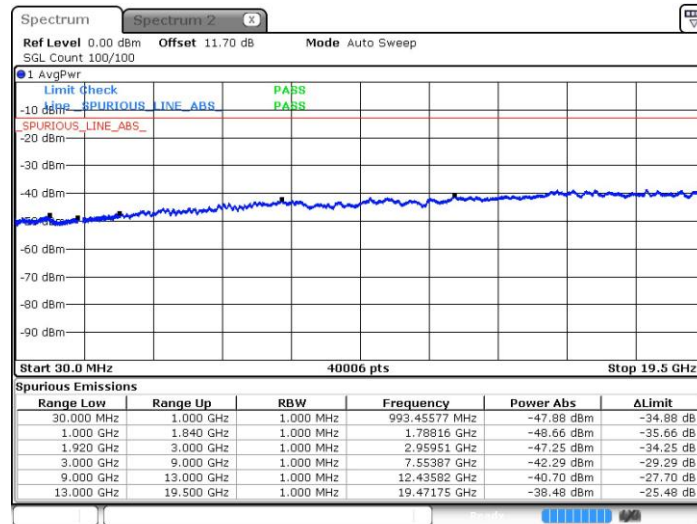




LTE Band 2 / 1.4MHz

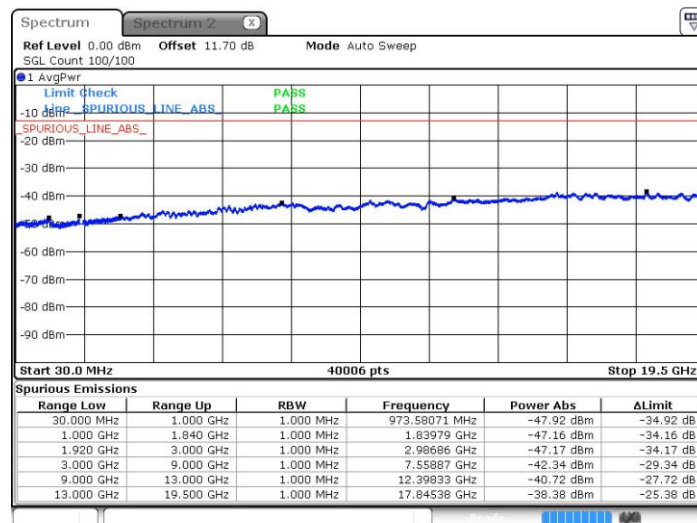
Highest Channel / QPSK



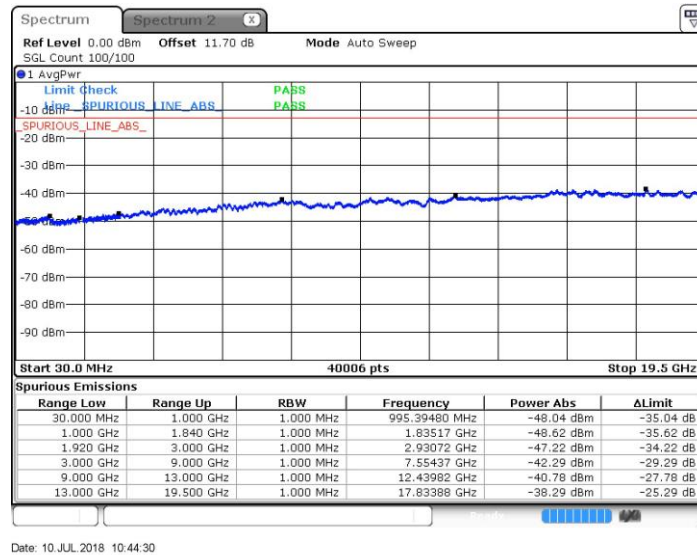
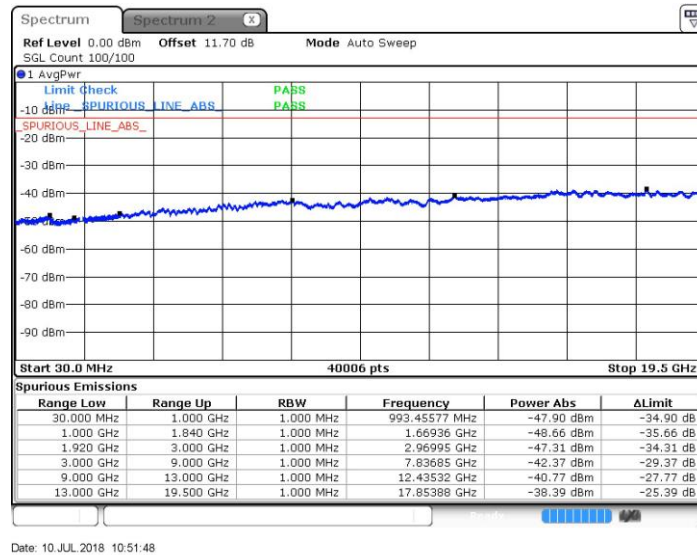
Date: 10 JUL 2018 16:36:51

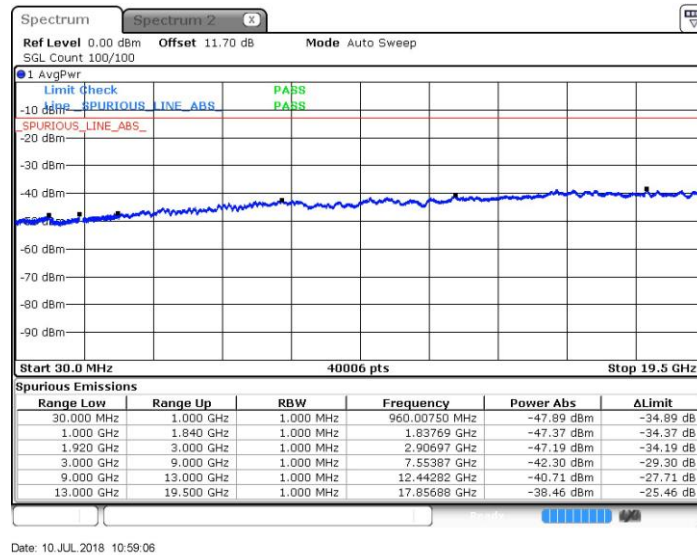
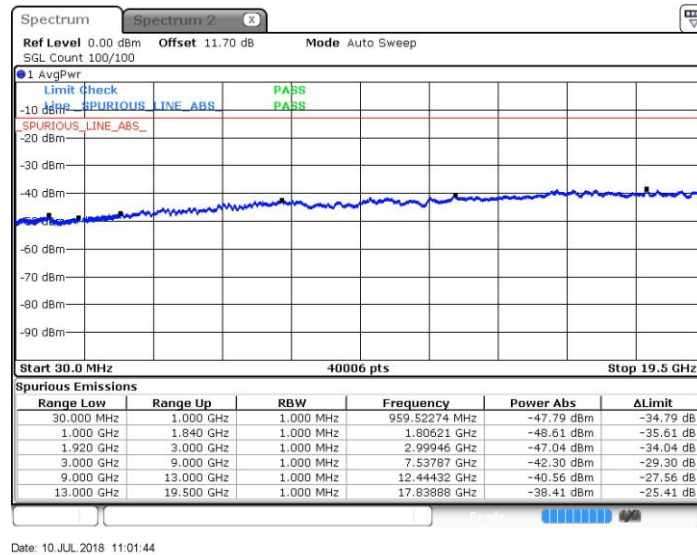
LTE Band 2 / 3MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 10:41:53

