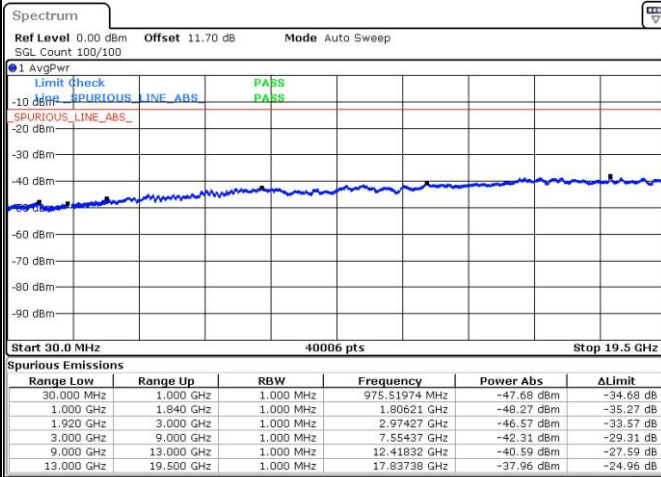




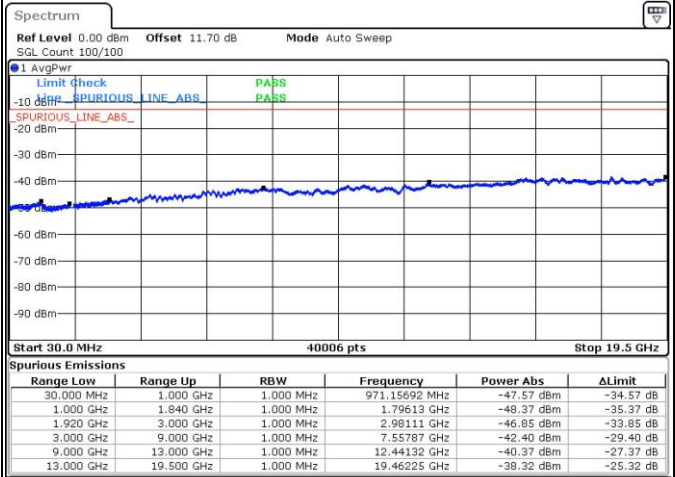
LTE Band 2 / 5MHz

Lowest Channel / QPSK



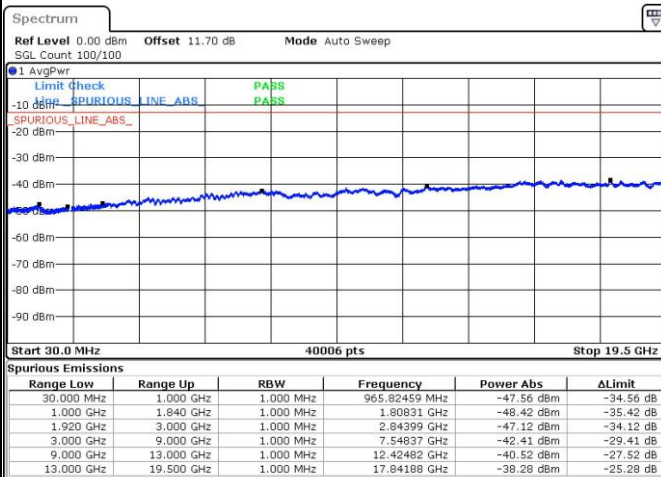
Date: 18 MAY 2019 11:34:38

Highest Channel / QPSK



Date: 18 MAY 2019 11:43:03

Middle Channel / QPSK

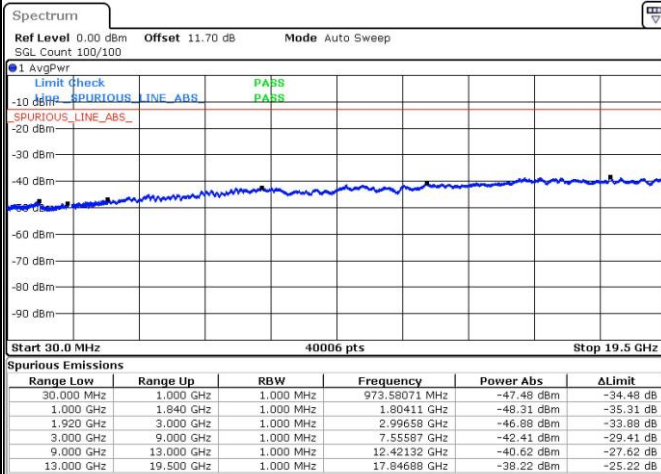


Date: 18 MAY 2019 11:36:47



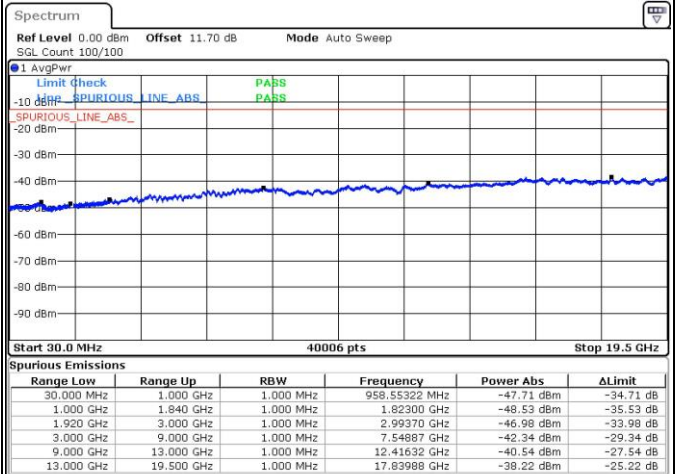
LTE Band 2 / 10MHz

Lowest Channel / QPSK



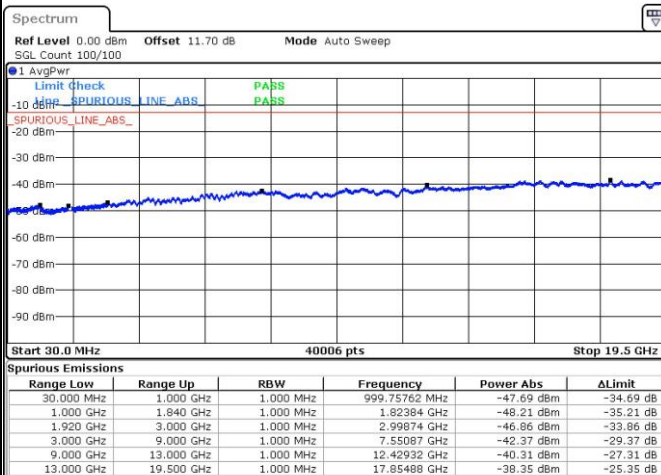
Date: 18 MAY 2019 11:49:21

Highest Channel / QPSK



Date: 18 MAY 2019 11:57:47

Middle Channel / QPSK

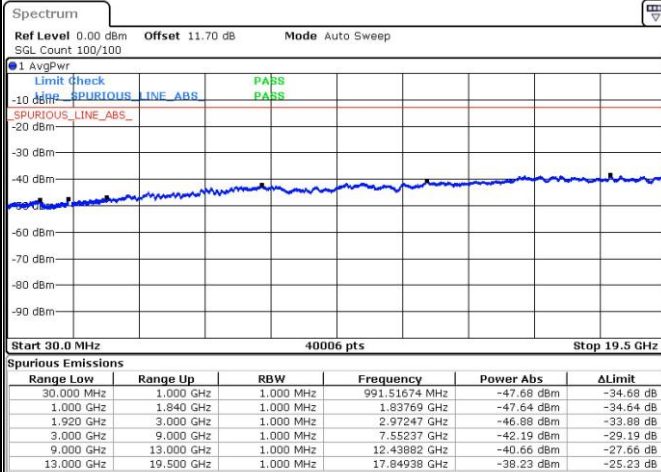


Date: 18 MAY 2019 11:51:31



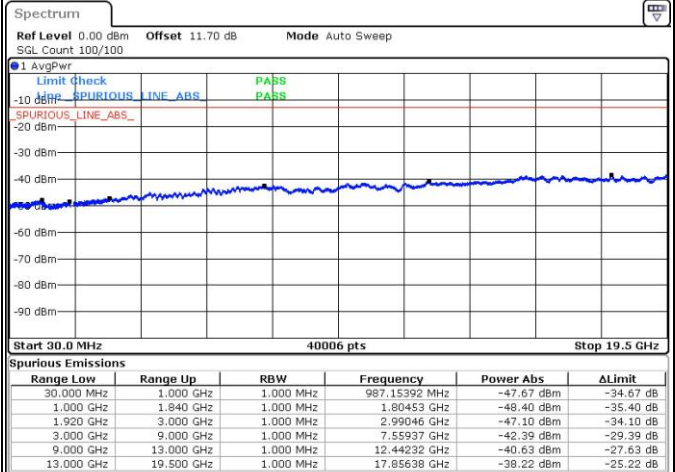
LTE Band 2 / 15MHz

Lowest Channel / QPSK



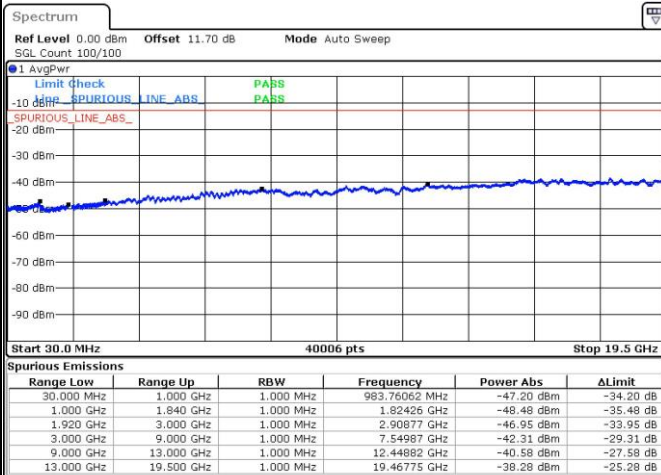
Date: 18 MAY 2019 12:04:06

Highest Channel / QPSK



Date: 18 MAY 2019 12:12:31

Middle Channel / QPSK

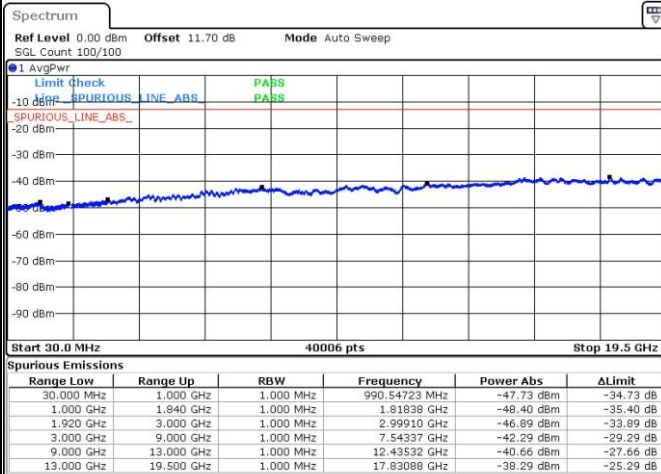


