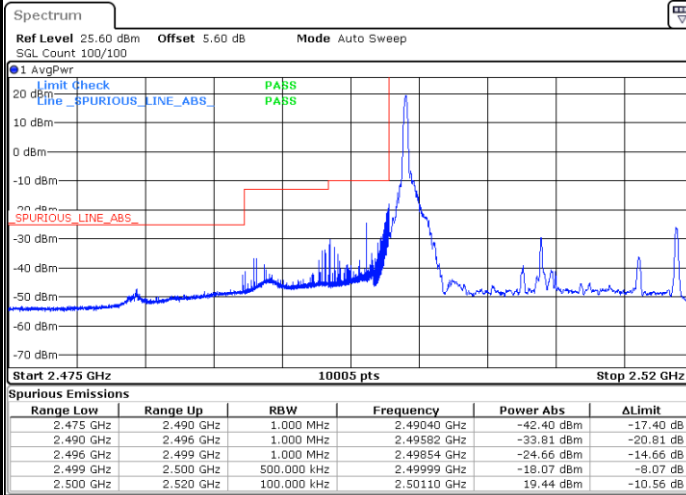


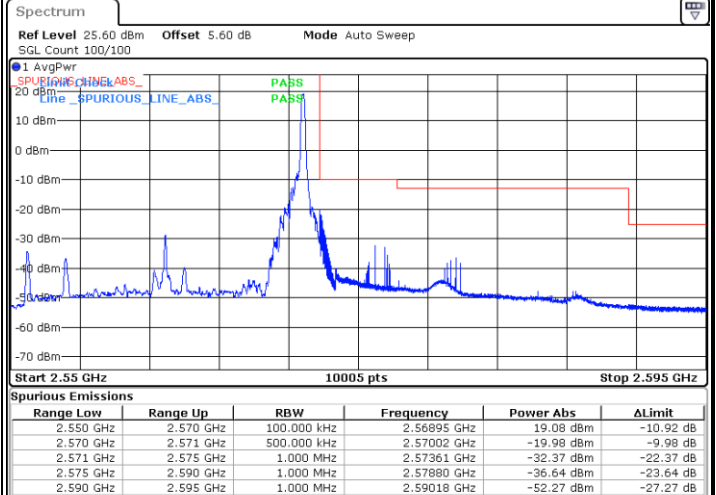


LTE Band 7 / 20MHz / 64QAM

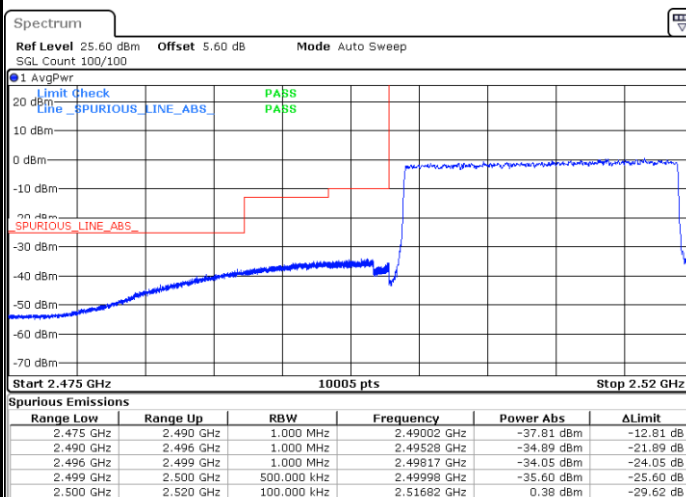
Lowest Band Edge / 1 RB



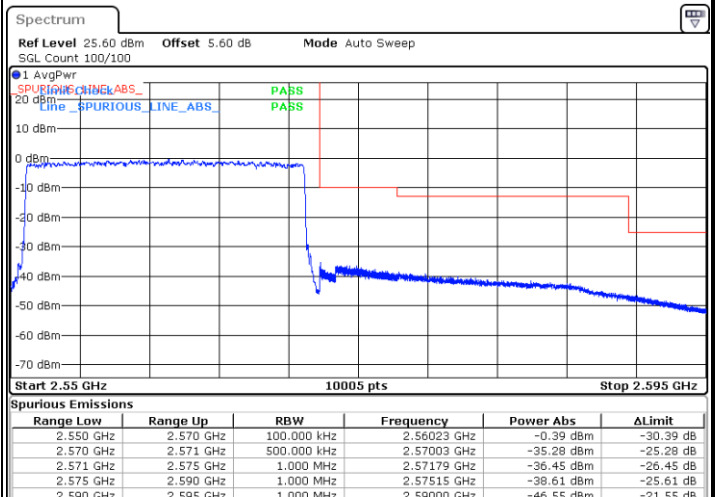
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB

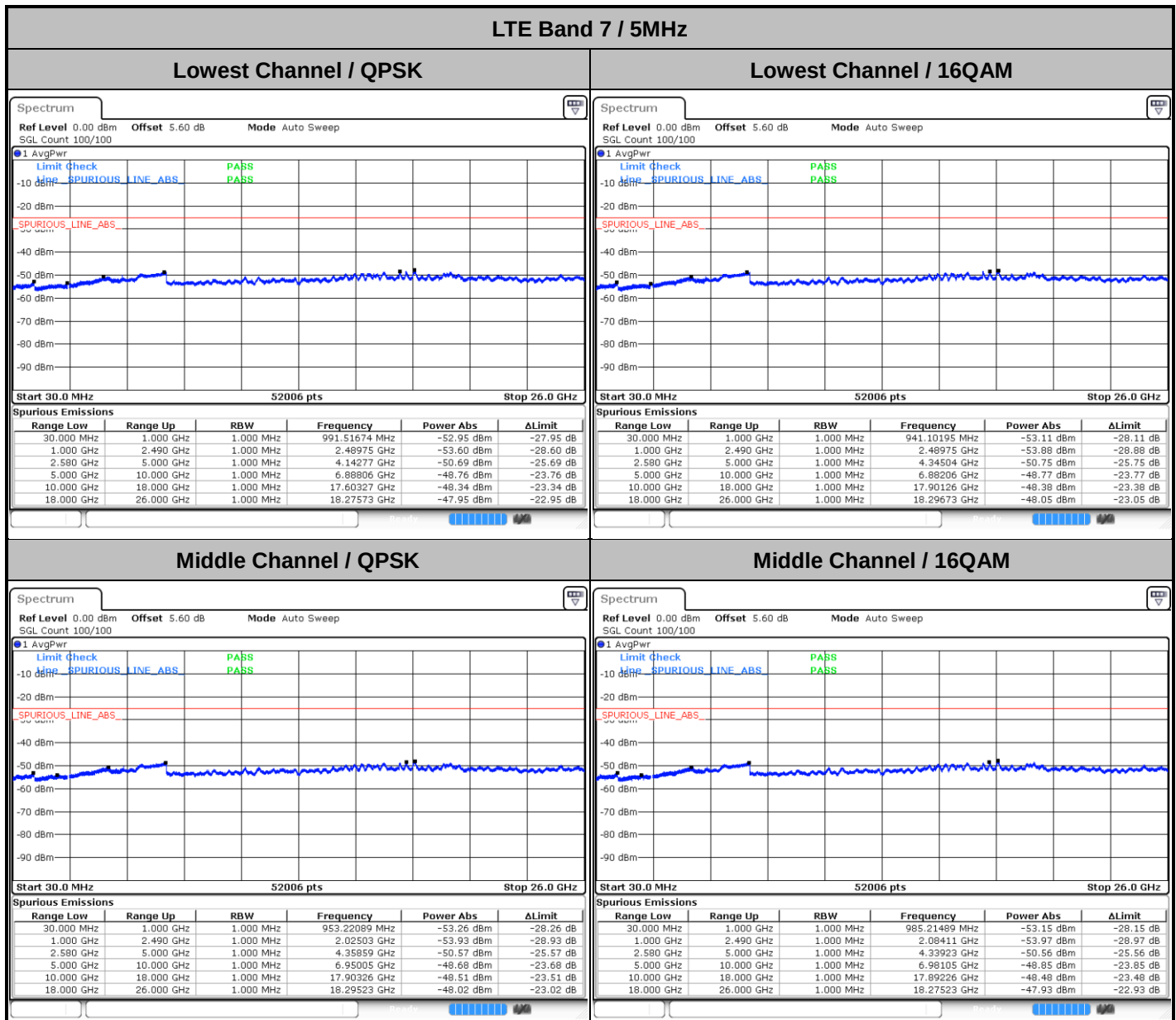


Highest Band Edge / Full RB





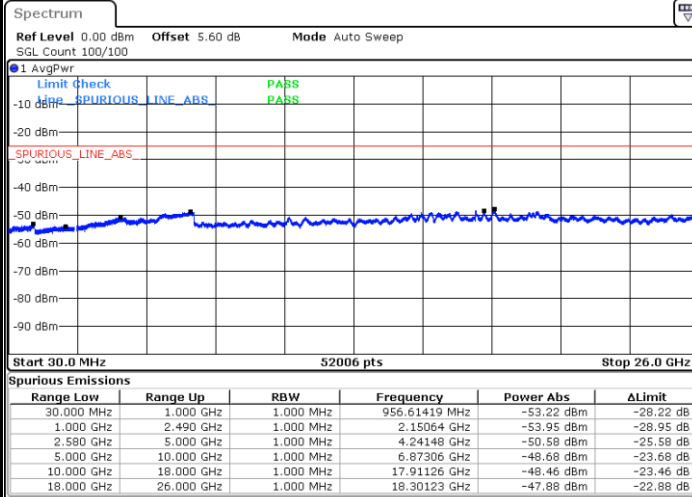
Conducted Spurious Emission



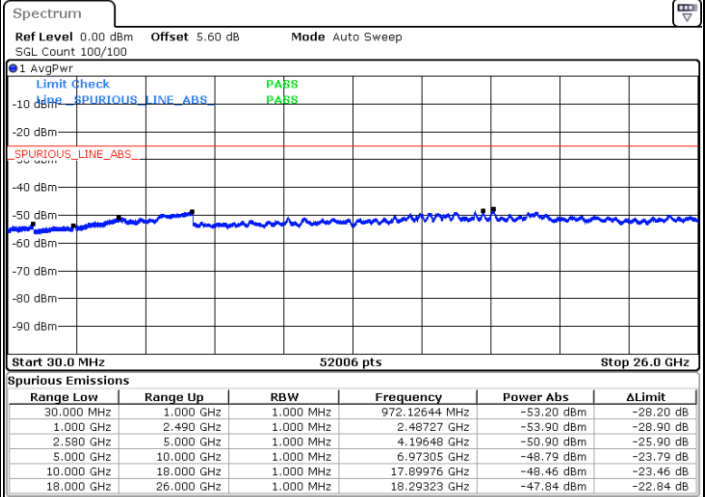


LTE Band 7 / 5MHz

Highest Channel / QPSK

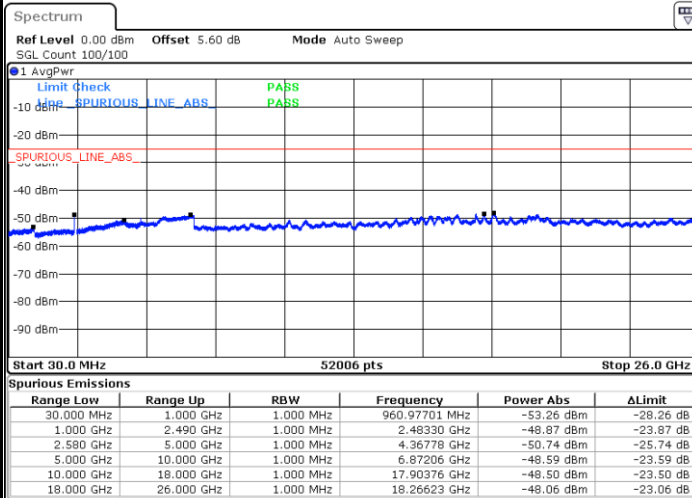


Highest Channel / 16QAM

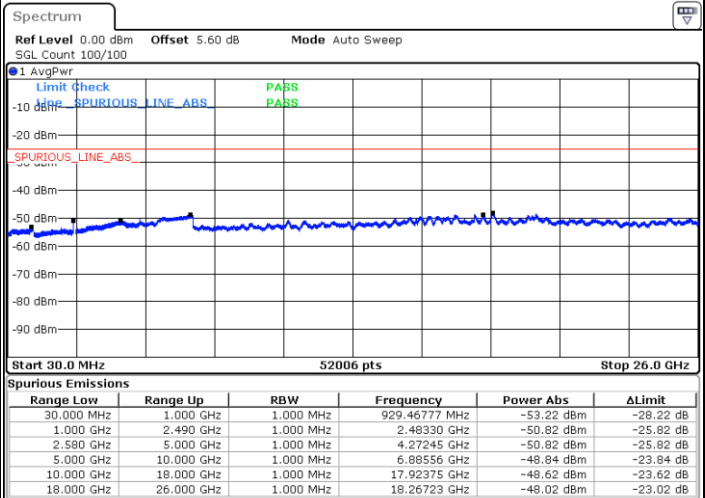


LTE Band 7 / 10MHz

Lowest Channel / QPSK



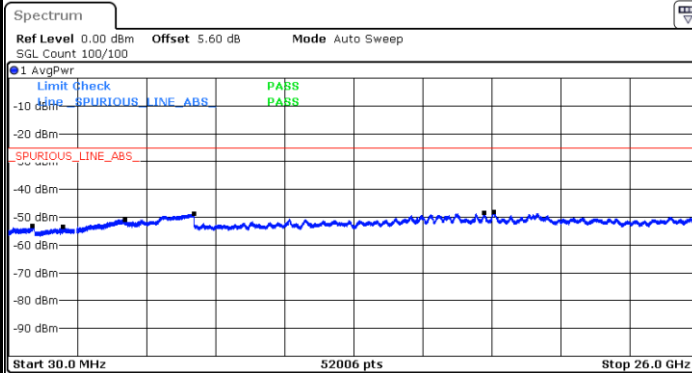
Lowest Channel / 16QAM





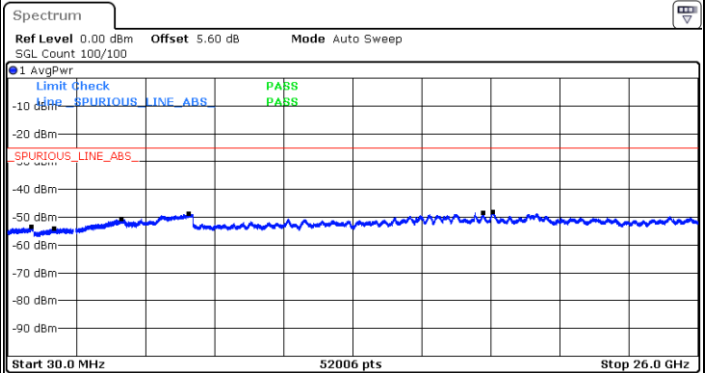
LTE Band 7 / 10MHz

Middle Channel / QPSK



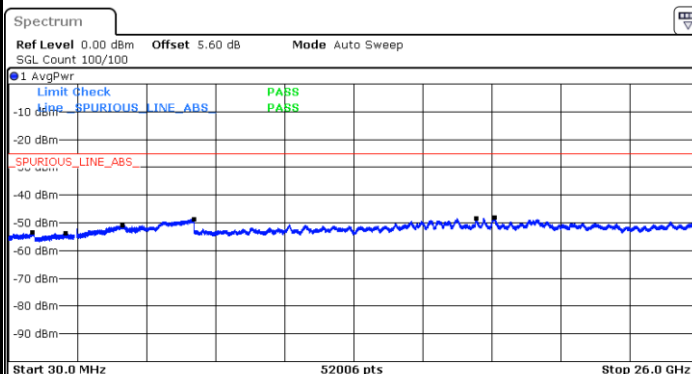
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	917.34883 MHz	-53.15 dBm	-28.15 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.07567 GHz	-53.56 dBm	-28.56 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.39440 GHz	-50.93 dBm	-25.93 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.98805 GHz	-48.87 dBm	-23.87 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.90326 GHz	-48.52 dBm	-23.52 dB
18.000 GHz	26.000 GHz	1.000 MHz	18.27273 GHz	-48.18 dBm	-23.18 dB