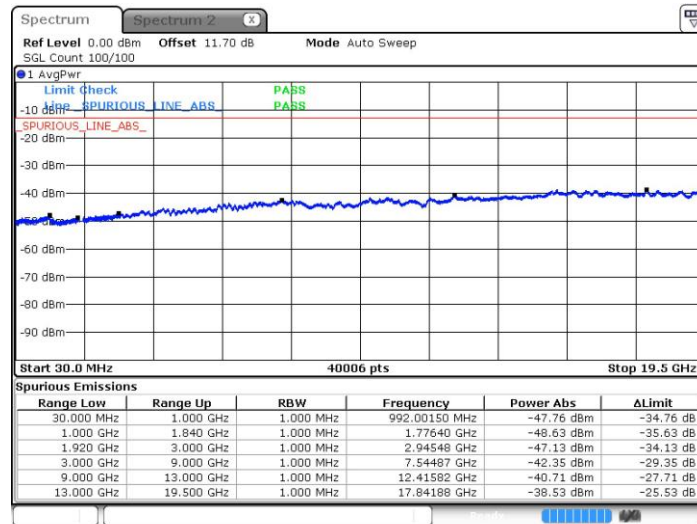
LTE Band 2 / 3MHz
Middle Channel / QPSK

Highest Channel / QPSK


LTE Band 2 / 5MHz
Lowest Channel / QPSK

Middle Channel / QPSK




LTE Band 2 / 5MHz

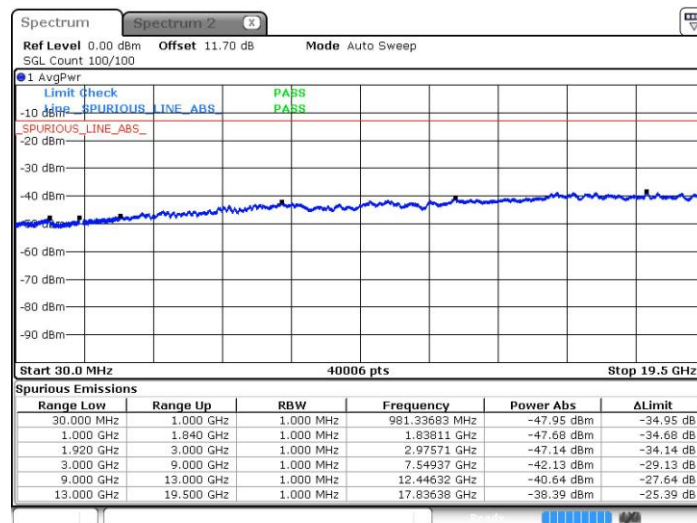
Highest Channel / QPSK



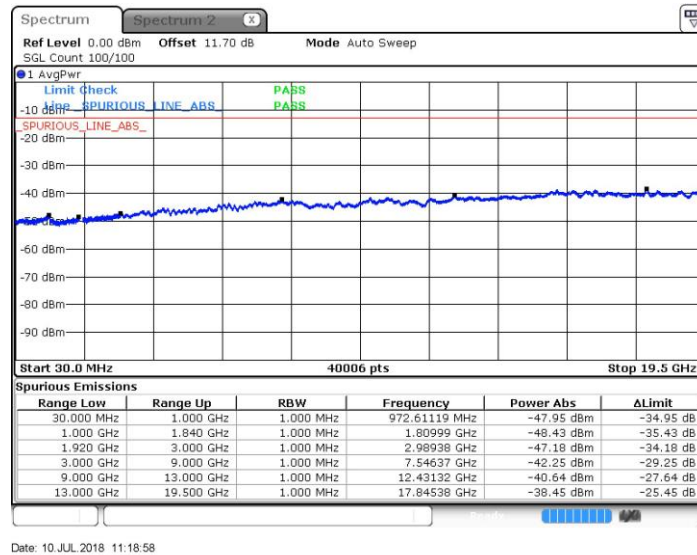
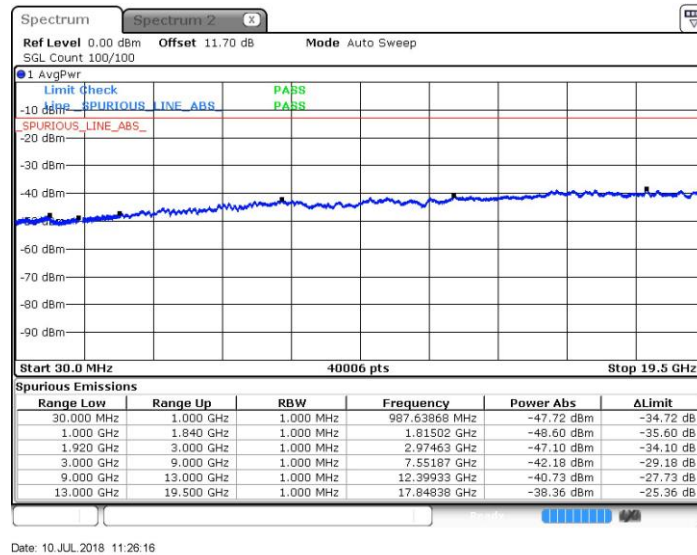
Date: 10 JUL 2018 11:09:02

LTE Band 2 / 10MHz

Lowest Channel / QPSK



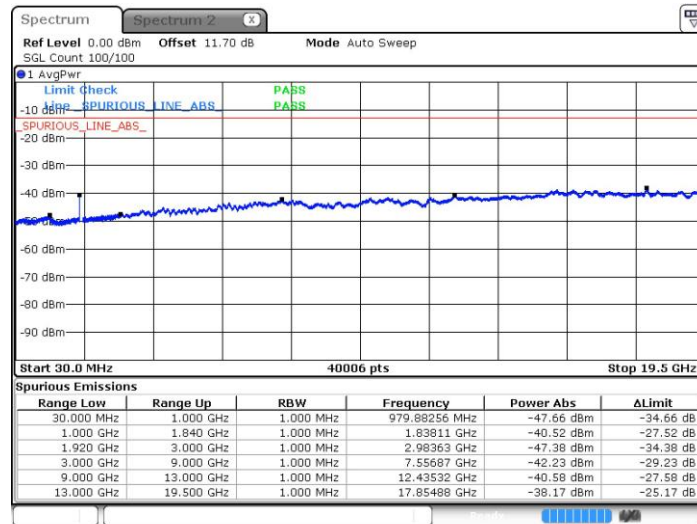
Date: 10 JUL 2018 11:16:20

LTE Band 2 / 10MHz
Middle Channel / QPSK

Highest Channel / QPSK




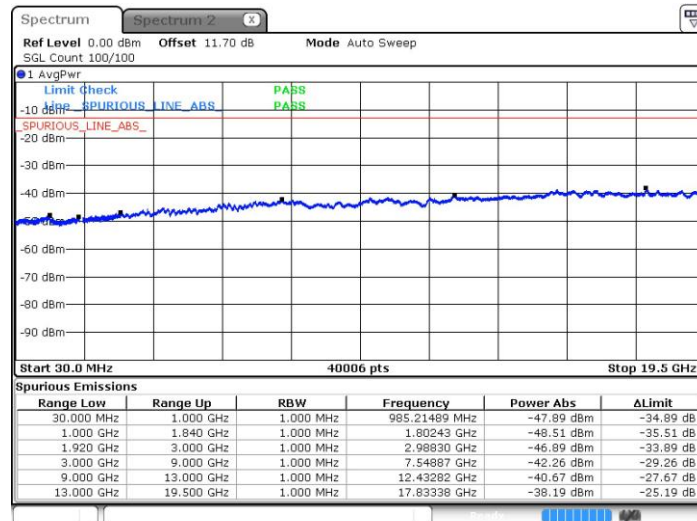
LTE Band 2 / 15MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 11:33:34

