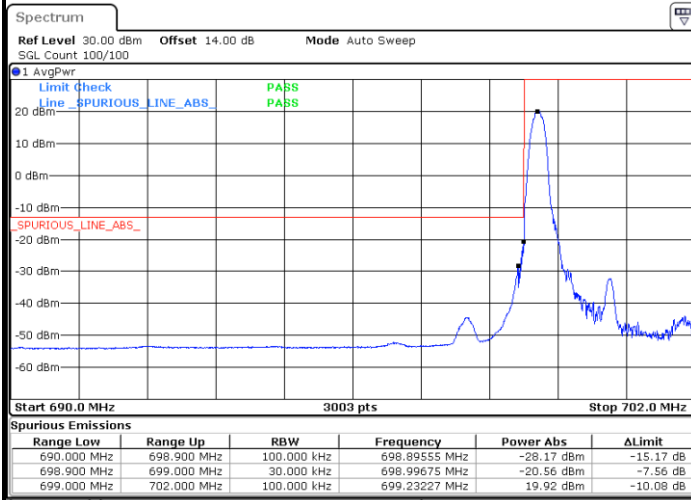


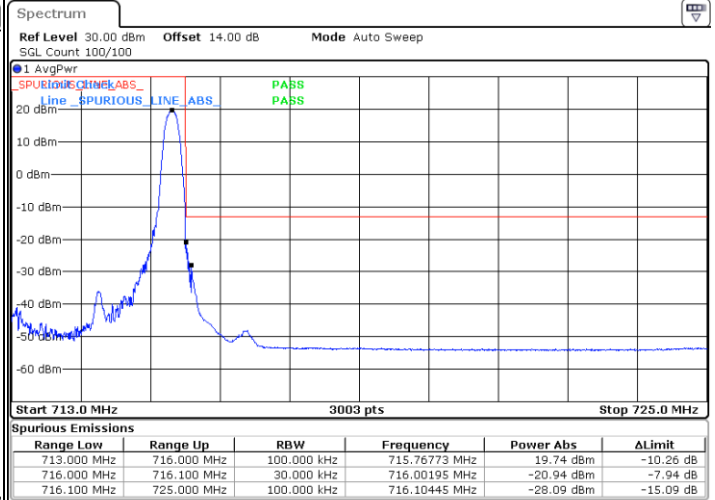


LTE Band 12 / 3MHz / QPSK

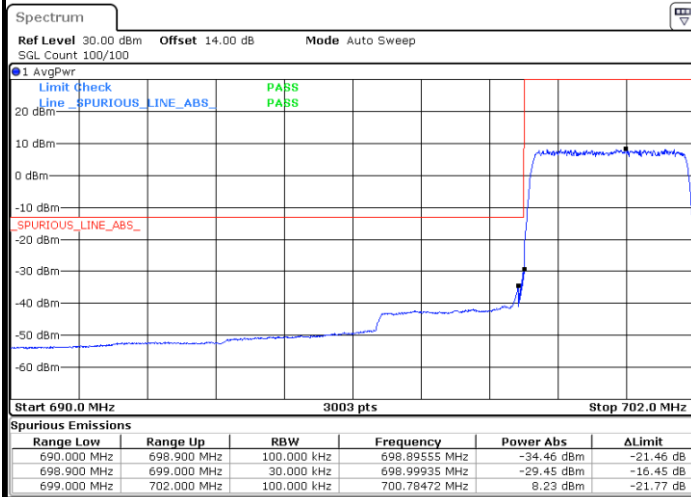
Lowest Band Edge / 1RB



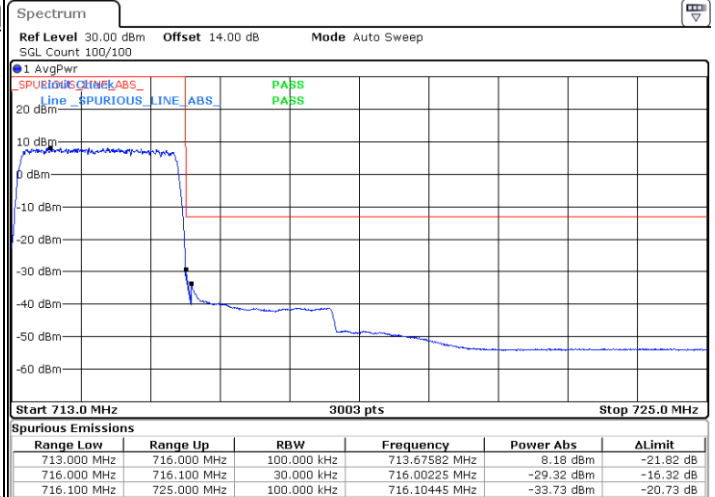
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