Middle Channel / 16QAM



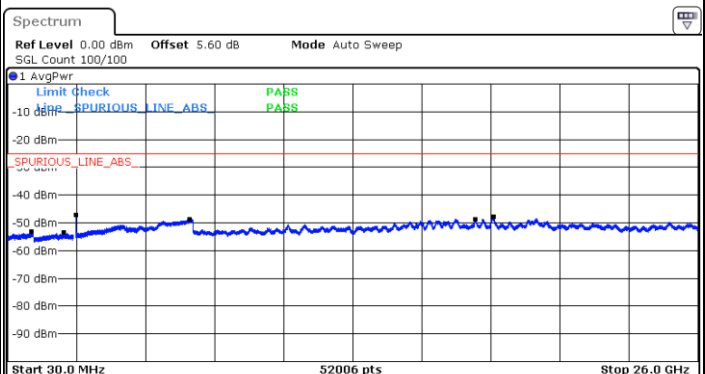
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.65067 MHz	-53.40 dBm	-28.40 dB
1.000 GHz	2.490 GHz	1.000 MHz	1.76138 GHz	-54.01 dBm	-29.01 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.31649 GHz	-50.69 dBm	-25.69 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.83357 GHz	-48.85 dBm	-23.85 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.90526 GHz	-48.52 dBm	-23.52 dB
18.000 GHz	26.000 GHz	1.000 MHz	18.27123 GHz	-48.08 dBm	-23.08 dB

Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	920.25737 MHz	-53.38 dBm	-28.38 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.15163 GHz	-53.68 dBm	-28.68 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.31503 GHz	-50.84 dBm	-25.84 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.98655 GHz	-48.72 dBm	-23.72 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.60727 GHz	-48.45 dBm	-23.45 dB
18.000 GHz	26.000 GHz	1.000 MHz	18.29223 GHz	-47.99 dBm	-22.99 dB

Highest Channel / 16QAM

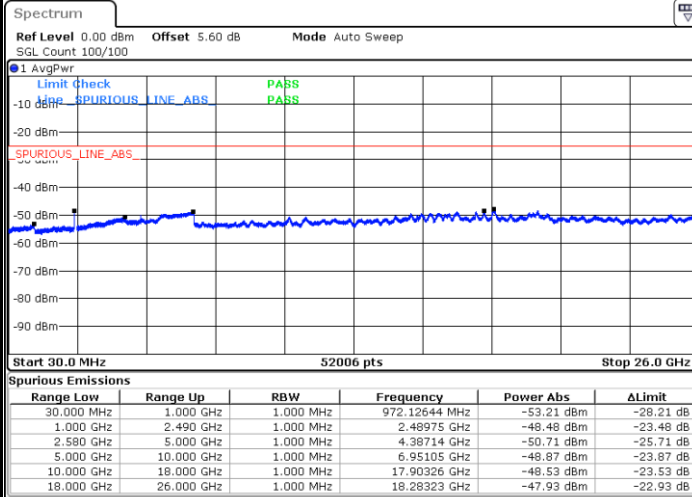


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	933.34583 MHz	-53.21 dBm	-28.21 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.13972 GHz	-53.56 dBm	-28.56 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58411 GHz	-47.15 dBm	-22.15 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.86756 GHz	-48.80 dBm	-23.80 dB
10.000 GHz	18.000 GHz	1.000 MHz	17.60227 GHz	-48.60 dBm	-23.60 dB
18.000 GHz	26.000 GHz	1.000 MHz	18.29523 GHz	-47.93 dBm	-22.93 dB