Date: 18 MAY 2019 12:06:16



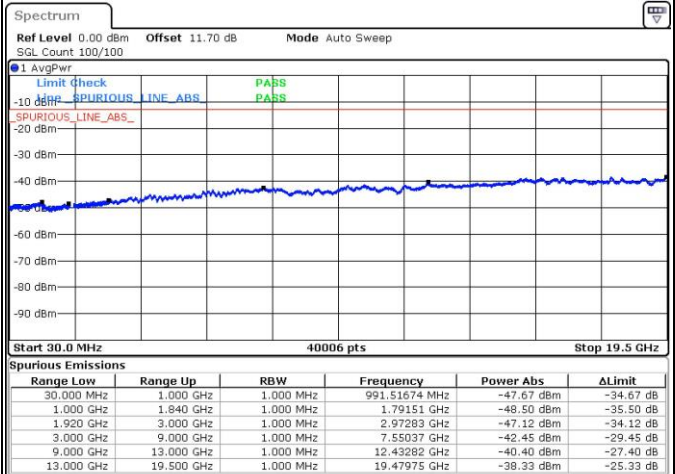
LTE Band 2 / 20MHz

Lowest Channel / QPSK



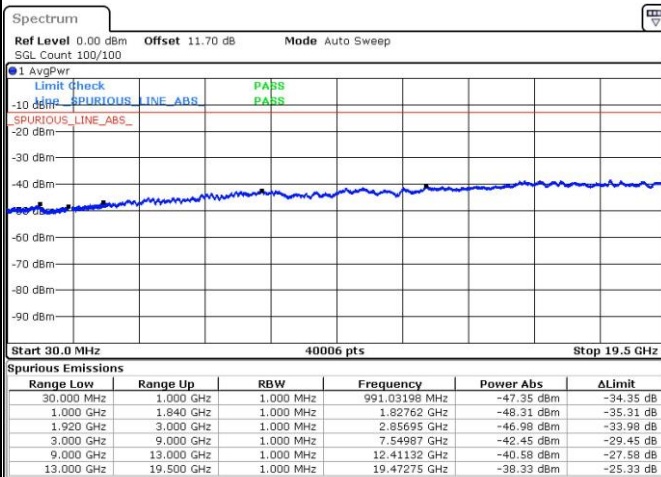
Date: 18 MAY 2019 12:18:50

Highest Channel / QPSK



Date: 18 MAY 2019 13:11:36

Middle Channel / QPSK



Date: 18 MAY 2019 13:05:19

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	0.0009	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0019	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0012	

Note:

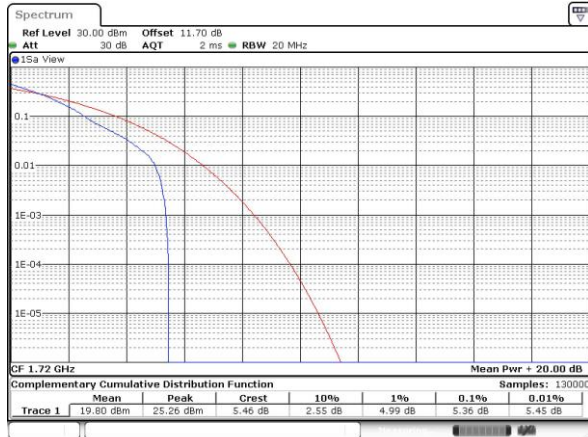
1. Normal Voltage =14.0 V. ; Battery End Point (BEP) =14.0 V. ; Maximum Voltage =16.0 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



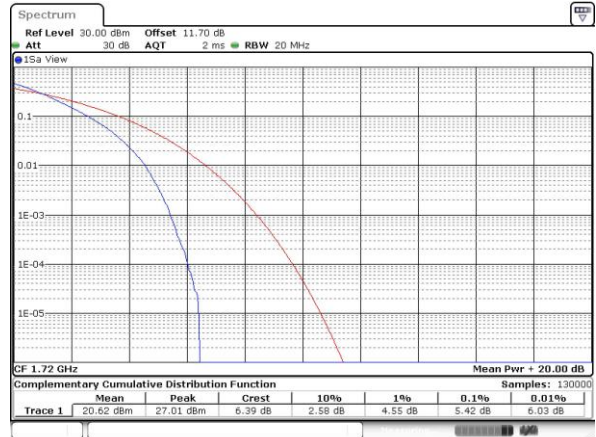
LTE Band 4

Peak-to-Average Ratio

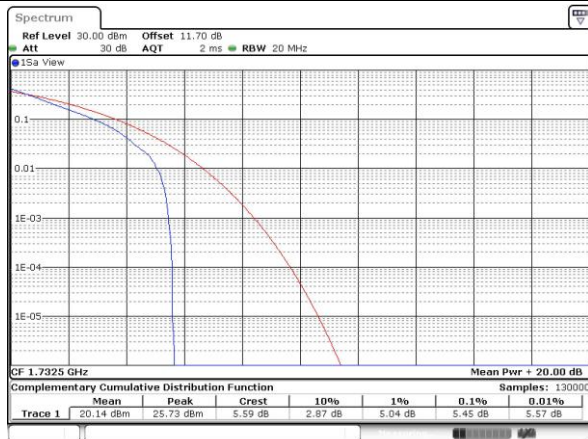
Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.36	5.42	-	-	PASS
Middle CH	5.45	5.42	-	-	
Highest CH	5.54	5.25	-	-	

