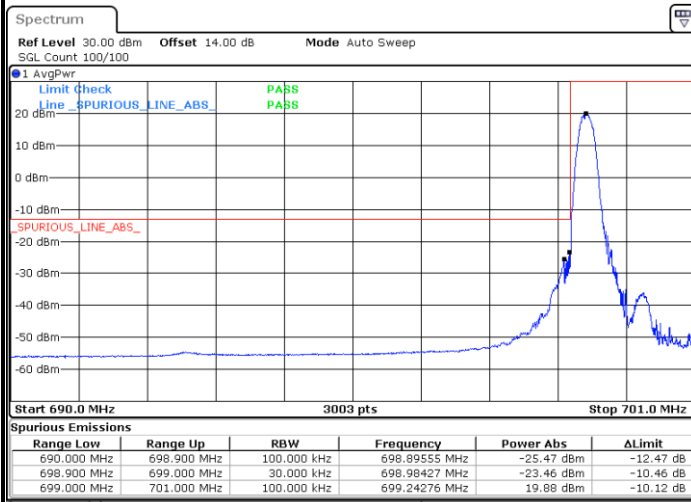


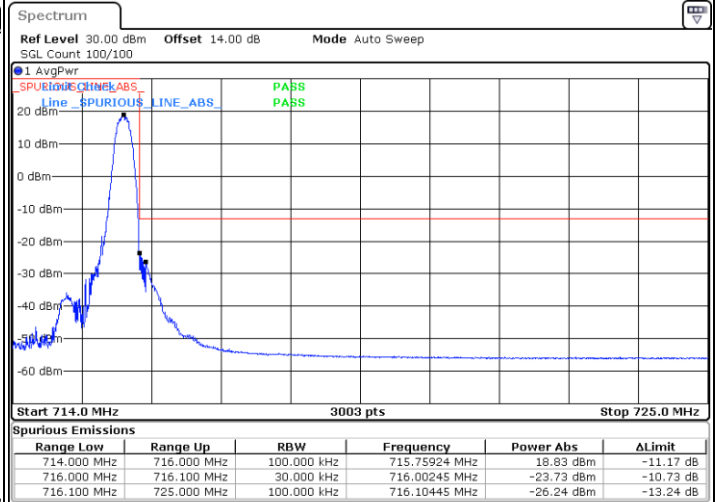


LTE Band 12 / 1.4MHz / 64QAM

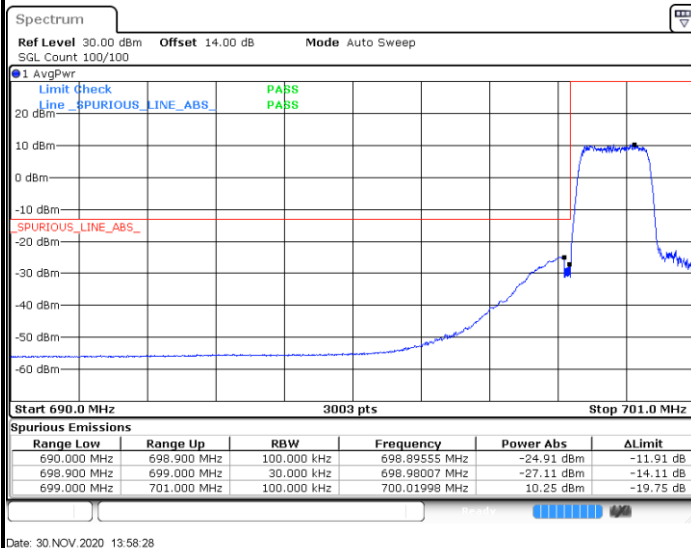
Lowest Band Edge / 1 RB



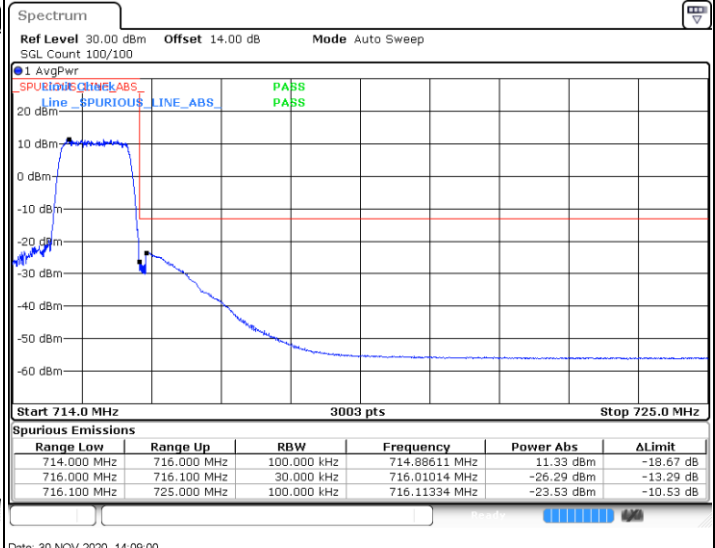
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



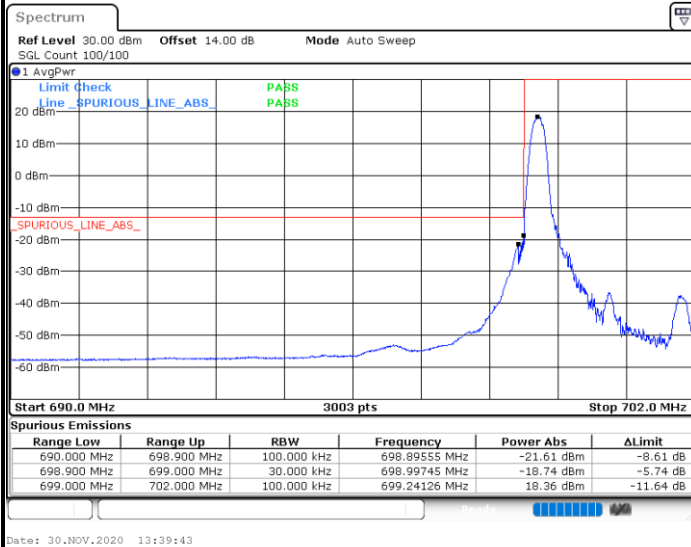
Highest Band Edge / Full RB



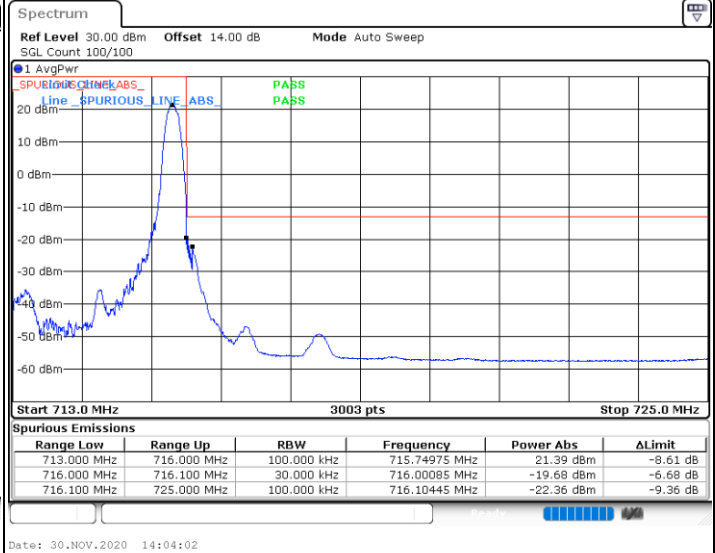


LTE Band 12 / 3MHz / QPSK

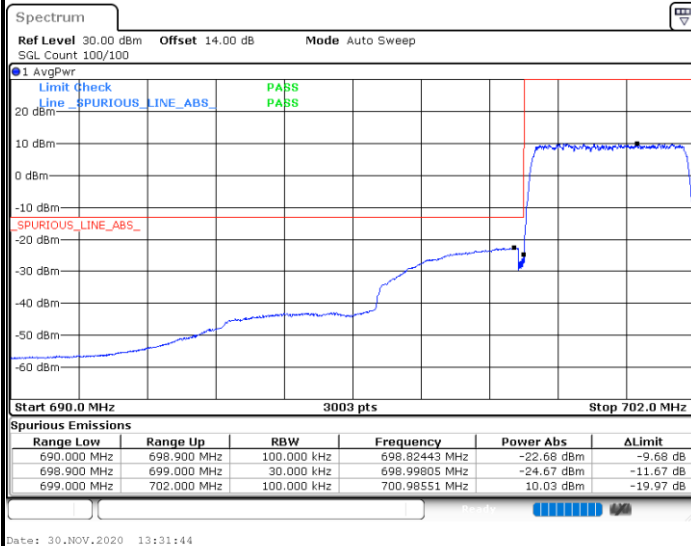
Lowest Band Edge / 1RB



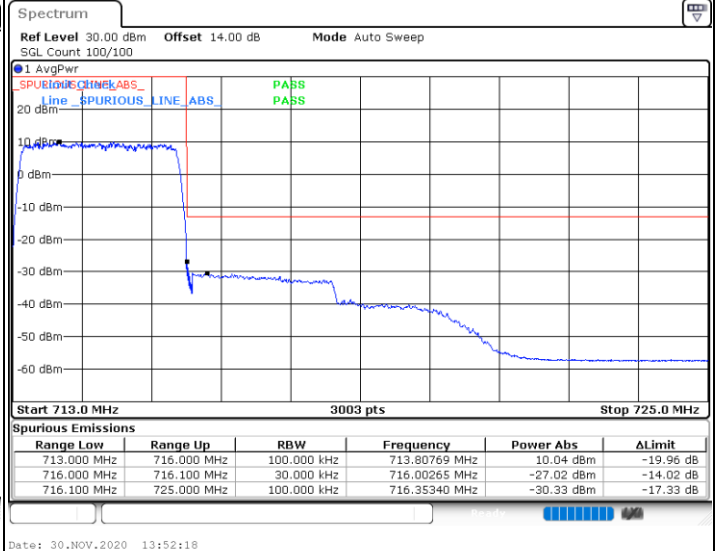
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



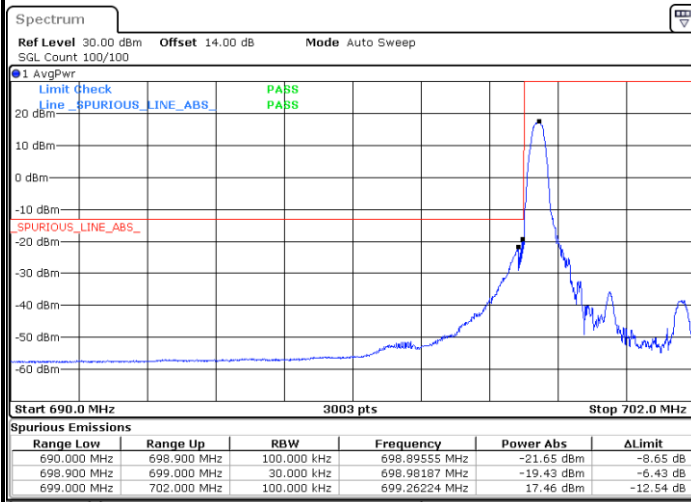
Highest Band Edge / Full RB



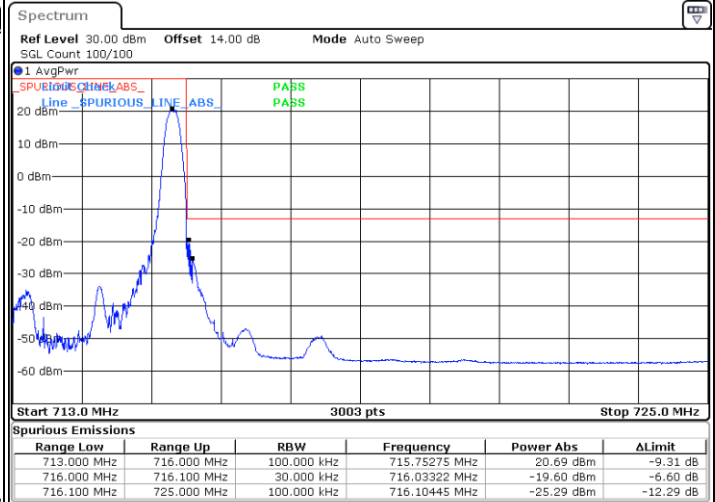


LTE Band 12 / 3MHz / 16QAM

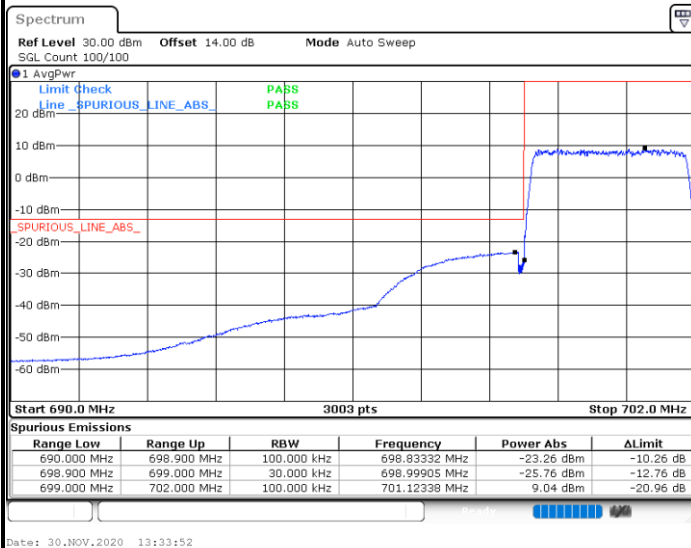
Lowest Band Edge / 1 RB



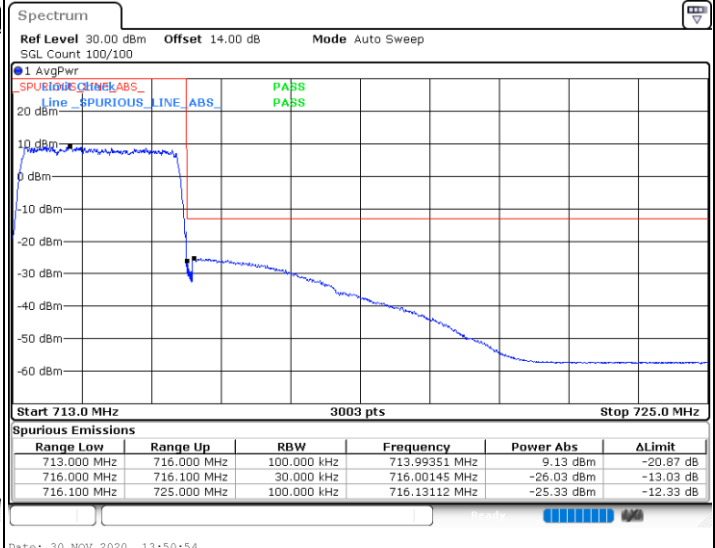
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