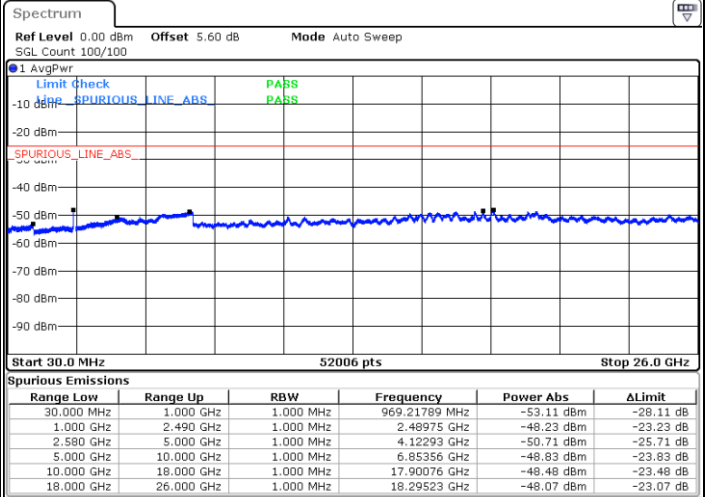


LTE Band 7 / 15MHz

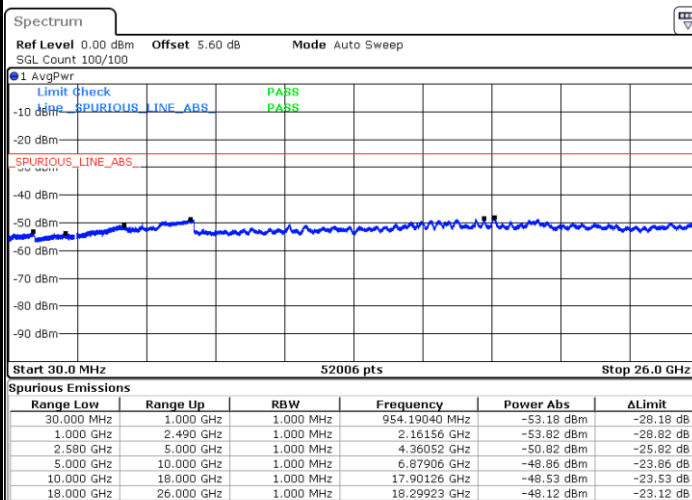
Lowest Channel / QPSK



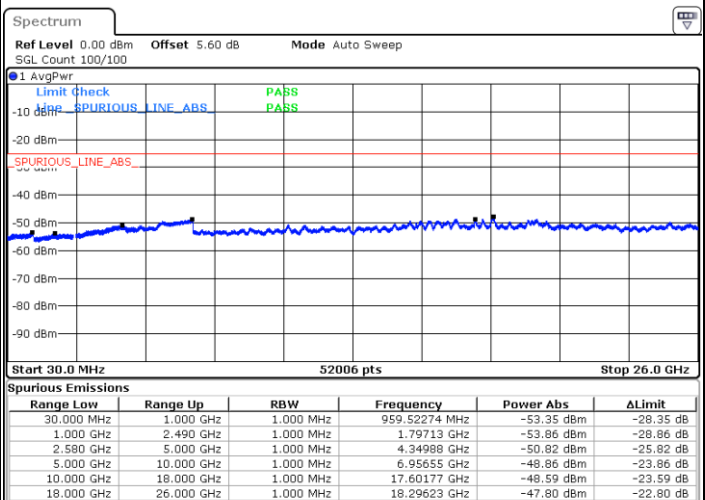
Lowest Channel / 16QAM



Middle Channel / QPSK



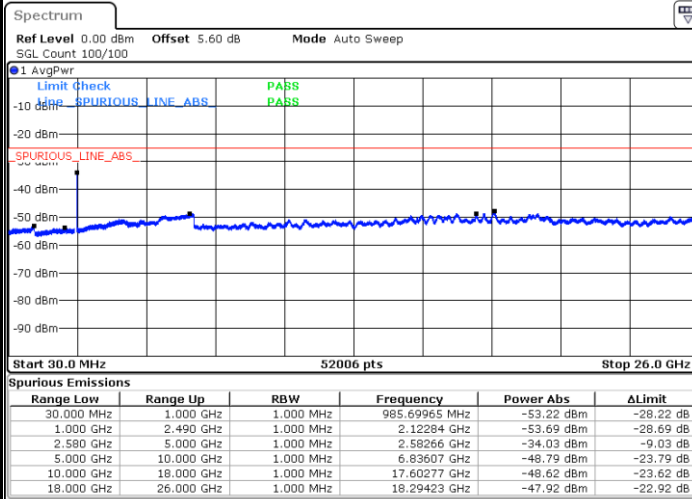
Middle Channel / 16QAM



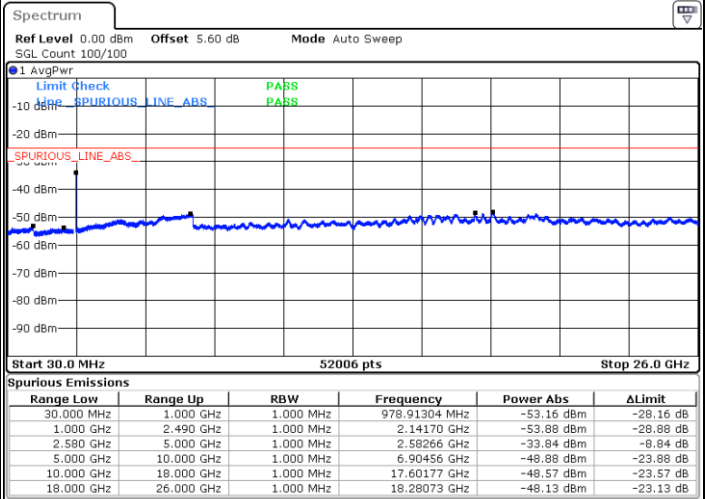


LTE Band 7 / 15MHz

Highest Channel / QPSK

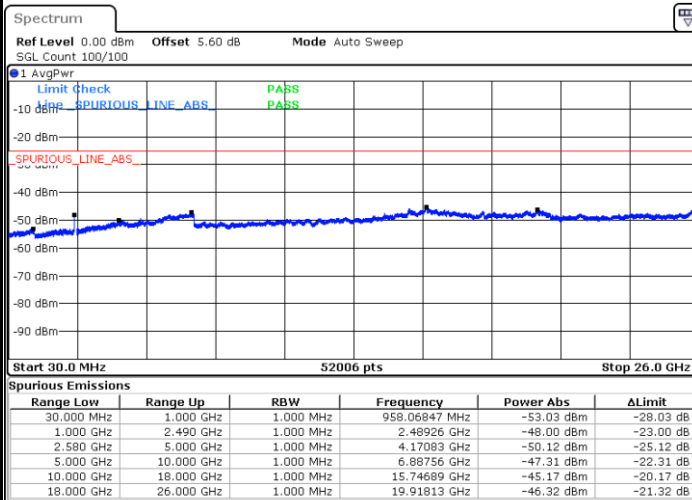


Highest Channel / 16QAM

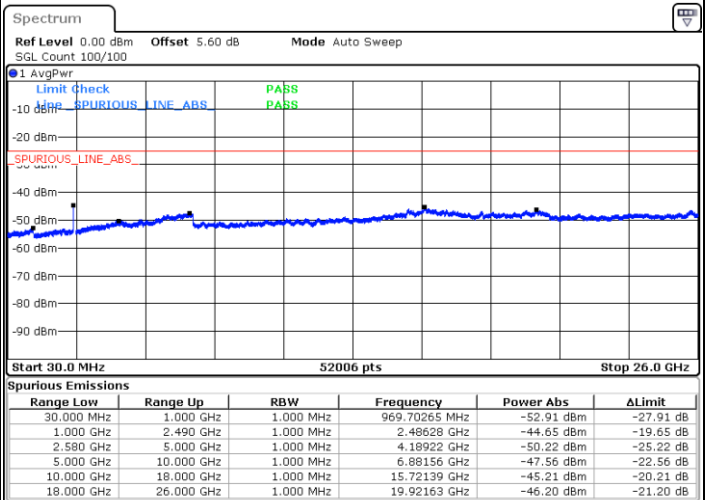


LTE Band 7 / 20MHz

Lowest Channel / QPSK



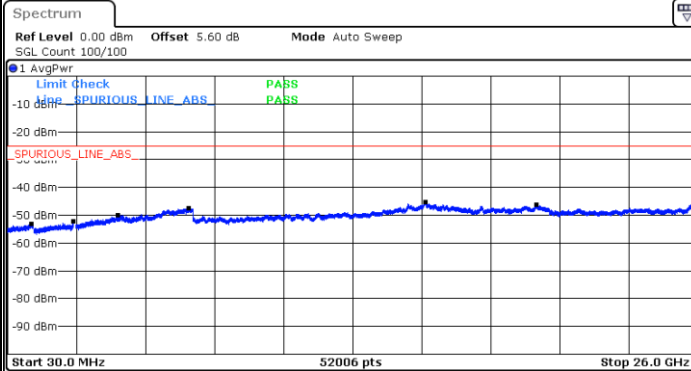
Lowest Channel / 16QAM





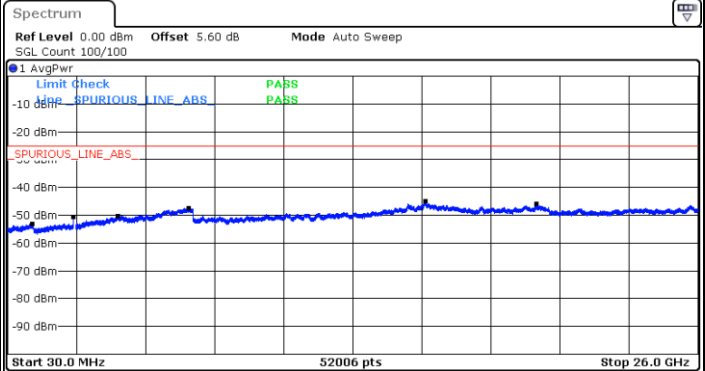
LTE Band 7 / 20MHz

Middle Channel / QPSK



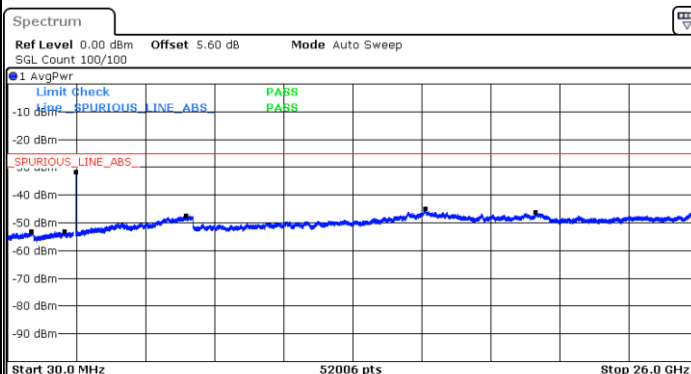
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	916.37931 MHz	-53.03 dBm	-28.03 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48975 GHz	-52.23 dBm	-27.23 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.16019 GHz	-50.06 dBm	-25.06 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.94557 GHz	-47.61 dBm	-22.61 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.74689 GHz	-45.21 dBm	-20.21 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.91913 GHz	-46.32 dBm	-21.32 dB

Middle Channel / 16QAM



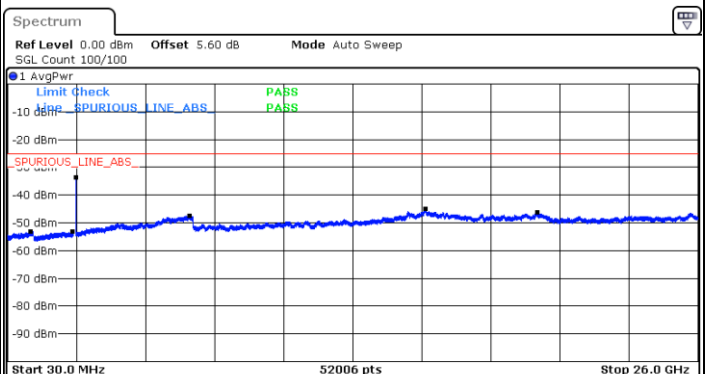
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	946.43428 MHz	-53.22 dBm	-28.22 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.48975 GHz	-50.61 dBm	-25.61 dB
2.580 GHz	5.000 GHz	1.000 MHz	4.17228 GHz	-50.24 dBm	-25.24 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.84307 GHz	-47.47 dBm	-22.47 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.75189 GHz	-44.98 dBm	-19.98 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.91913 GHz	-45.99 dBm	-20.99 dB

Highest Channel / QPSK



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	915.89455 MHz	-53.07 dBm	-28.07 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.15114 GHz	-53.08 dBm	-28.08 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58702 GHz	-31.64 dBm	-6.64 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.73008 GHz	-47.58 dBm	-22.58 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.73039 GHz	-45.06 dBm	-20.06 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.87863 GHz	-46.36 dBm	-21.36 dB

Highest Channel / 16QAM

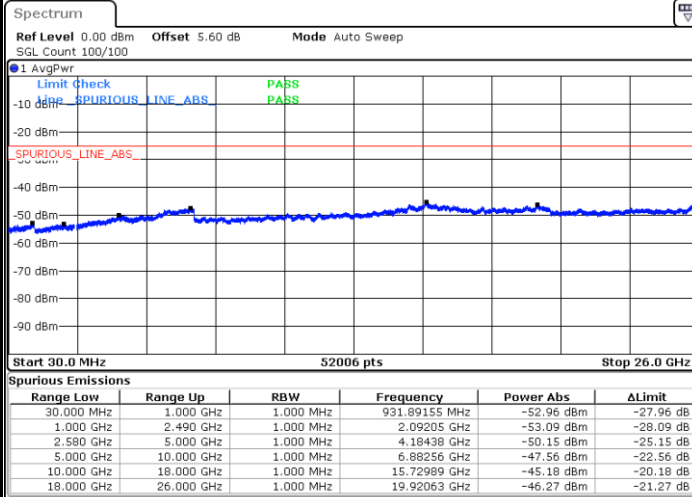


Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	901.35182 MHz	-53.13 dBm	-28.13 dB
1.000 GHz	2.490 GHz	1.000 MHz	2.46989 GHz	-53.27 dBm	-28.27 dB
2.580 GHz	5.000 GHz	1.000 MHz	2.58702 GHz	-33.60 dBm	-8.60 dB
5.000 GHz	10.000 GHz	1.000 MHz	6.87056 GHz	-47.37 dBm	-22.37 dB
10.000 GHz	18.000 GHz	1.000 MHz	15.72939 GHz	-45.11 dBm	-20.11 dB
18.000 GHz	26.000 GHz	1.000 MHz	19.93613 GHz	-46.29 dBm	-21.29 dB