LTE Band 4 / 20MHz / QPSK
Lowest Channel / 1RB


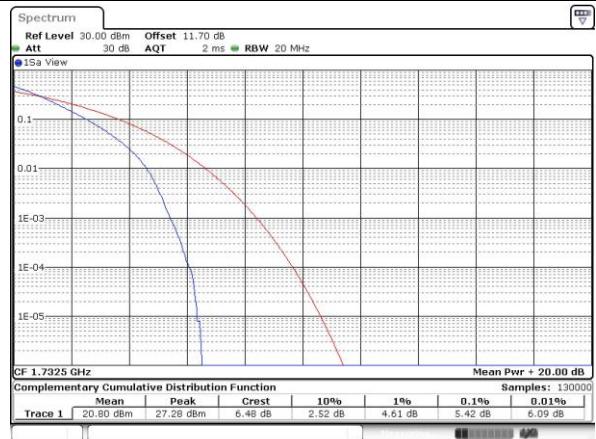
Date: 18 MAY 2019 14:47:53

Lowest Channel / Full RB


Date: 18 MAY 2019 14:48:07

Middle Channel / 1RB


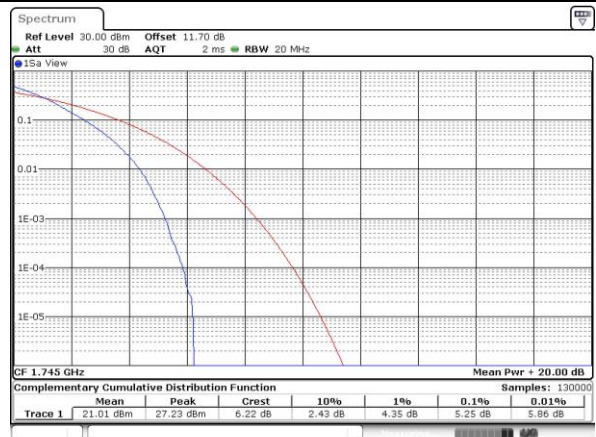
Date: 18 MAY 2019 14:48:19

Middle Channel / Full RB


Date: 18 MAY 2019 14:48:30

Highest Channel / 1RB


Date: 18 MAY 2019 14:48:42

Highest Channel / Full RB


Date: 18 MAY 2019 14:48:54



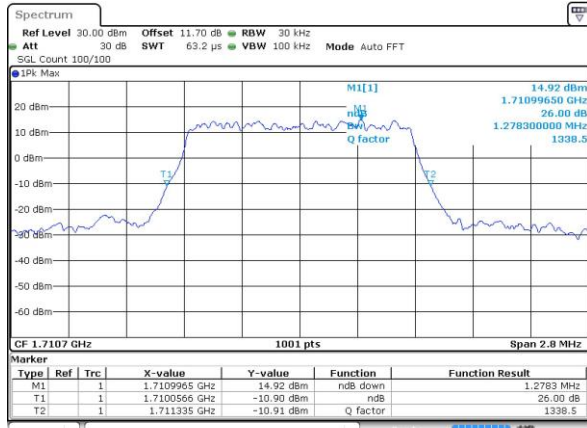
26dB Bandwidth

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	1.28	-	2.98	-	4.93	-	9.65	-	14.30	-	18.82	-
Middle CH	1.28	-	2.94	-	5.03	-	9.69	-	14.30	-	18.78	-
Highest CH	1.28	-	3.01	-	4.84	-	9.71	-	14.42	-	18.86	-



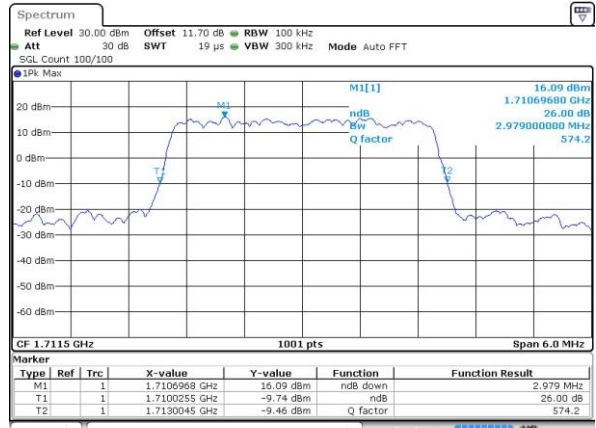
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