Middle Channel / QPSK

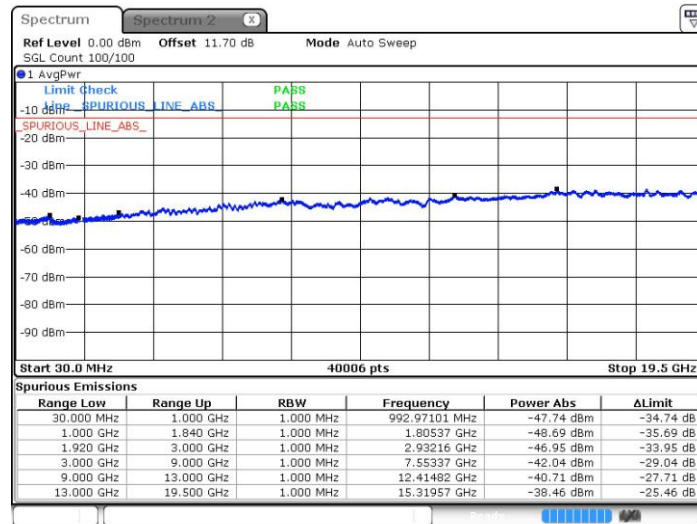


Date: 10 JUL 2018 11:38:12



LTE Band 2 / 15MHz

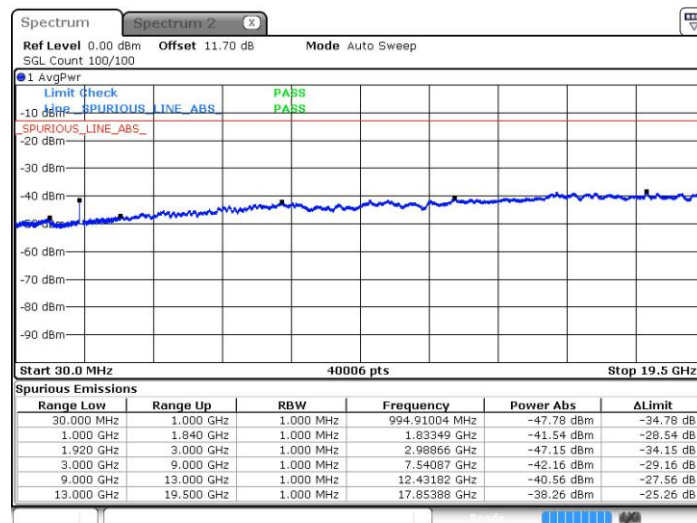
Highest Channel / QPSK



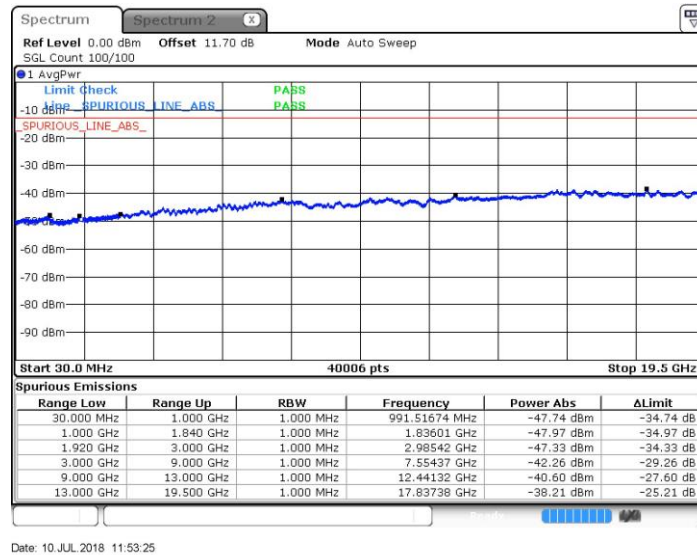
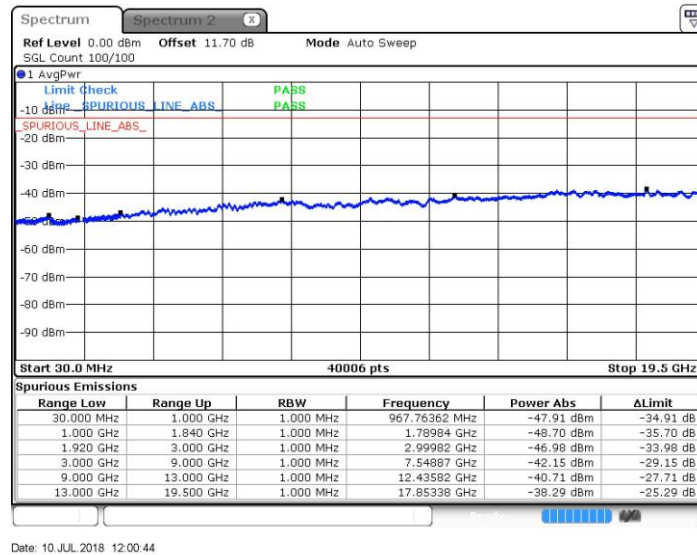
Date: 10 JUL 2018 11:43:30

LTE Band 2 / 20MHz

Lowest Channel / QPSK



Date: 10 JUL 2018 11:50:48

LTE Band 2 / 20MHz
Middle Channel / QPSK

Highest Channel / QPSK


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	0.0120	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0032	
0	Normal Voltage	0.0022	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0029	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0007	

Note:

1. Normal Voltage =12.0 V. ; Battery End Point (BEP) =10.8 V. ; Maximum Voltage =13.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

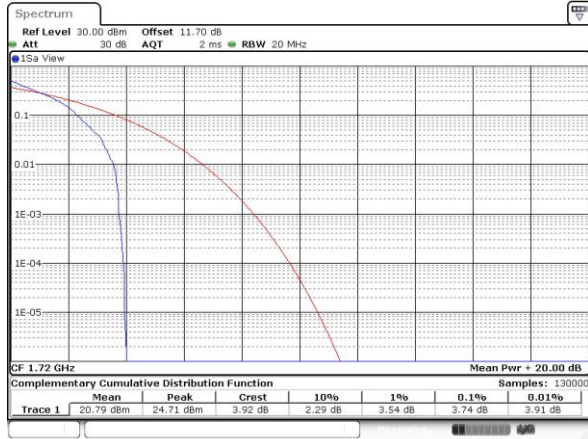
**LTE Band 4****Peak-to-Average Ratio**

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.74	4.49	-	-	PASS
Middle CH	3.80	4.70	-	-	
Highest CH	4.03	4.52	-	-	

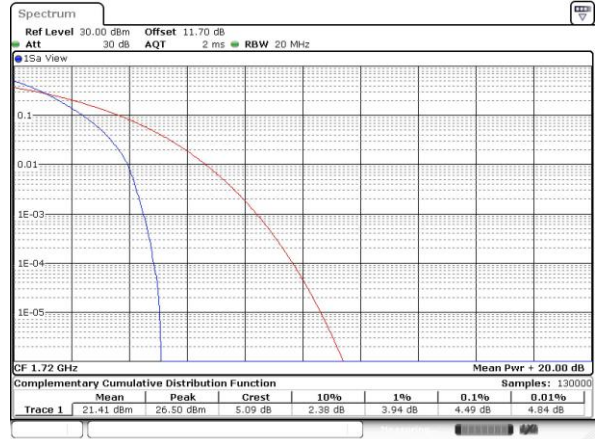


LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



Lowest Channel / Full RB



Middle Channel / 1RB



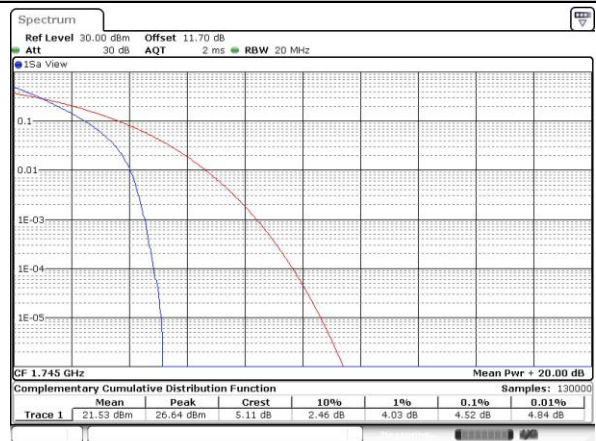
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB





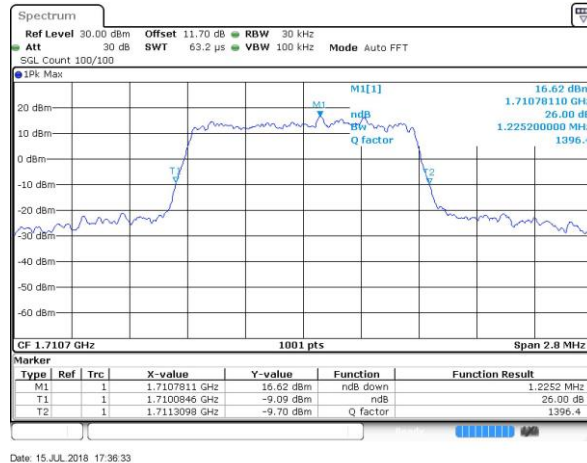
26dB Bandwidth

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	-	3.03	-	4.92	-	9.83	-	14.12	-	20.14	-
Middle CH	1.24	-	3.03	-	4.91	-	9.69	-	14.48	-	20.14	-
Highest CH	1.25	-	3.08	-	4.86	-	9.77	-	14.51	-	20.10	-

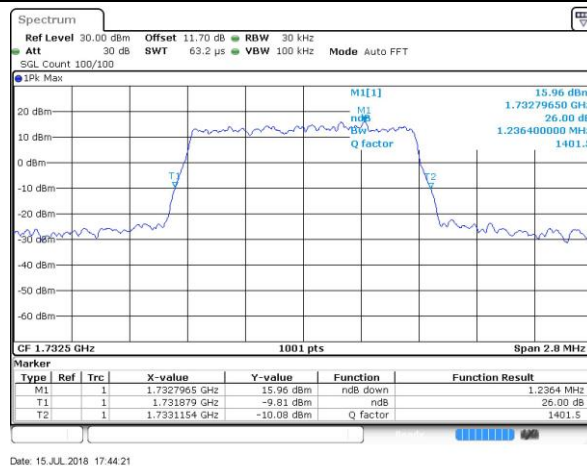


LTE Band 4

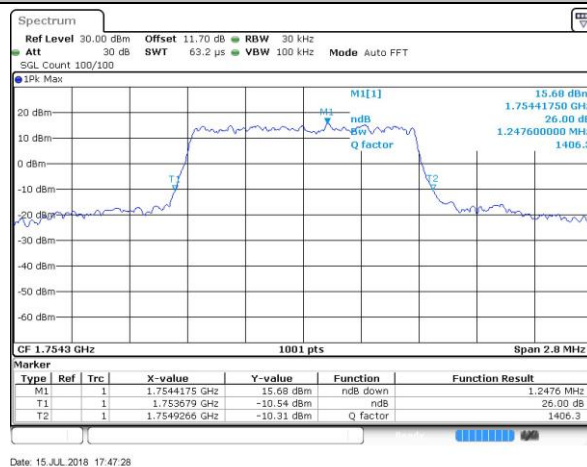
Lowest Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / QPSK