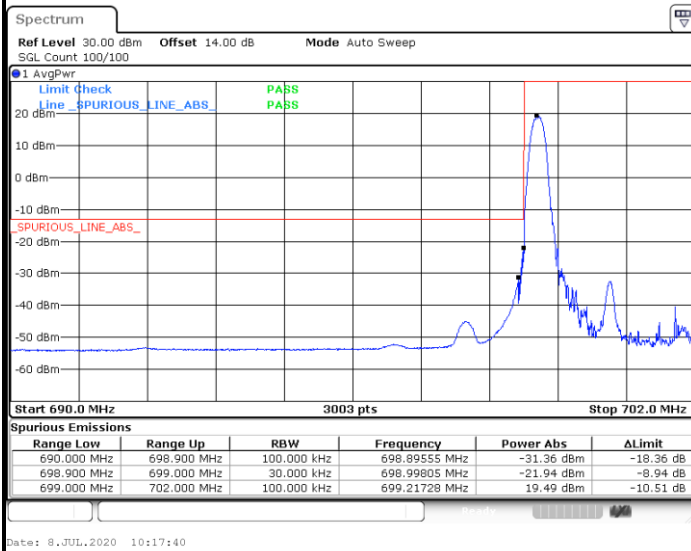
Highest Band Edge / Full RB



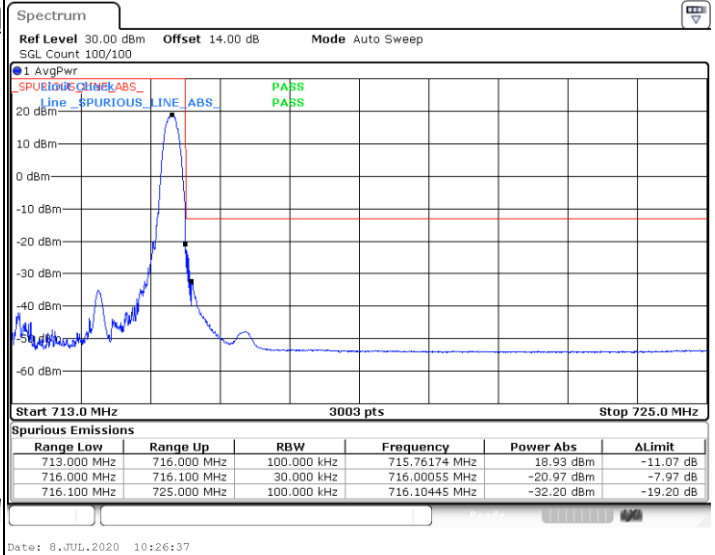


LTE Band 12 / 3MHz / 16QAM

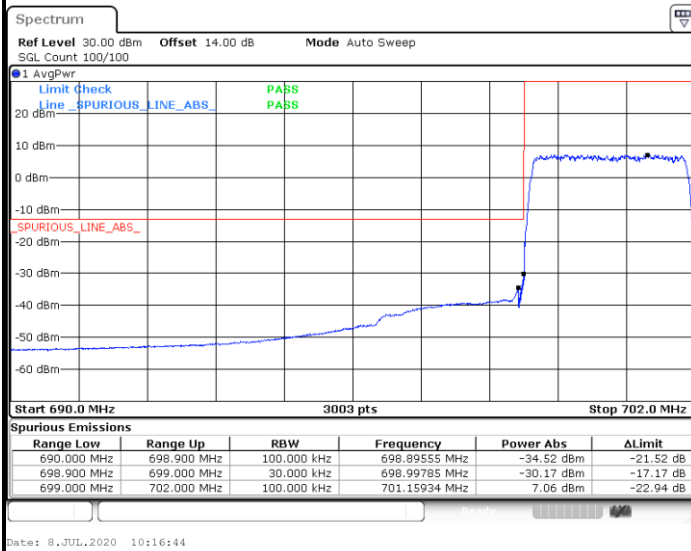
Lowest Band Edge / 1 RB



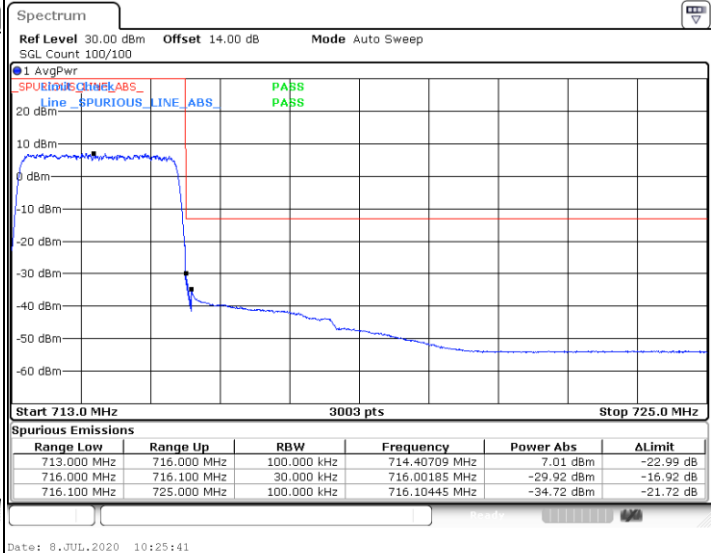
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



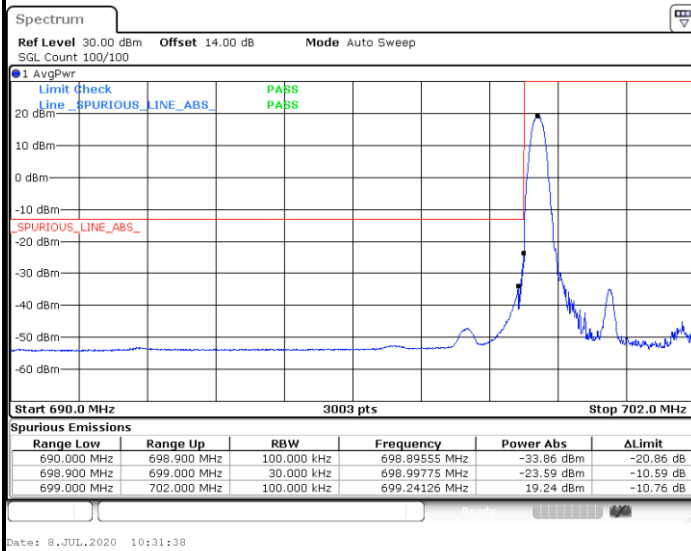
Highest Band Edge / Full RB



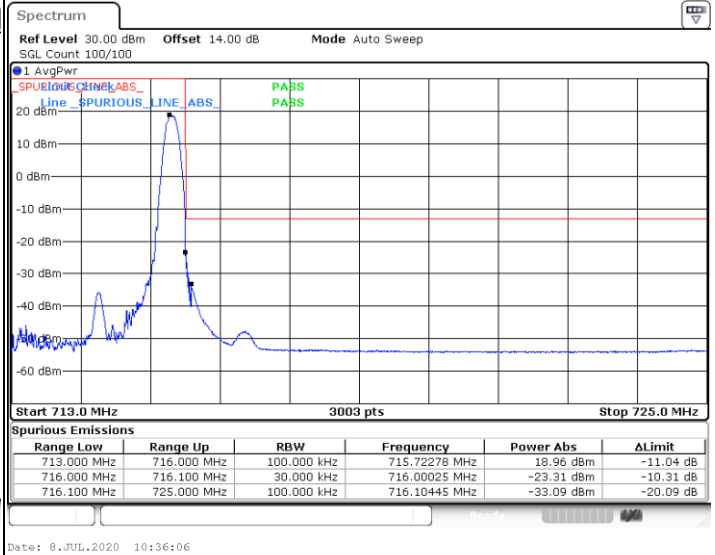


LTE Band 12 / 3MHz / 64QAM

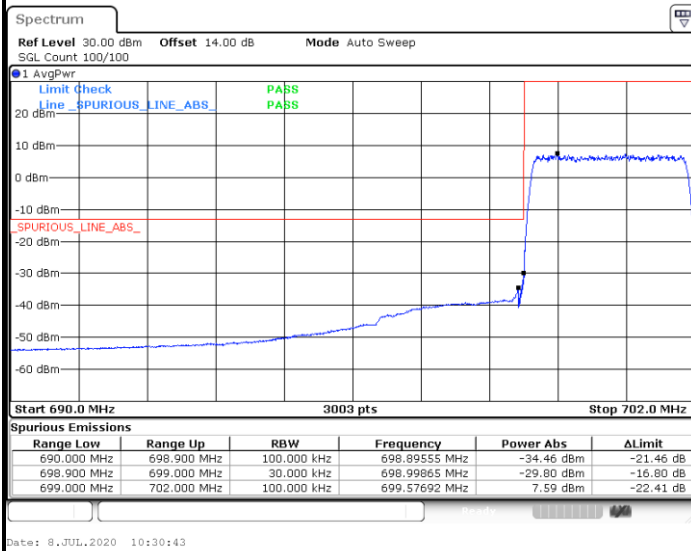
Lowest Band Edge / 1 RB



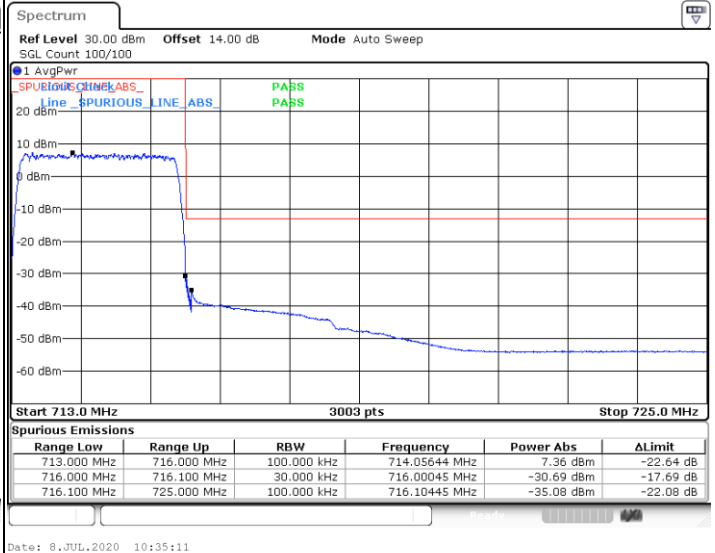
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