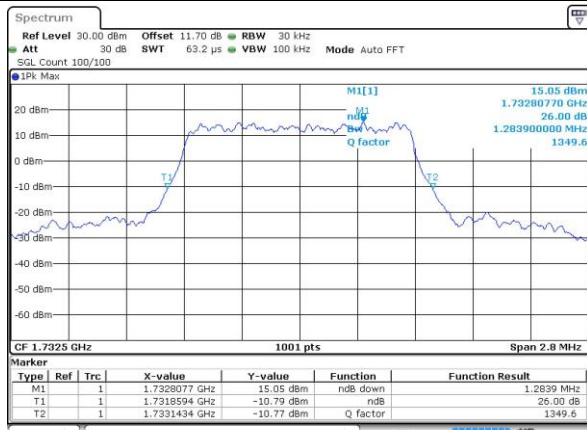
Date: 18 MAY 2019 14:31:51

Lowest Channel / 3MHz / QPSK



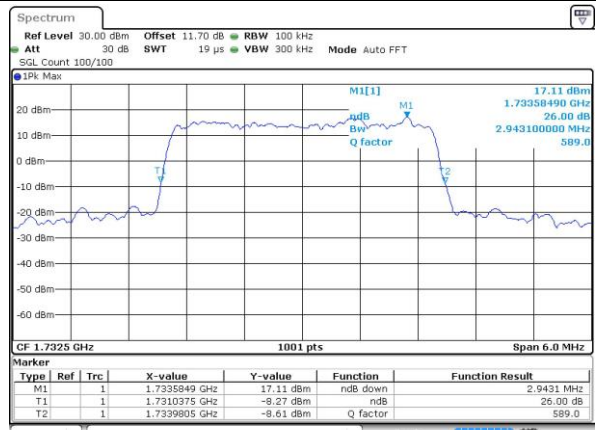
Date: 18 MAY 2019 13:18:06

Middle Channel / 1.4MHz / QPSK



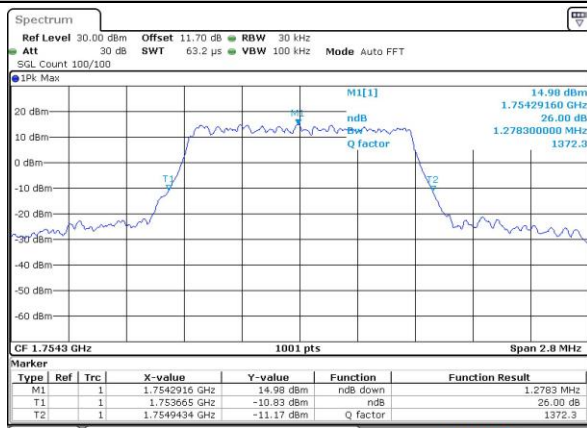
Date: 18 MAY 2019 14:38:19

Middle Channel / 3MHz / QPSK



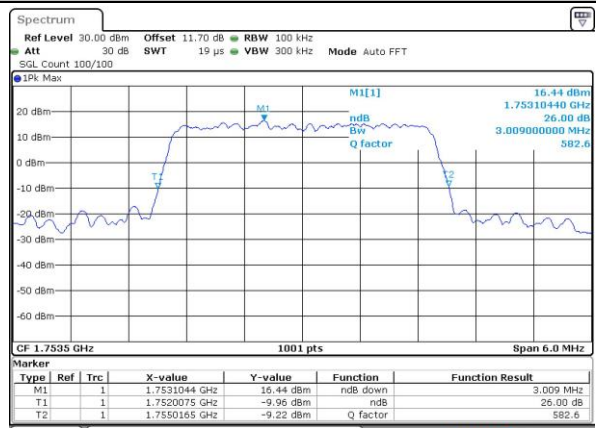
Date: 18 MAY 2019 13:24:21

Highest Channel / 1.4MHz / QPSK



Date: 18 MAY 2019 14:40:30

Highest Channel / 3MHz / QPSK

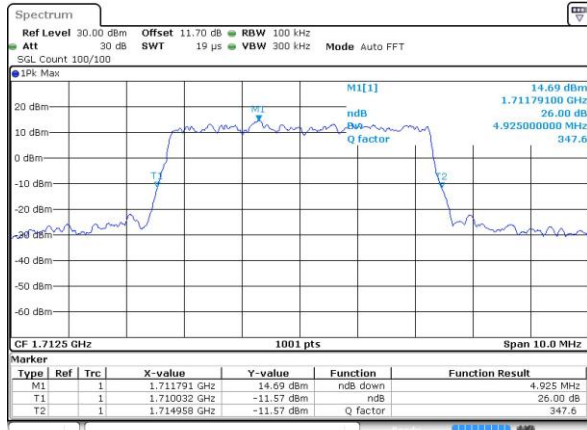


Date: 18 MAY 2019 13:26:31

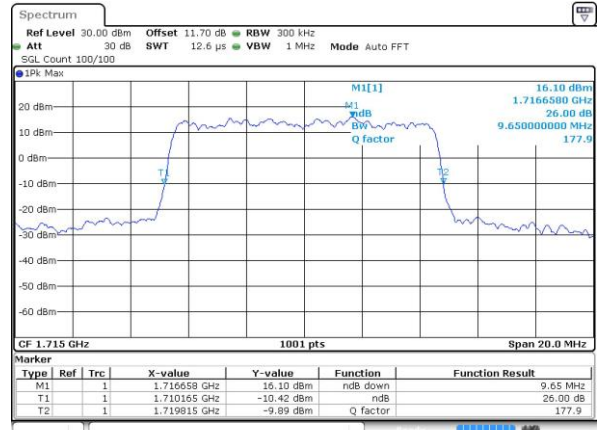


LTE Band 4

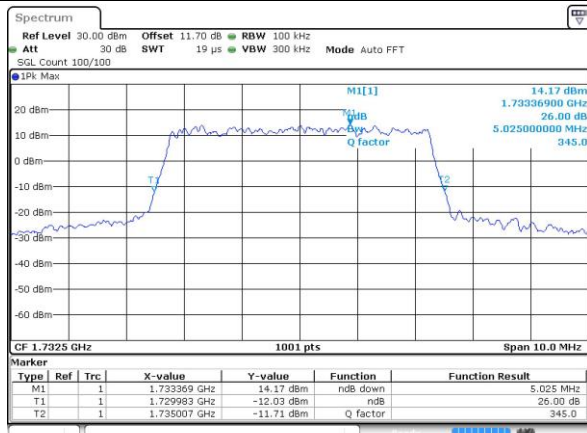
Lowest Channel / 5MHz / QPSK



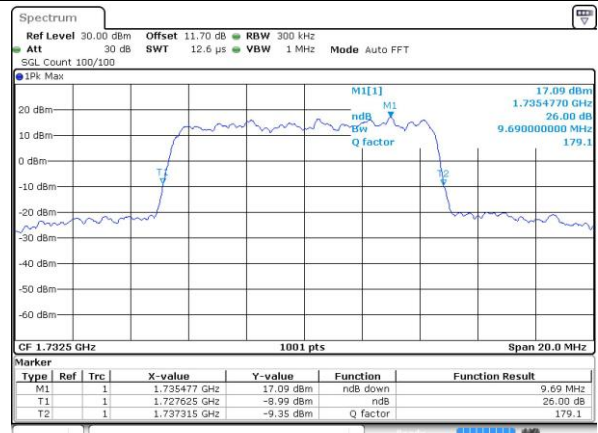
Lowest Channel / 10MHz / QPSK



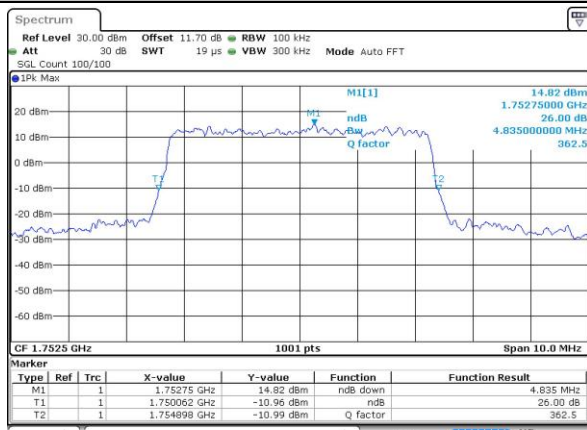
Middle Channel / 5MHz / QPSK



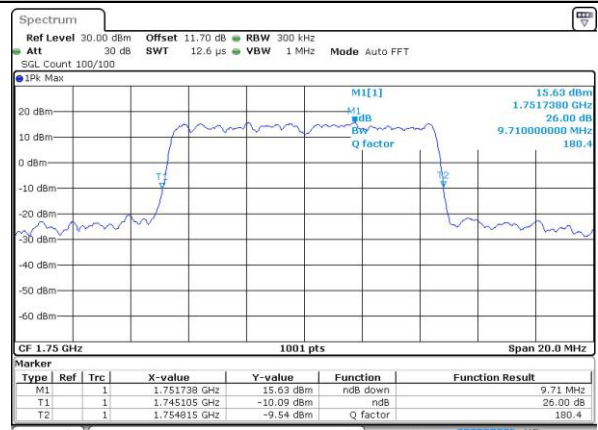
Middle Channel / 10MHz / QPSK



Highest Channel / 5MHz / QPSK



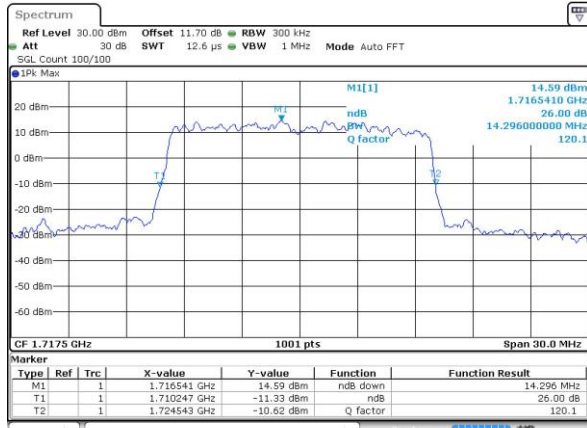
Highest Channel / 10MHz / QPSK



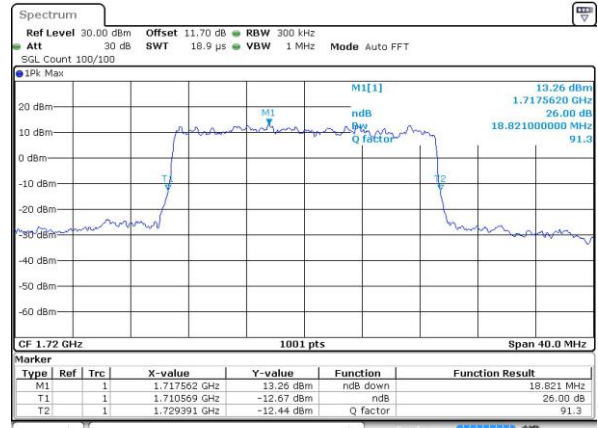


LTE Band 4

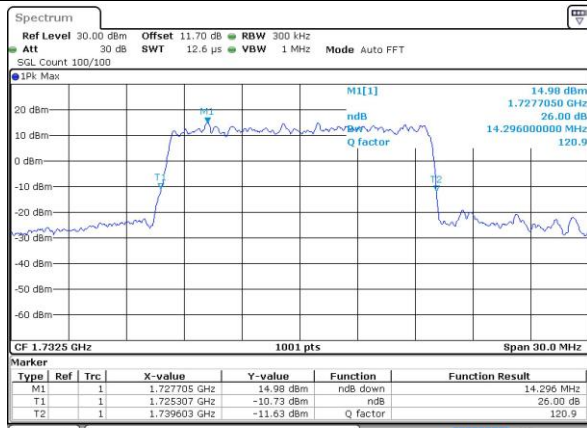
Lowest Channel / 15MHz / QPSK



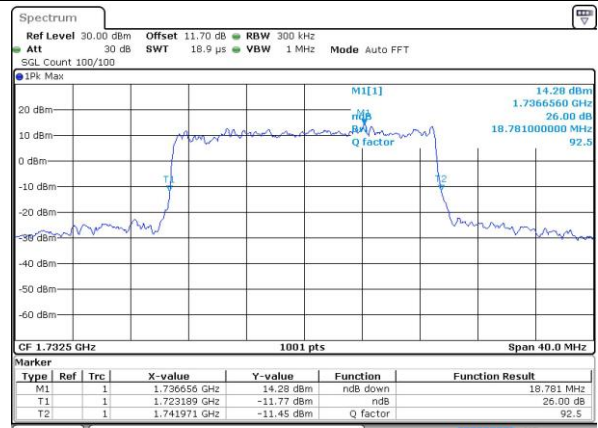
Lowest Channel / 20MHz / QPSK



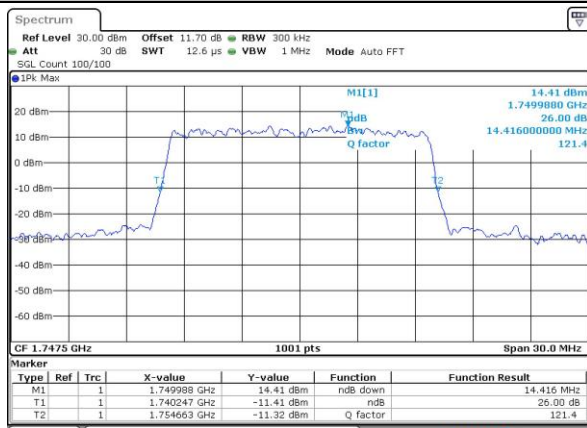
Middle Channel / 15MHz / QPSK



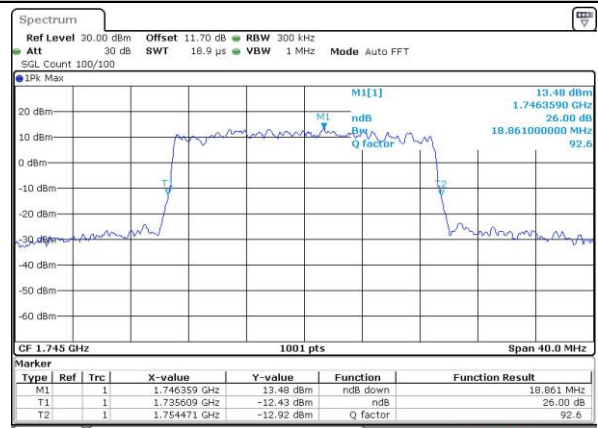
Middle Channel / 20MHz / QPSK



Highest Channel / 15MHz / QPSK



Highest Channel / 20MHz / QPSK





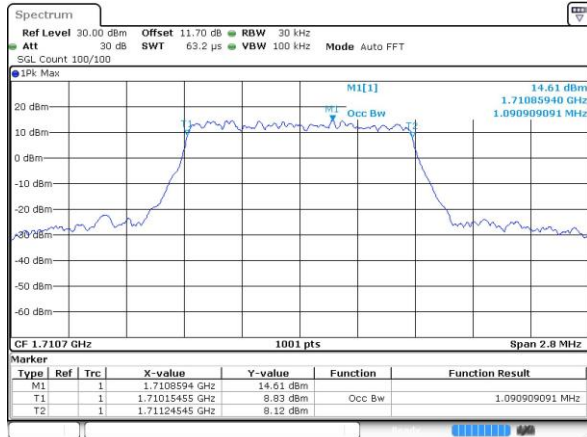
Occupied Bandwidth

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	-	2.73	-	4.48	-	9.07	-	13.4	-	17.86	-
Middle CH	1.09	-	2.73	-	4.5	-	9.05	-	13.46	-	17.86	-
Highest CH	1.11	-	2.72	-	4.49	-	8.97	-	13.43	-	17.86	-