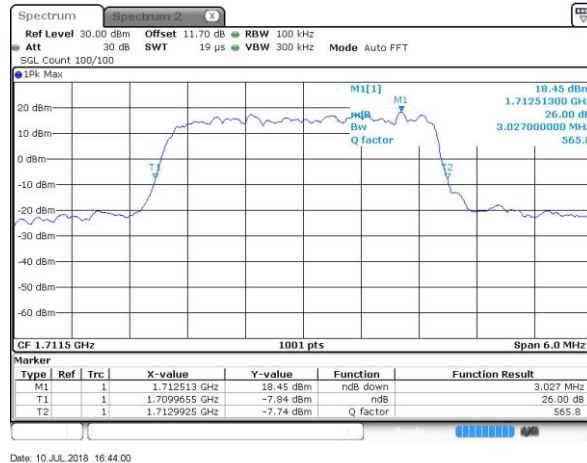
Highest Channel / 1.4MHz / QPSK



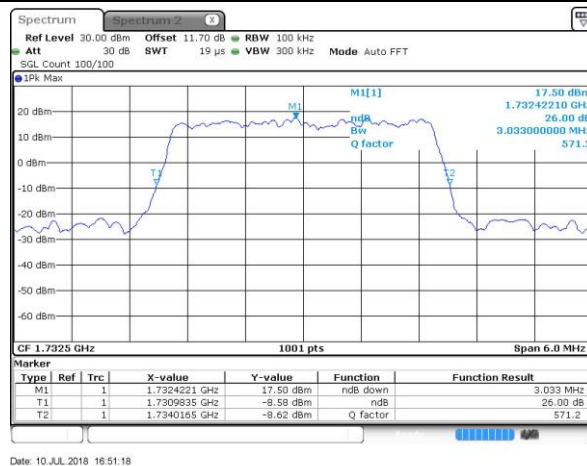


LTE Band 4

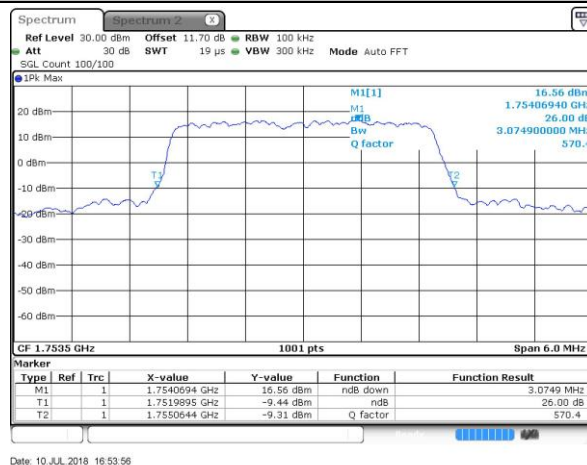
Lowest Channel / 3MHz / QPSK



Middle Channel / 3MHz / QPSK



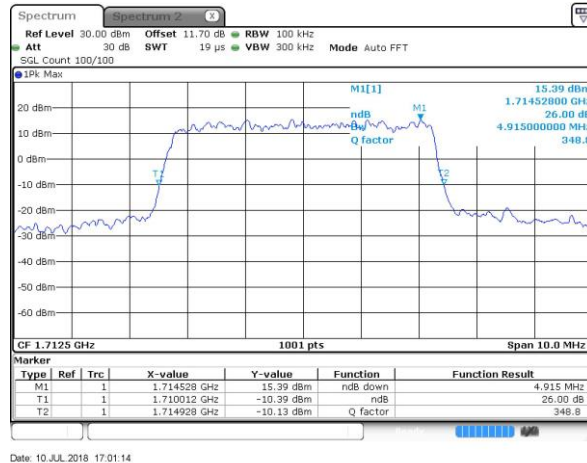
Highest Channel / 3MHz / QPSK



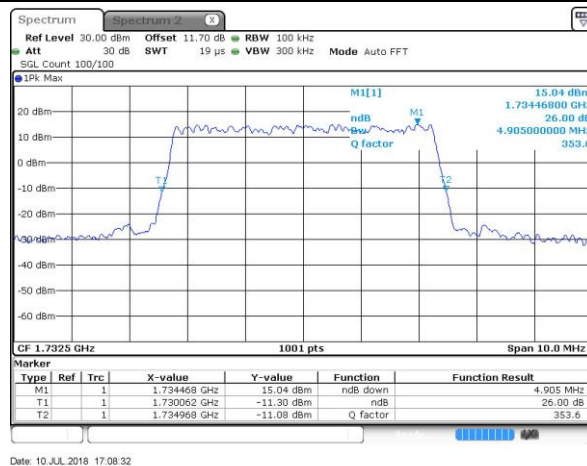


LTE Band 4

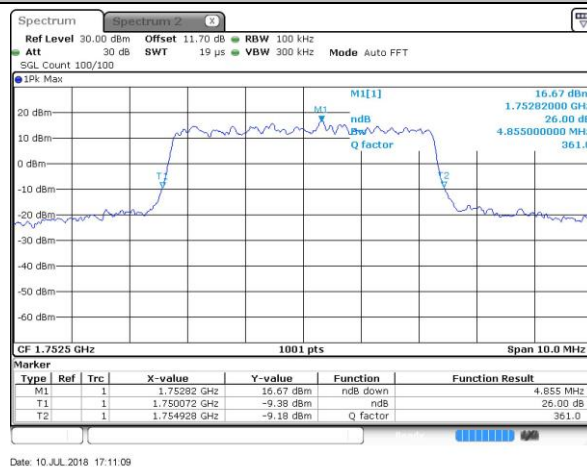
Lowest Channel / 5MHz / QPSK



Middle Channel / 5MHz / QPSK



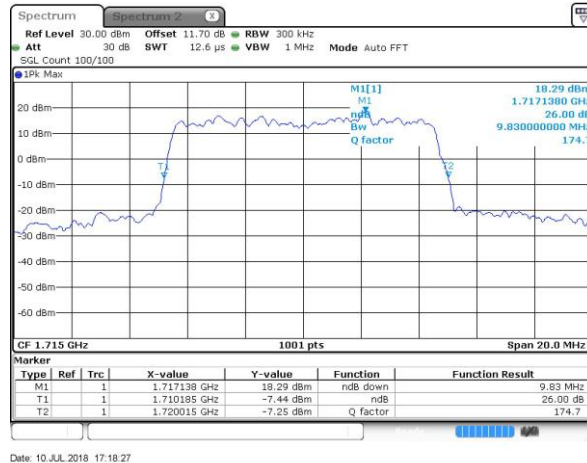
Highest Channel / 5MHz / QPSK



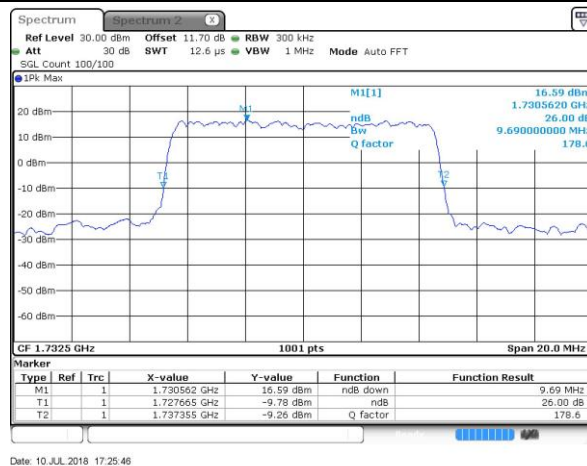


LTE Band 4

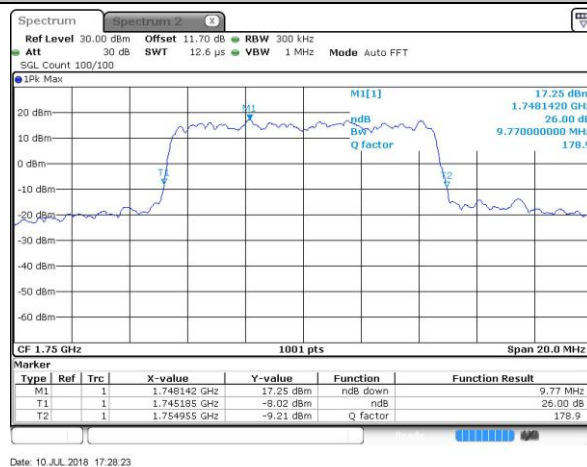
Lowest Channel / 10MHz / QPSK



Middle Channel / 10MHz / QPSK



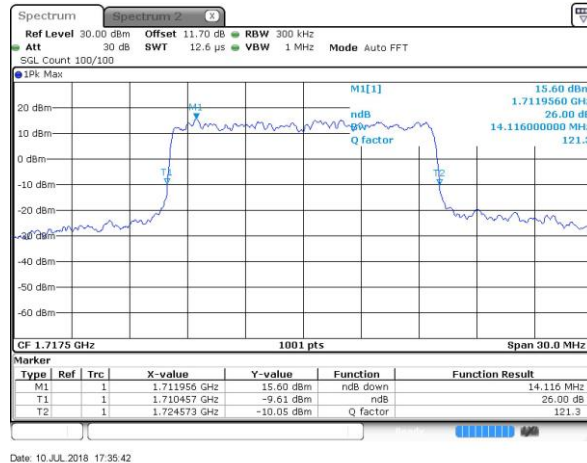