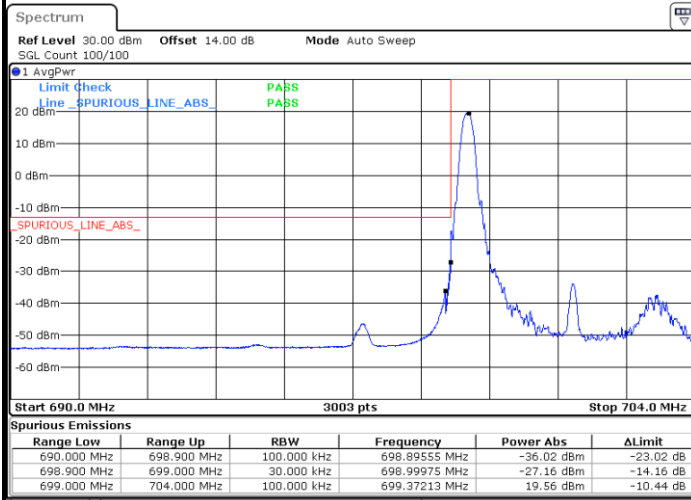
Highest Band Edge / Full RB



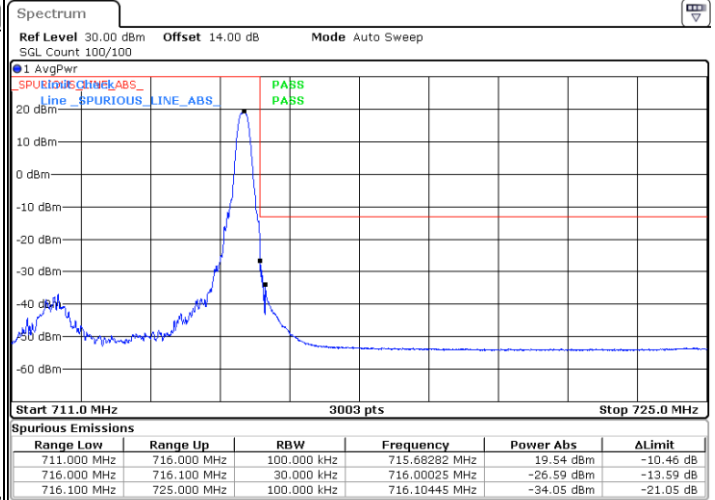


LTE Band 12 / 5MHz / QPSK

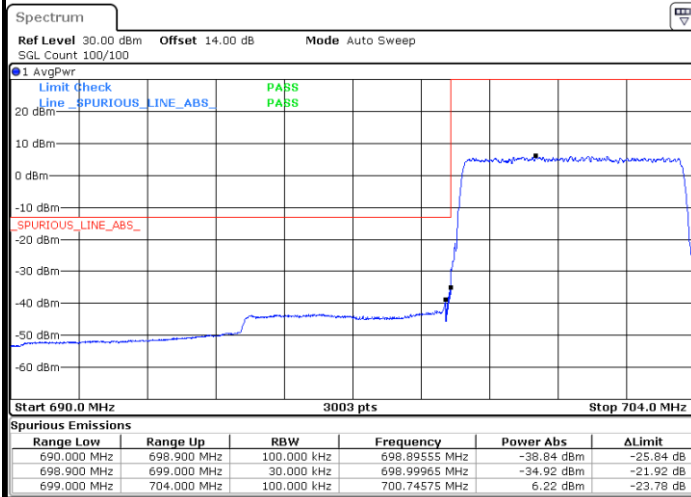
Lowest Band Edge / 1 RB



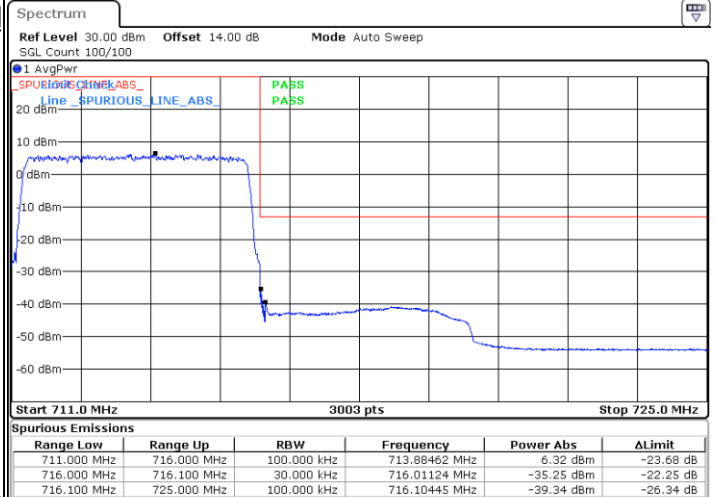
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