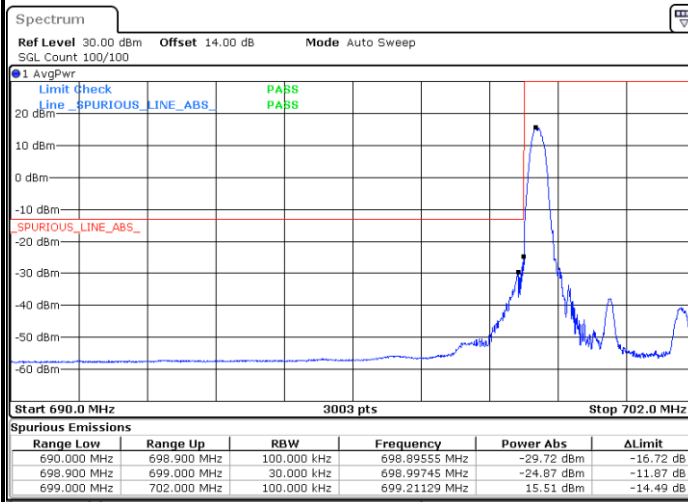
Highest Band Edge / Full RB



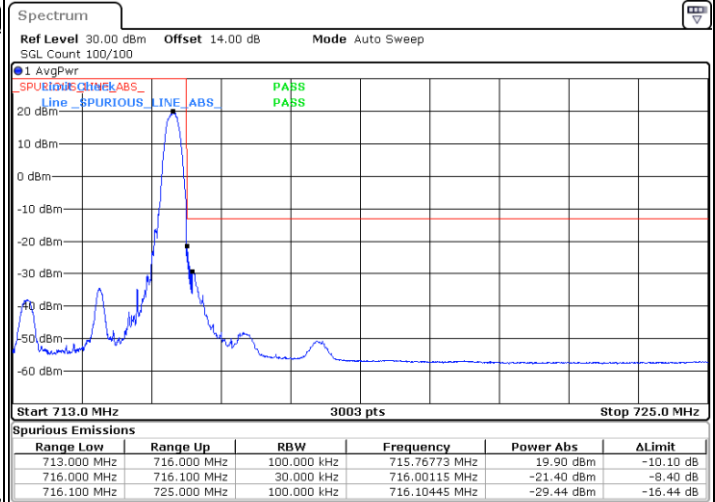


LTE Band 12 / 3MHz / 64QAM

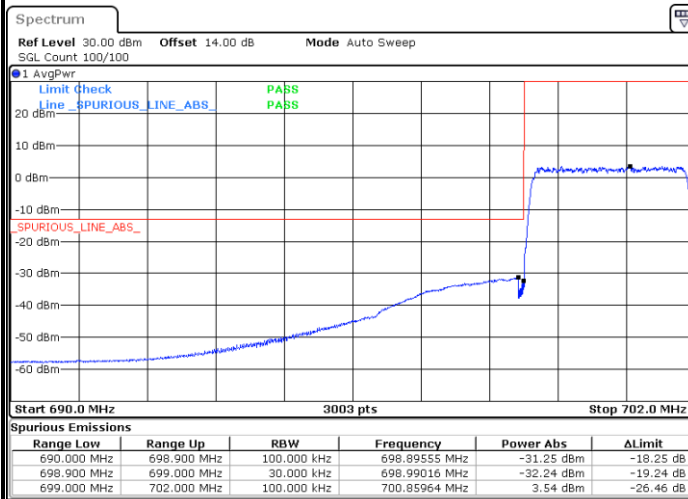
Lowest Band Edge / 1 RB



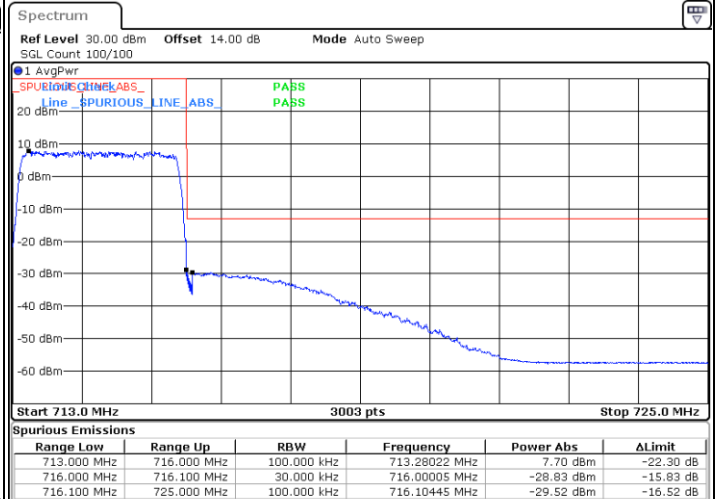
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



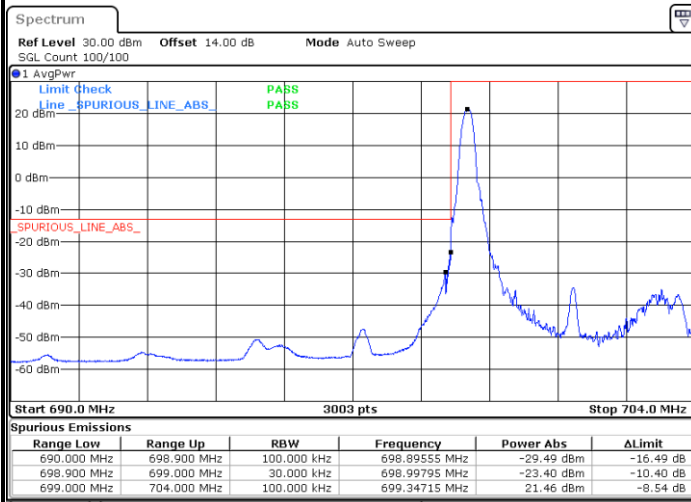
Highest Band Edge / Full RB



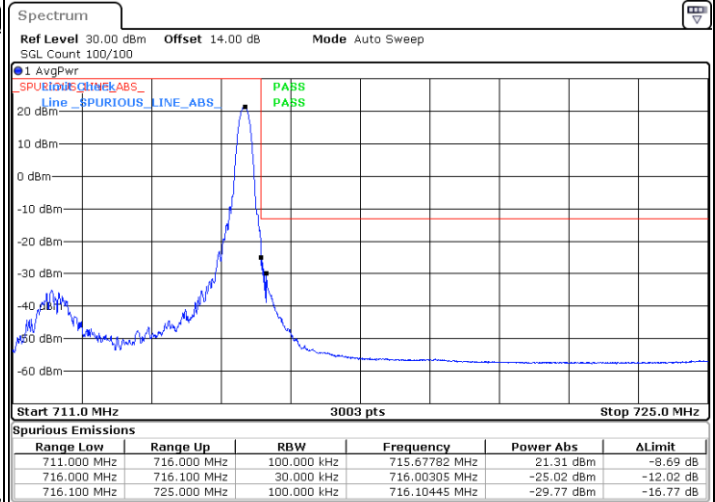


LTE Band 12 / 5MHz / QPSK

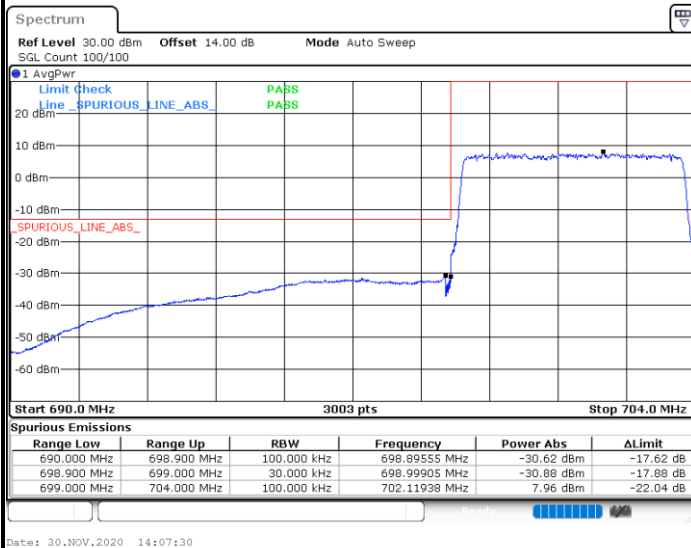
Lowest Band Edge / 1 RB



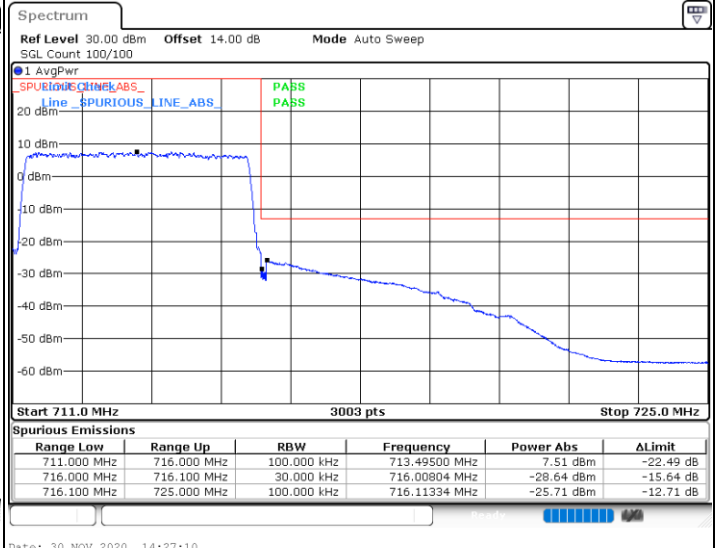
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



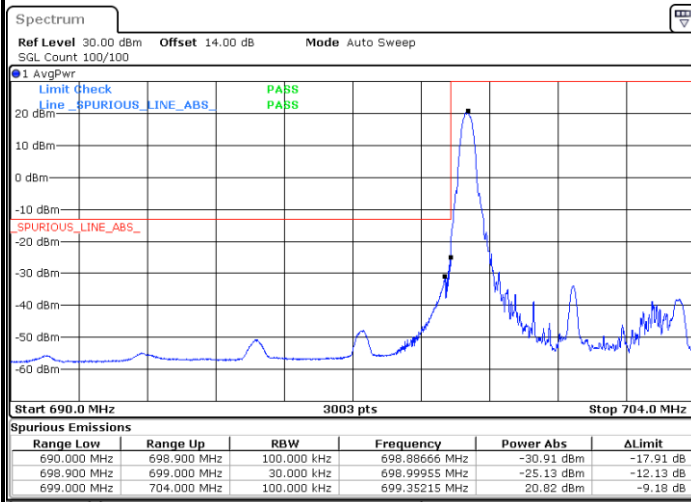
Highest Band Edge / Full RB



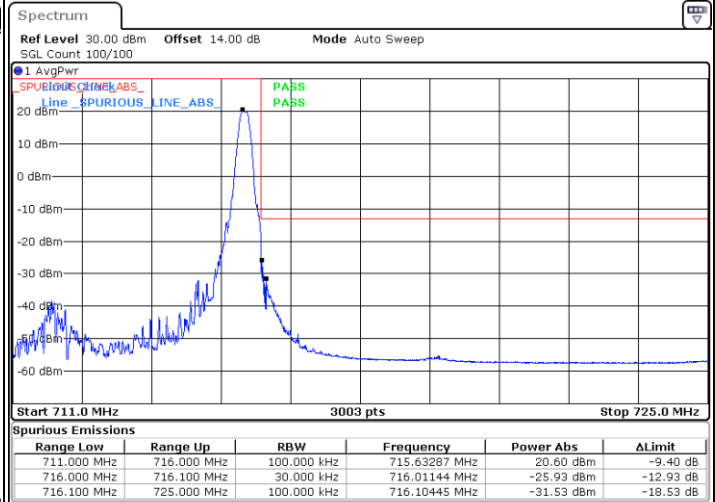


LTE Band 12 / 5MHz / 16QAM

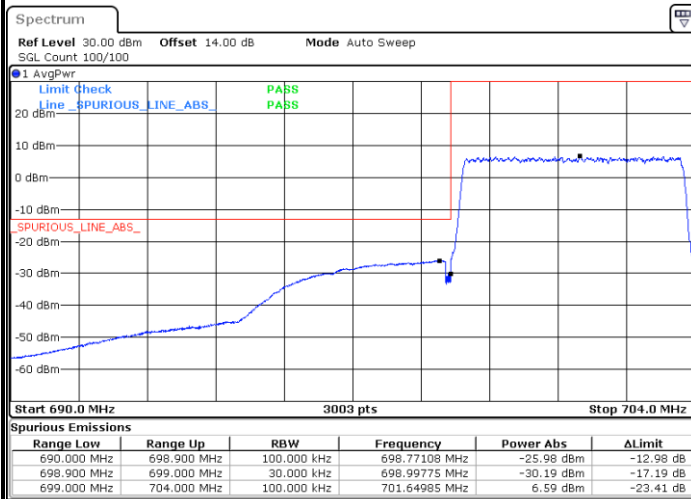
Lowest Band Edge / 1RB



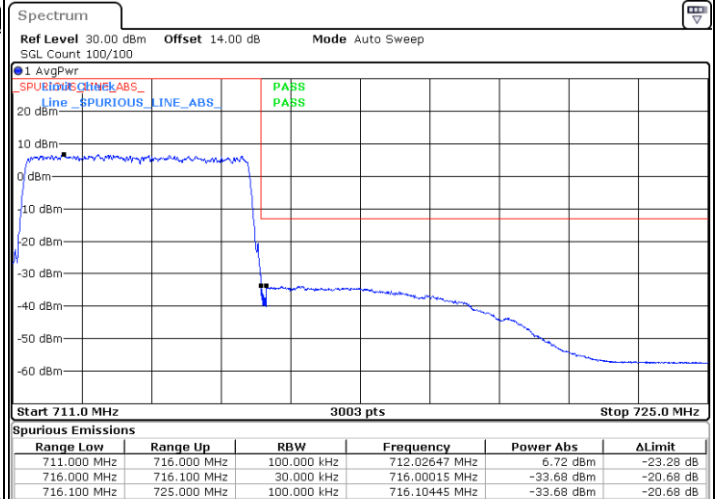
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