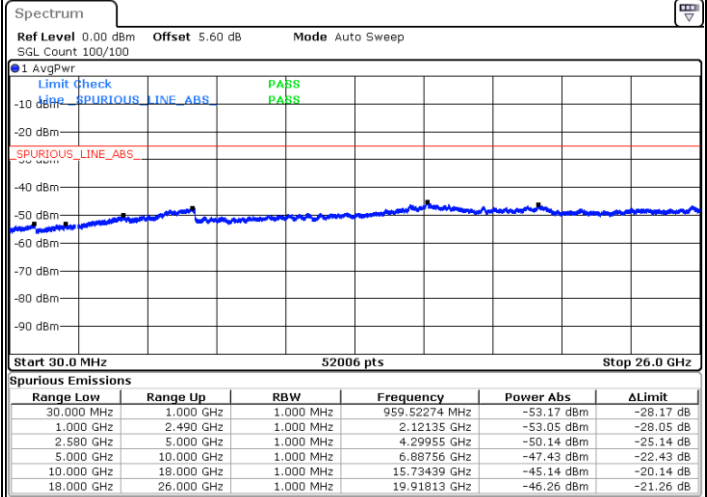


LTE Band 7 / 5MHz

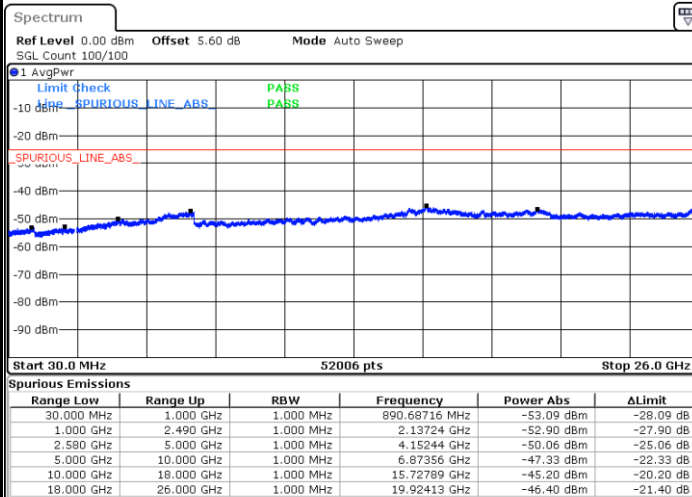
Lowest Channel / 64QAM



Middle Channel / 64QAM



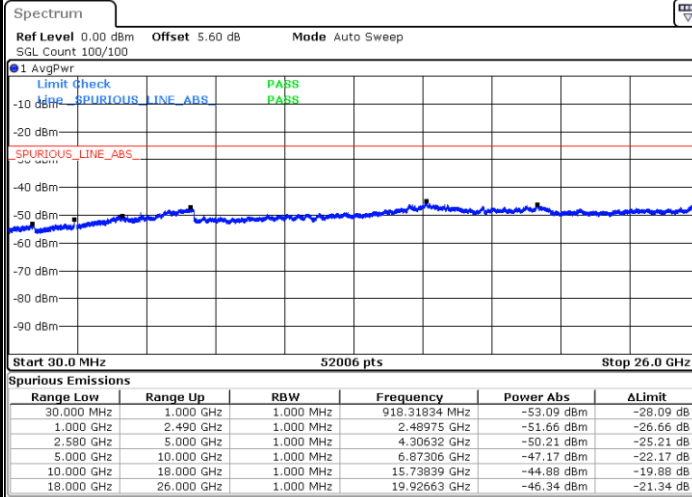
Highest Channel / 64QAM



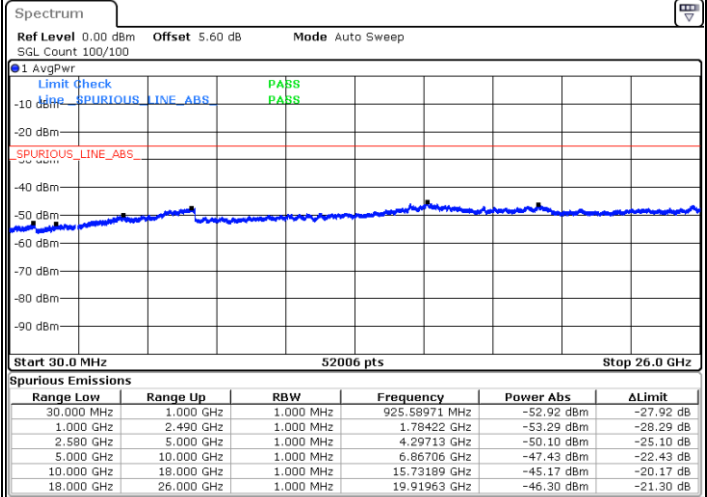


LTE Band 7 / 10MHz

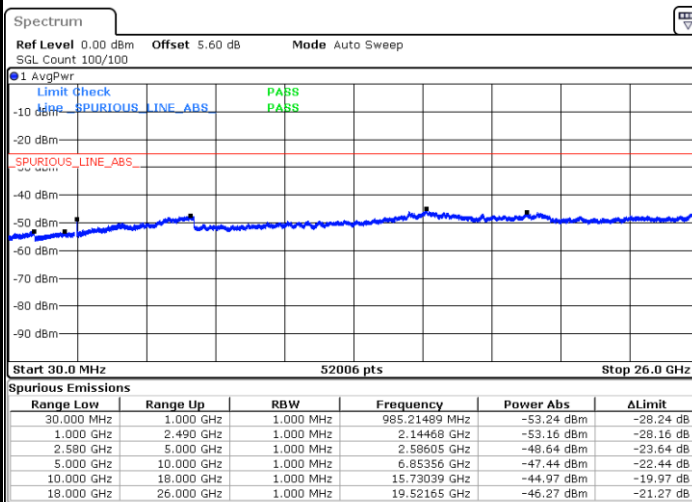
Lowest Channel / 64QAM



Middle Channel / 64QAM



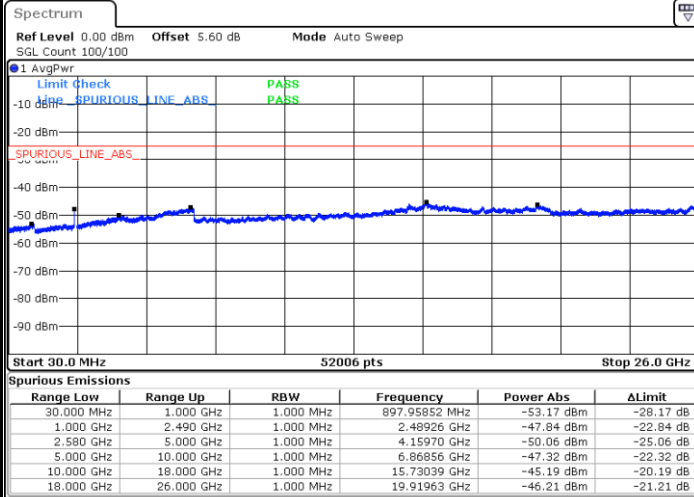
Highest Channel / 64QAM



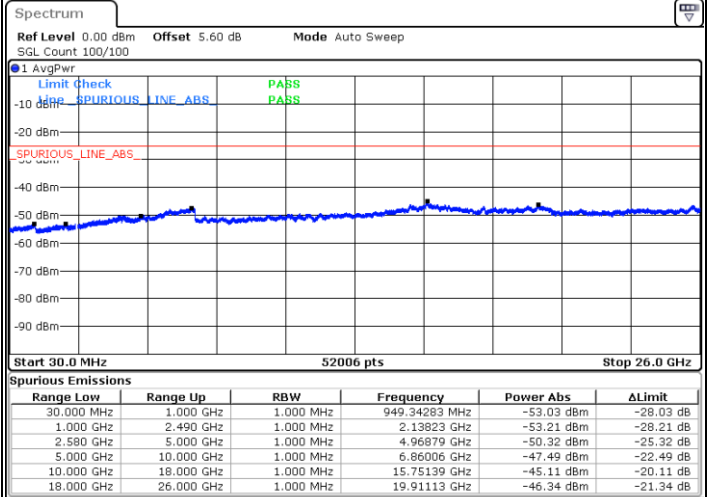


LTE Band 7 / 15MHz

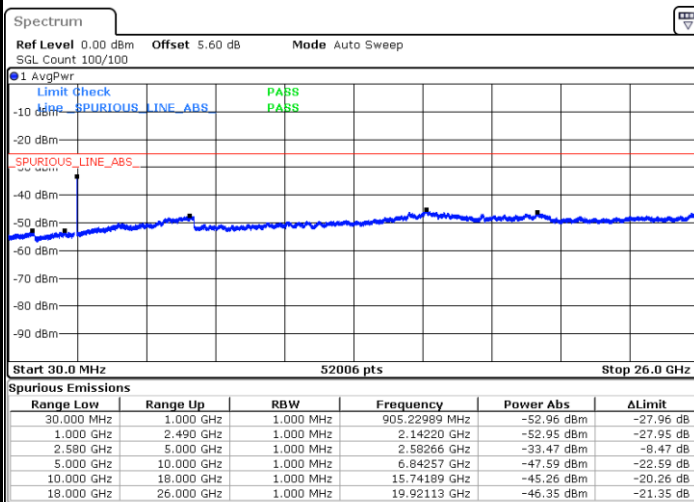
Lowest Channel / 64QAM



Middle Channel / 64QAM



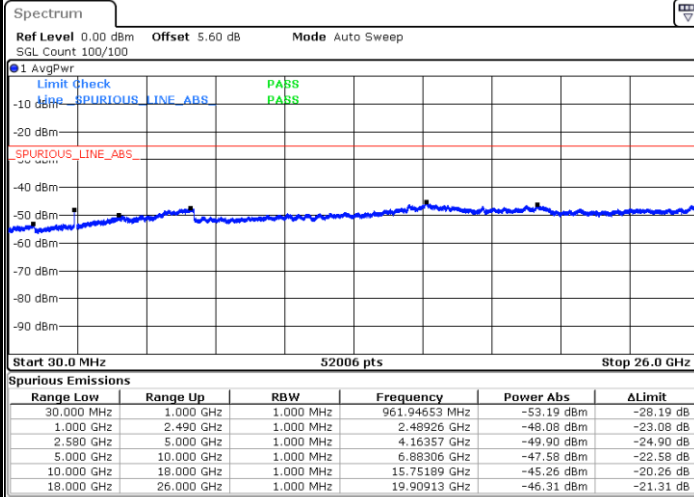
Highest Channel / 64QAM



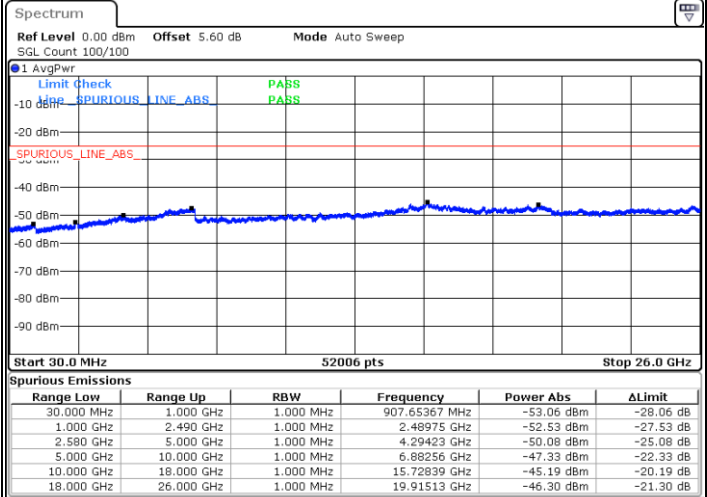


LTE Band 7 / 20MHz

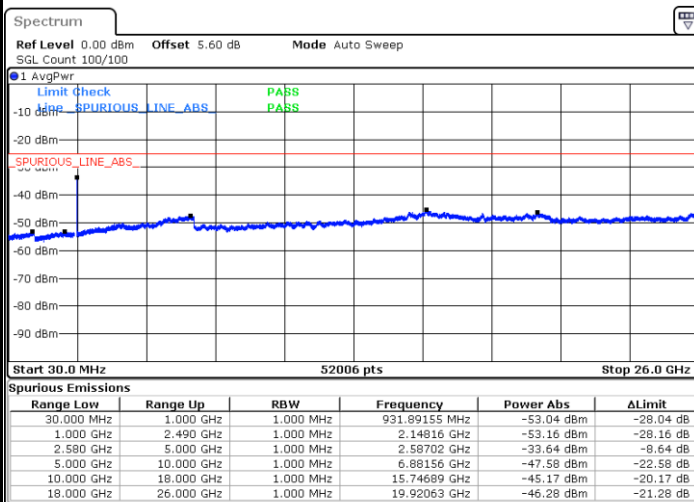
Lowest Channel / 64QAM



Middle Channel / 64QAM



Highest Channel / 64QAM



**Frequency Stability**

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0024	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0026	

Note:

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

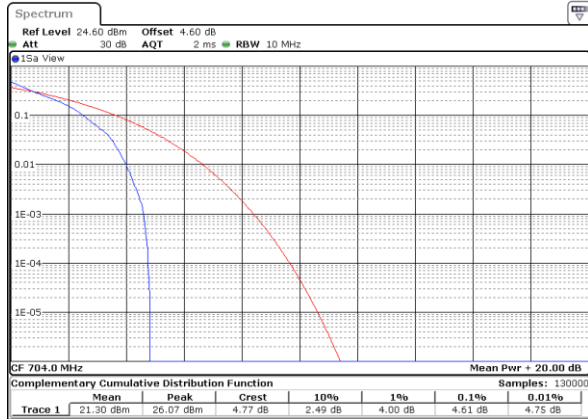
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.61	5.22	5.80	5.97	PASS
Middle CH	4.41	5.16	5.28	6.09	
Highest CH	3.83	4.90	4.52	6.00	
Mode	LTE Band 12 / 10MHz				
Mod.	64QAM		-		Limit: 13dB
RB Size	1RB	Full RB	-	-	Result
Lowest CH	6.38	6.32	-	-	PASS
Middle CH	6.14	6.32	-	-	
Highest CH	5.74	6.35	-	-	