Highest Channel / 10MHz / QPSK



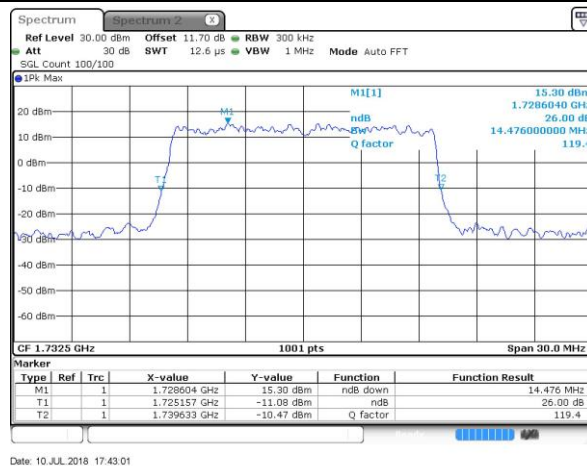


LTE Band 4

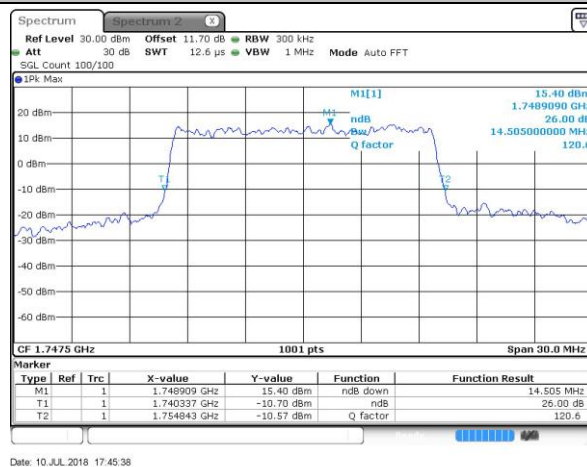
Lowest Channel / 15MHz / QPSK



Middle Channel / 15MHz / QPSK



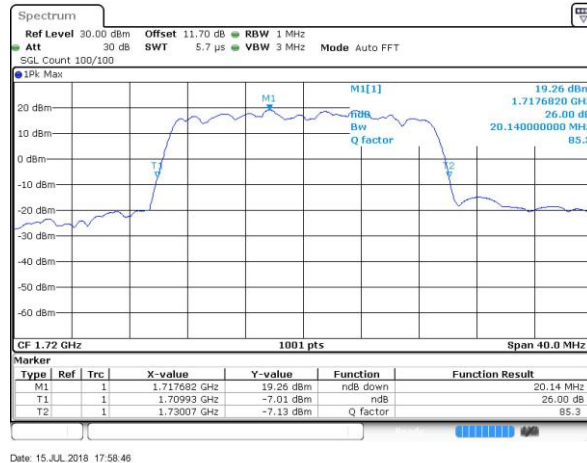
Highest Channel / 15MHz / QPSK



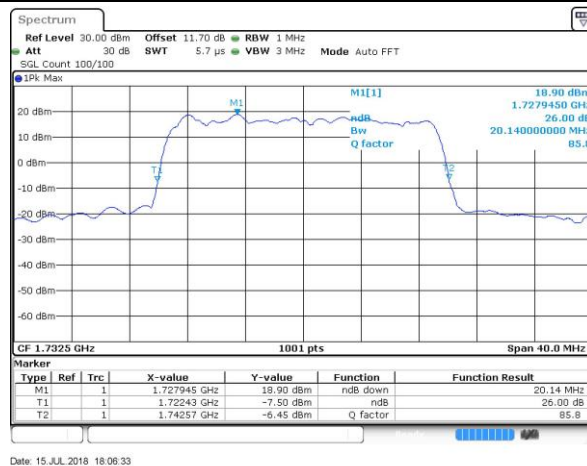


LTE Band 4

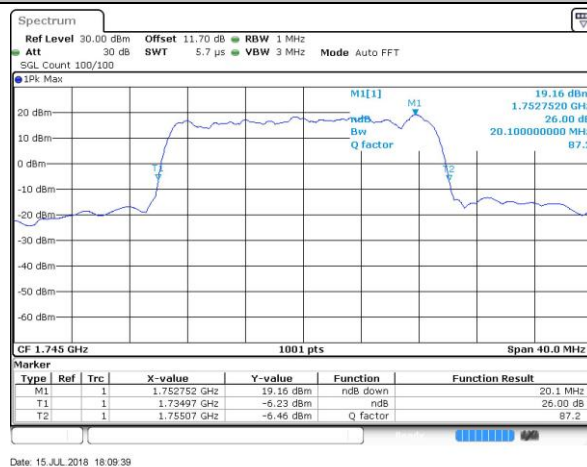
Lowest Channel / 20MHz / QPSK



Middle Channel / 20MHz / QPSK



Highest Channel / 20MHz / QPSK



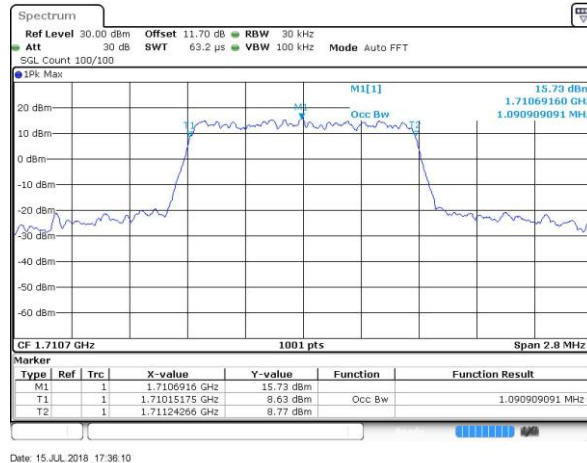
**Occupied Bandwidth**

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	-	2.72	-	4.50	-	9.07	-	13.46	-	18.30	-
Middle CH	1.09	-	2.71	-	4.49	-	9.03	-	13.43	-	18.34	-
Highest CH	1.10	-	2.73	-	4.48	-	9.05	-	13.43	-	18.22	-