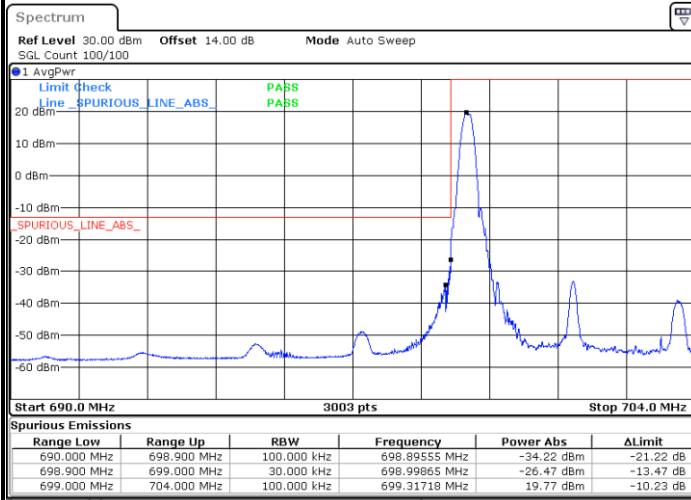
Highest Band Edge / Full RB



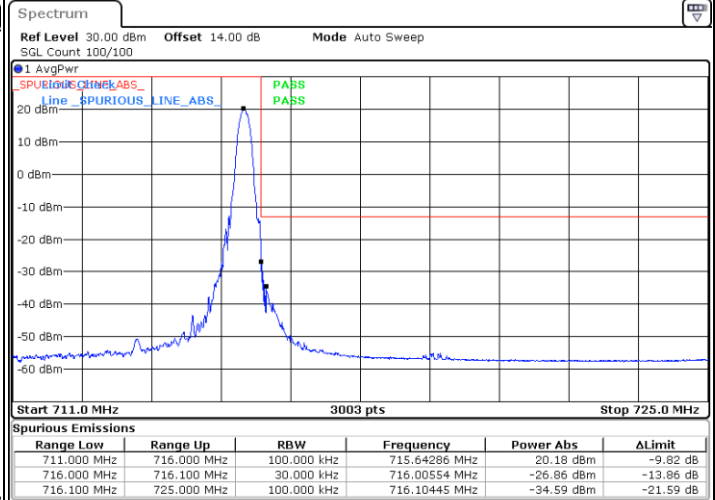


LTE Band 12 / 5MHz / 64QAM

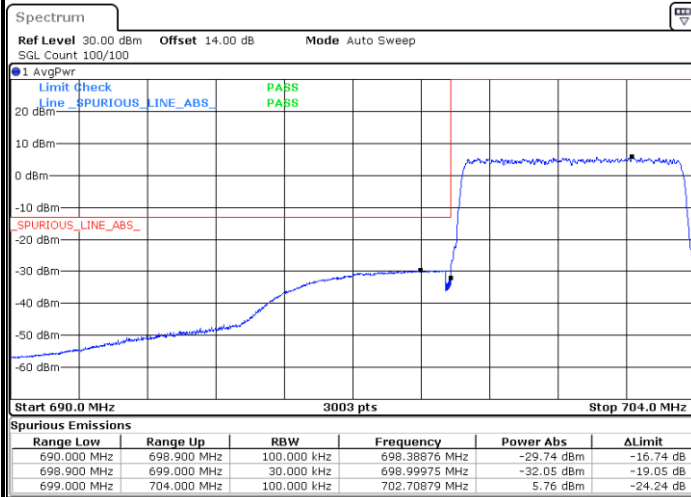
Lowest Band Edge / 1RB



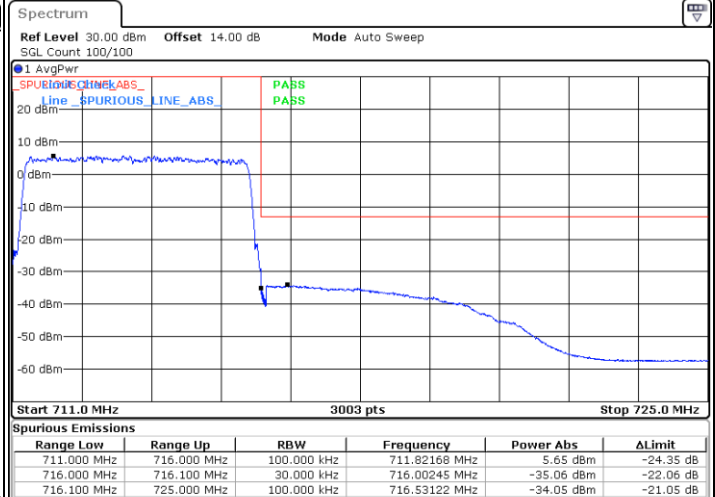
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



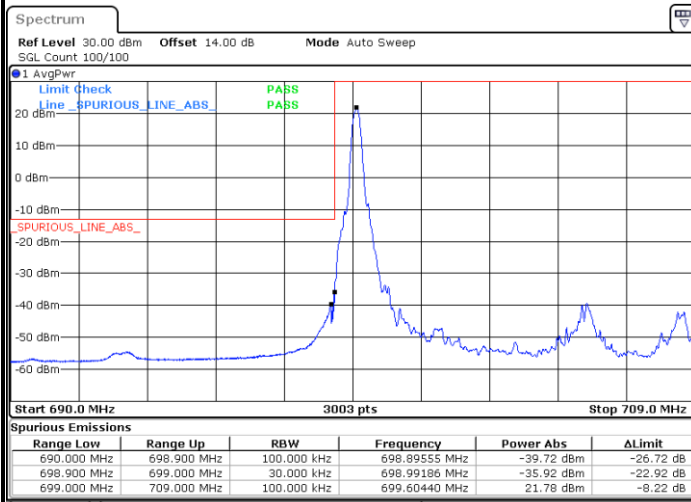
Highest Band Edge / Full RB



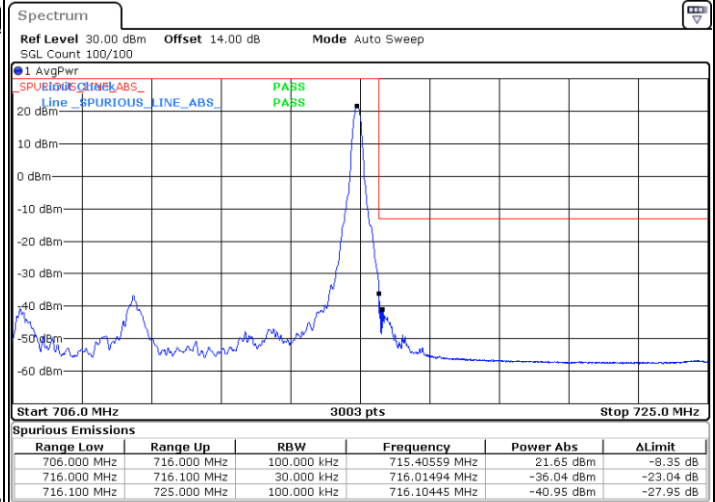


LTE Band 12 / 10MHz / QPSK

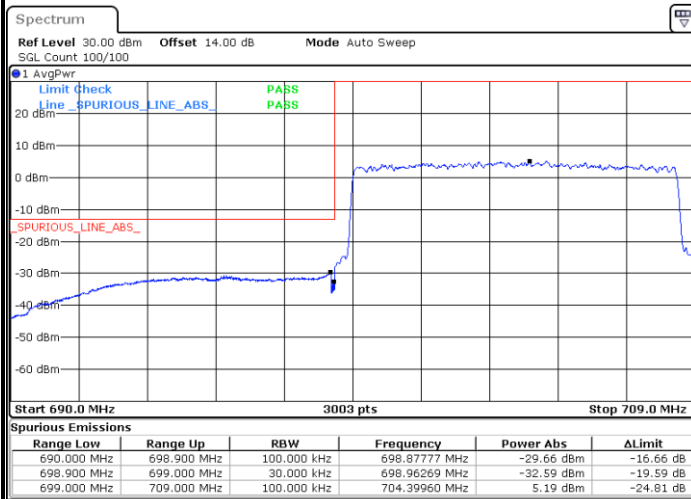
Lowest Band Edge / 1 RB



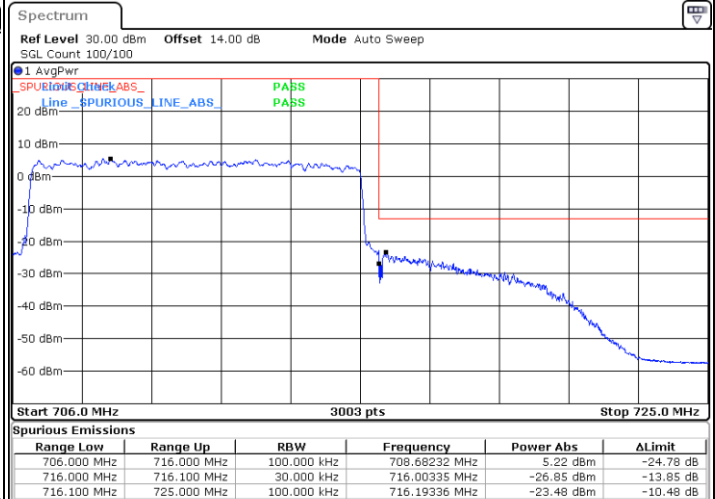
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



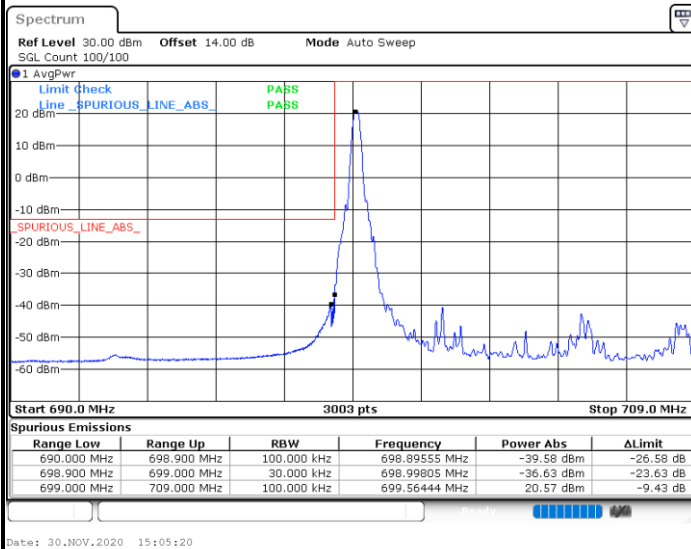
Highest Band Edge / Full RB



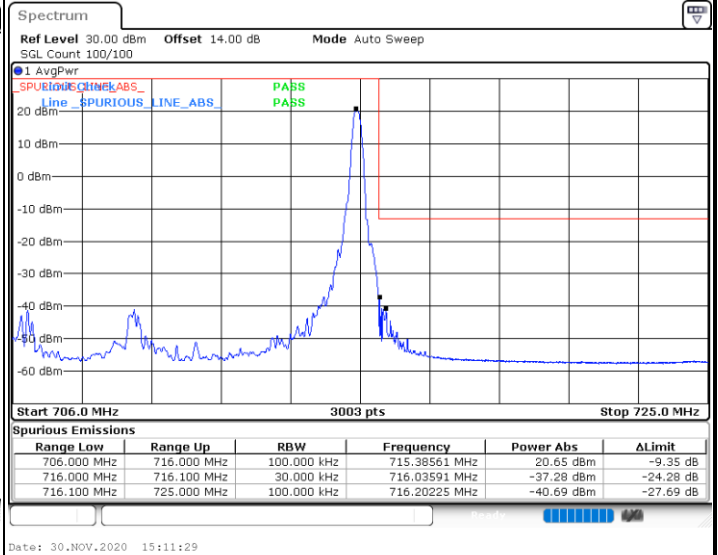


LTE Band 12 / 10MHz / 16QAM

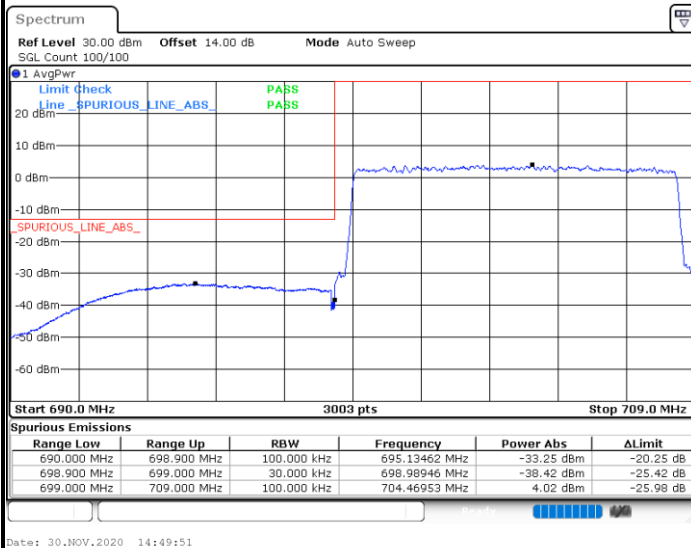
Lowest Band Edge / 1 RB



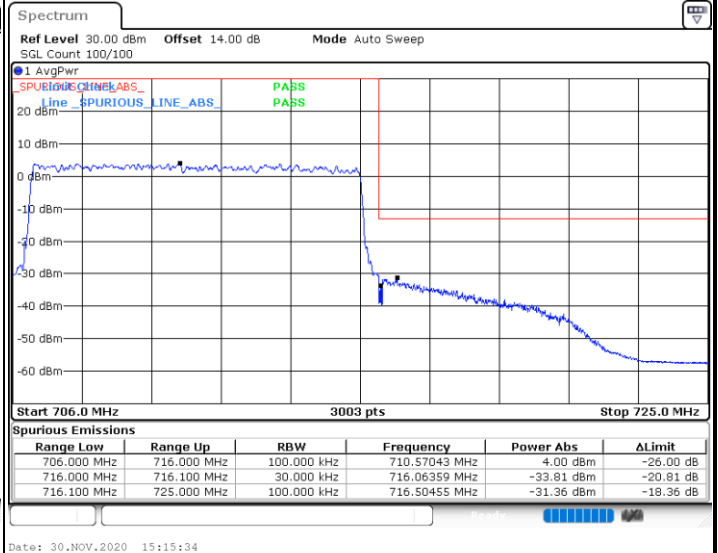
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