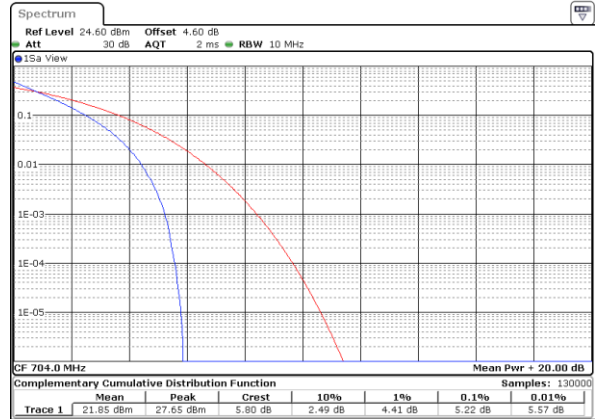


LTE Band 12 / 10MHz / QPSK

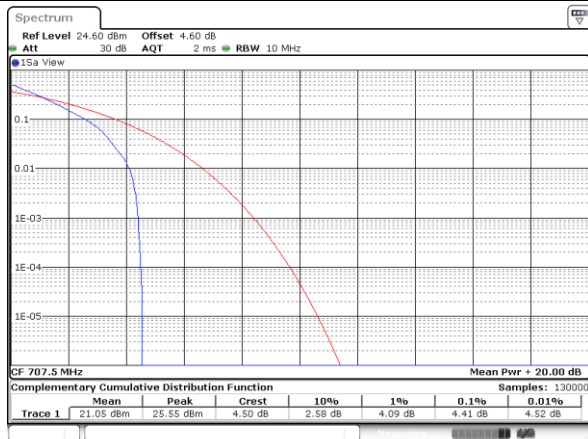
Lowest Channel / 1RB



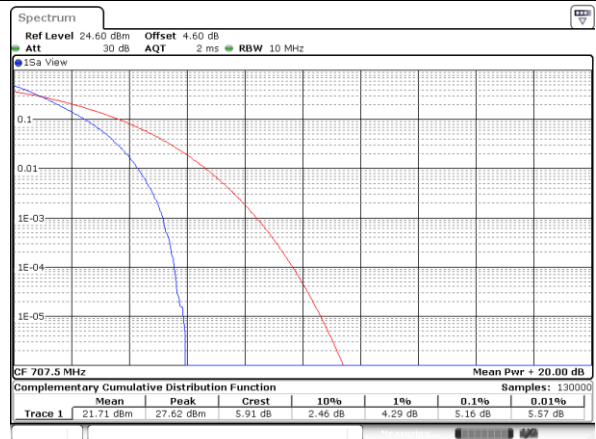
Lowest Channel / Full RB



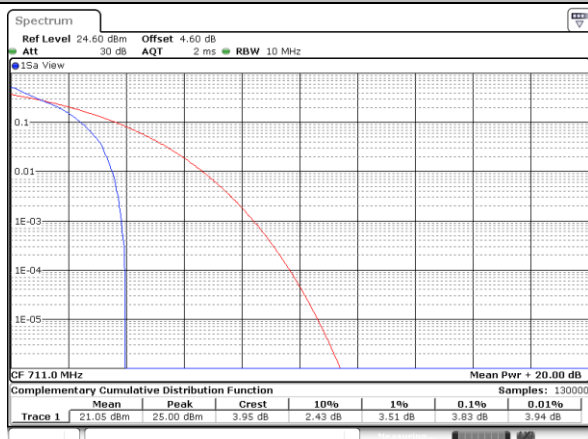
Middle Channel / 1RB



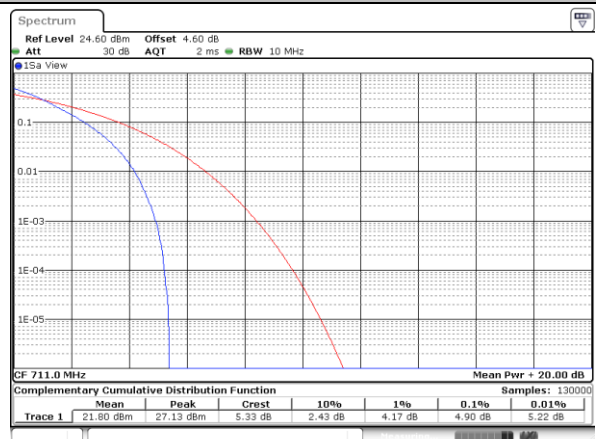
Middle Channel / Full RB



Highest Channel / 1RB



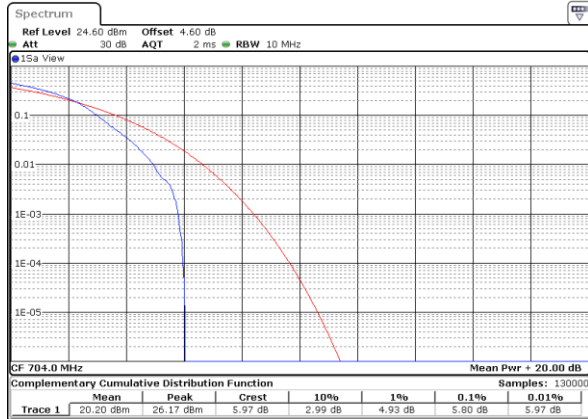
Highest Channel / Full RB



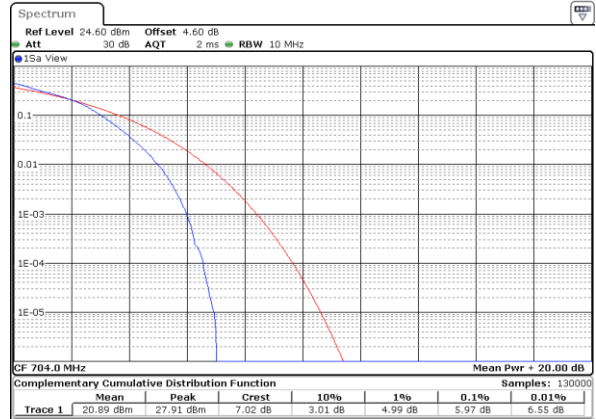


LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



Lowest Channel / Full RB



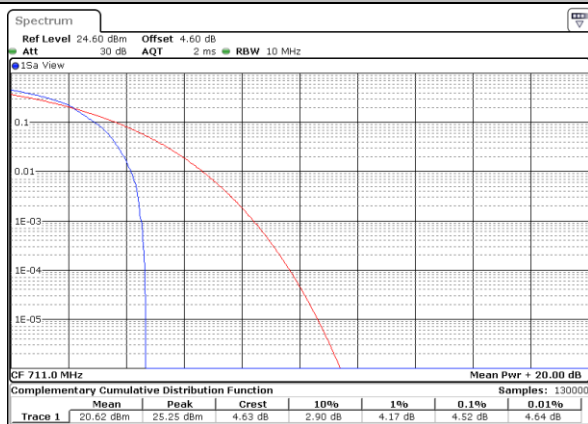
Middle Channel / 1RB



Middle Channel / Full RB



Highest Channel / 1RB



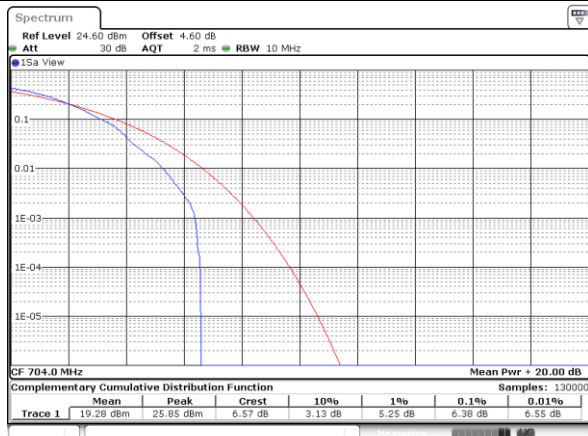
Highest Channel / Full RB



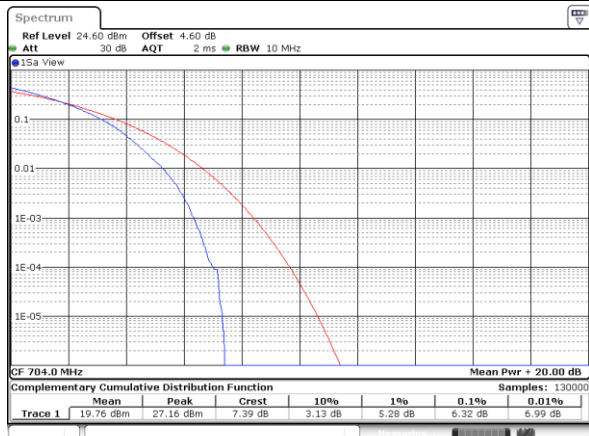


LTE Band 12 / 10MHz / 64QAM

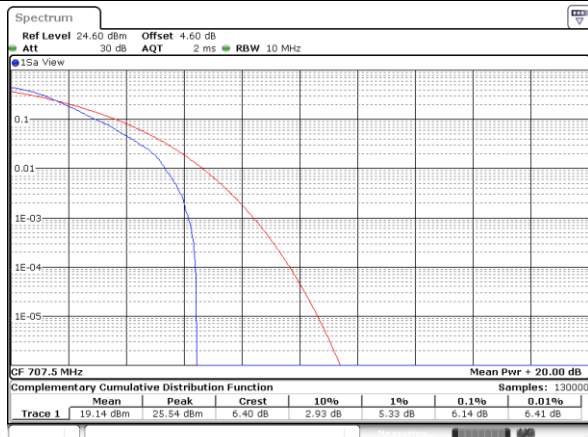
Lowest Channel / 1RB



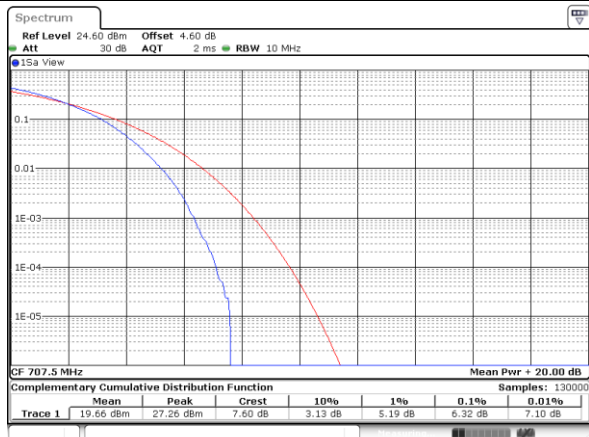
Lowest Channel / Full RB



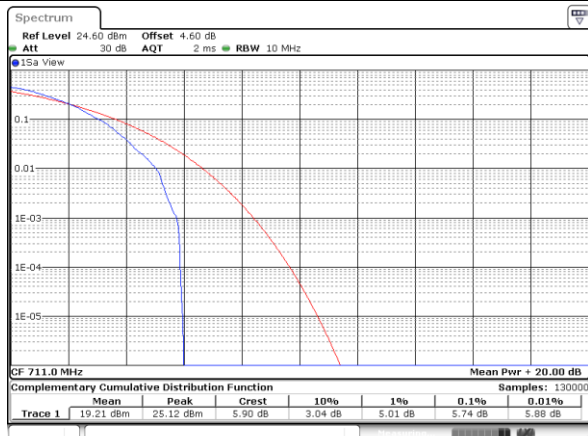
Middle Channel / 1RB



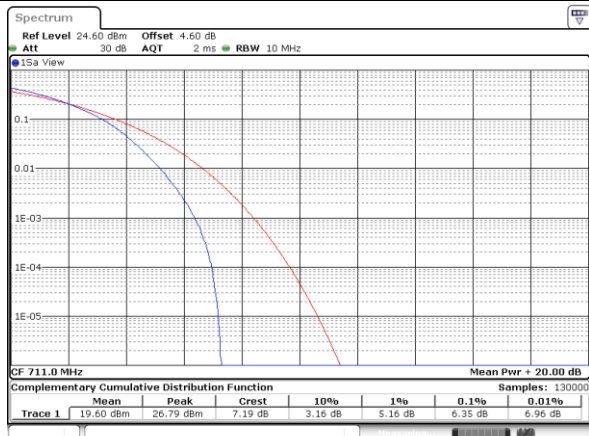
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB



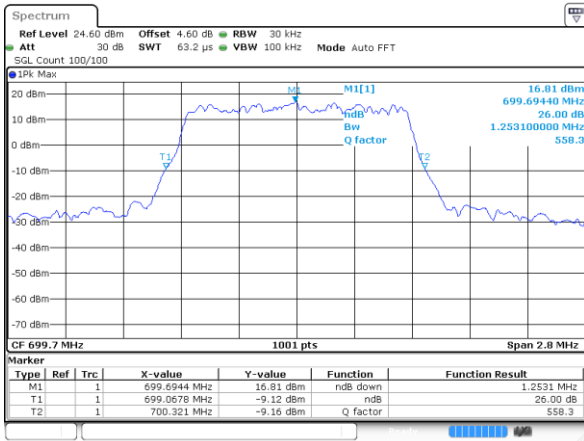
**26dB Bandwidth**

Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.25	1.25	2.94	2.98	5.01	5.04	9.93	9.95
Middle CH	1.28	1.31	2.98	2.96	5.05	5.03	9.71	10.13
Highest CH	1.26	1.31	2.96	2.96	5.15	5.05	9.99	9.65
Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.28		2.92		5.09		10.19	
Middle CH	1.26		2.95		5.07		10.21	
Highest CH	1.30		2.96		5.03		9.93	

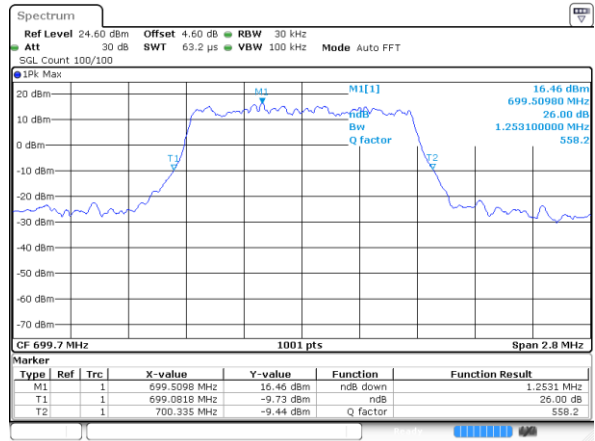


LTE Band 12

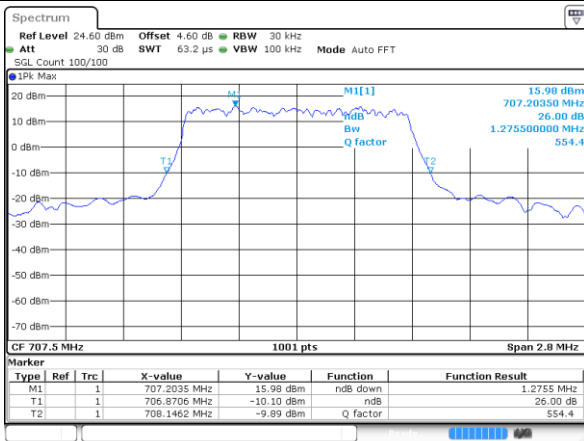
Lowest Channel / 1.4MHz / QPSK



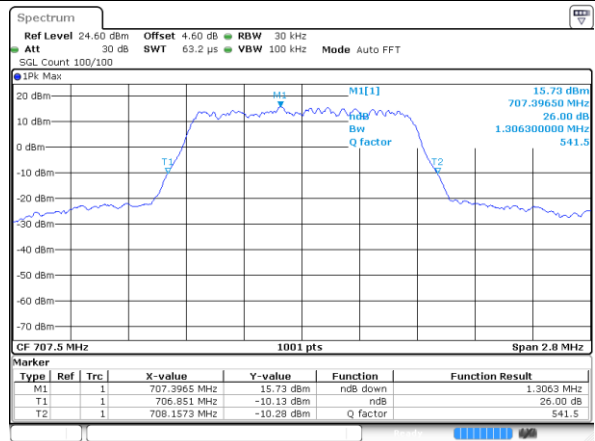
Lowest Channel / 1.4MHz / 16QAM



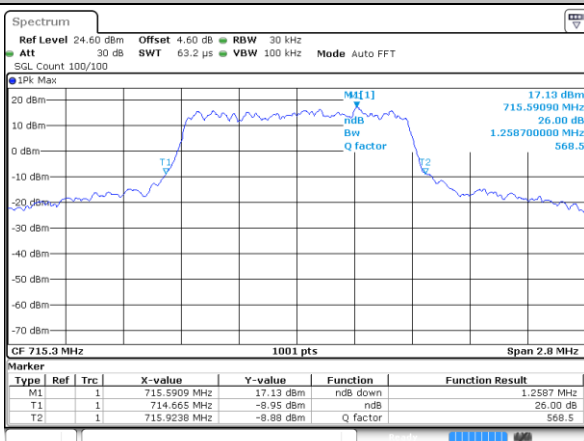
Middle Channel / 1.4MHz / QPSK



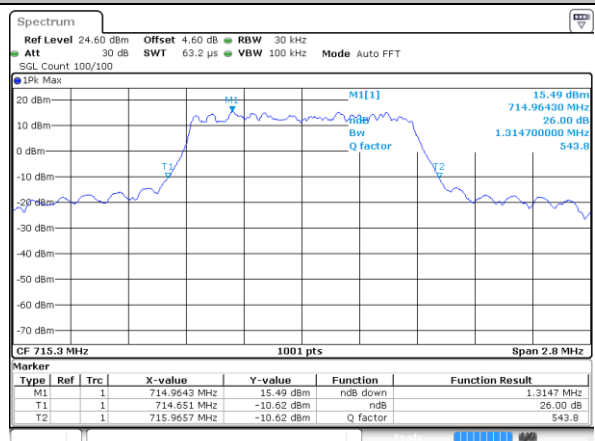
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



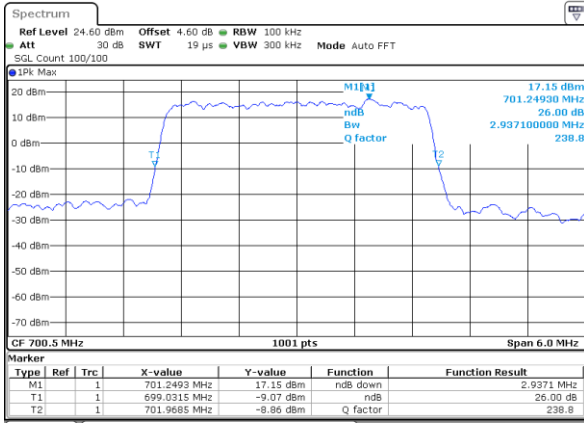
Highest Channel / 1.4MHz / 16QAM



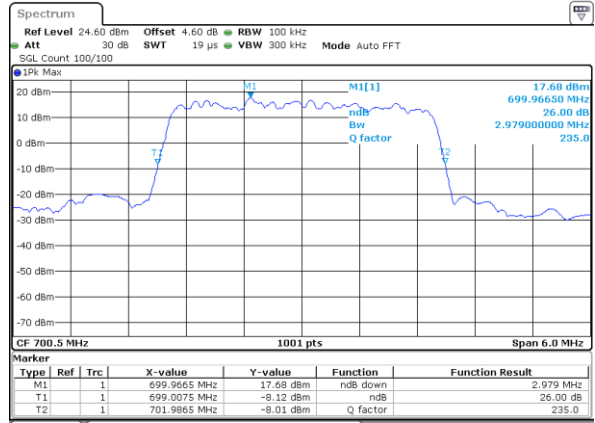


LTE Band 12

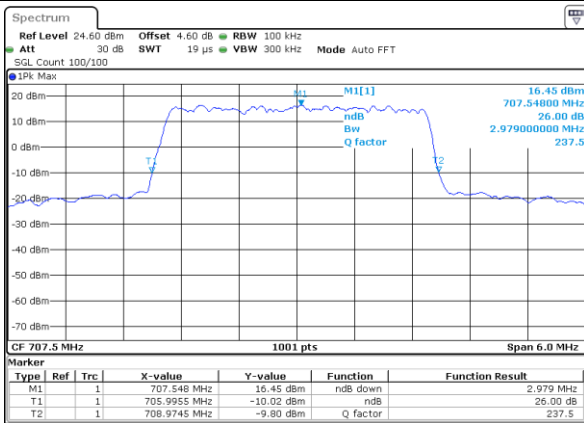
Lowest Channel / 3MHz / QPSK



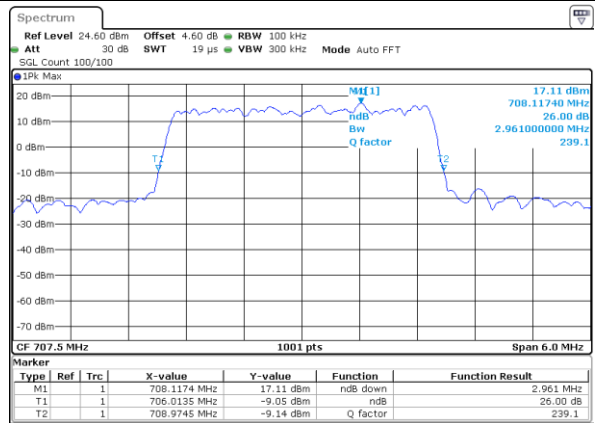
Lowest Channel / 3MHz / 16QAM



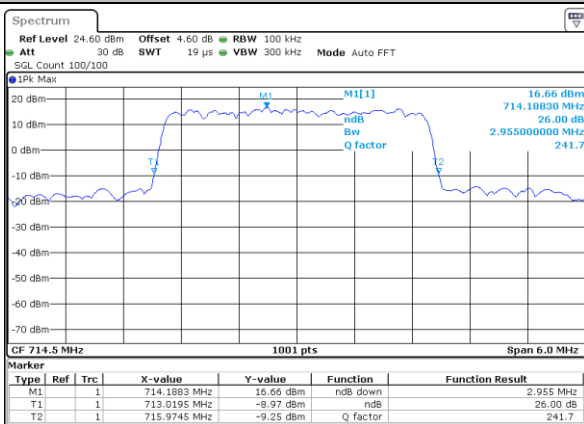
Middle Channel / 3MHz / QPSK



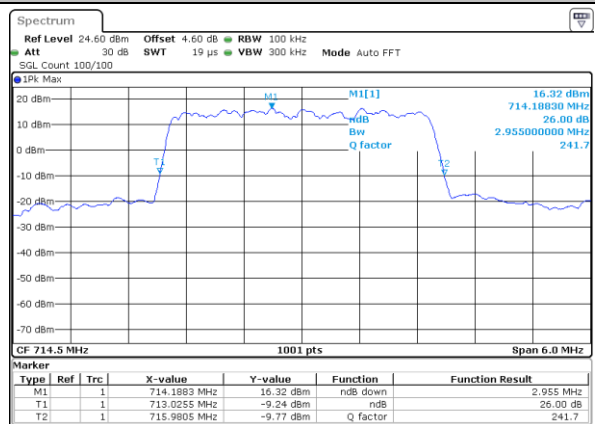
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