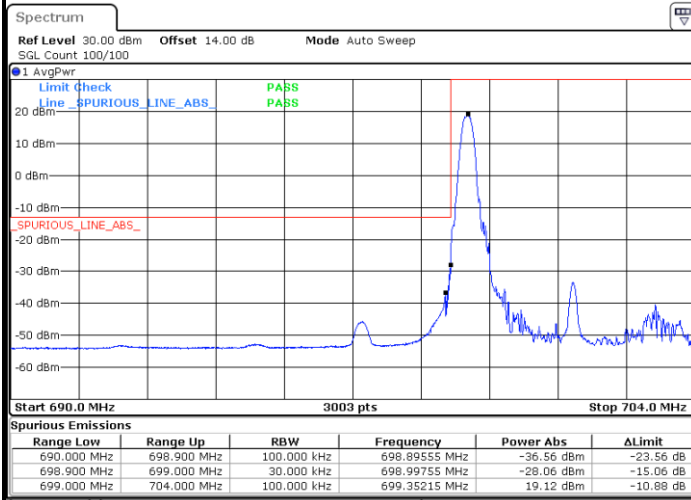
Highest Band Edge / Full RB



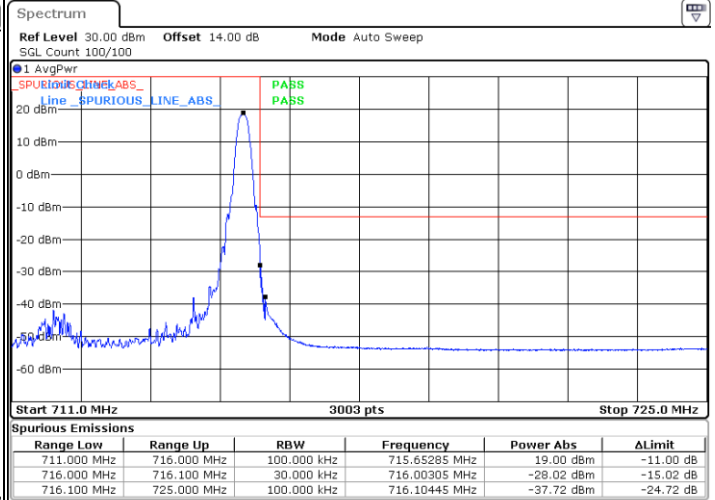


LTE Band 12 / 5MHz / 16QAM

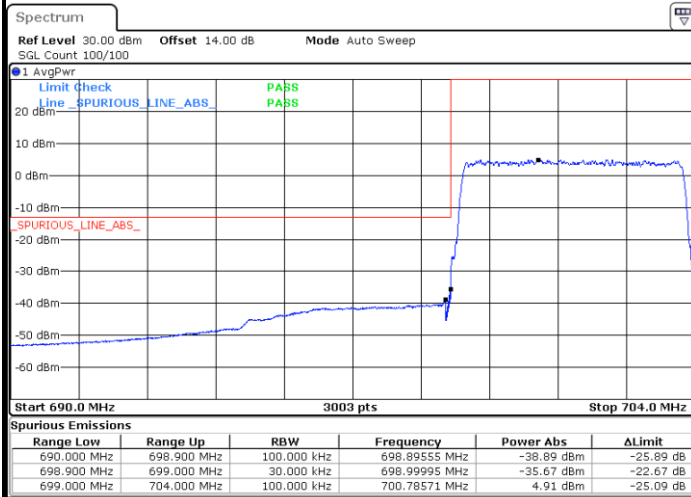
Lowest Band Edge / 1RB



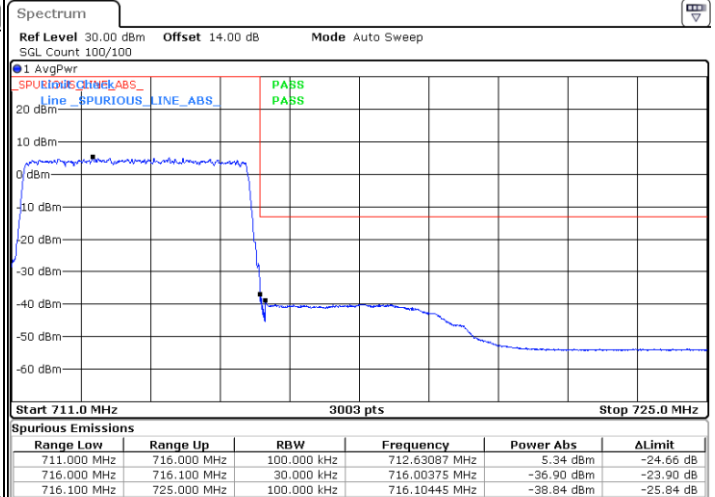
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



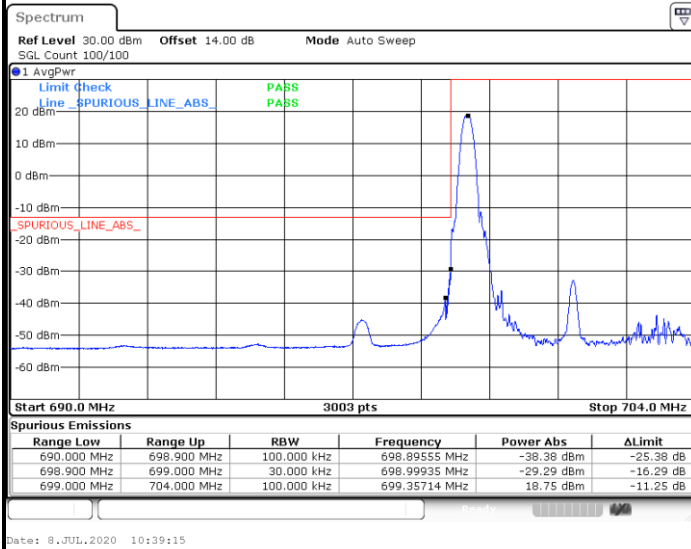
Highest Band Edge / Full RB



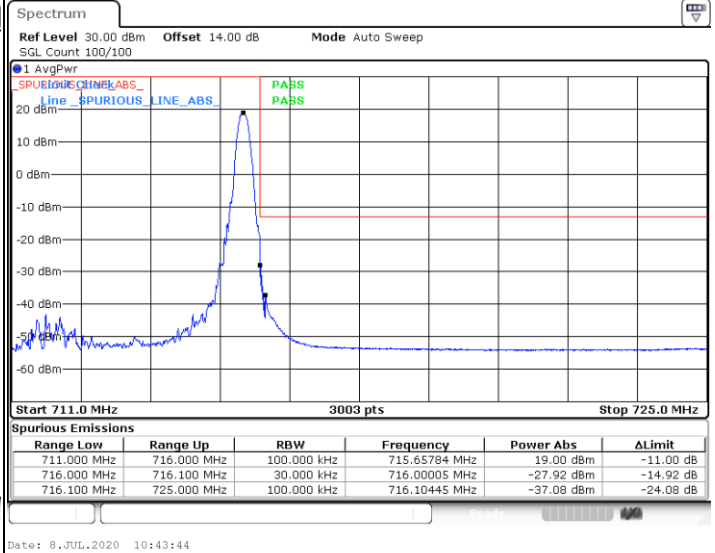


LTE Band 12 / 5MHz / 64QAM

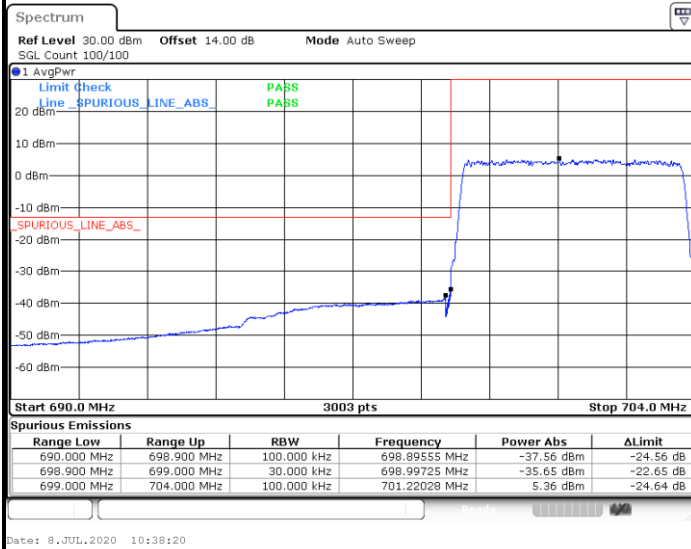
Lowest Band Edge / 1RB



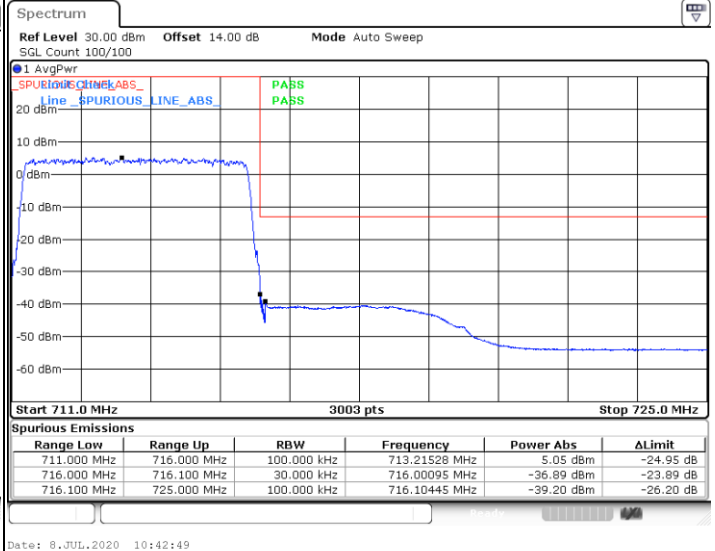
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