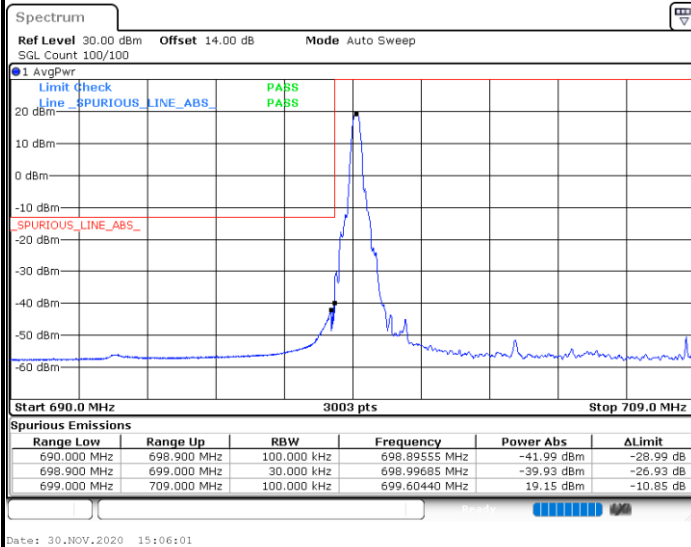
Highest Band Edge / Full RB



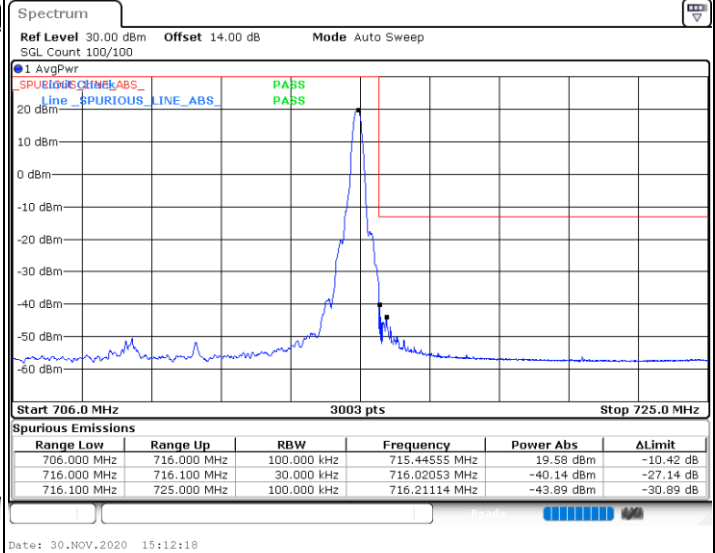


LTE Band 12 / 10MHz / 64QAM

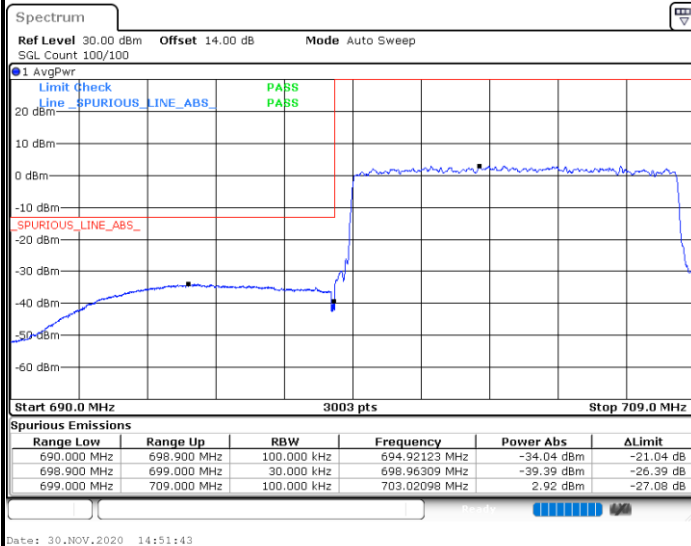
Lowest Band Edge / 1 RB



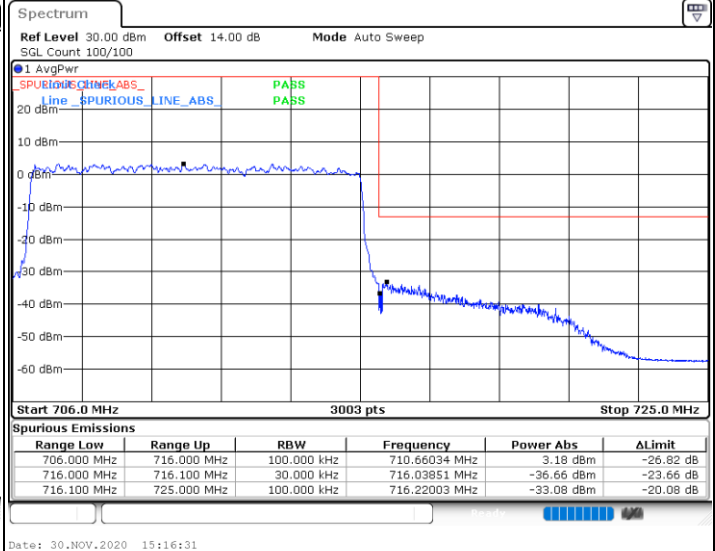
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

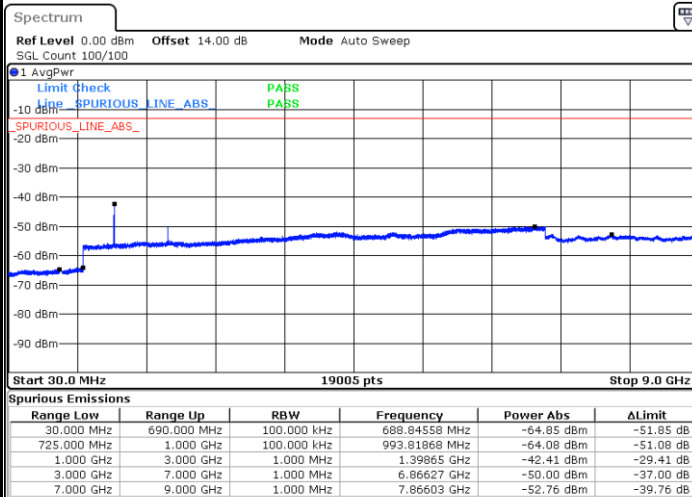




Conducted Spurious Emission

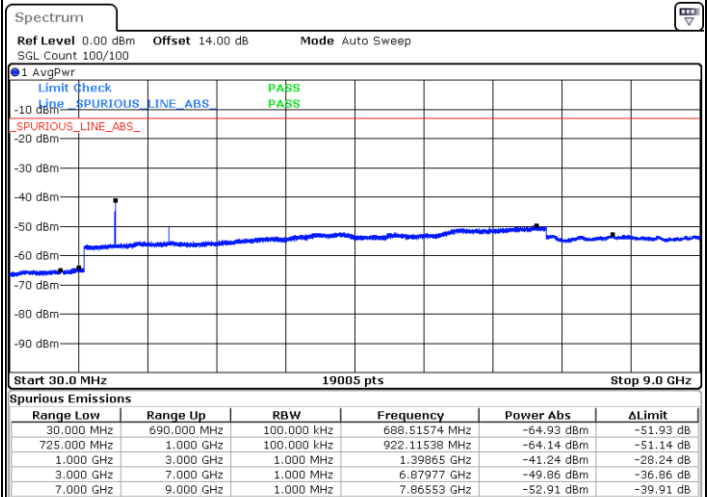
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



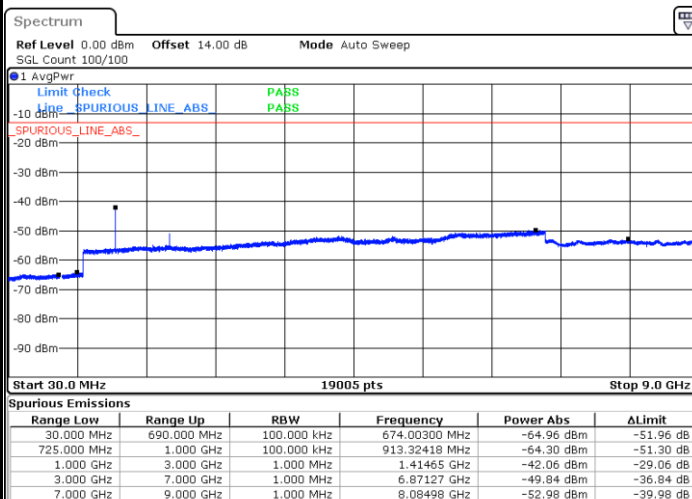
Date: 30 NOV 2020 14:02:08

Lowest Channel / 16QAM



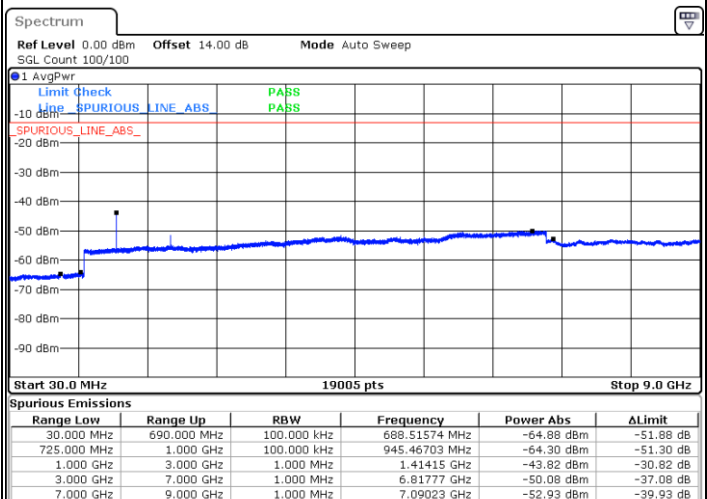
Date: 30 NOV 2020 13:59:29

Middle Channel / QPSK



Date: 30 NOV 2020 14:03:05

Middle Channel / 16QAM

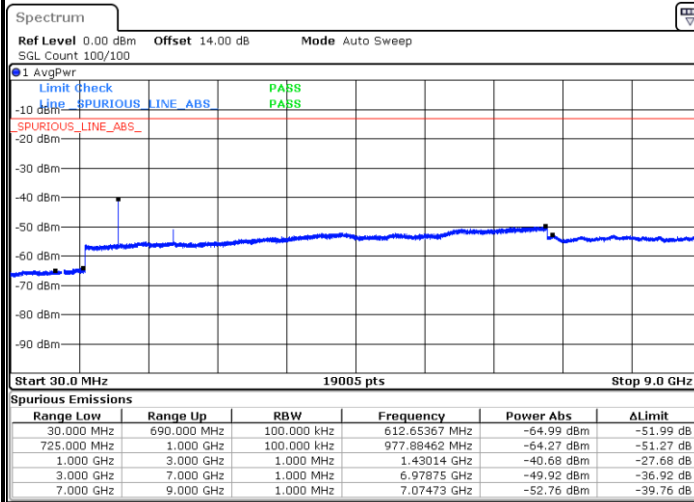


Date: 30 NOV 2020 14:03:34



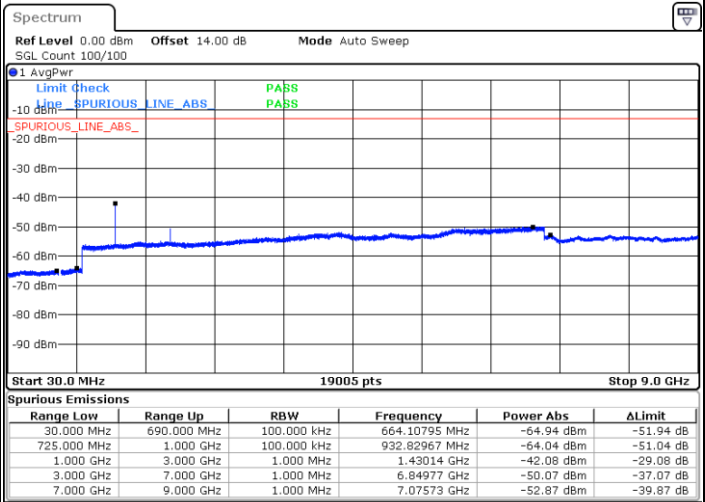
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 30 NOV 2020 14:11:39

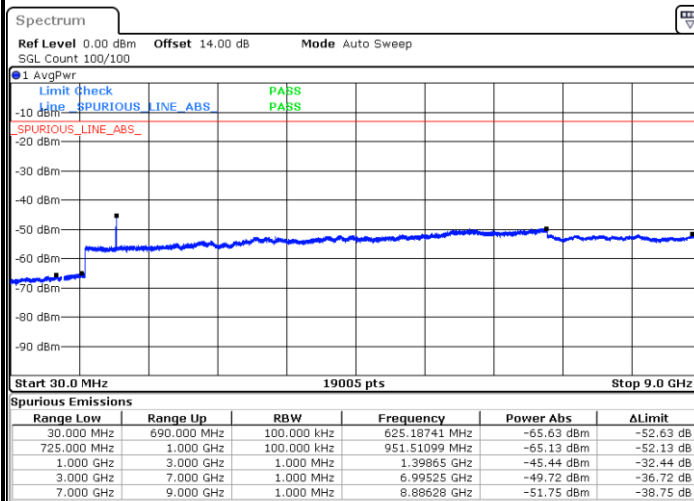
Highest Channel / 16QAM



Date: 30 NOV 2020 14:10:24

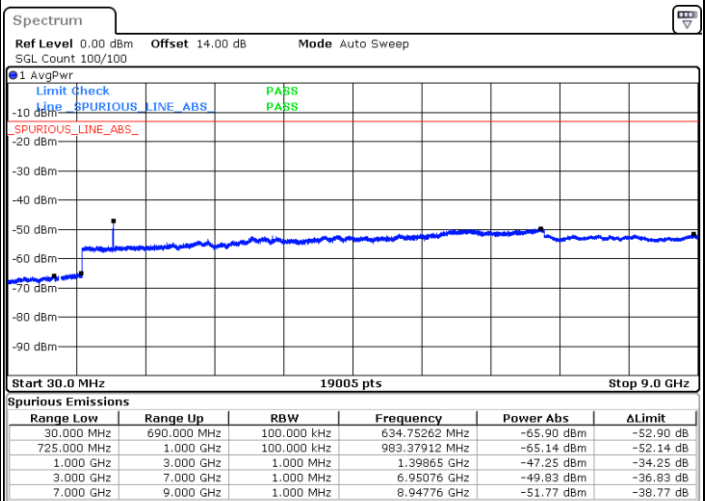
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 30.NOV.2020 13:38:10