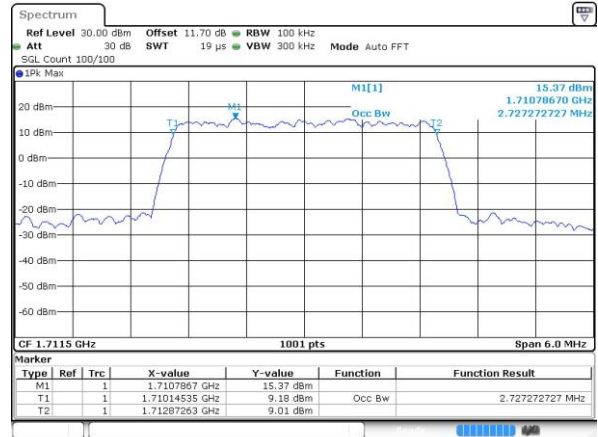


LTE Band 4

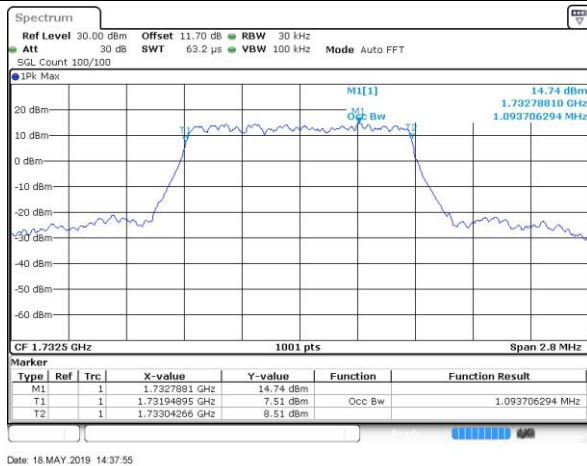
Lowest Channel / 1.4MHz / QPSK



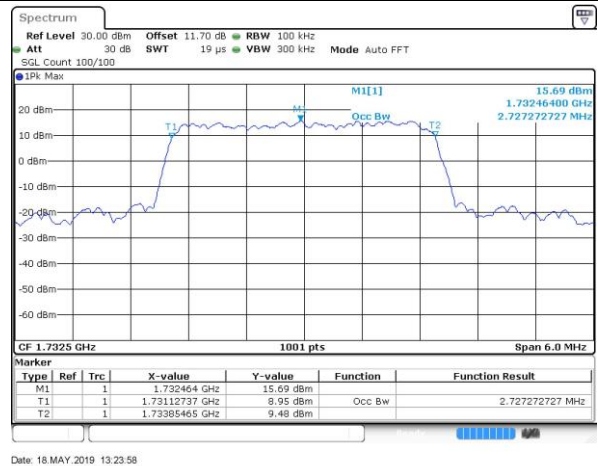
Lowest Channel / 3MHz / QPSK



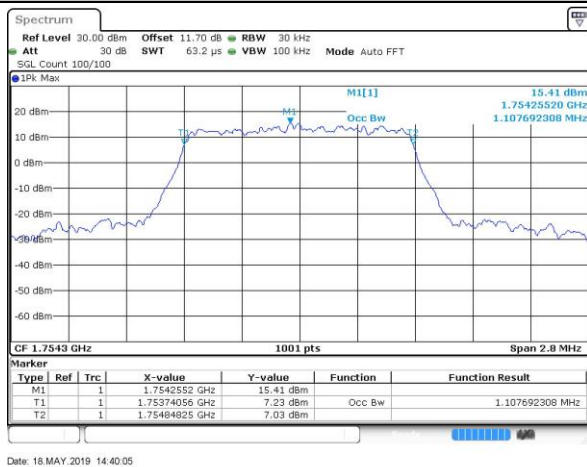
Middle Channel / 1.4MHz / QPSK



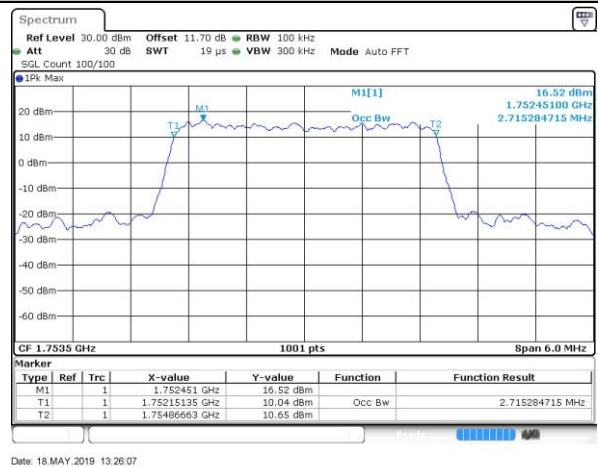
Middle Channel / 3MHz / QPSK



Highest Channel / 1.4MHz / QPSK



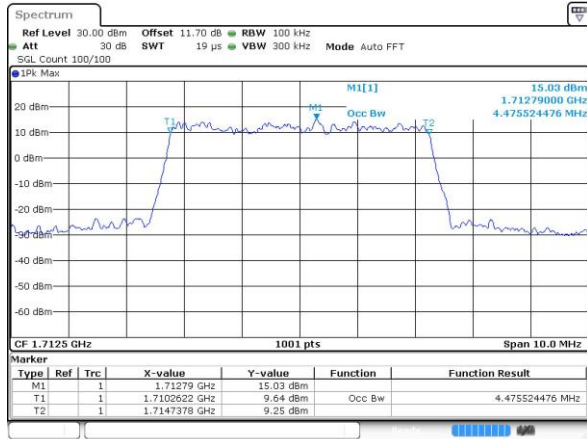
Highest Channel / 3MHz / QPSK



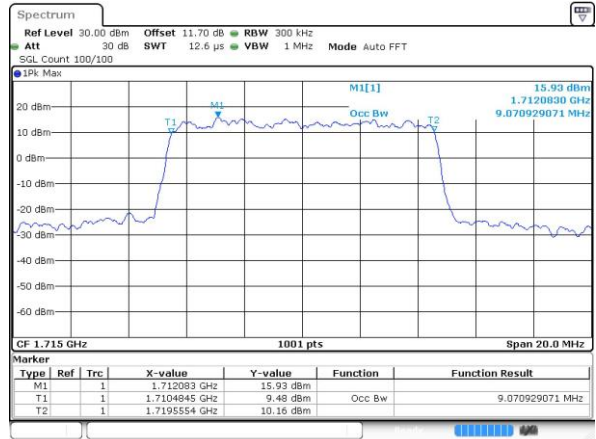


LTE Band 4

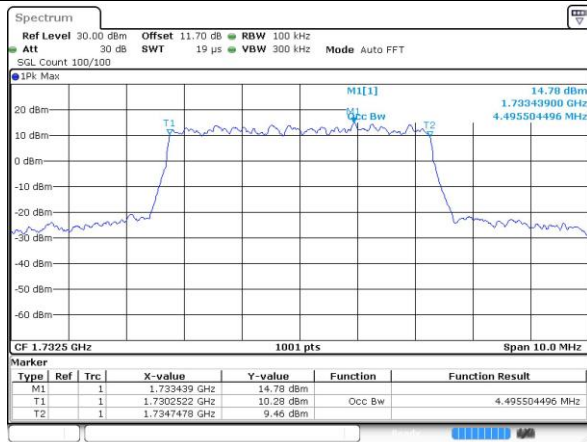
Lowest Channel / 5MHz / QPSK



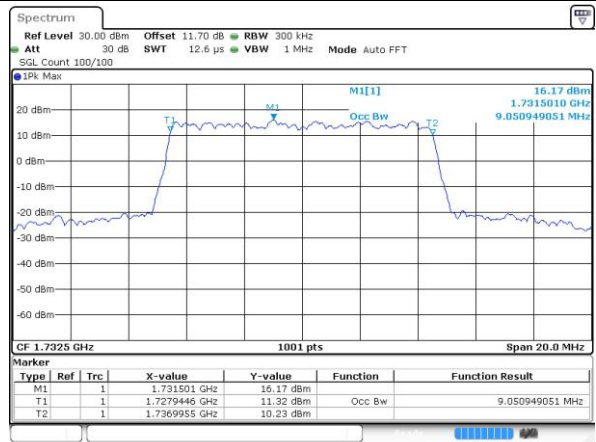
Lowest Channel / 10MHz / QPSK



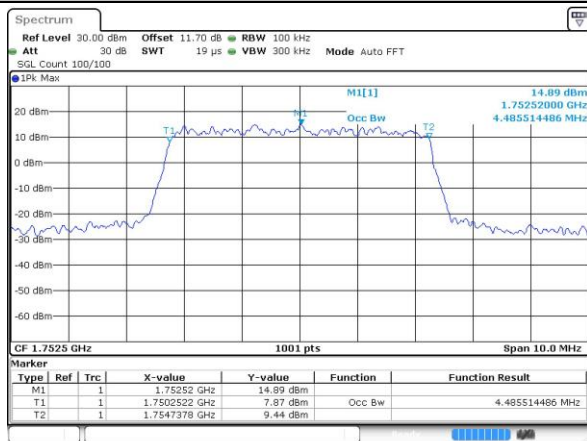
Middle Channel / 5MHz / QPSK



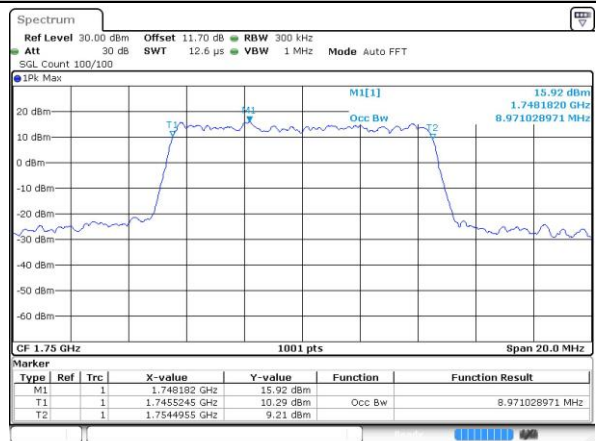