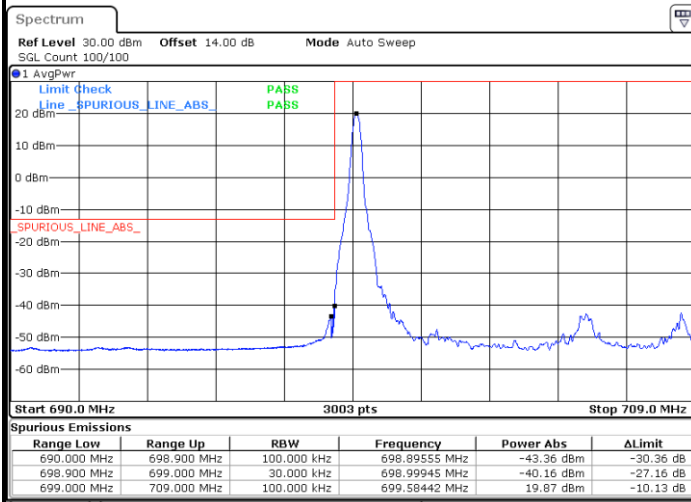
Highest Band Edge / Full RB



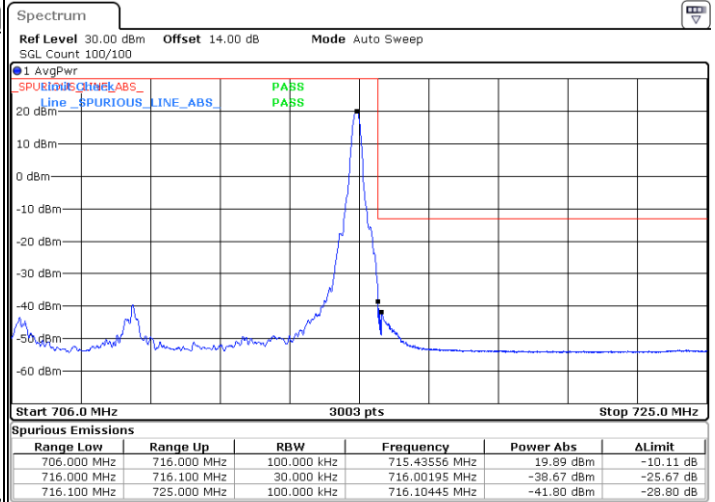


LTE Band 12 / 10MHz / QPSK

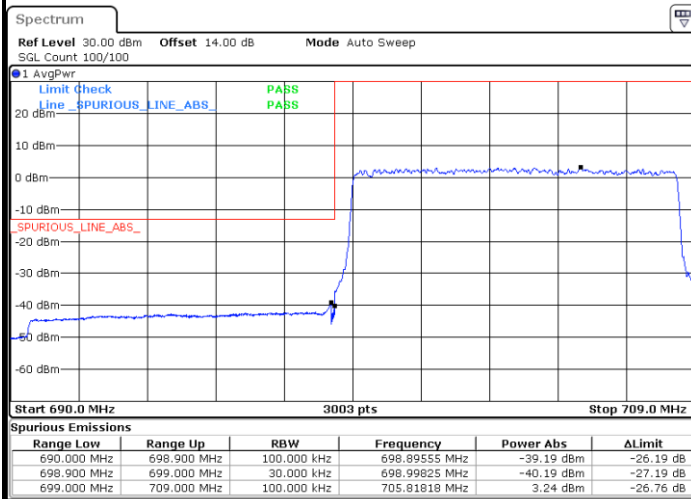
Lowest Band Edge / 1 RB



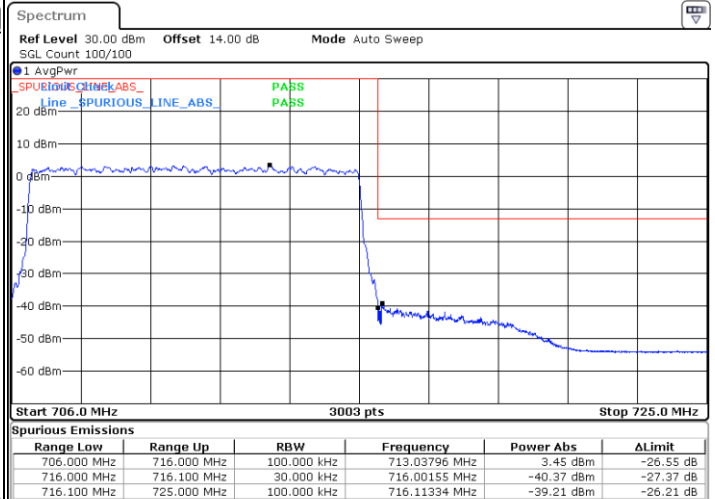
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