Lowest Channel / 16QAM

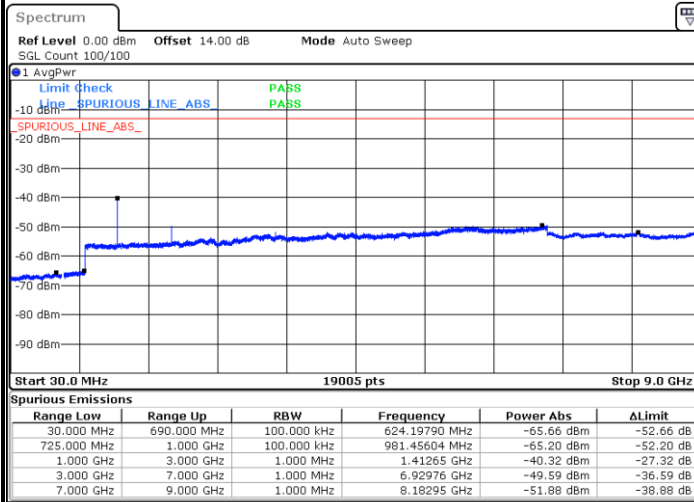


Date: 30.NOV.2020 13:37:18



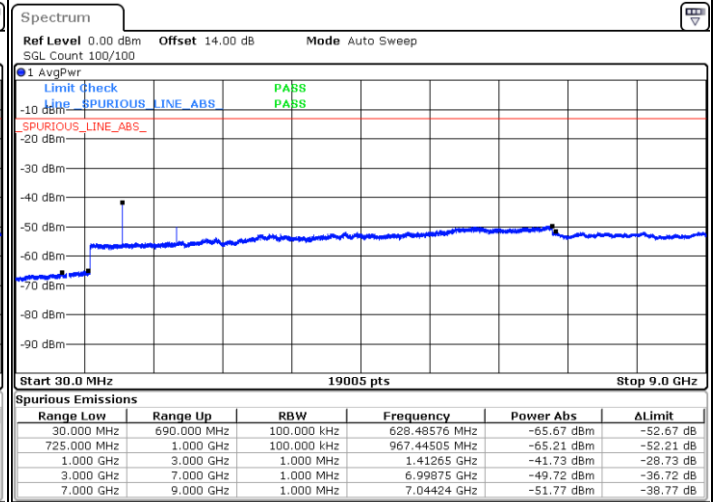
LTE Band 12 / 3MHz

Middle Channel / QPSK



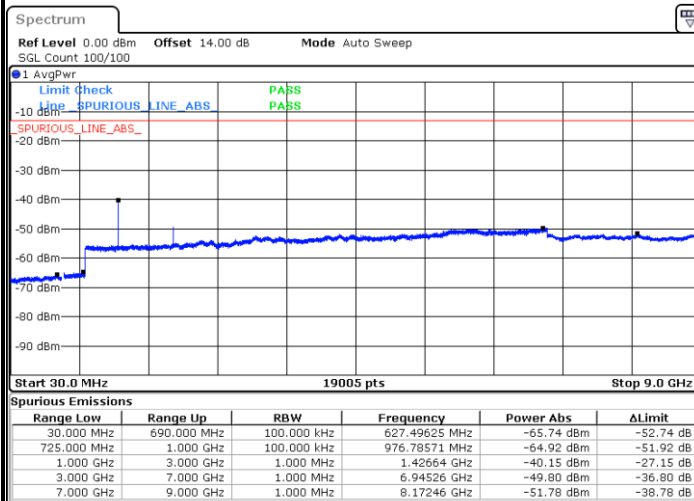
Date: 30.NOV.2020 13:44:16

Middle Channel / 16QAM



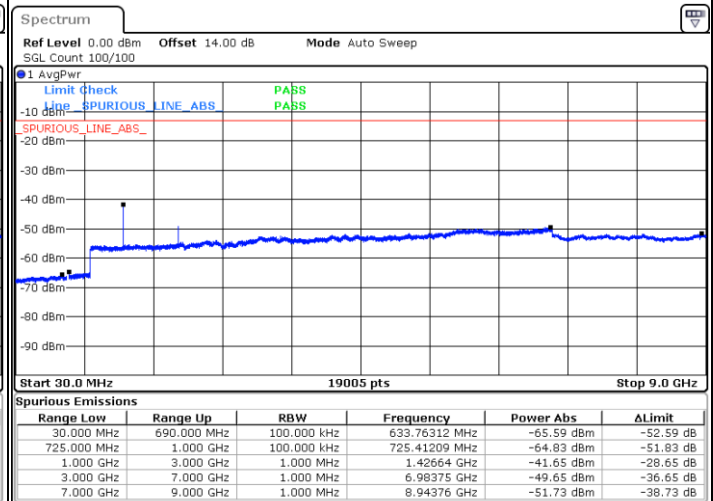
Date: 30.NOV.2020 13:43:37

Highest Channel / QPSK



Date: 30.NOV.2020 13:53:36

Highest Channel / 16QAM

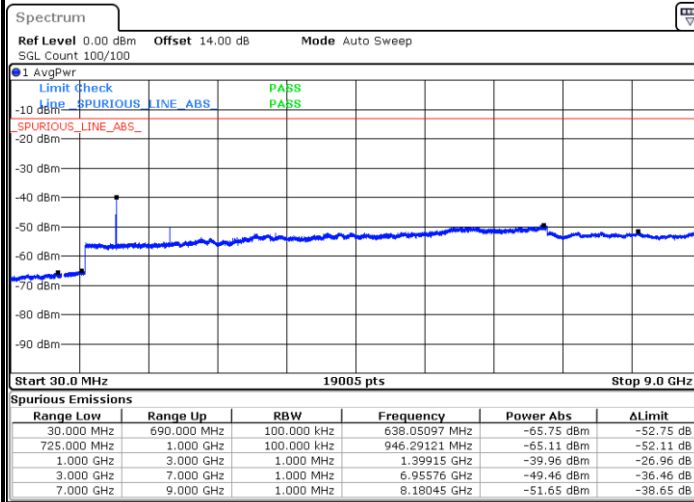


Date: 30.NOV.2020 13:54:21



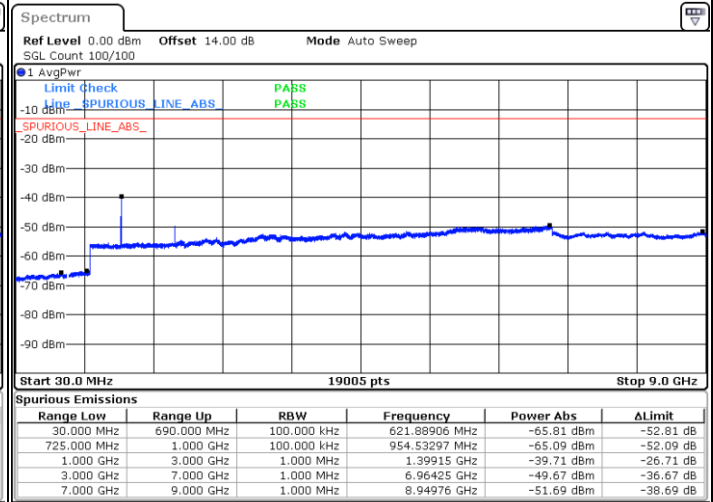
LTE Band 12 / 5MHz

Lowest Channel / QPSK



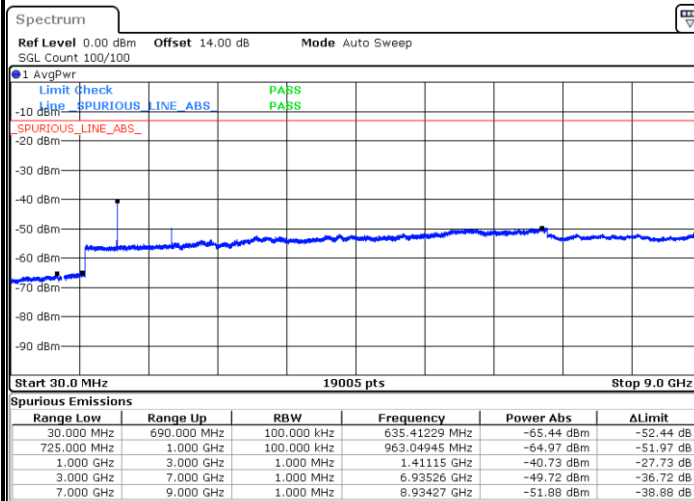
Date: 30.NOV.2020 14:15:14

Lowest Channel / 16QAM



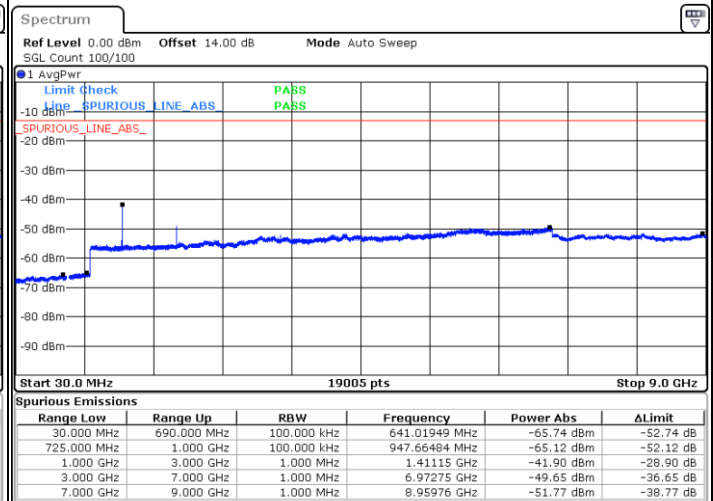
Date: 30.NOV.2020 14:13:04

Middle Channel / QPSK



Date: 30.NOV.2020 14:16:59

Middle Channel / 16QAM

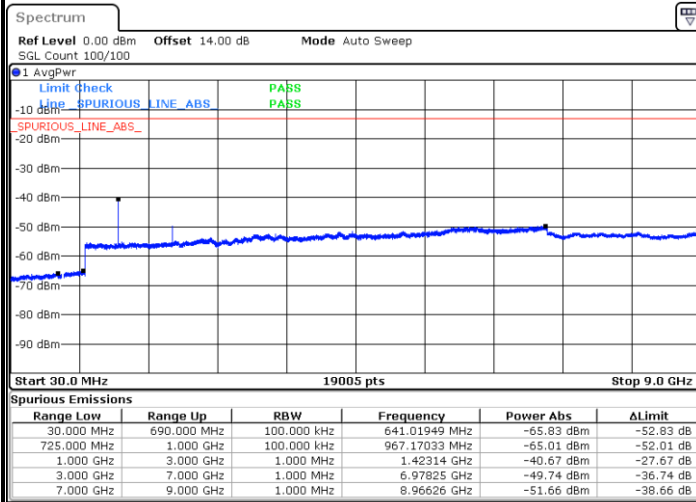


Date: 30.NOV.2020 14:18:03



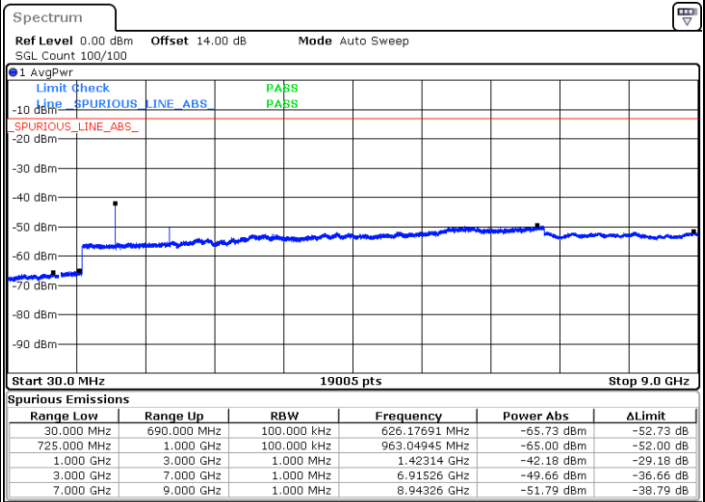
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 30.NOV.2020 14:35:16

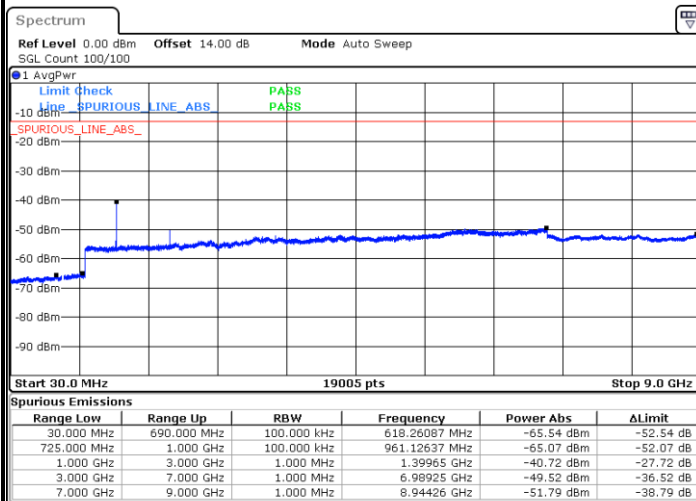
Highest Channel / 16QAM



Date: 30.NOV.2020 14:34:33

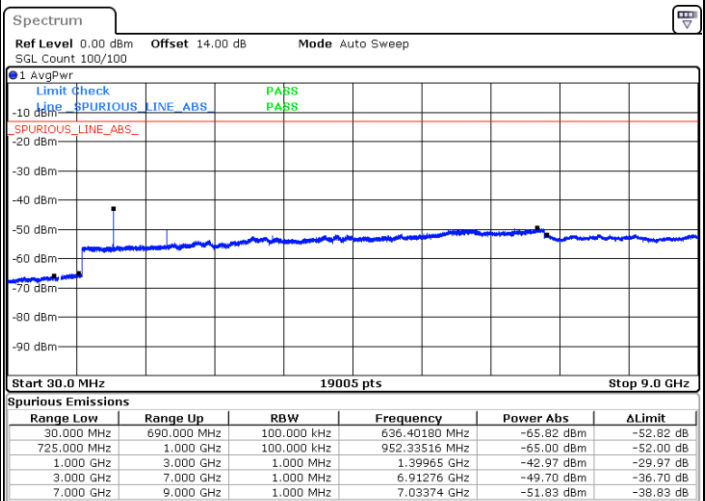
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 30.NOV.2020 14:56:44