Middle Channel / 10MHz / QPSK



Highest Channel / 5MHz / QPSK



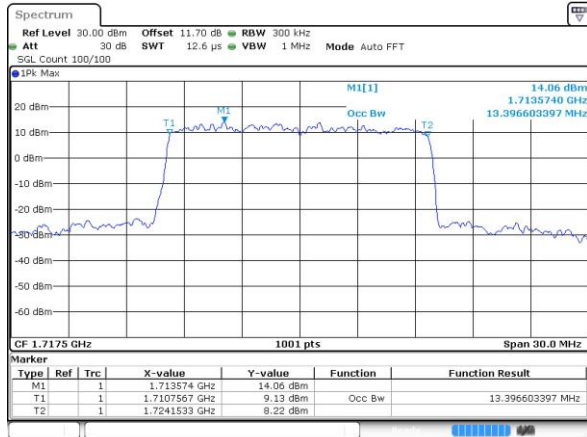
Highest Channel / 10MHz / QPSK



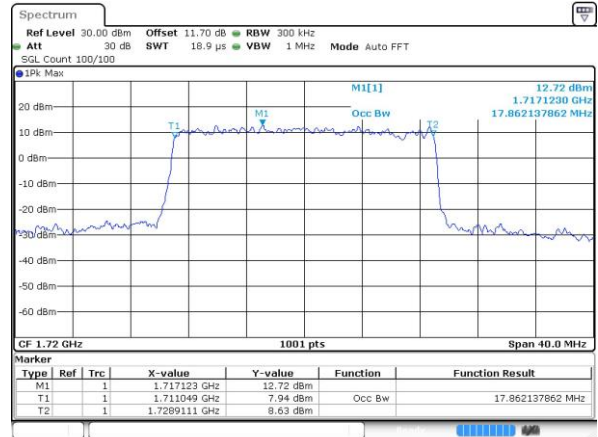


LTE Band 4

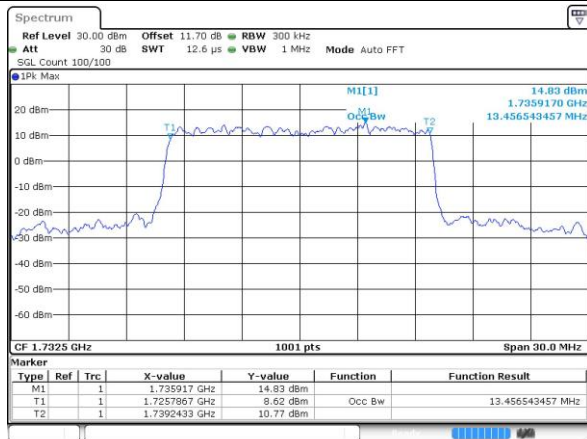
Lowest Channel / 15MHz / QPSK



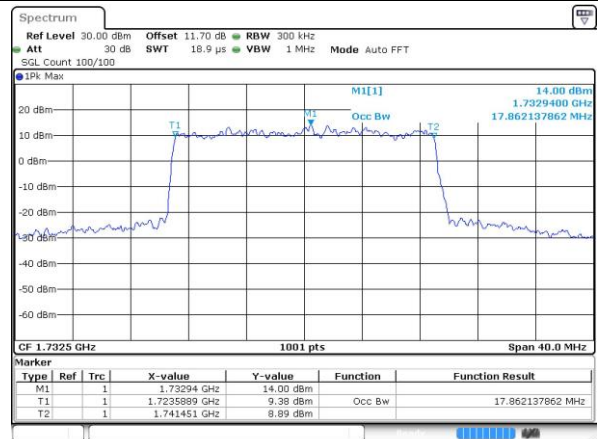
Lowest Channel / 20MHz / QPSK



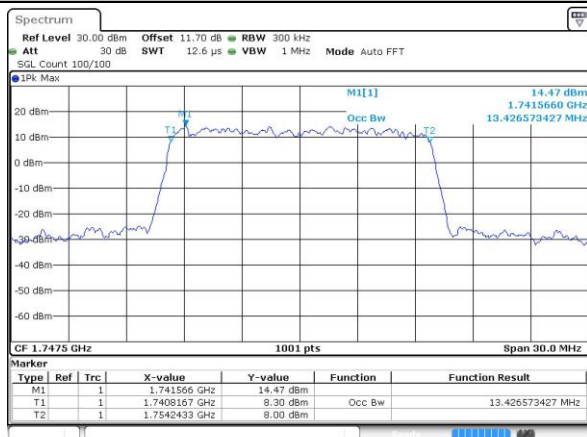
Middle Channel / 15MHz / QPSK



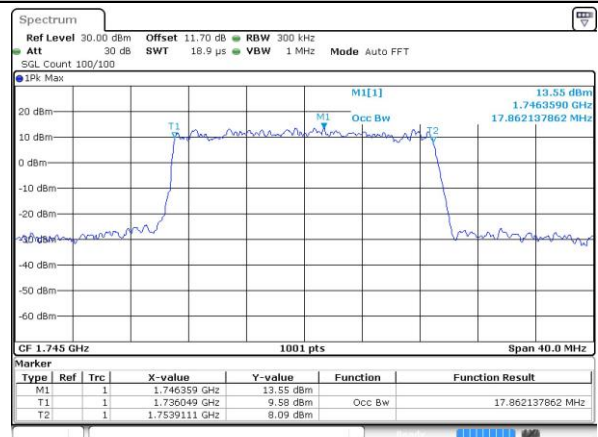
Middle Channel / 20MHz / QPSK

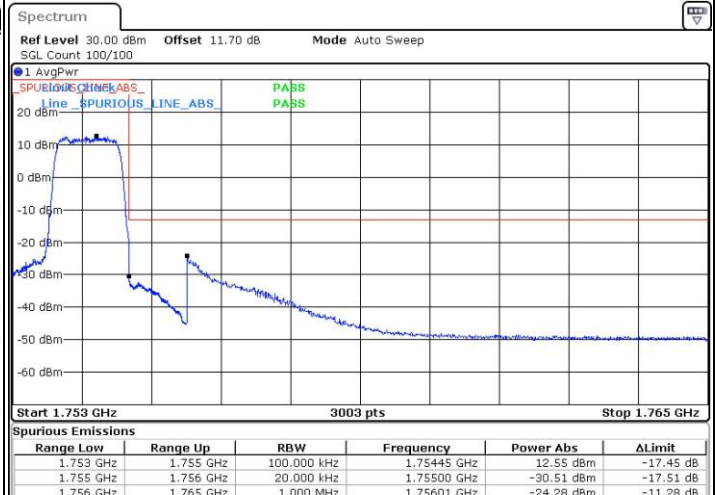


Highest Channel / 15MHz / QPSK



Highest Channel / 20MHz / QPSK

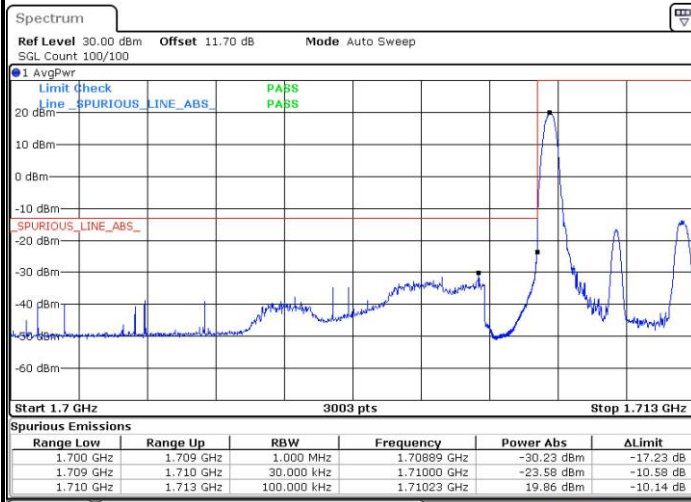


**Conducted Band Edge****LTE Band 4 / 1.4MHz / QPSK****Lowest Band Edge / 1RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