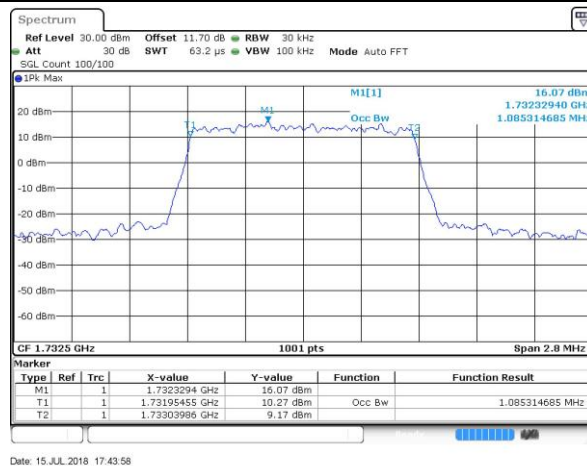


LTE Band 4

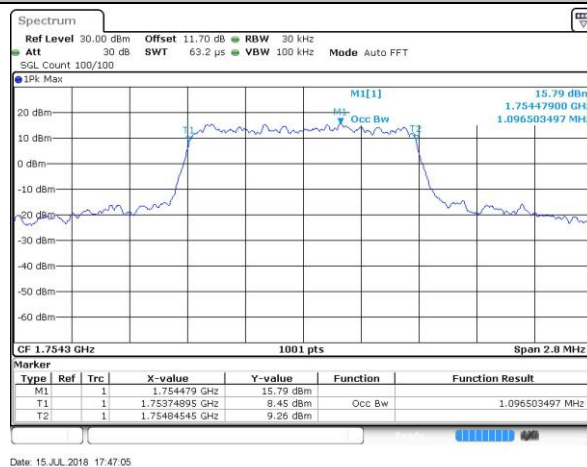
Lowest Channel / 1.4MHz / QPSK



Middle Channel / 1.4MHz / QPSK



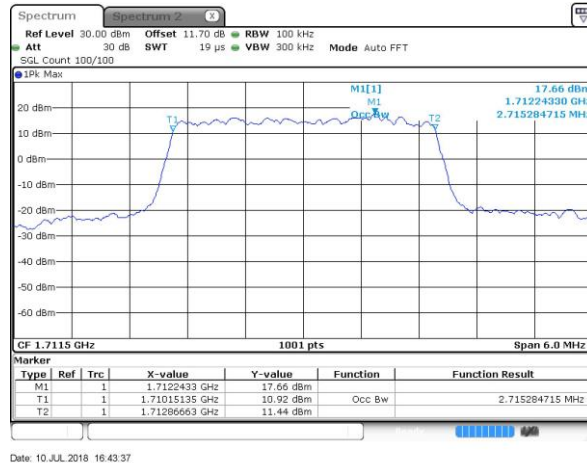
Highest Channel / 1.4MHz / QPSK



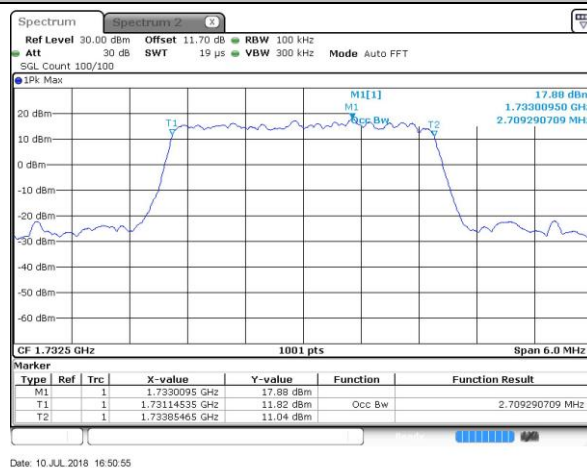


LTE Band 4

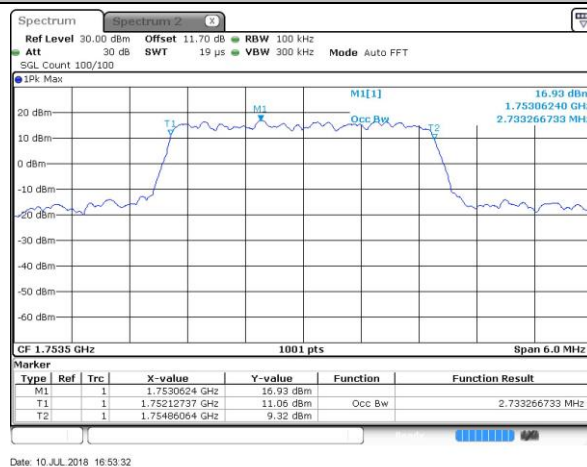
Lowest Channel / 3MHz / QPSK



Middle Channel / 3MHz / QPSK



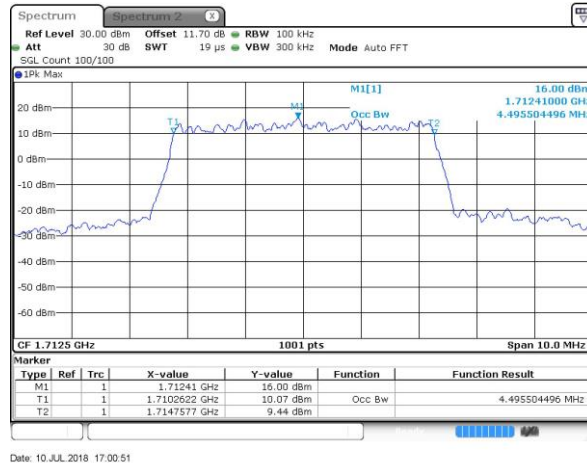
Highest Channel / 3MHz / QPSK



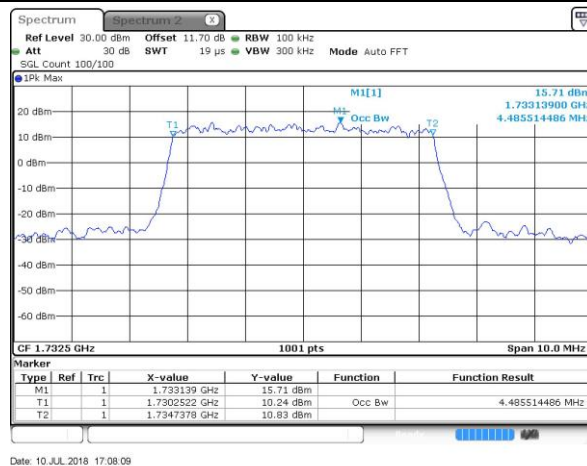


LTE Band 4

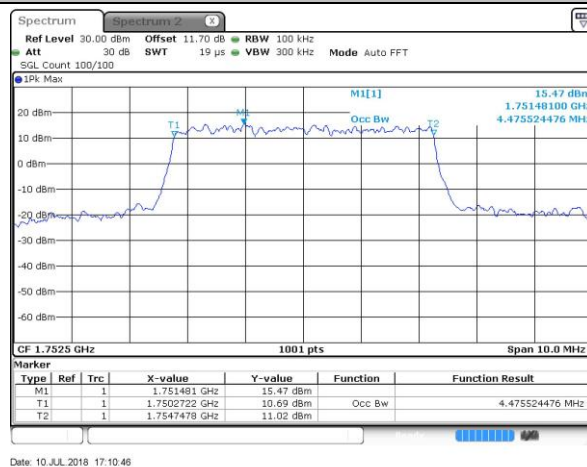
Lowest Channel / 5MHz / QPSK

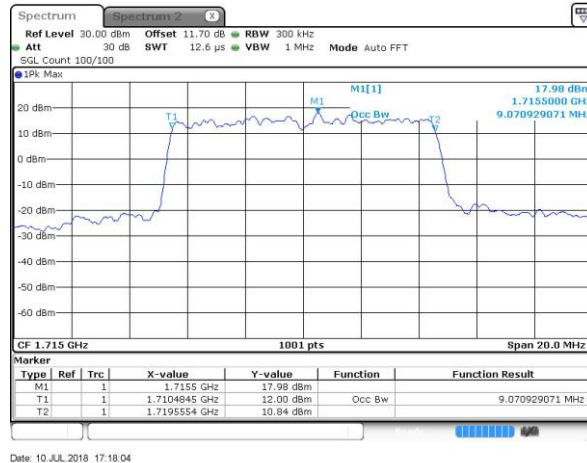


Middle Channel / 5MHz / QPSK

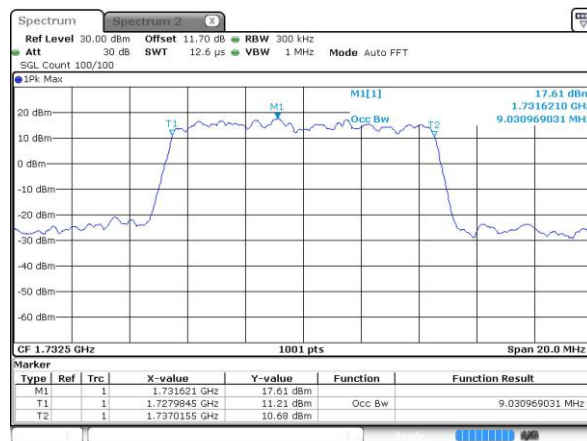


Highest Channel / 5MHz / QPSK

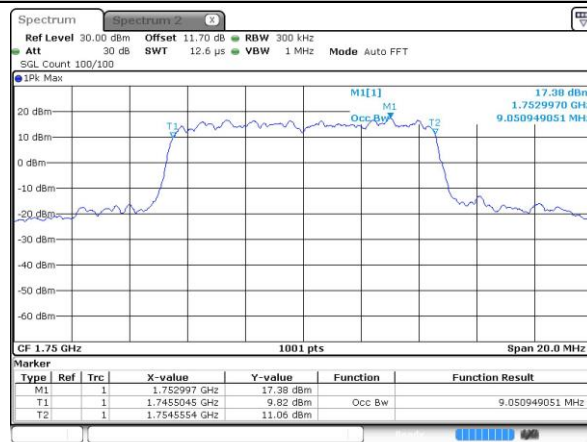


LTE Band 4
Lowest Channel / 10MHz / QPSK


Date: 10 JUL 2018 17:18:04

Middle Channel / 10MHz / QPSK


Date: 10 JUL 2018 17:25:22

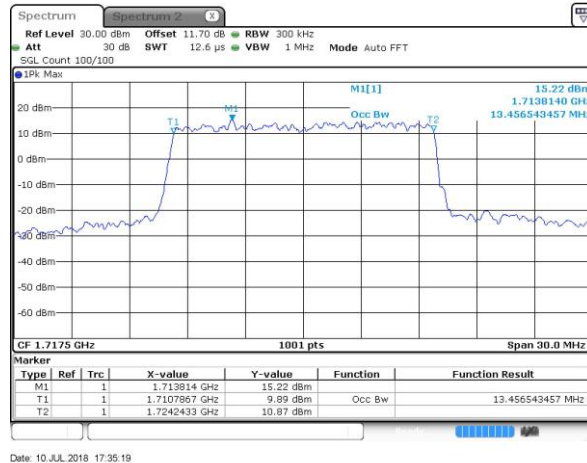
Highest Channel / 10MHz / QPSK


Date: 10 JUL 2018 17:28:00