Lowest Channel / 16QAM

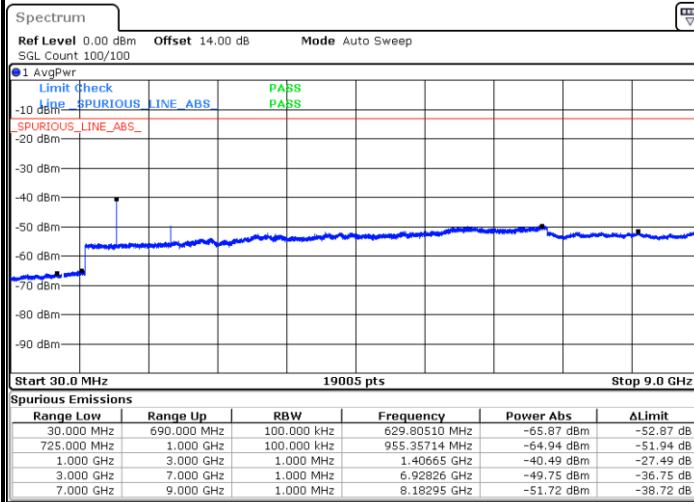


Date: 30.NOV.2020 14:55:20



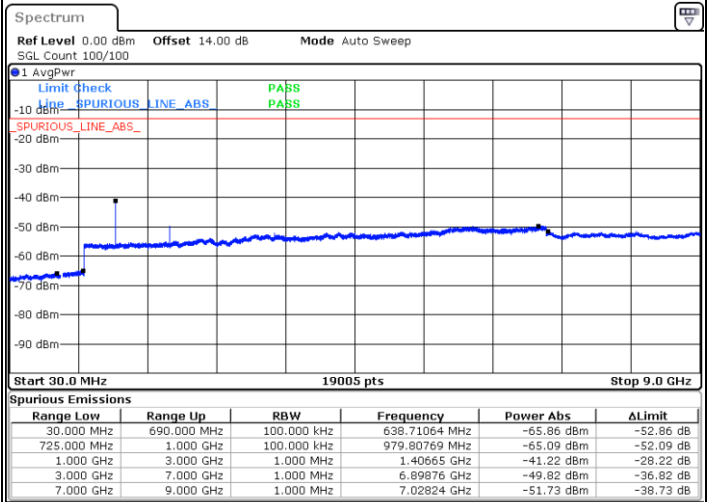
LTE Band 12 / 10MHz

Middle Channel / QPSK



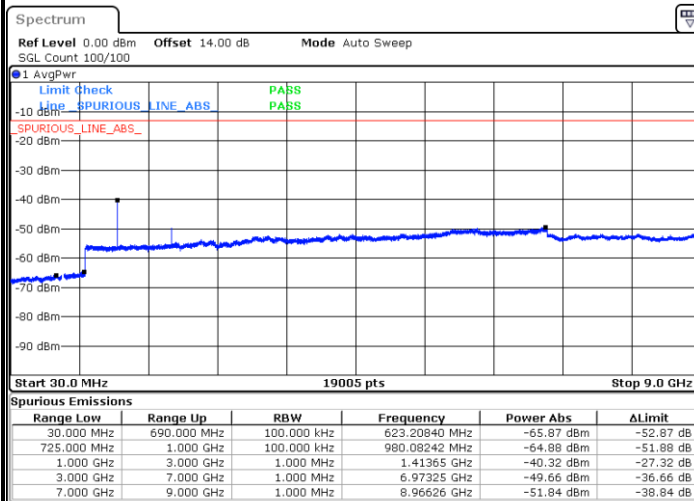
Date: 30.NOV.2020 14:57:57

Middle Channel / 16QAM



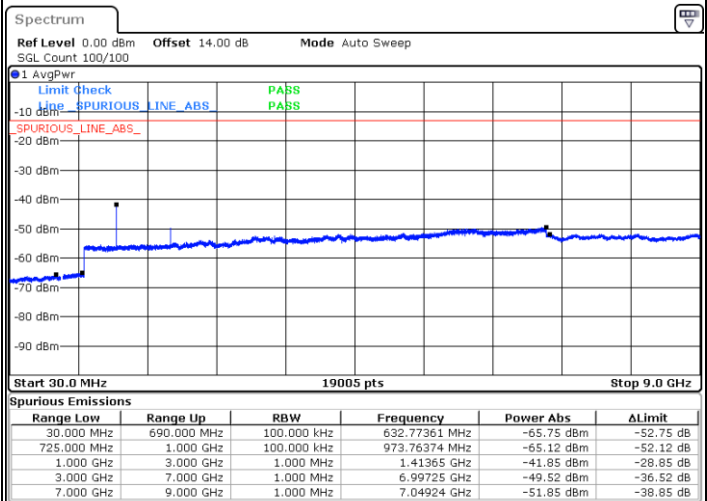
Date: 30.NOV.2020 14:58:23

Highest Channel / QPSK



Date: 30.NOV.2020 15:09:40

Highest Channel / 16QAM

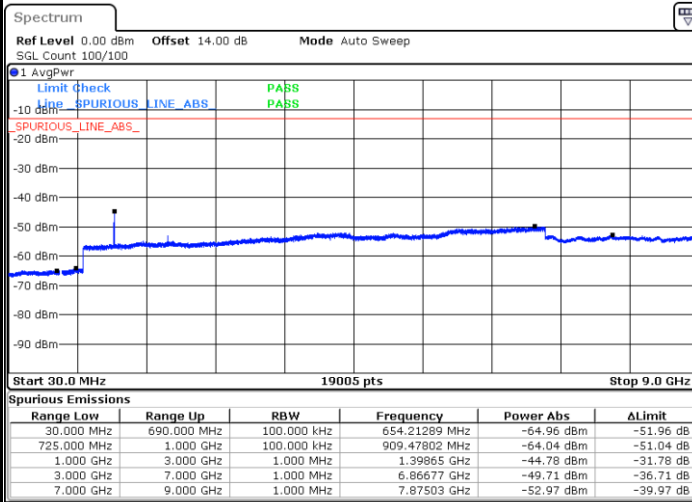


Date: 30.NOV.2020 15:08:48



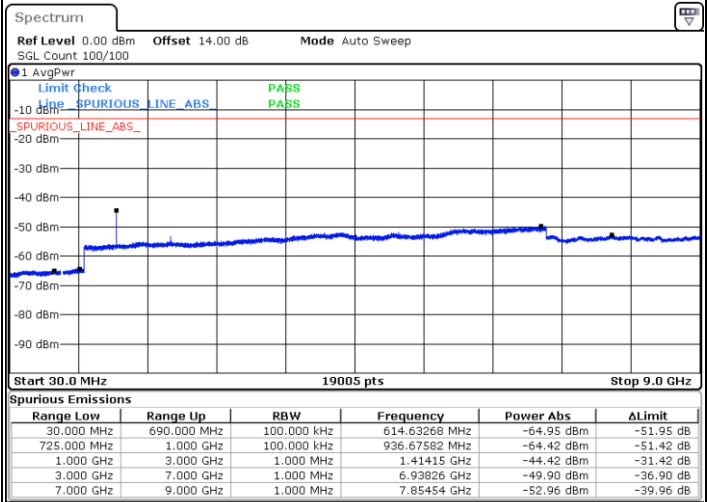
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



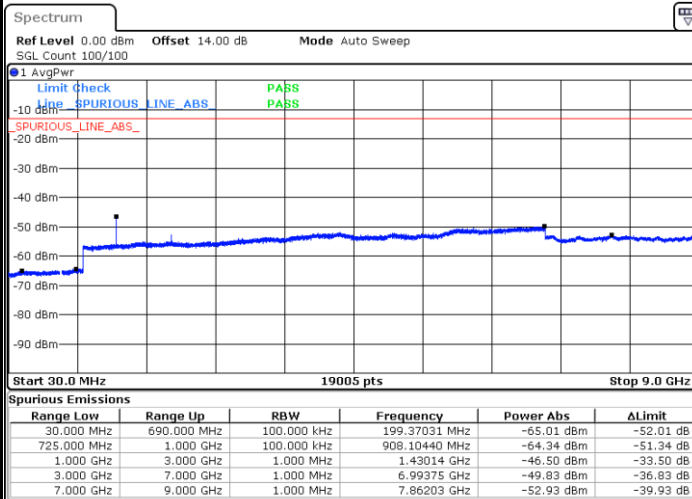
Date: 30 NOV 2020 13:59:05

Middle Channel / 64QAM



Date: 30 NOV 2020 14:04:16

Highest Channel / 64QAM

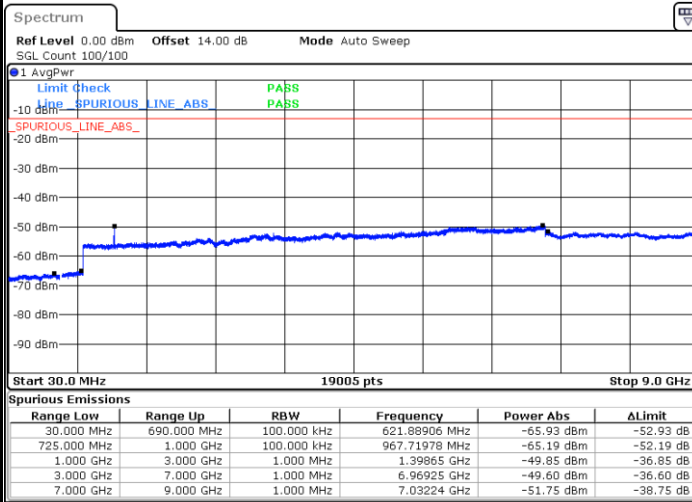


Date: 30 NOV 2020 14:09:34



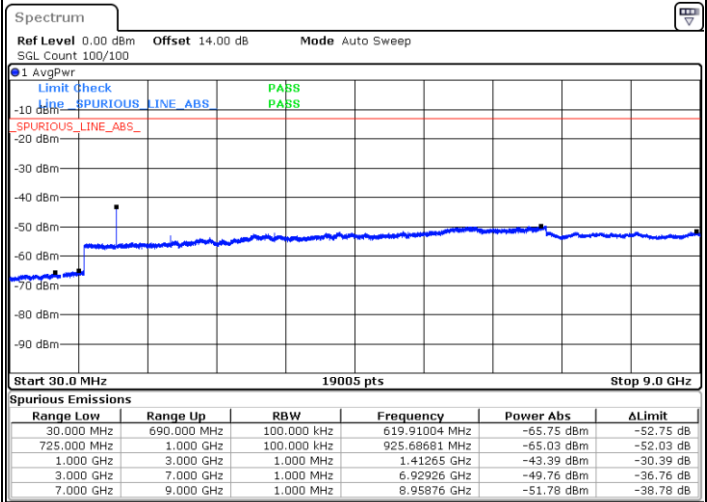
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



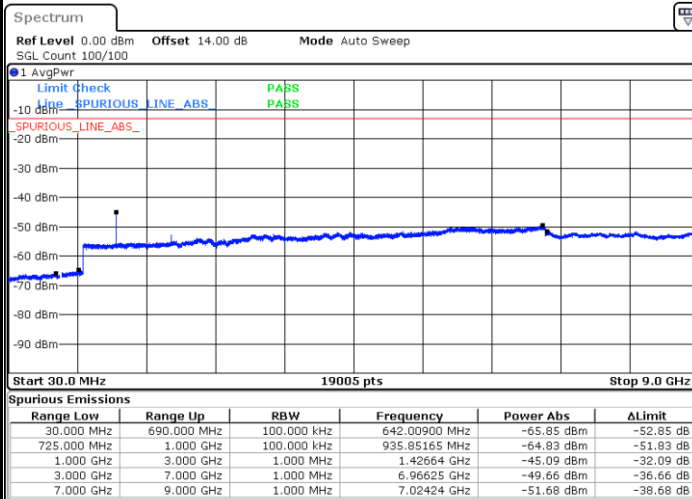
Date: 30.NOV.2020 13:36:12

Middle Channel / 64QAM



Date: 30.NOV.2020 13:42:46

Highest Channel / 64QAM

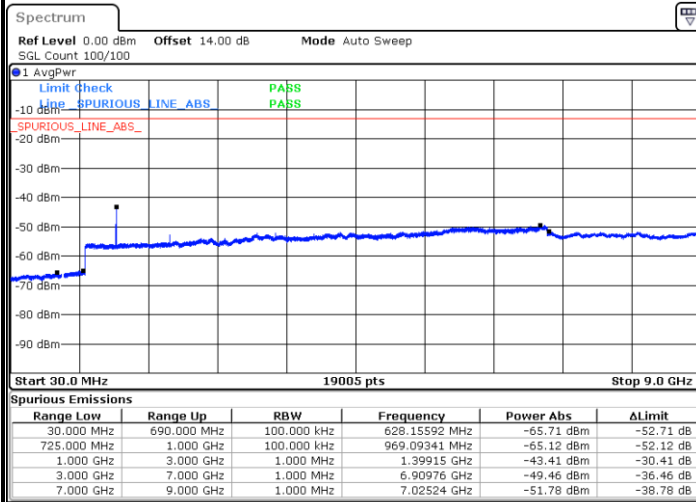


Date: 30.NOV.2020 13:55:17



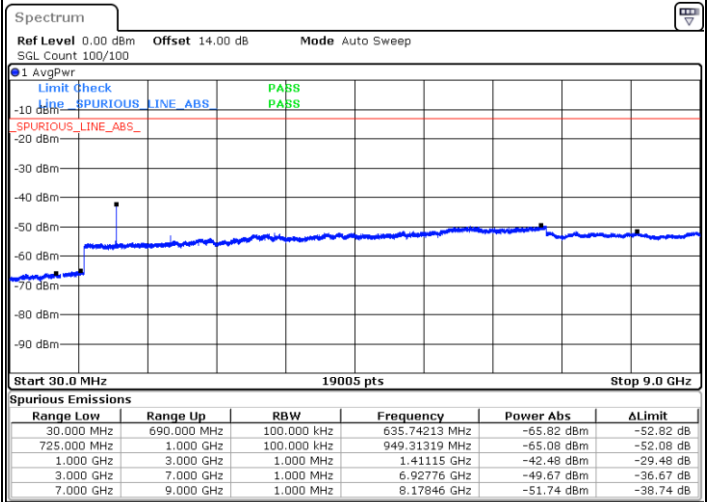
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



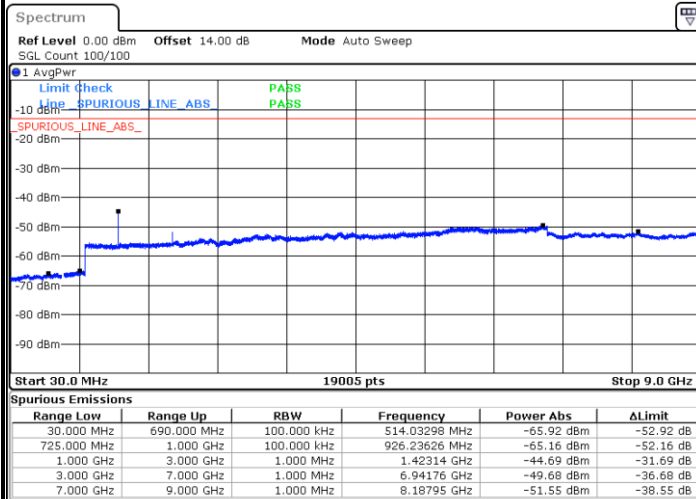
Date: 30.NOV.2020 14:12:16

Middle Channel / 64QAM



Date: 30.NOV.2020 14:19:12

Highest Channel / 64QAM

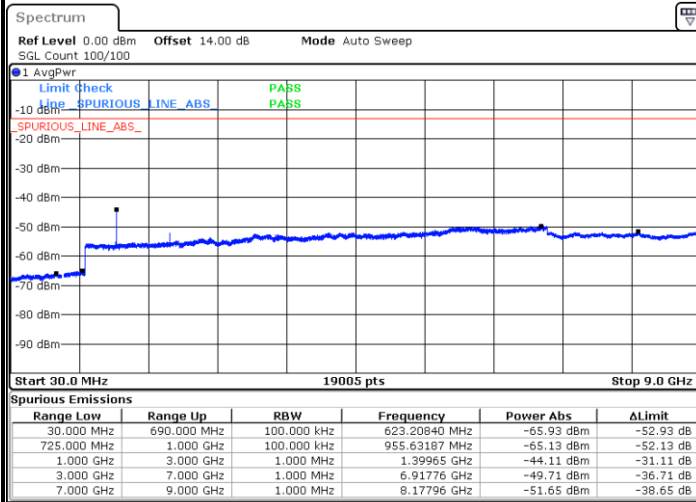


Date: 30.NOV.2020 14:33:44



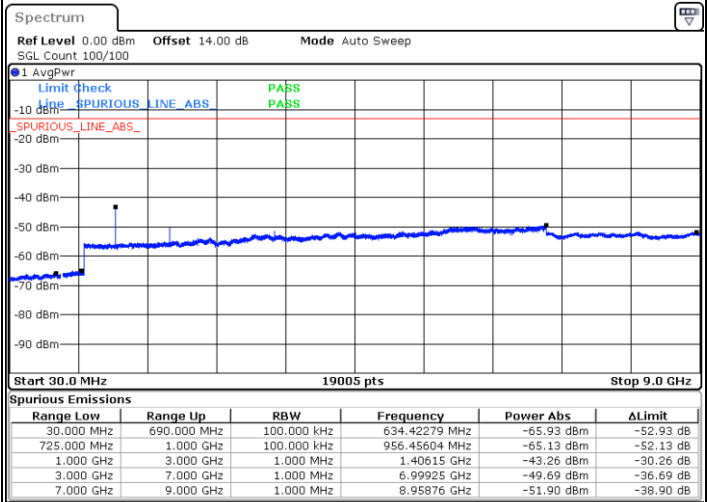
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