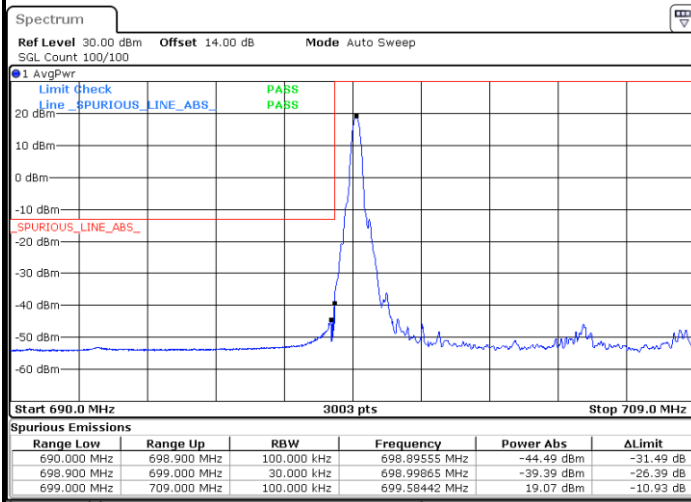
Highest Band Edge / Full RB



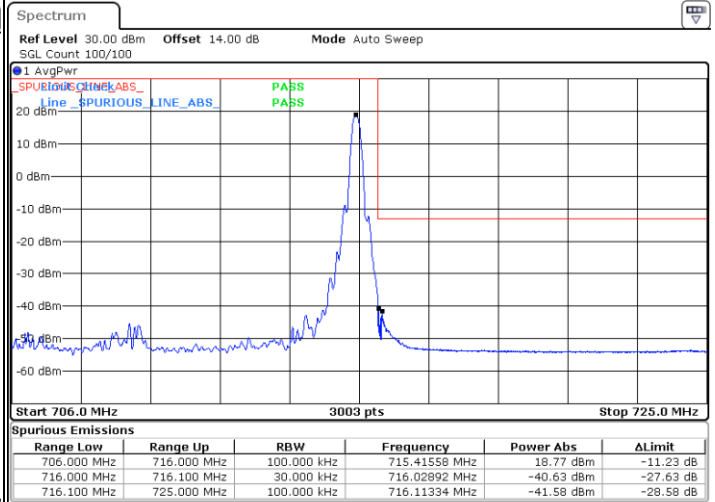


LTE Band 12 / 10MHz / 16QAM

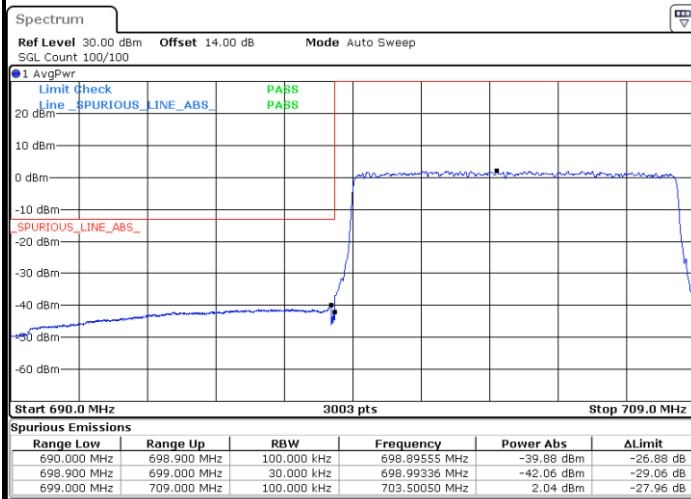
Lowest Band Edge / 1 RB



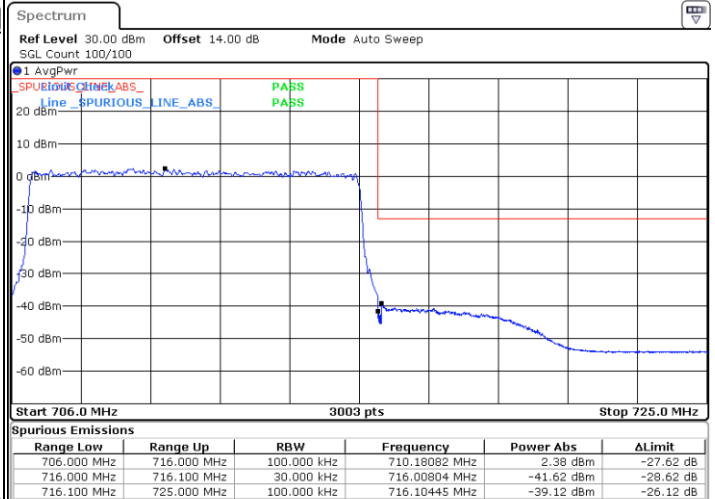
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



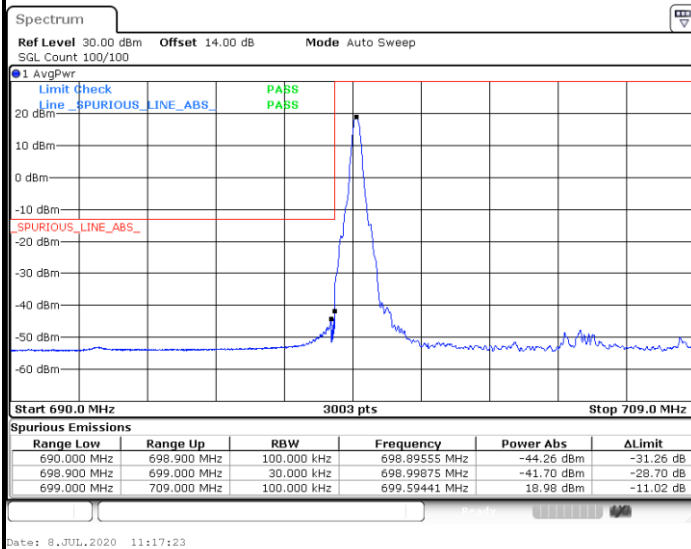
Highest Band Edge / Full RB



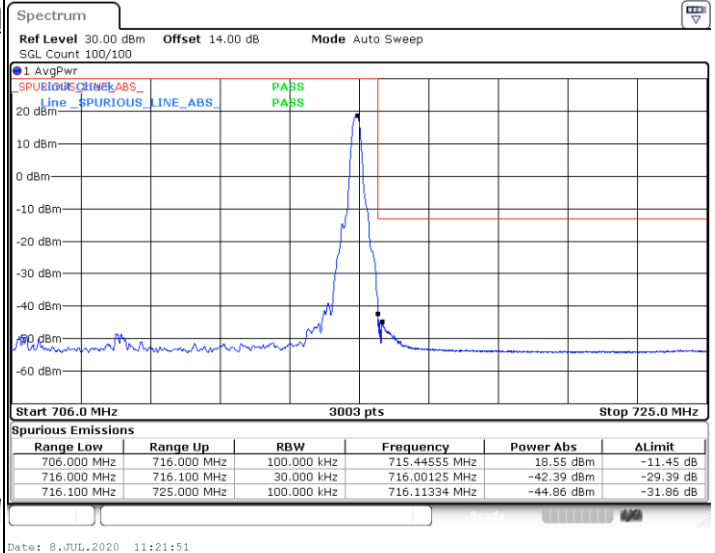


LTE Band 12 / 10MHz / 64QAM

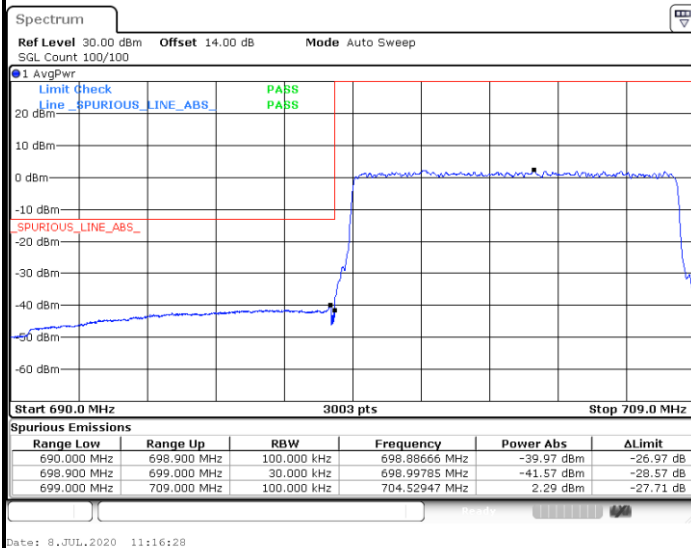
Lowest Band Edge / 1 RB



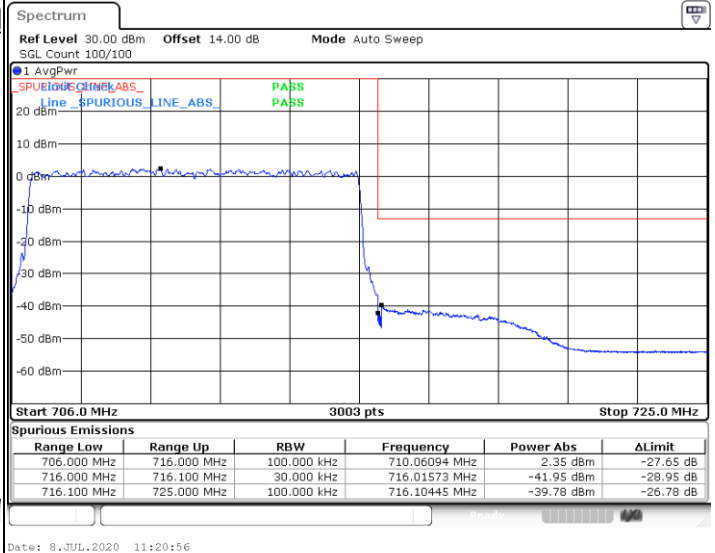
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