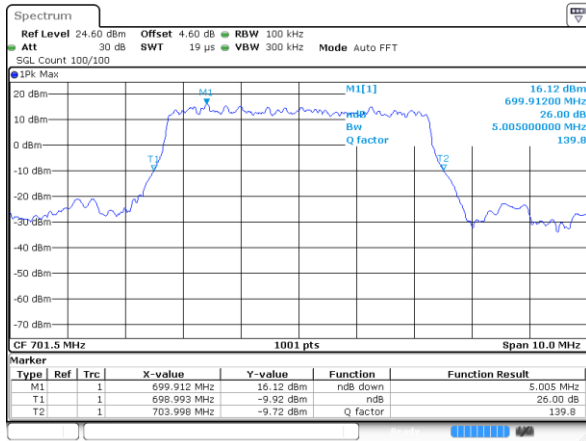
Highest Channel / 3MHz / 16QAM



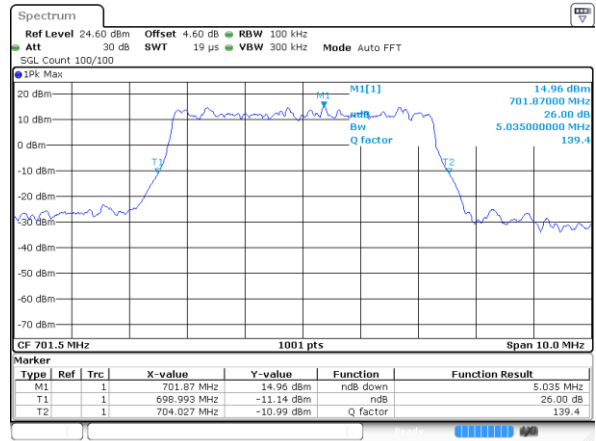


LTE Band 12

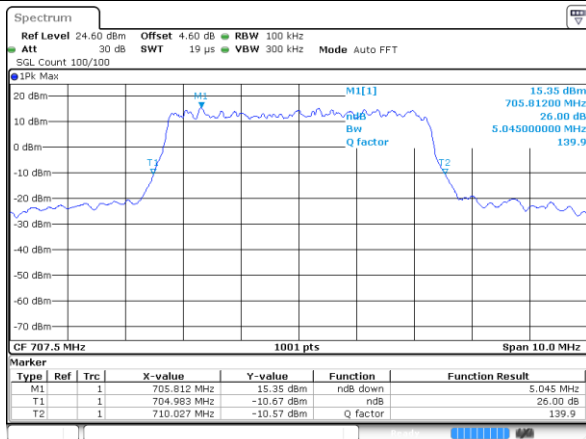
Lowest Channel / 5MHz / QPSK



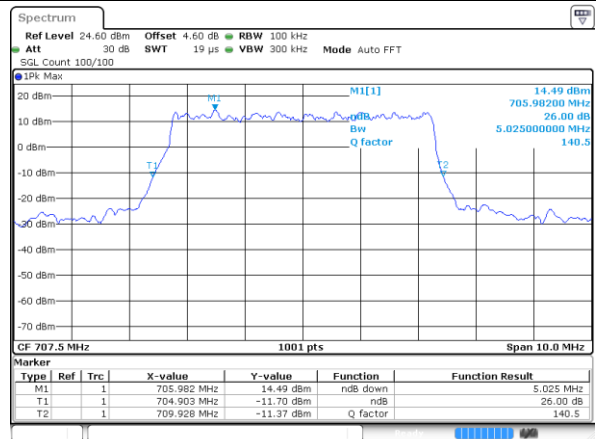
Lowest Channel / 5MHz / 16QAM



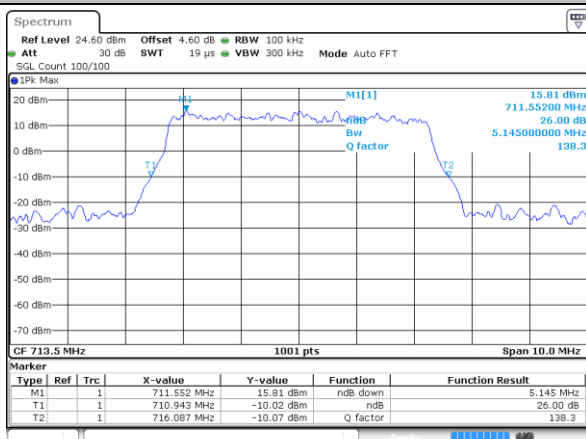
Middle Channel / 5MHz / QPSK



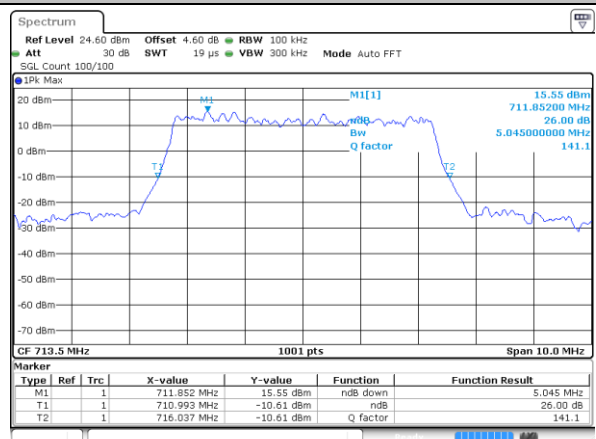
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



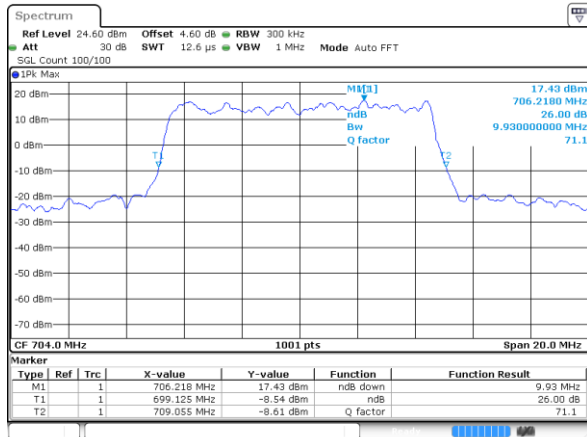
Highest Channel / 5MHz / 16QAM



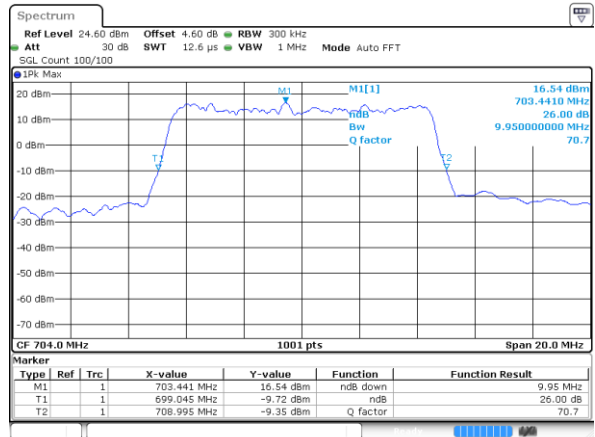


LTE Band 12

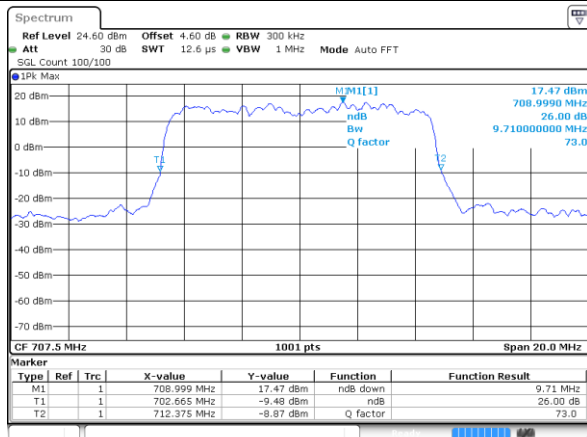
Lowest Channel / 10MHz / QPSK



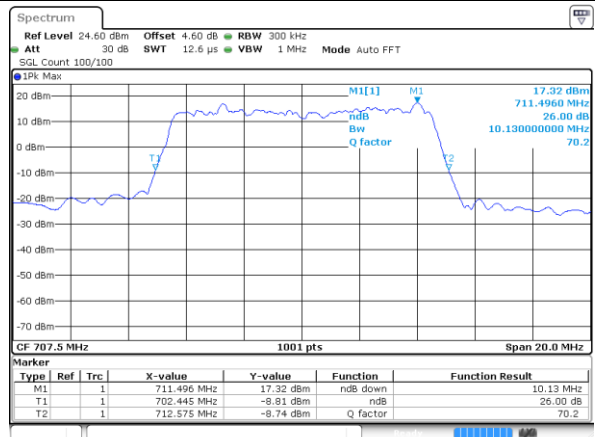
Lowest Channel / 10MHz / 16QAM



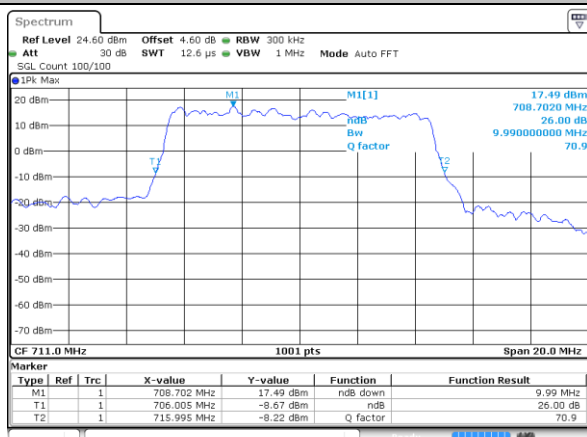
Middle Channel / 10MHz / QPSK



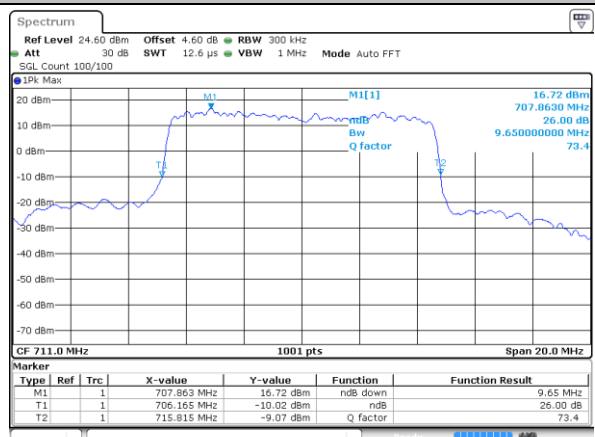
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