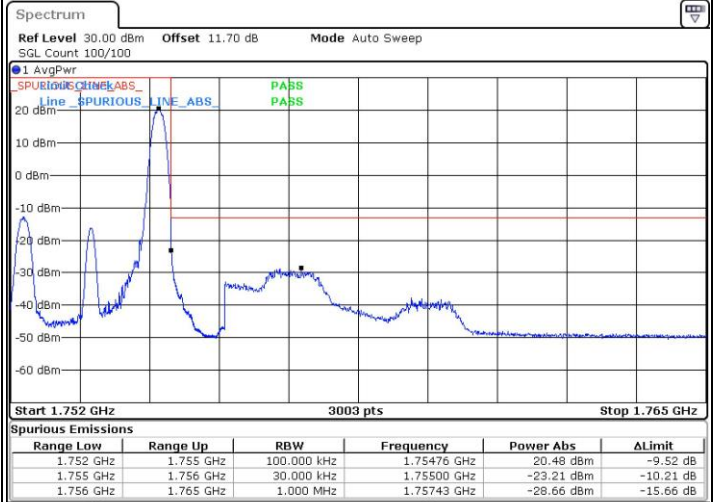


LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



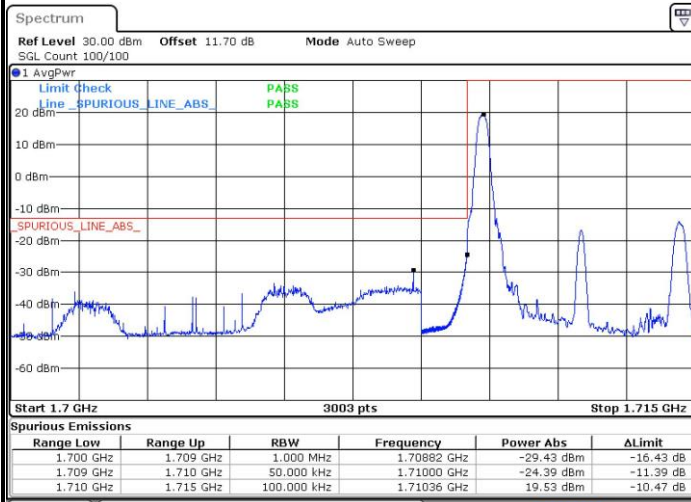
Highest Band Edge / Full RB



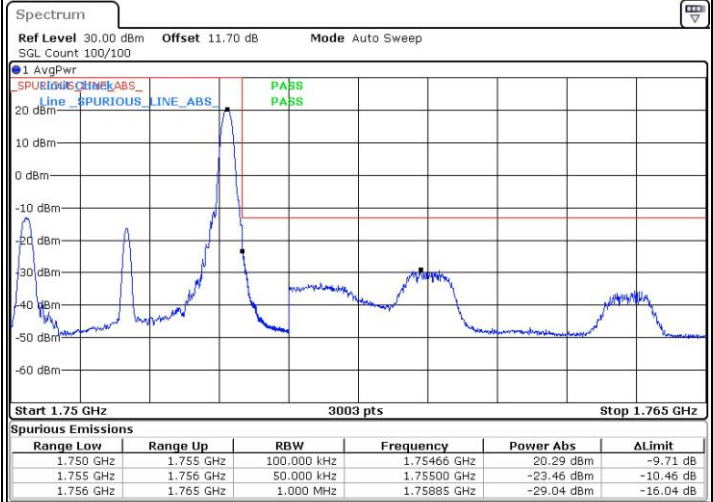


LTE Band 4 / 5MHz / QPSK

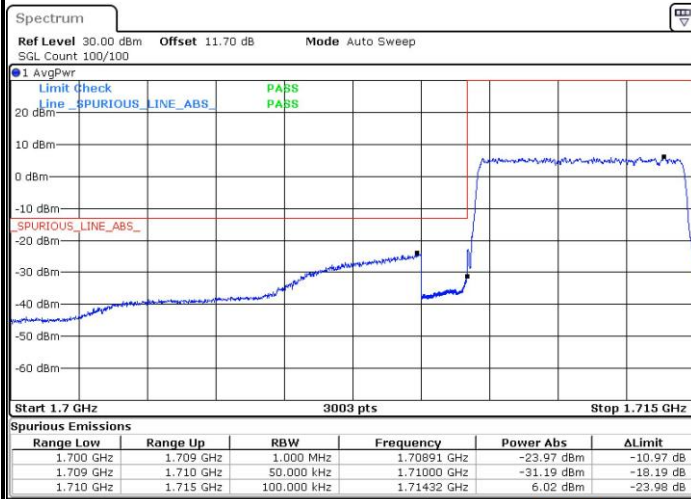
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



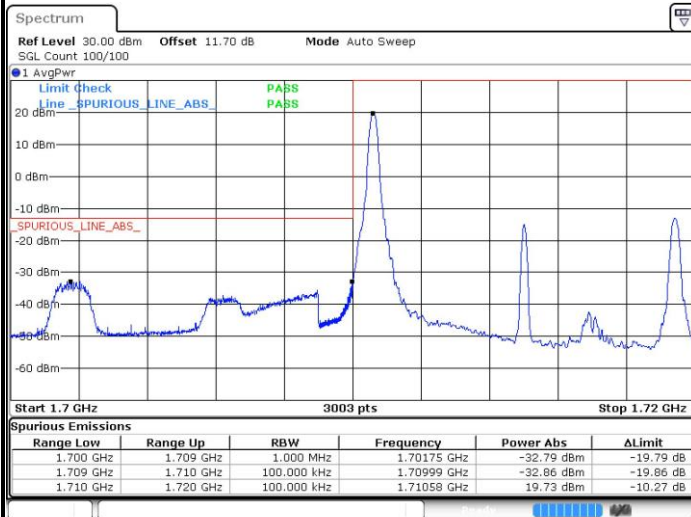
Highest Band Edge / Full RB



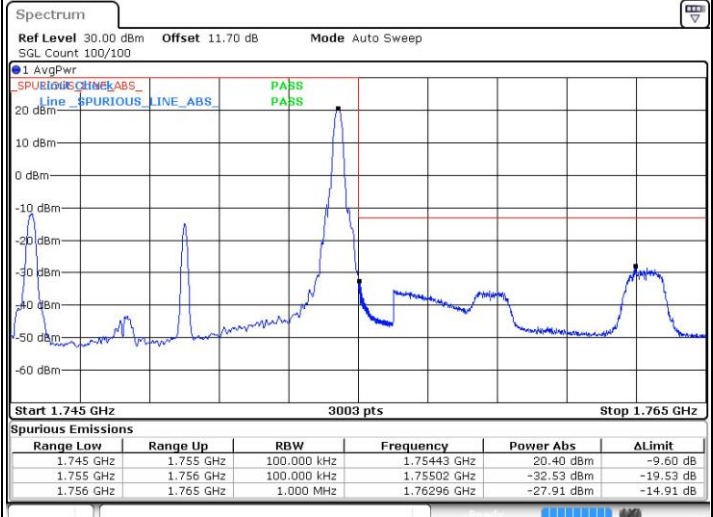


LTE Band 4 / 10MHz / QPSK

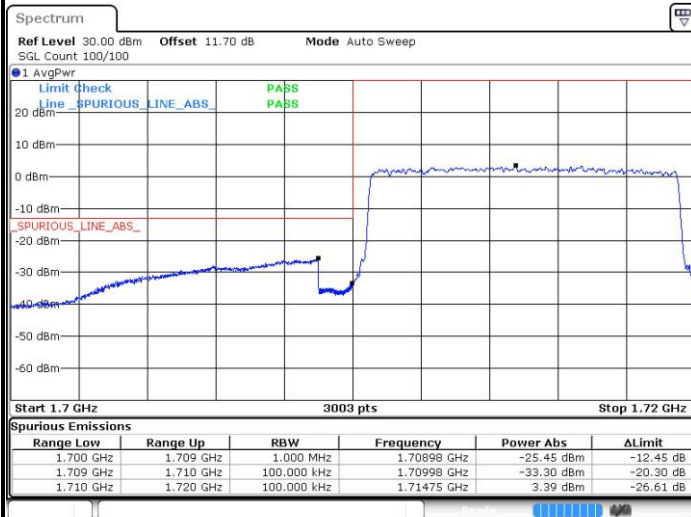
Lowest Band Edge / 1 RB



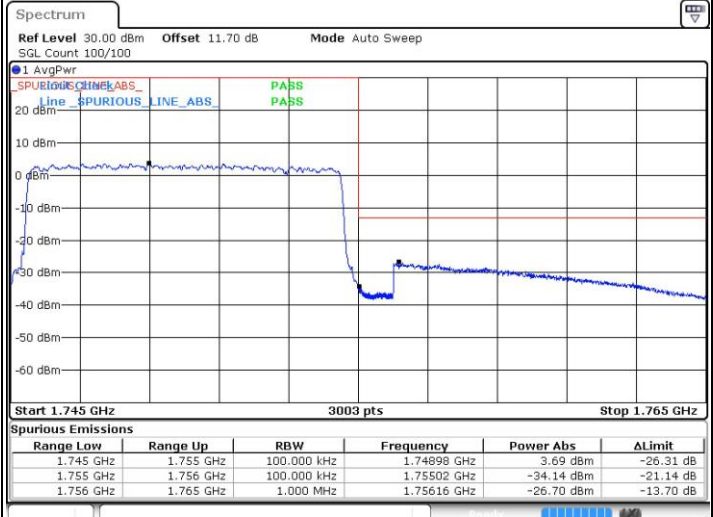
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