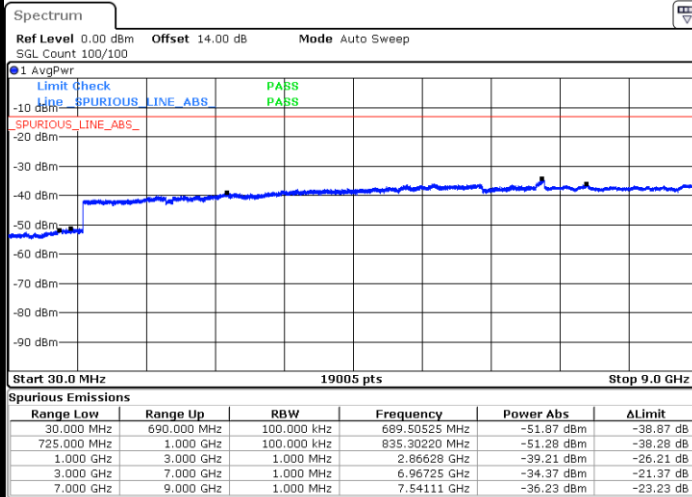




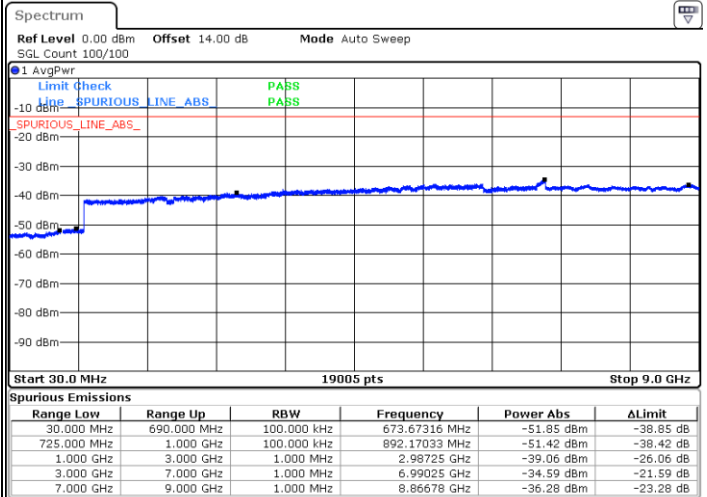
Conducted Spurious Emission

LTE Band 12 / 1.4MHz

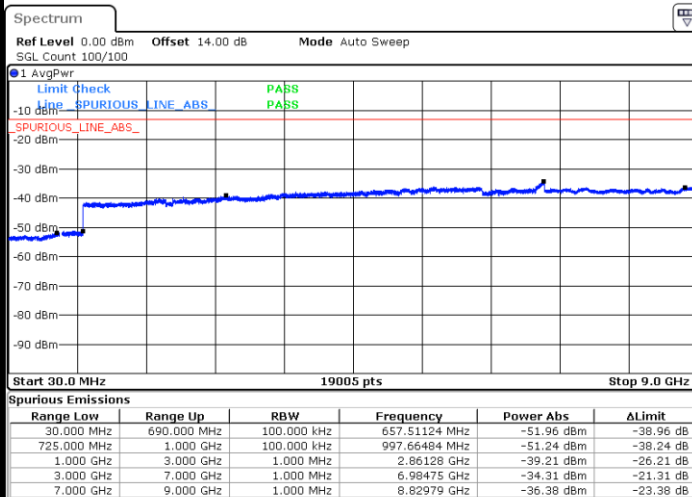
Lowest Channel / QPSK



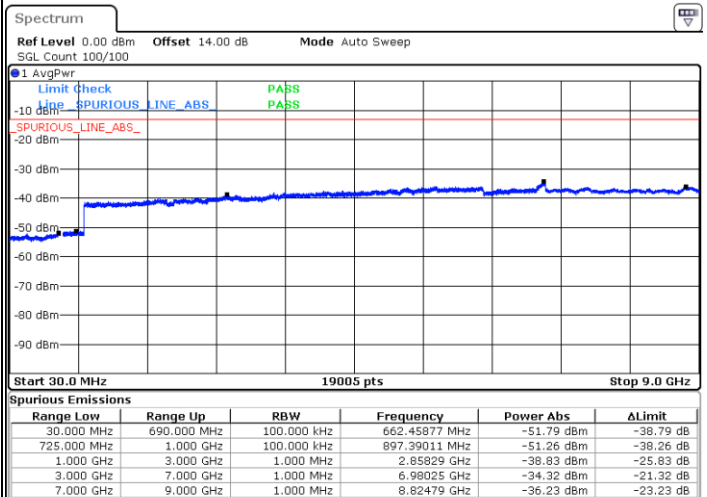
Lowest Channel / 16QAM



Middle Channel / QPSK



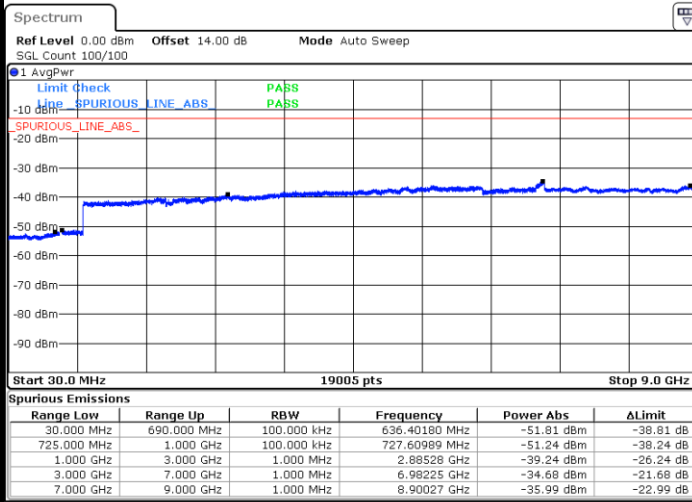
Middle Channel / 16QAM





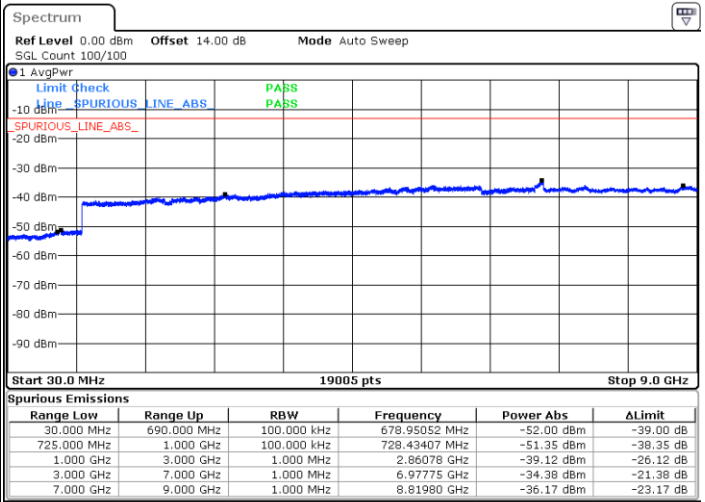
LTE Band 12 / 1.4MHz

Highest Channel / QPSK



Date: 8.JUL.2020 11:41:36

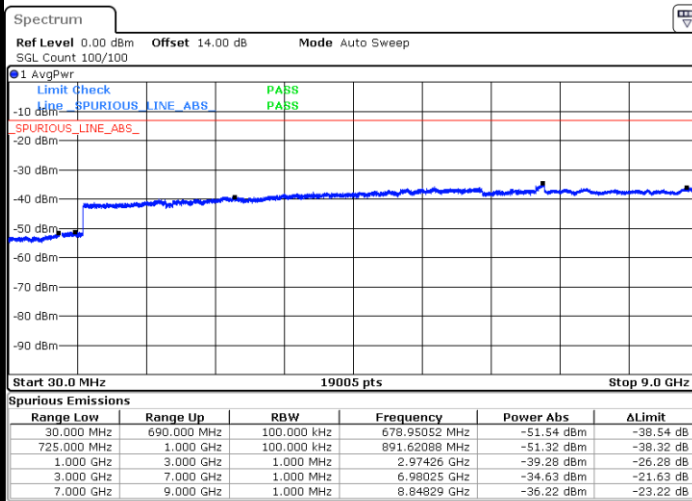
Highest Channel / 16QAM



Date: 8.JUL.2020 11:42:33