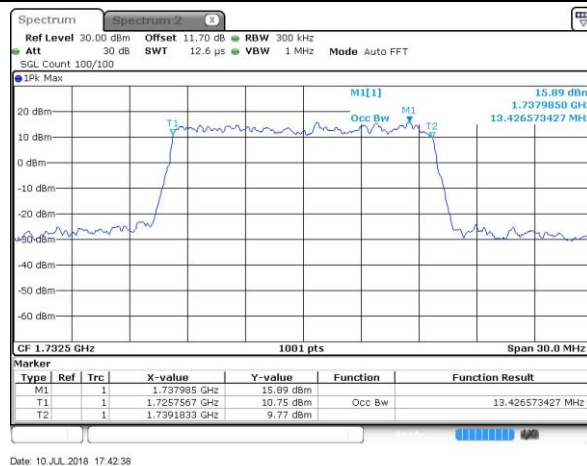


LTE Band 4

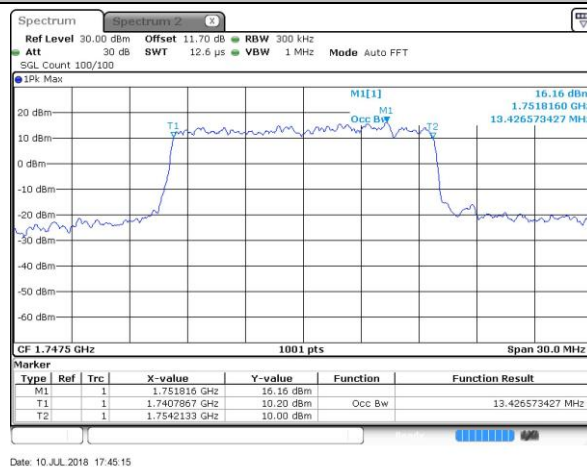
Lowest Channel / 15MHz / QPSK



Middle Channel / 15MHz / QPSK



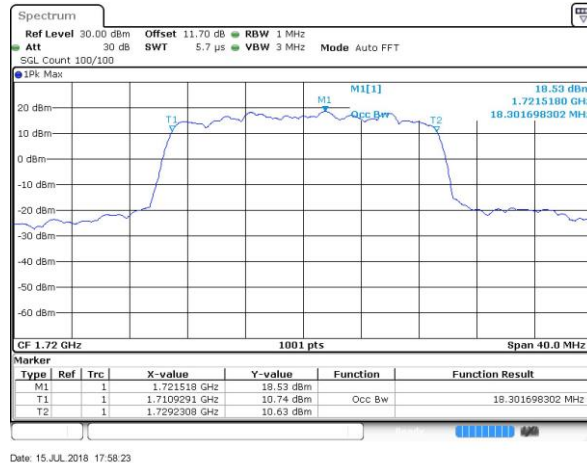
Highest Channel / 15MHz / QPSK



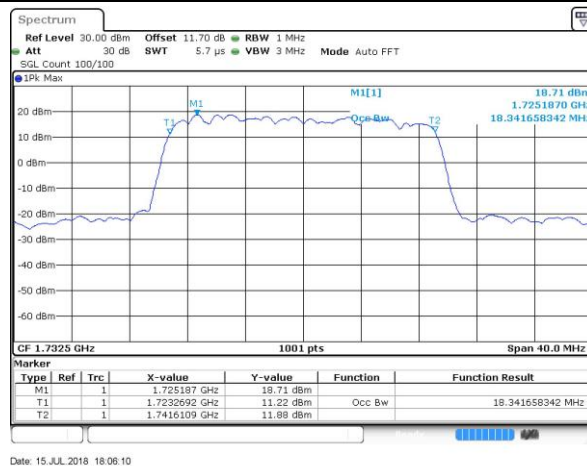


LTE Band 4

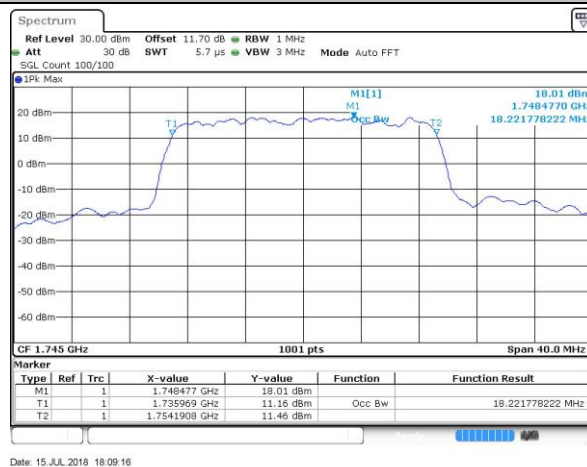
Lowest Channel / 20MHz / QPSK

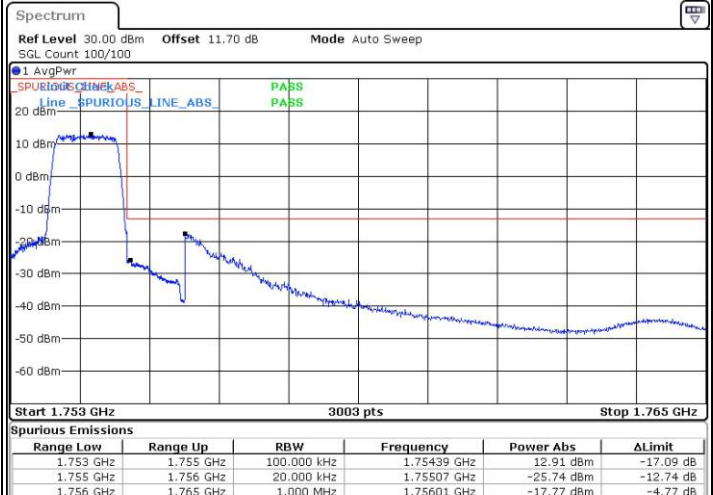


Middle Channel / 20MHz / QPSK



Highest Channel / 20MHz / QPSK

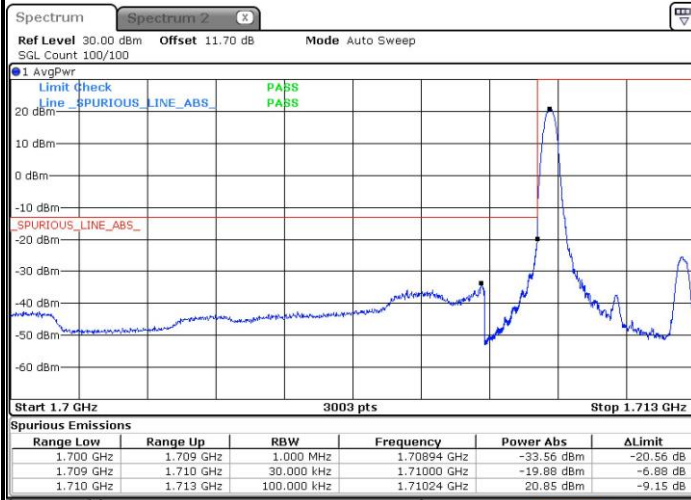


**Conducted Band Edge****LTE Band 4 / 1.4MHz / QPSK****Lowest Band Edge / 1RB****Highest Band Edge / 1RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

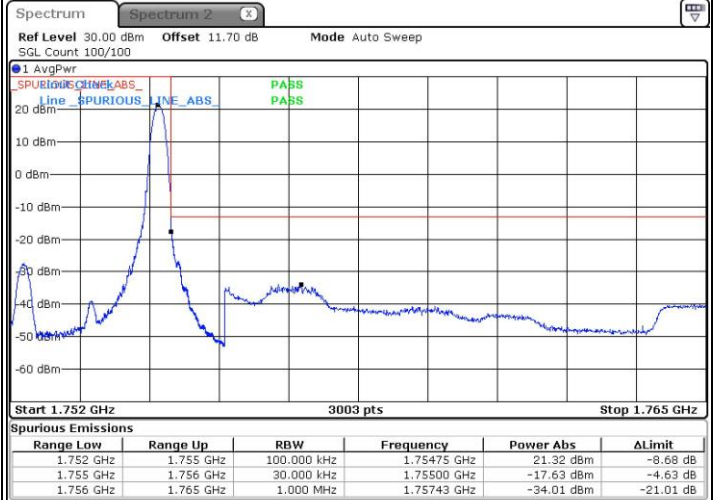


LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



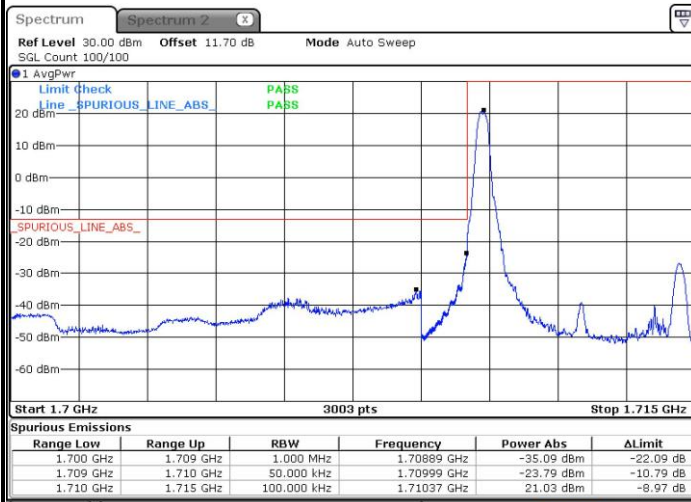
Highest Band Edge / Full RB



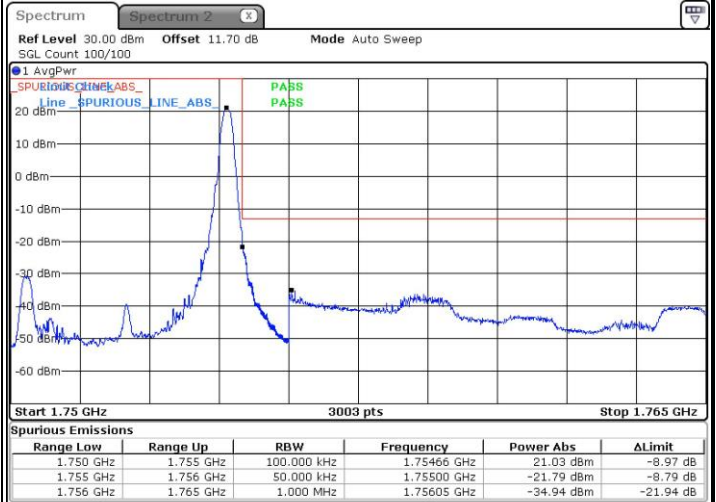


LTE Band 4 / 5MHz / QPSK

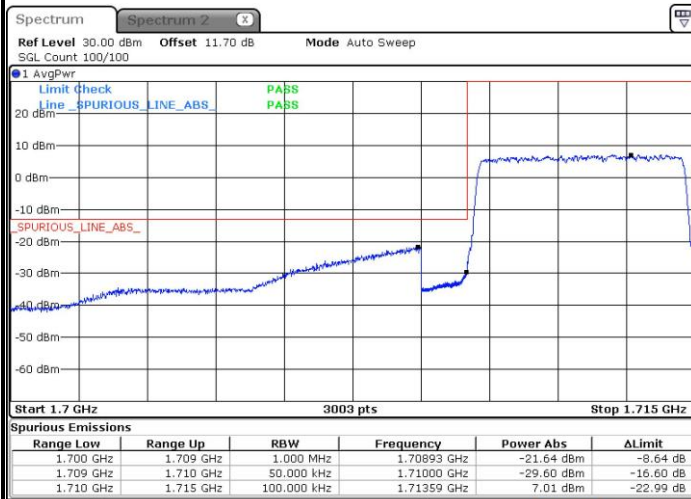
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