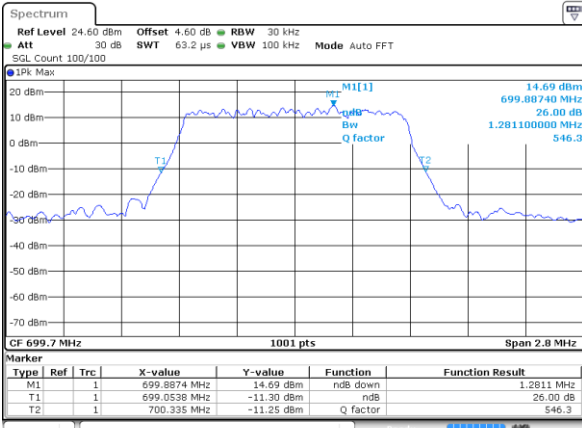
Highest Channel / 10MHz / 16QAM



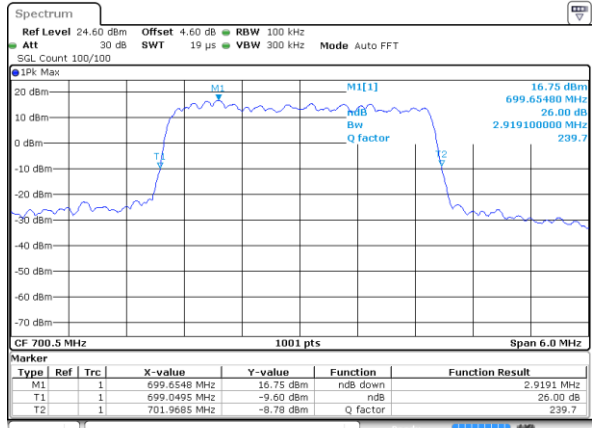


LTE Band 12

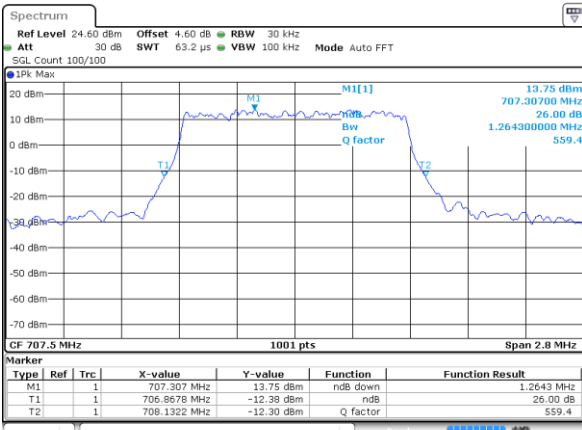
Lowest Channel / 1.4MHz / 64QAM



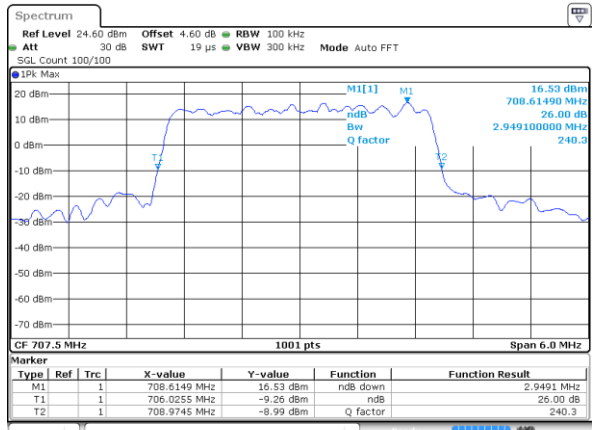
Lowest Channel / 3MHz / 64QAM



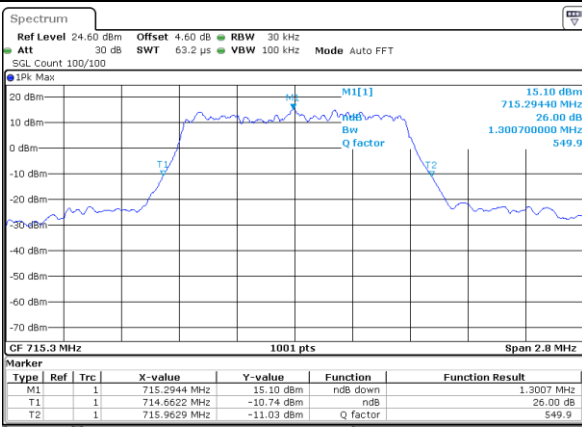
Middle Channel / 1.4MHz / 64QAM



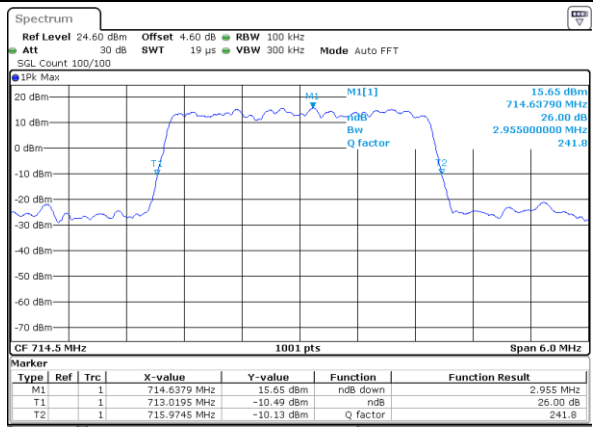
Middle Channel / 3MHz / 64QAM



Highest Channel / 1.4MHz / 64QAM



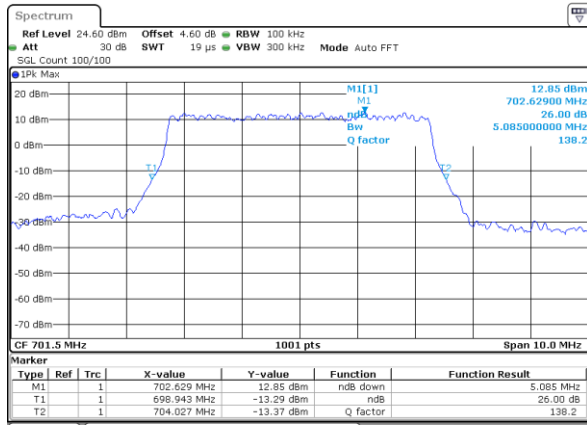
Highest Channel / 3MHz / 64QAM



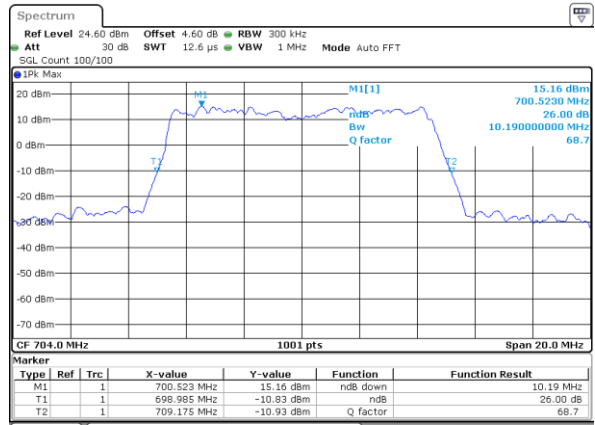


LTE Band 12

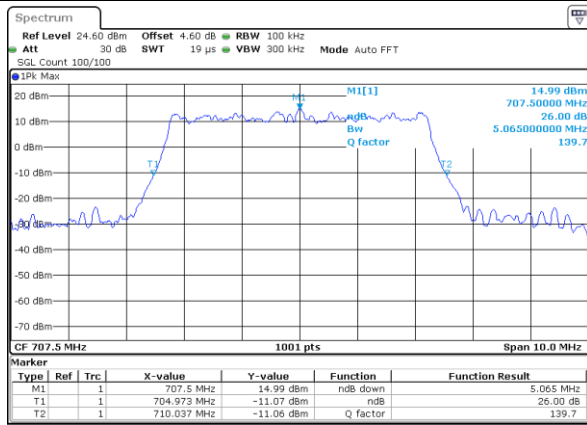
Lowest Channel / 5MHz / 64QAM



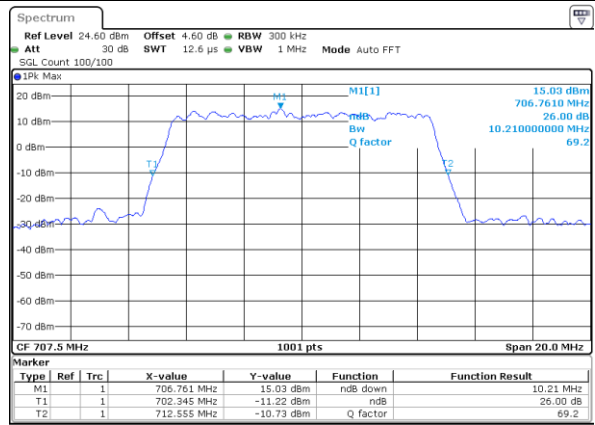
Lowest Channel / 10MHz / 64QAM



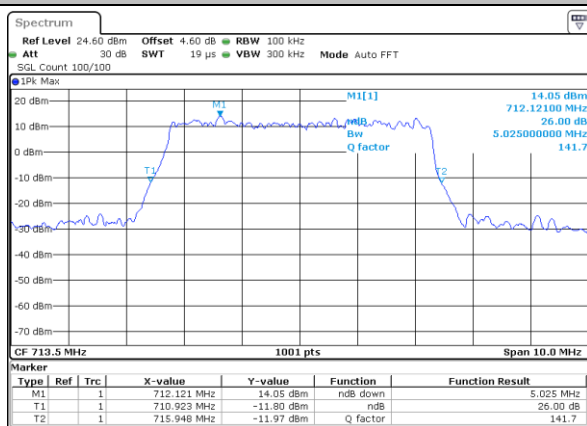
Middle Channel / 5MHz / 64QAM



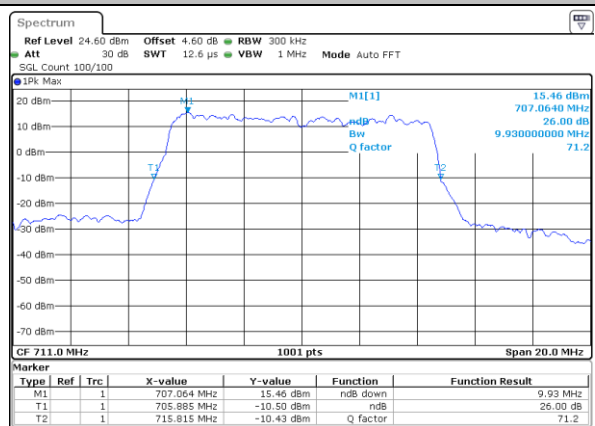
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



Highest Channel / 10MHz / 64QAM



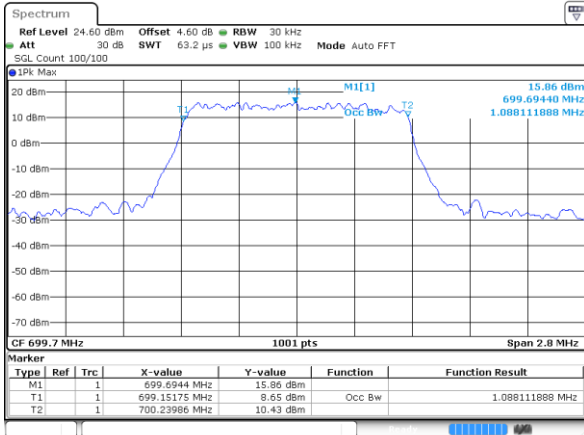
**Occupied Bandwidth`**

Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.09	2.70	2.71	4.50	4.50	9.05	9.01
Middle CH	1.10	1.09	2.72	2.72	4.48	4.51	8.97	9.03
Highest CH	1.09	1.09	2.72	2.71	4.51	4.50	9.01	9.01
Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.09		2.69		4.48		9.05	
Middle CH	1.09		2.72		4.50		9.03	
Highest CH	1.09		2.72		4.50		8.99	

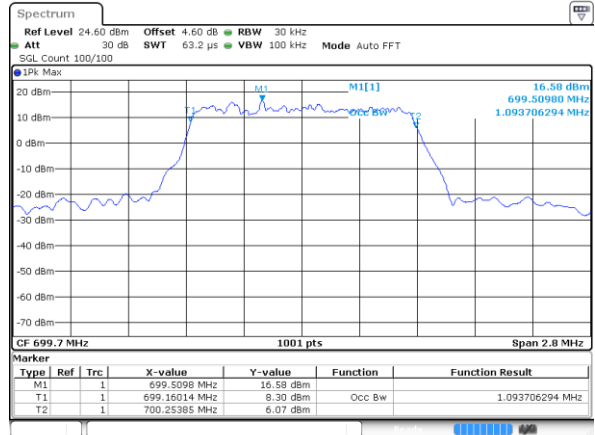


LTE Band 12

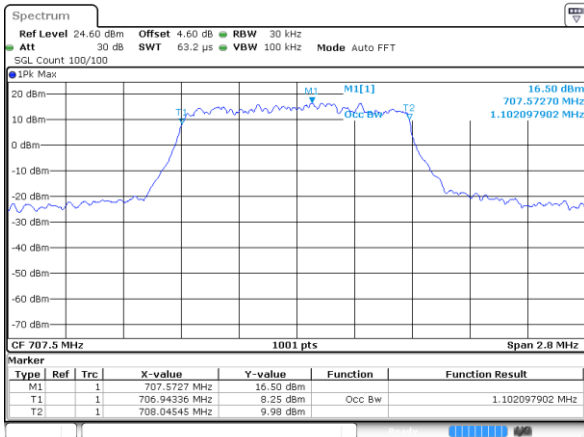
Lowest Channel / 1.4MHz / QPSK



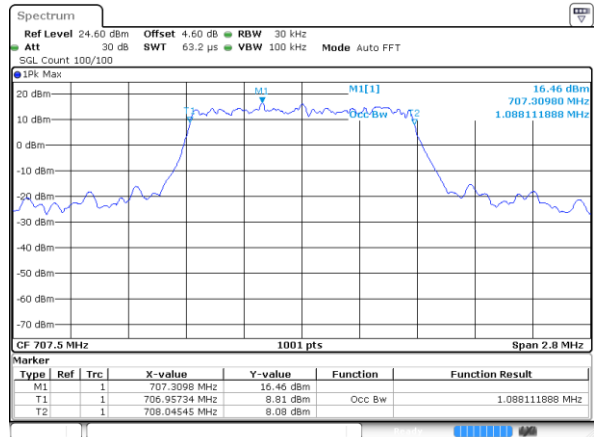
Lowest Channel / 1.4MHz / 16QAM



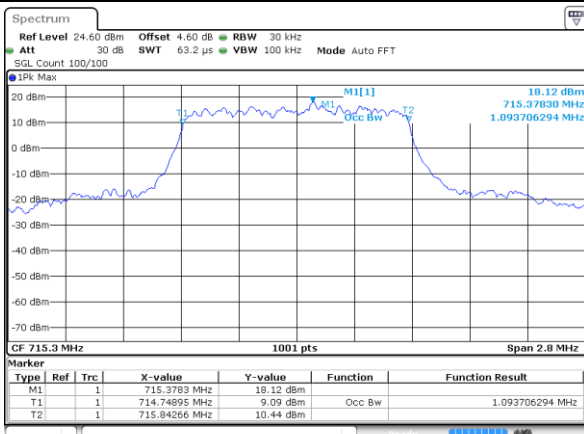
Middle Channel / 1.4MHz / QPSK



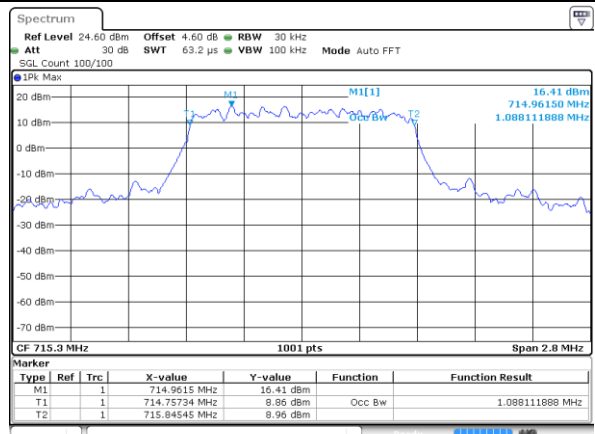
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK