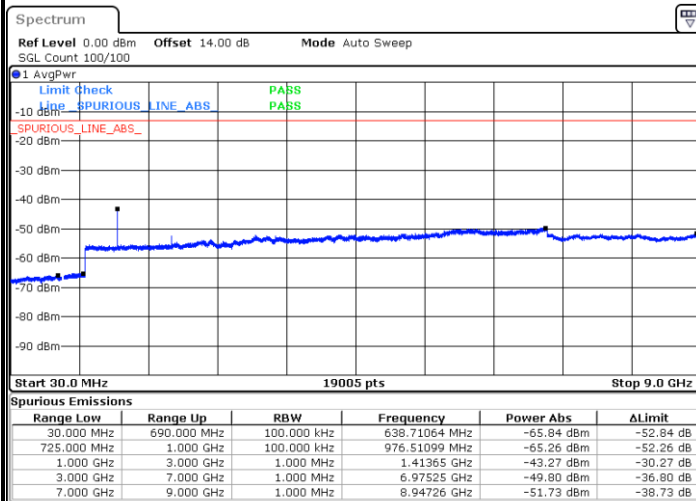
Date: 30.NOV.2020 14:54:02

Middle Channel / 64QAM



Date: 30.NOV.2020 14:59:05

Highest Channel / 64QAM



Date: 30.NOV.2020 15:08:05

Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0110	PASS
40	Normal Voltage	0.0017	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0085	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0082	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0110	
20	Maximum Voltage	0.0016	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

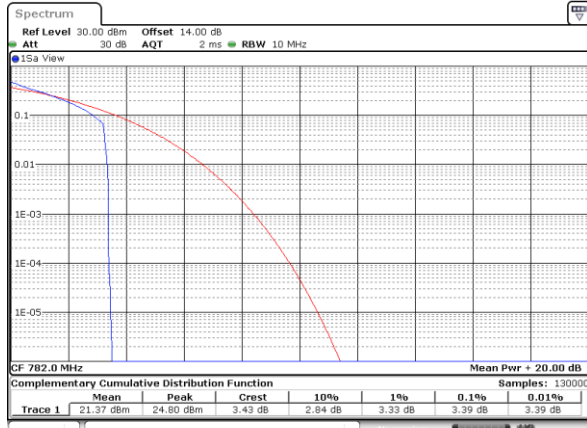
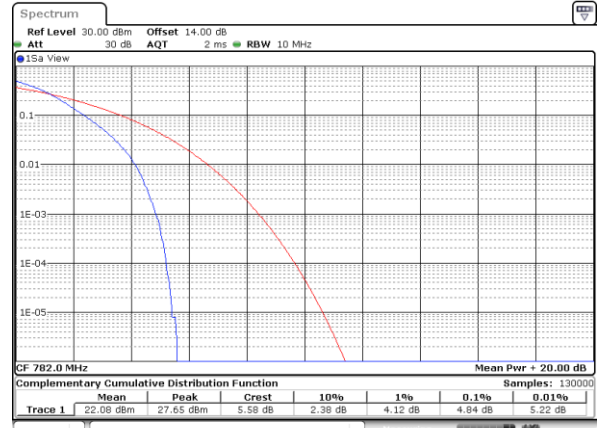
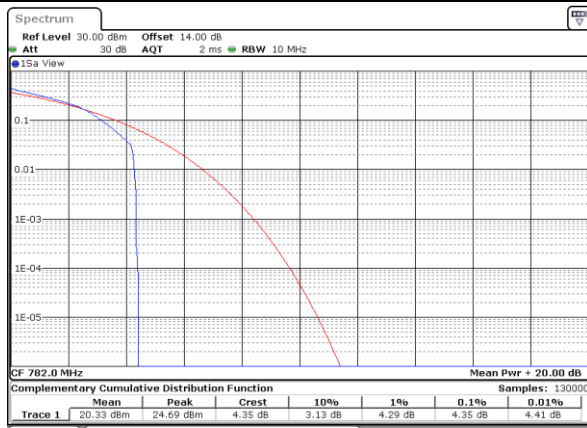
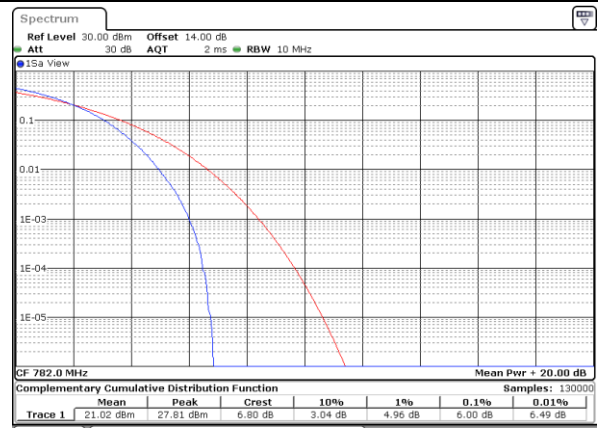
1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.2 V. ; Maximum Voltage =8.9 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.39	4.84	4.35	6.00	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.12	6.55	-	-	
Highest CH	-	-	-	-	

LTE Band 13 / 10MHz / QPSK
Middle Channel / 1RB

Middle Channel / Full RB

LTE Band 13 / 10MHz / 16QAM
Middle Channel / 1RB

Middle Channel / Full RB

LTE Band 13 / 10MHz / 64QAM
Middle Channel / 1RB

Middle Channel / Full RB


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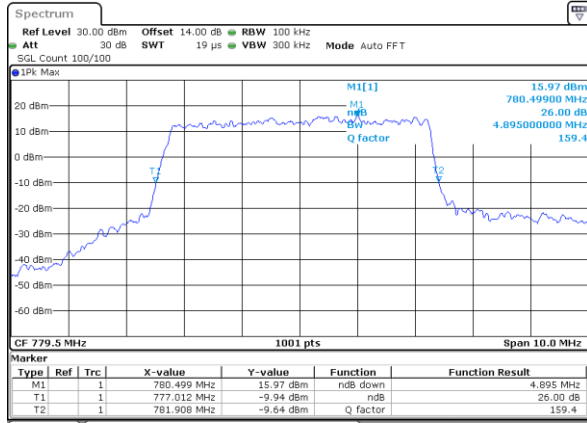
**26dB Bandwidth**

Mode	LTE Band 13 : 26dB BW(MHz)					
BW	5MHz			10MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	4.90	4.88	4.80	-	-	-
Middle CH	4.95	4.89	4.89	9.69	9.77	9.65
Highest CH	4.96	4.94	4.95	-	-	-

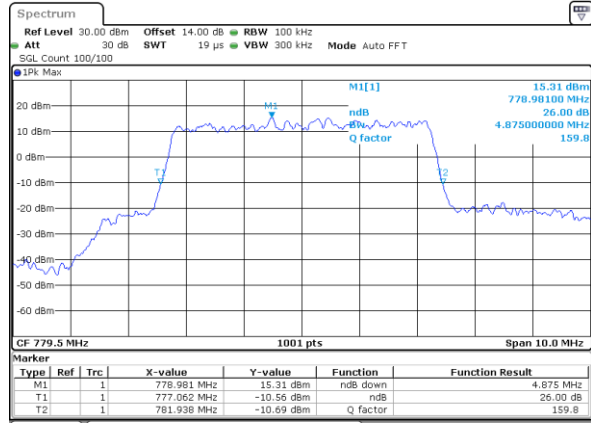


LTE Band 13

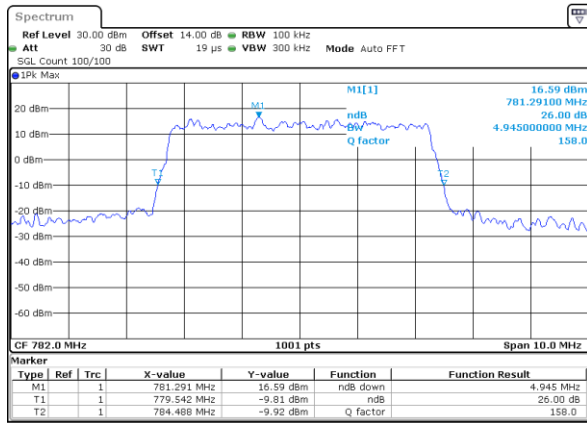
Lowest Channel / 5MHz / QPSK



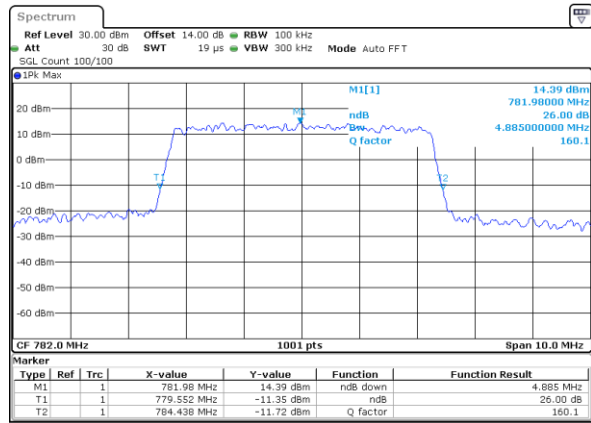
Lowest Channel / 5MHz / 16QAM



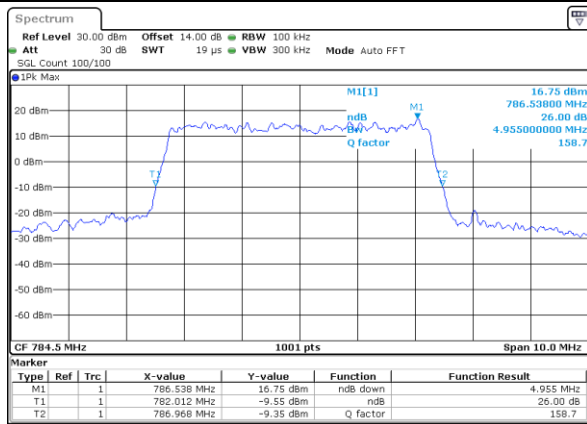
Middle Channel / 5MHz / QPSK



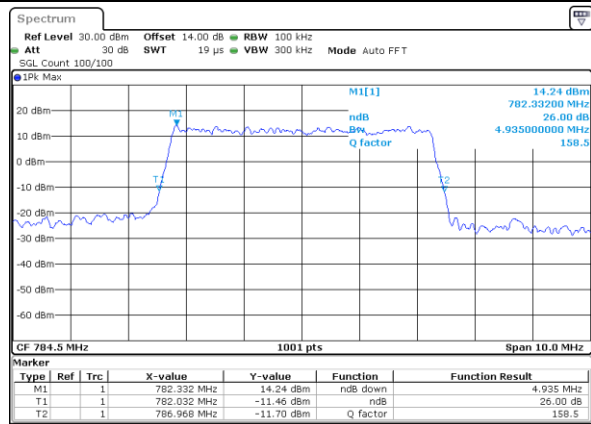
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



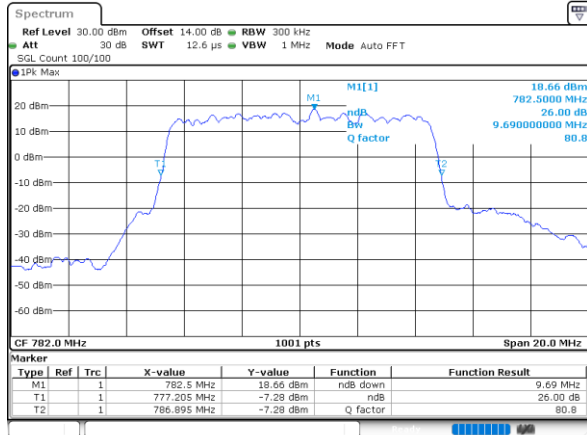
Highest Channel / 5MHz / 16QAM





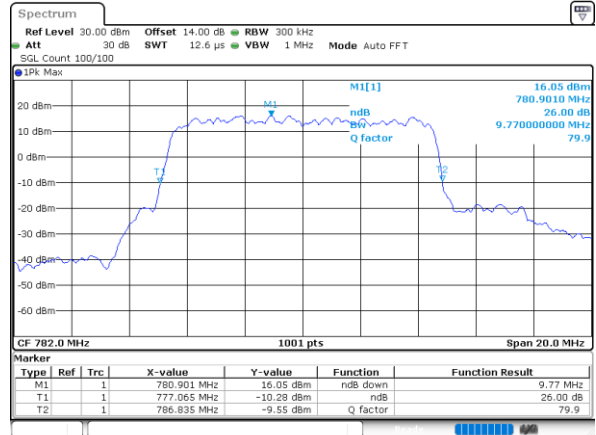
LTE Band 13

Middle Channel / 10MHz / QPSK



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Middle Channel / 10MHz / 16QAM

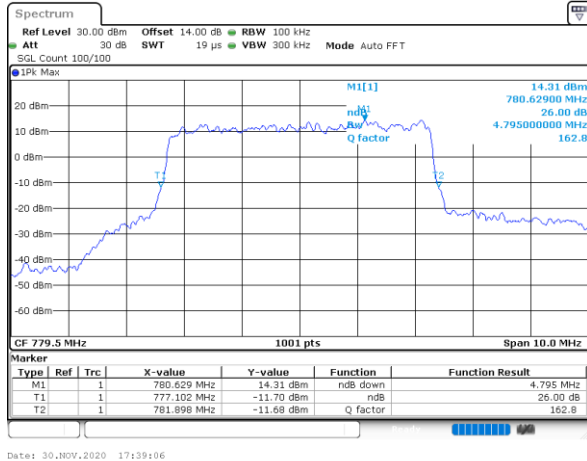


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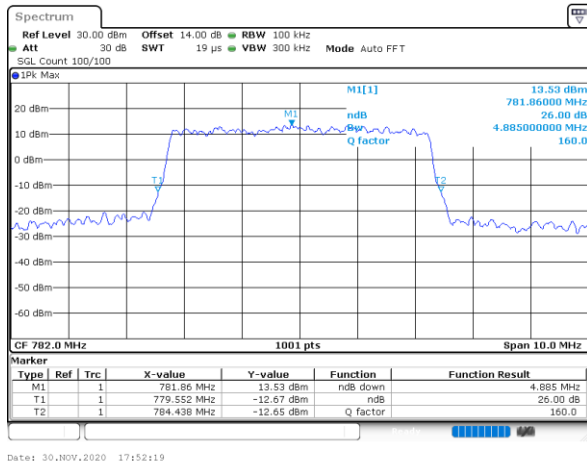


LTE Band 13

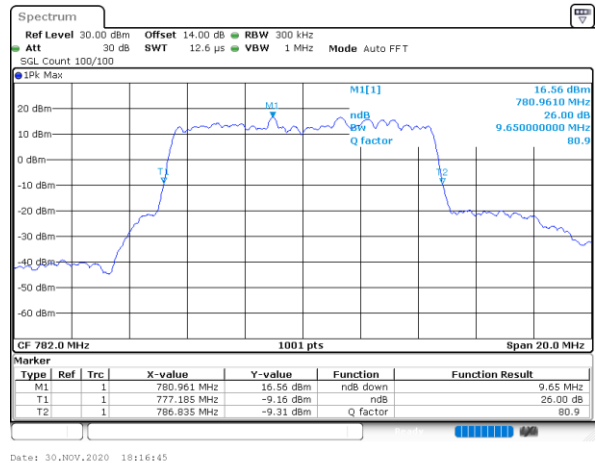
Lowest Channel / 5MHz / 64QAM



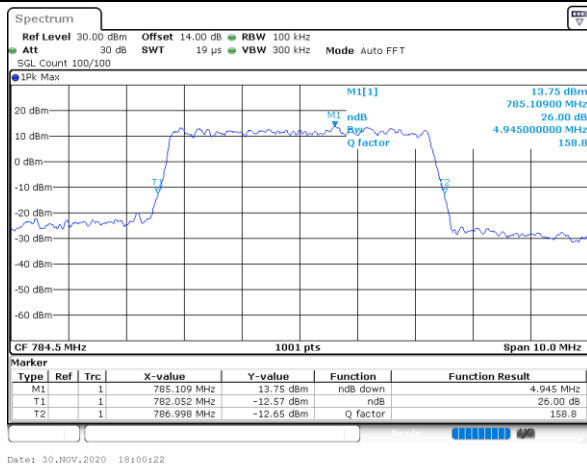
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