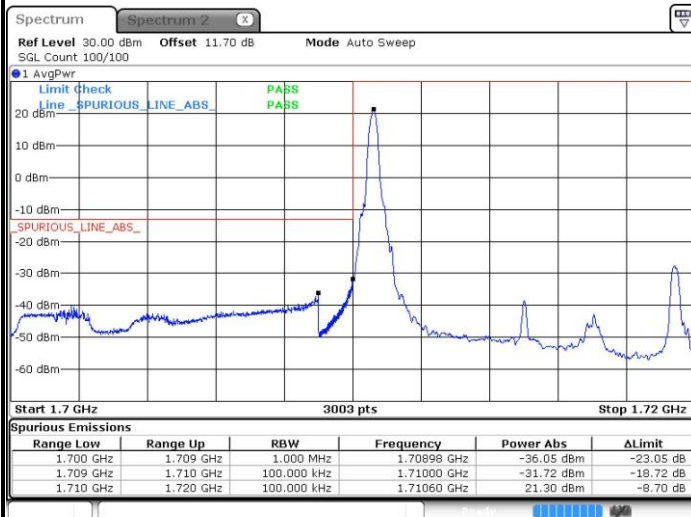
Highest Band Edge / Full RB



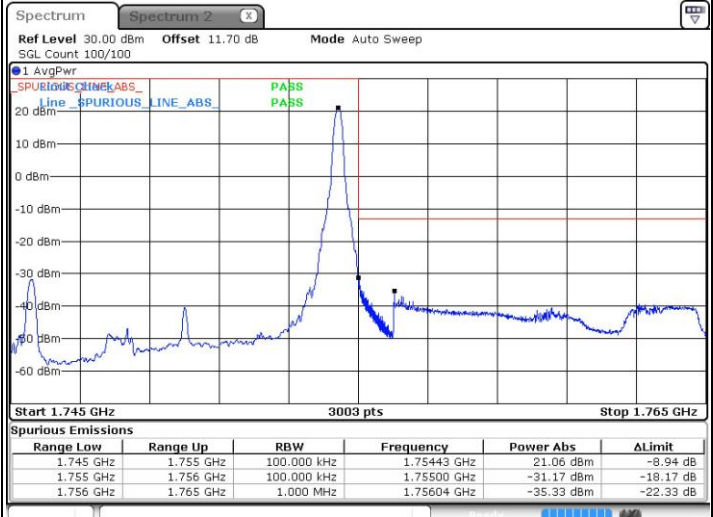


LTE Band 4 / 10MHz / QPSK

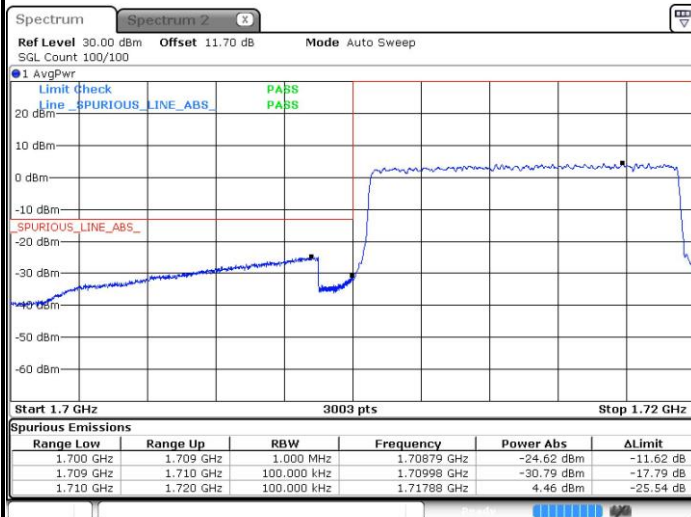
Lowest Band Edge / 1 RB



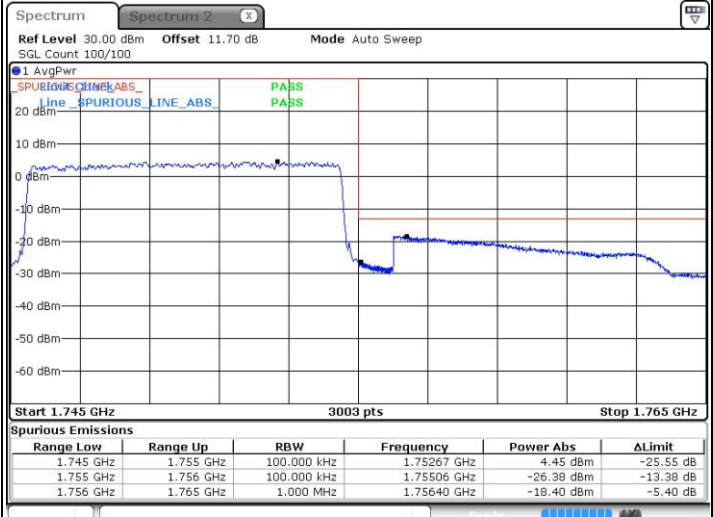
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



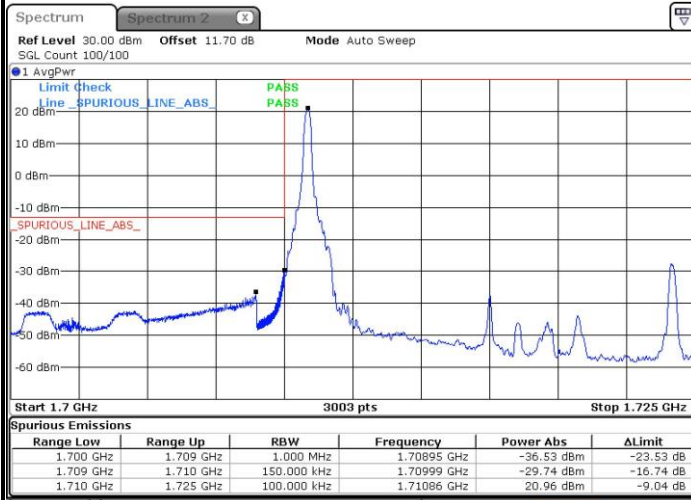
Highest Band Edge / Full RB



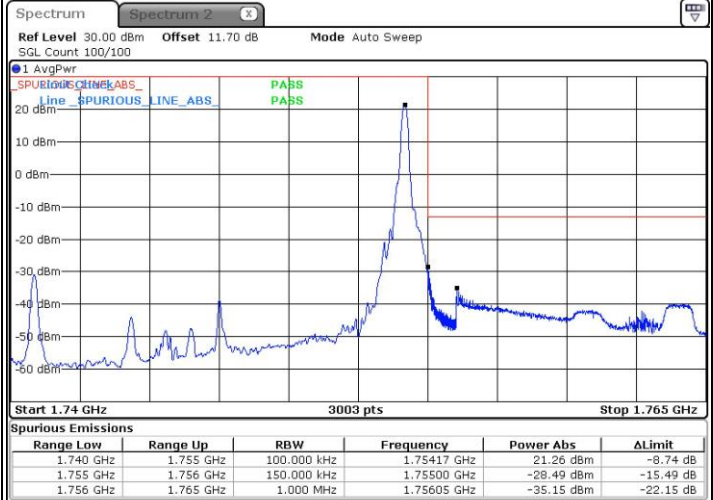


LTE Band 4 / 15MHz / QPSK

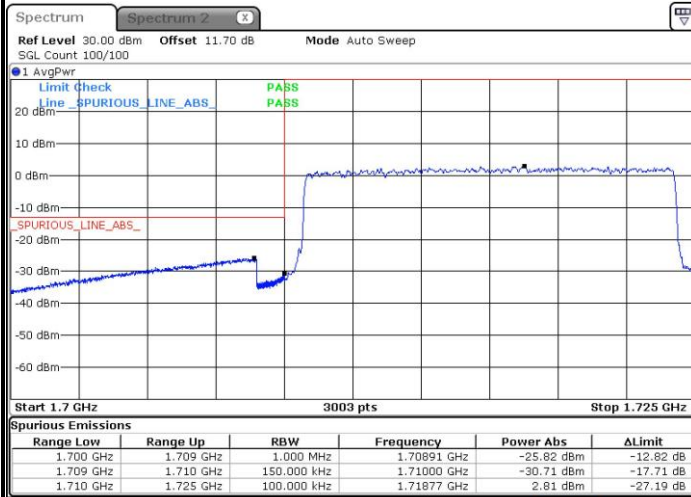
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