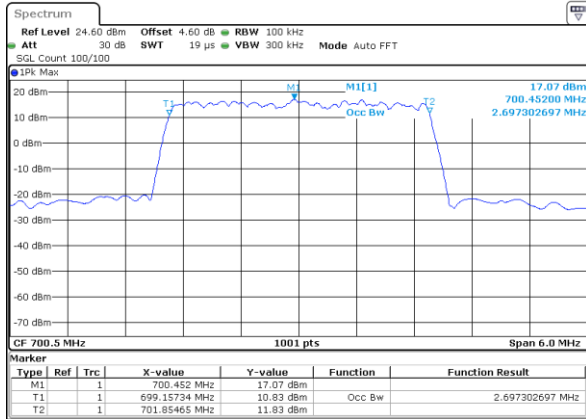
Highest Channel / 1.4MHz / 16QAM



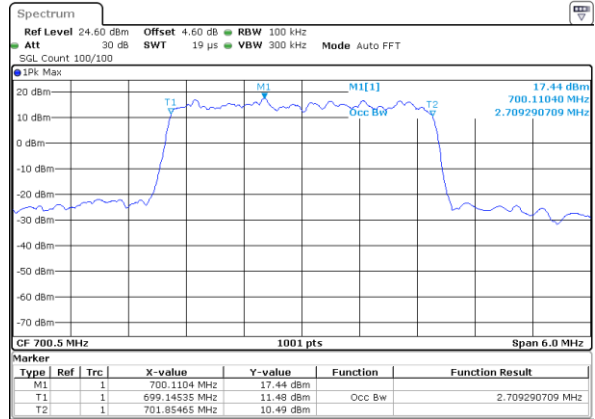


LTE Band 12

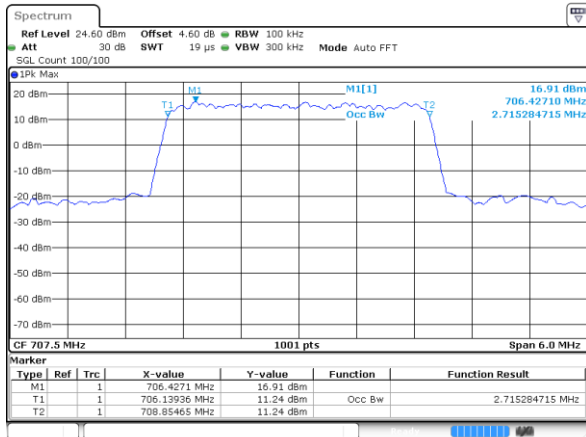
Lowest Channel / 3MHz / QPSK



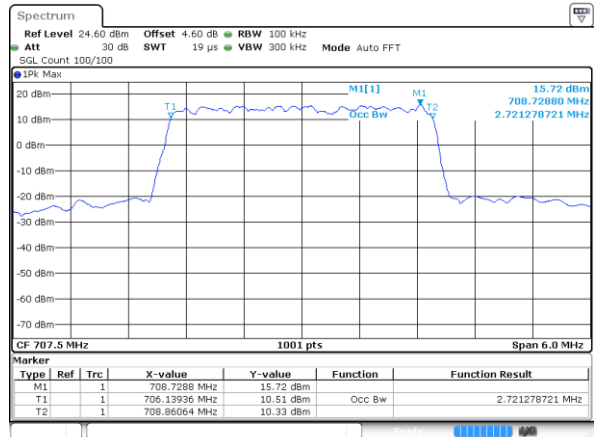
Lowest Channel / 3MHz / 16QAM



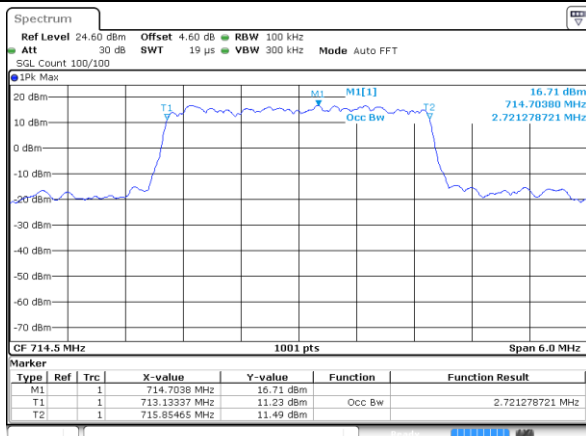
Middle Channel / 3MHz / QPSK



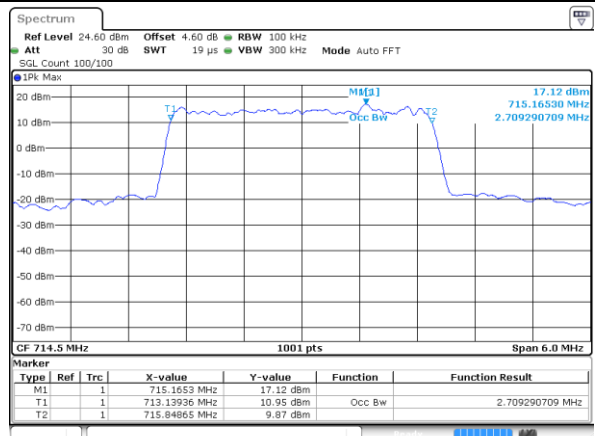
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



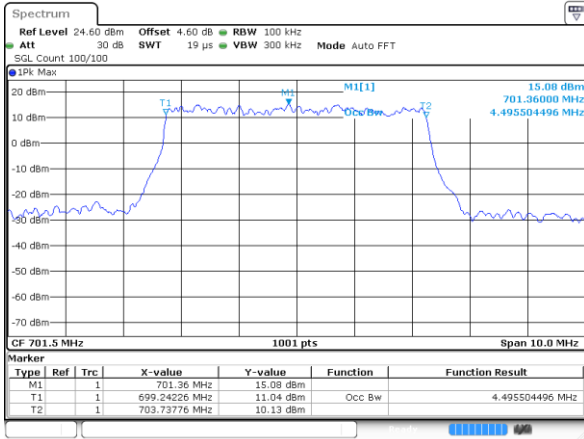
Highest Channel / 3MHz / 16QAM



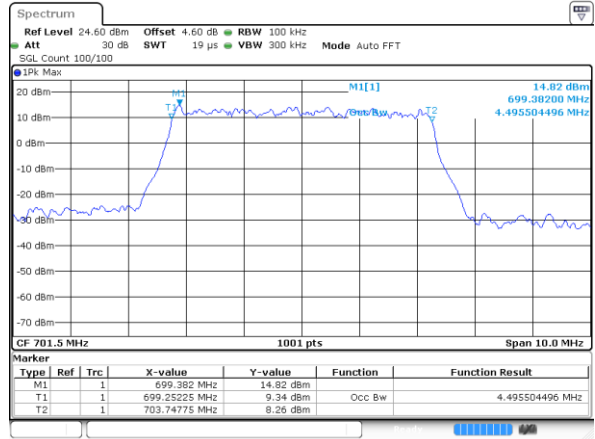


LTE Band 12

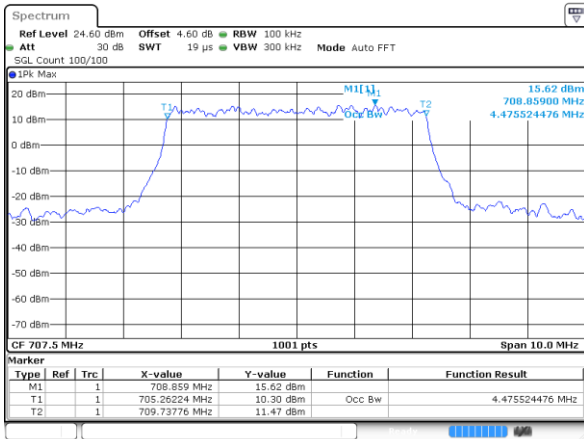
Lowest Channel / 5MHz / QPSK



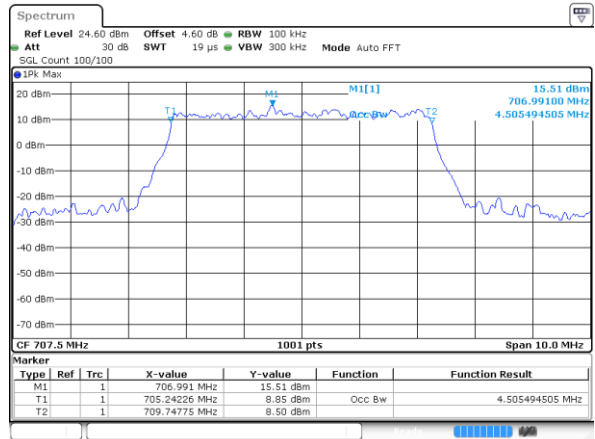
Lowest Channel / 5MHz / 16QAM



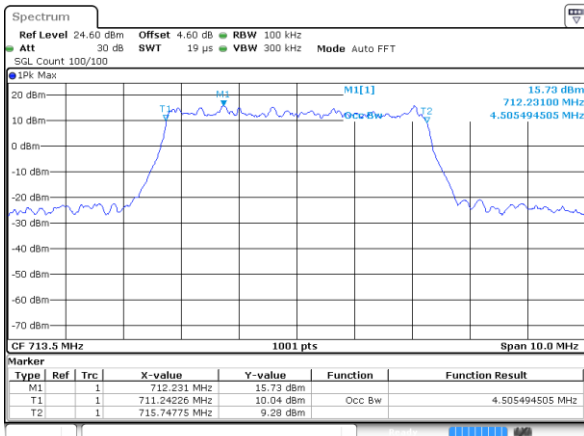
Middle Channel / 5MHz / QPSK



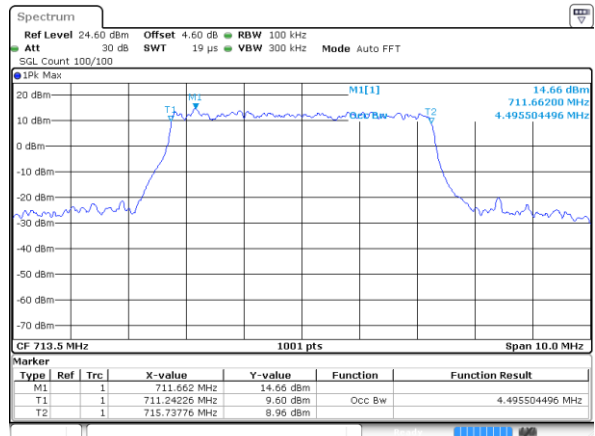
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



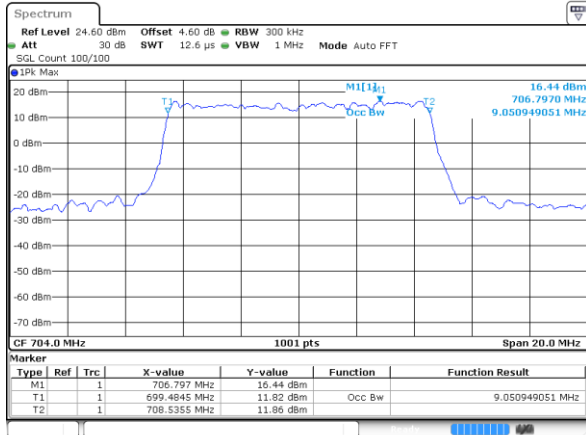
Highest Channel / 5MHz / 16QAM



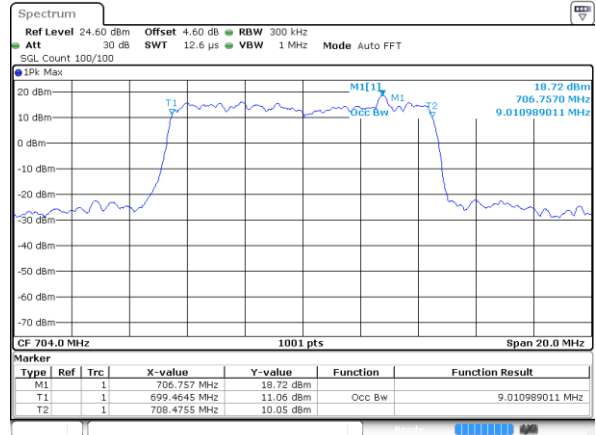


LTE Band 12

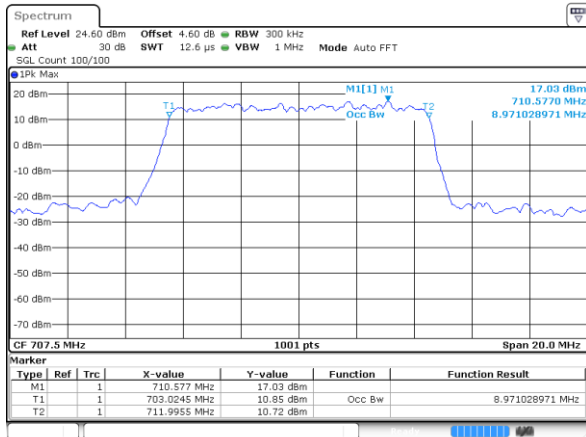
Lowest Channel / 10MHz / QPSK



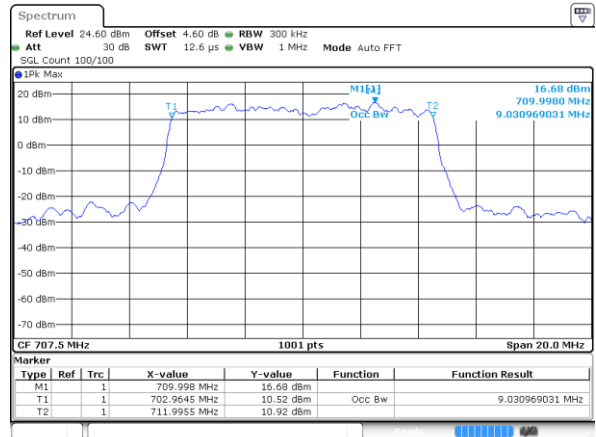
Lowest Channel / 10MHz / 16QAM



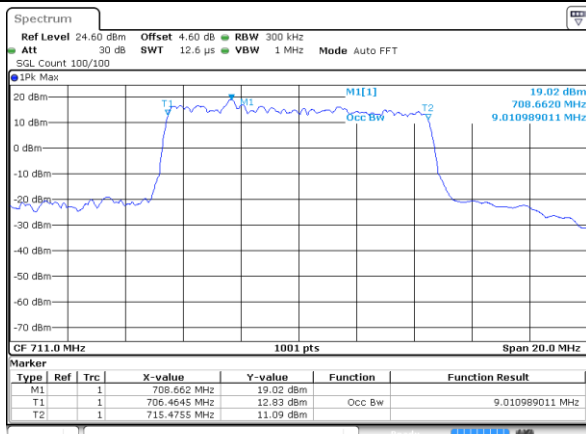
Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