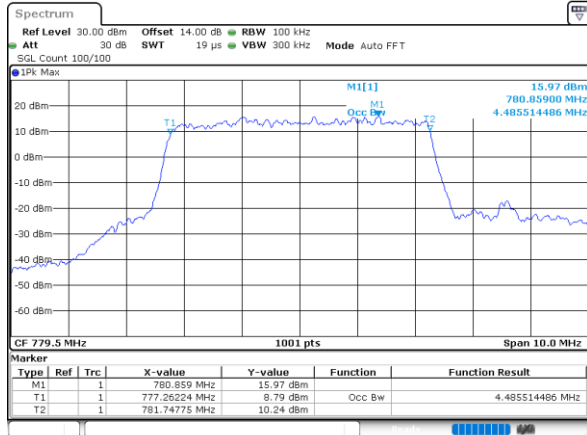
**Occupied Bandwidth**

Mode	LTE Band 13 : 99%OBW(MHz)					
BW	5MHz			10MHz		
Mod.	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Lowest CH	4.49	4.47	4.46	-	-	-
Middle CH	4.49	4.48	4.51	8.97	8.99	8.93
Highest CH	4.49	4.48	4.52	-	-	-

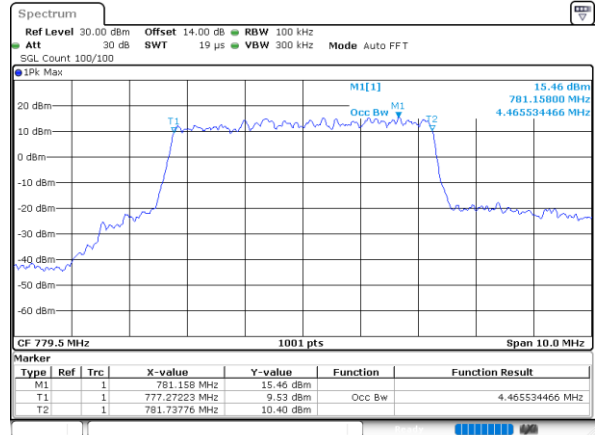


LTE Band 13

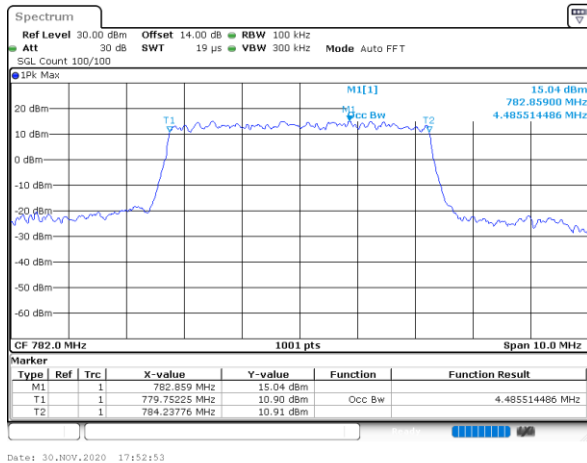
Lowest Channel / 5MHz / QPSK



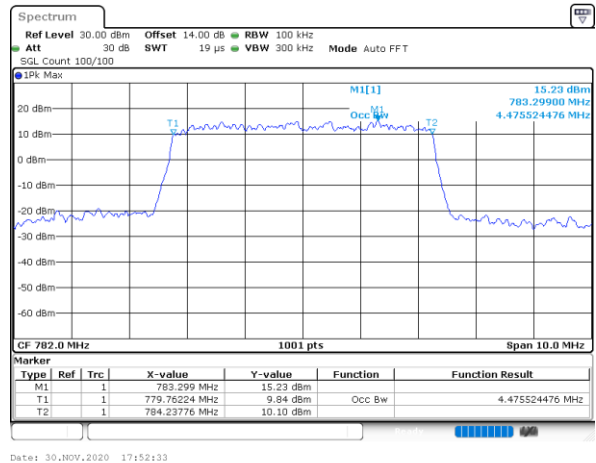
Lowest Channel / 5MHz / 16QAM



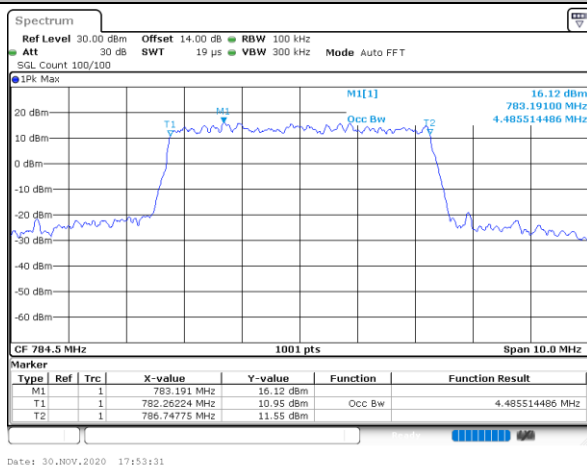
Middle Channel / 5MHz / QPSK



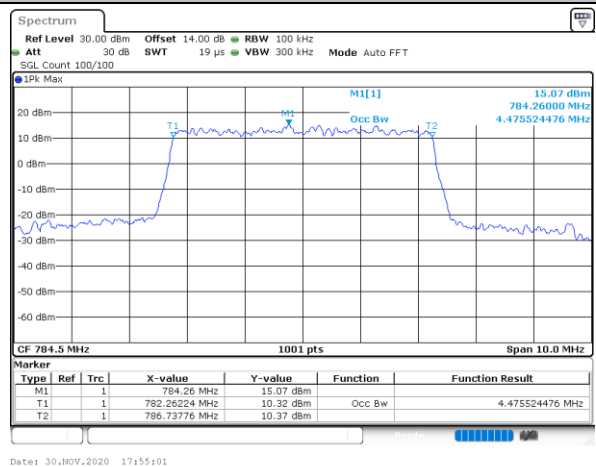
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



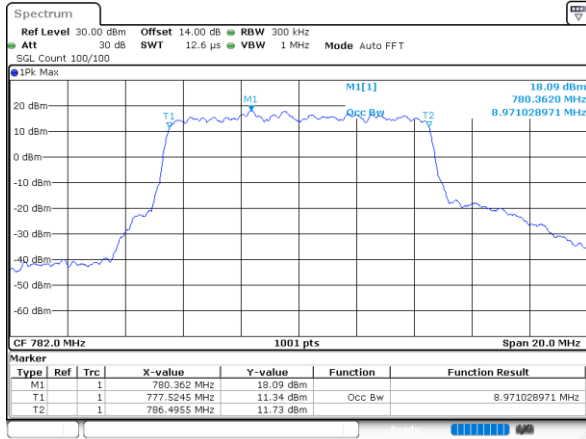
Highest Channel / 5MHz / 16QAM





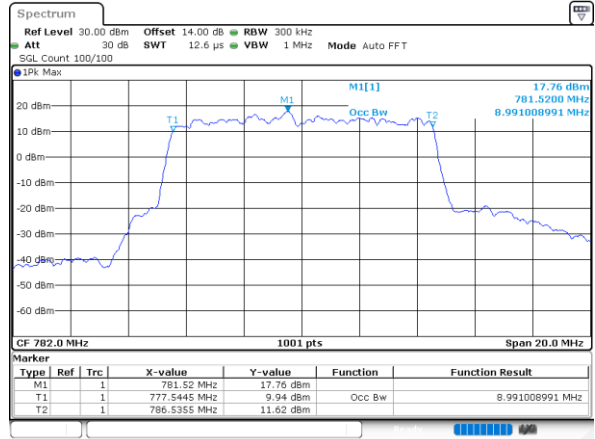
LTE Band 13

Middle Channel / 10MHz / QPSK



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Middle Channel / 10MHz / 16QAM

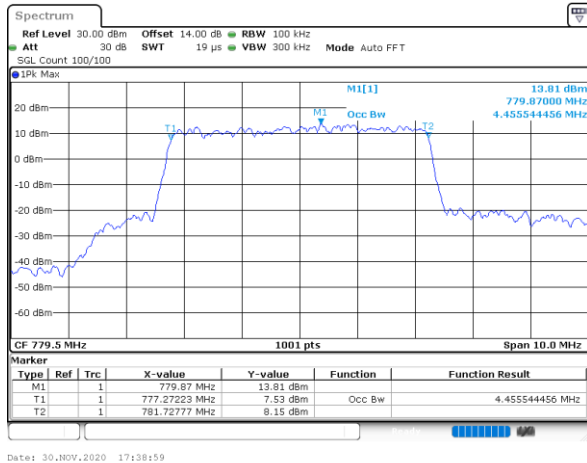


Date: 30,NOV,2020 18:14:13

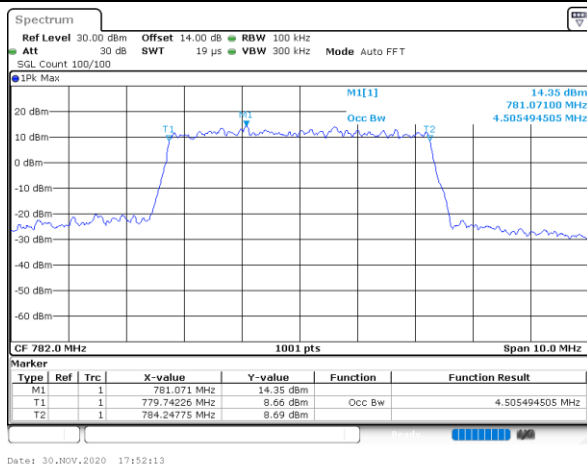


LTE Band 13

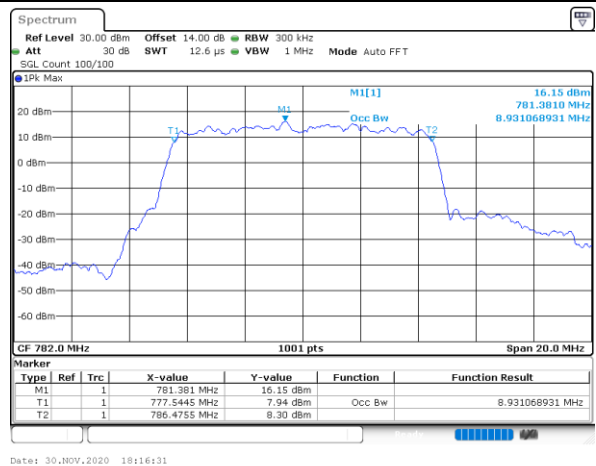
Lowest Channel / 5MHz / 64QAM



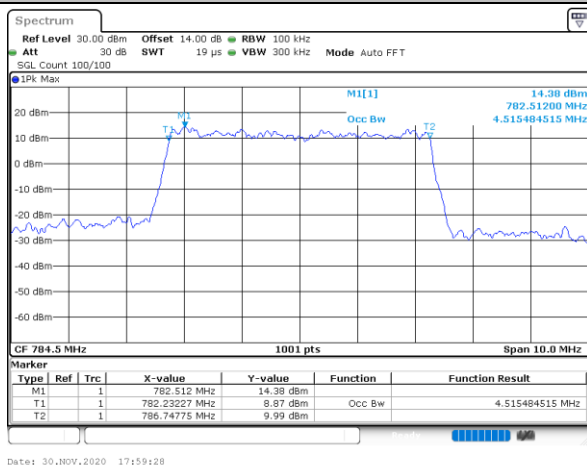
Middle Channel / 5MHz / 64QAM

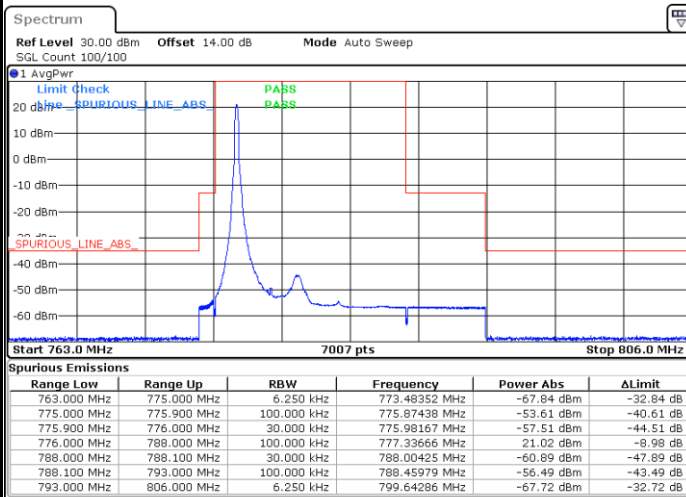
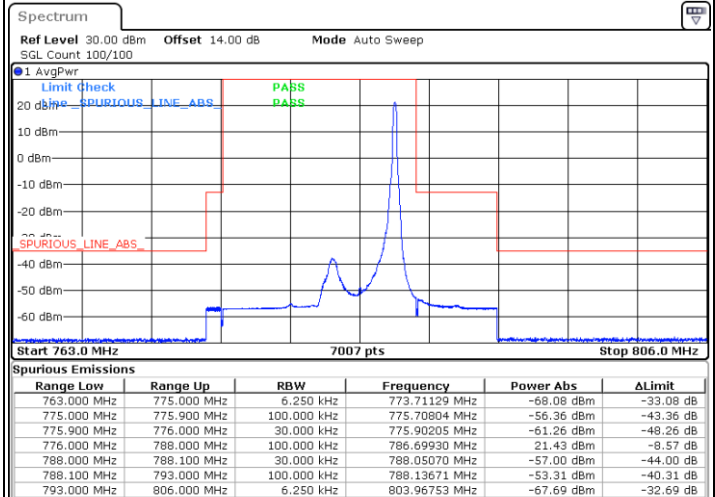
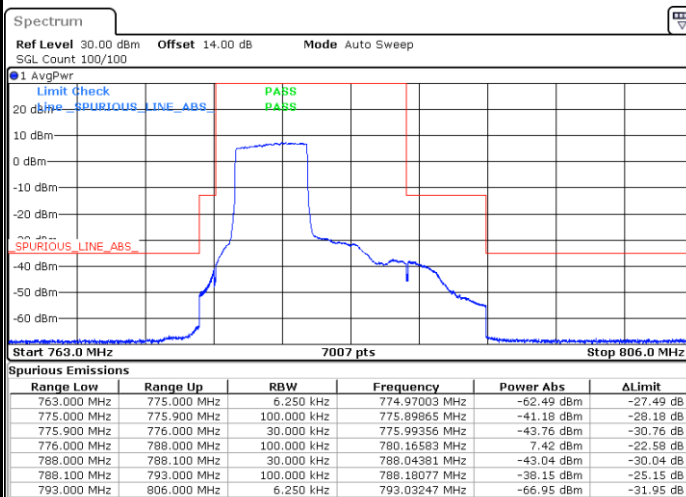


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**