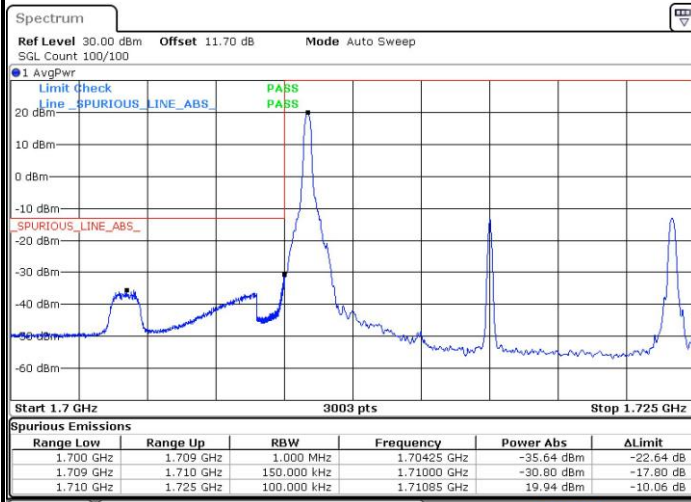
Highest Band Edge / Full RB



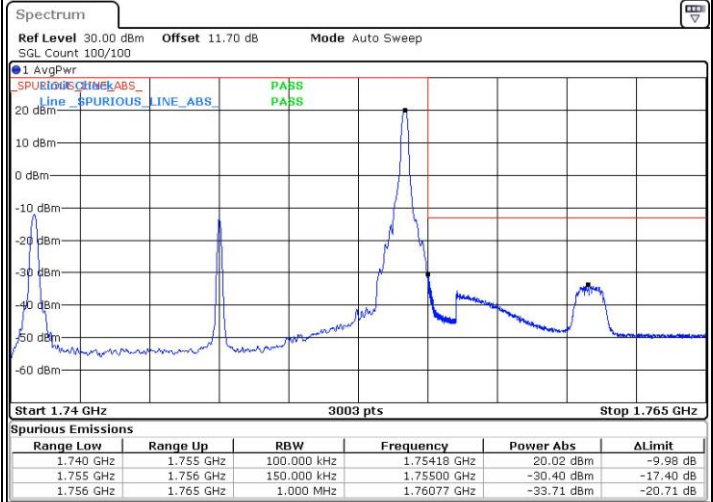


LTE Band 4 / 15MHz / QPSK

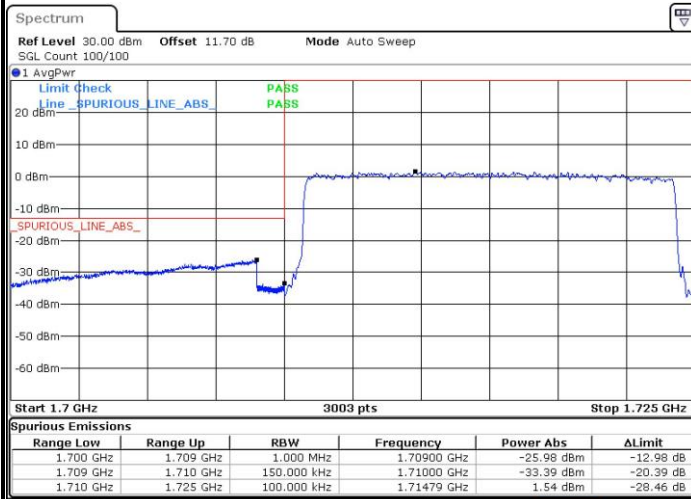
Lowest Band Edge / 1 RB



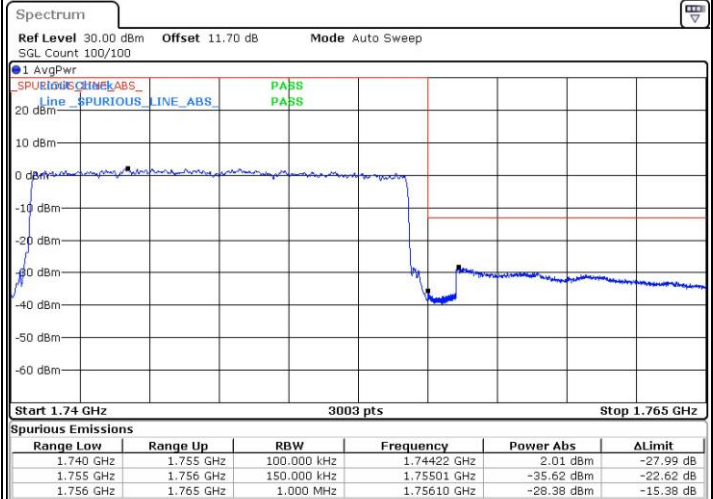
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



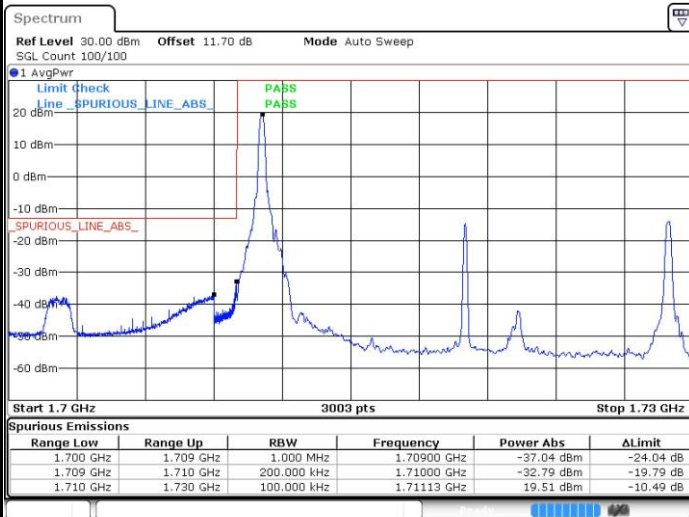
Highest Band Edge / Full RB



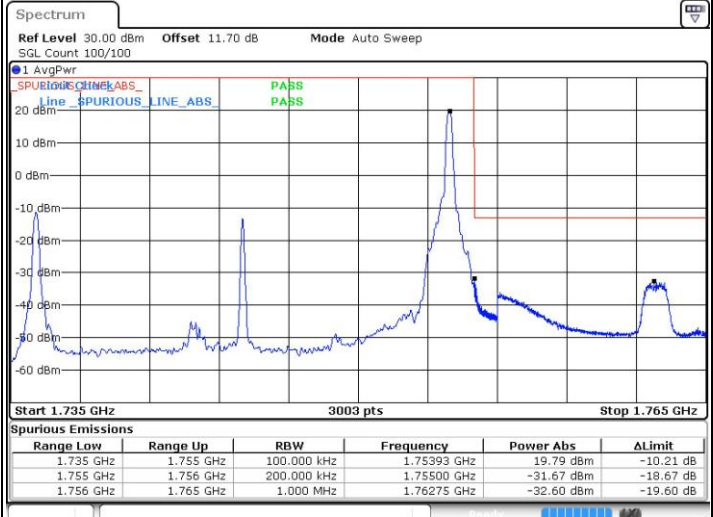


LTE Band 4 / 20MHz / QPSK

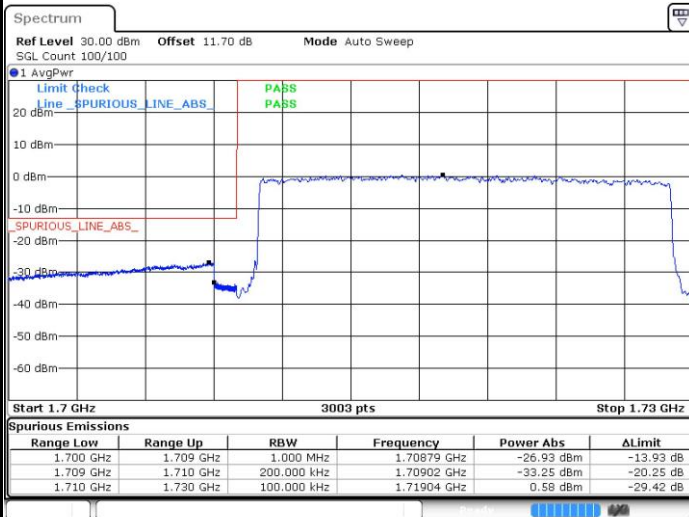
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