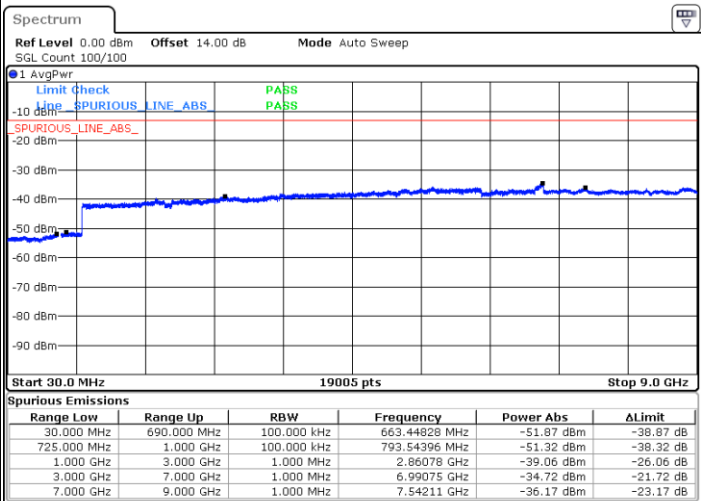
LTE Band 12 / 3MHz

Lowest Channel / QPSK



Date: 8.JUL.2020 10:19:33

Lowest Channel / 16QAM

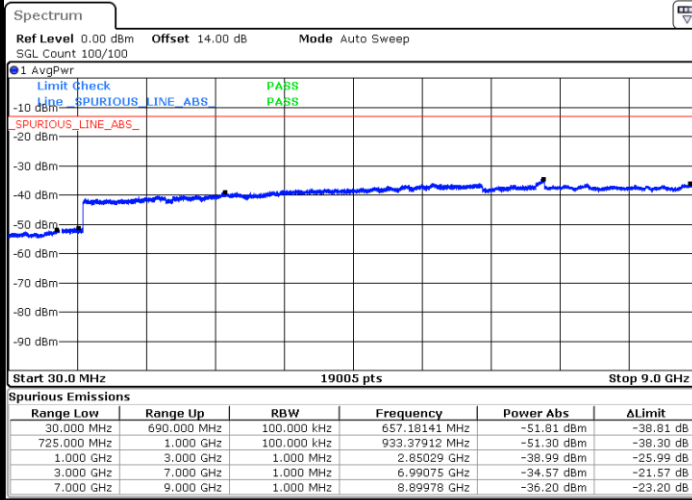


Date: 8.JUL.2020 10:20:30



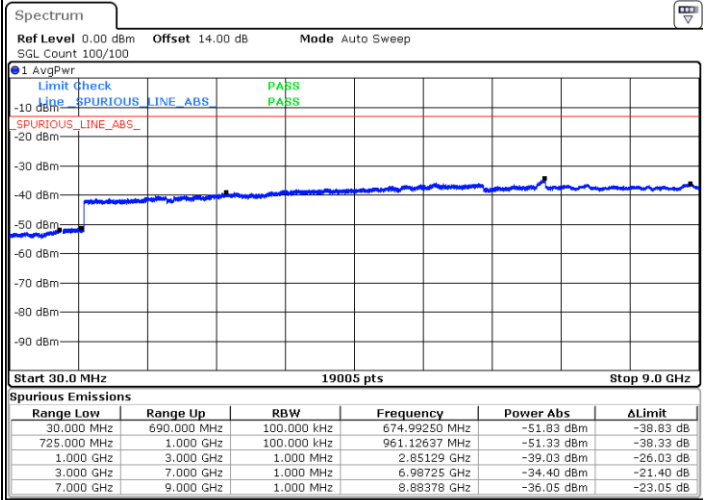
LTE Band 12 / 3MHz

Middle Channel / QPSK



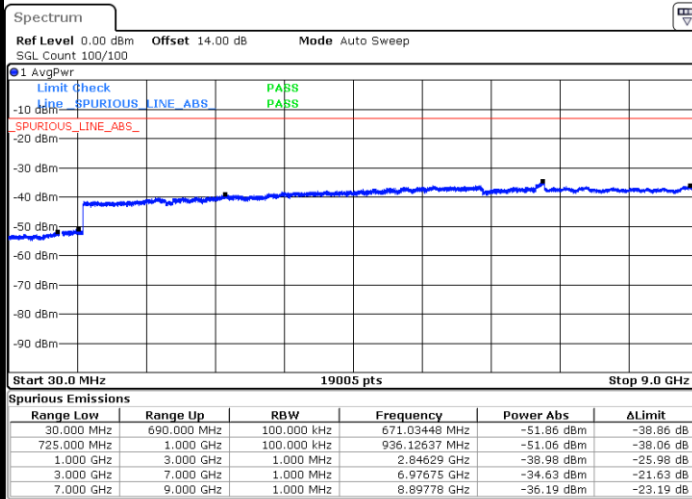
Date: 8.JUL.2020 10:23:08

Middle Channel / 16QAM



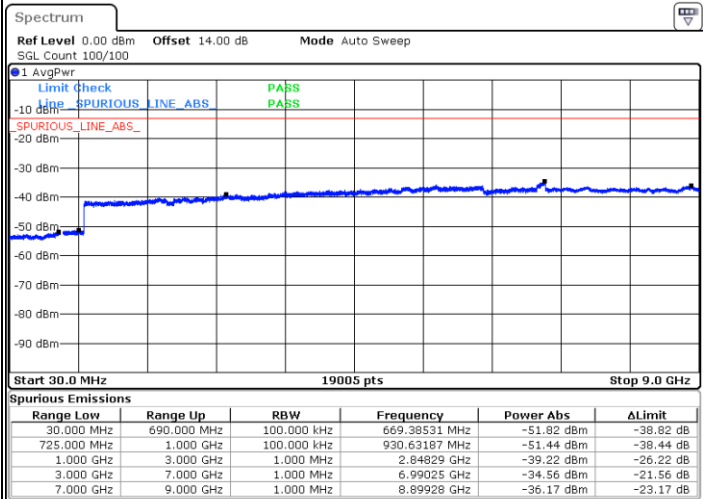
Date: 8.JUL.2020 10:22:11

Highest Channel / QPSK



Date: 8.JUL.2020 10:28:29

Highest Channel / 16QAM

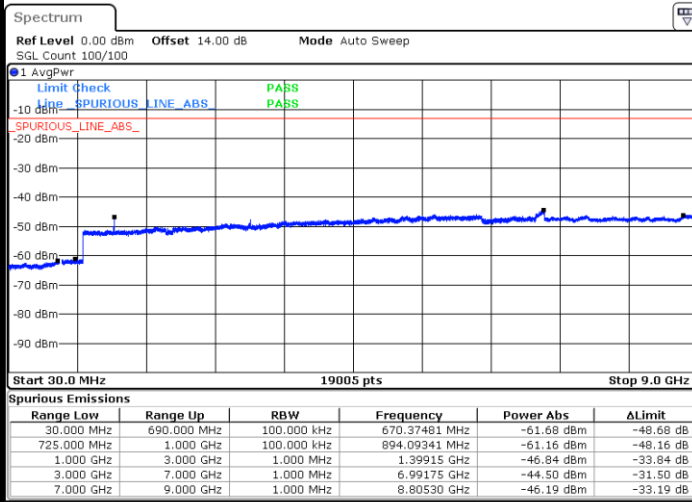


Date: 8.JUL.2020 10:29:26



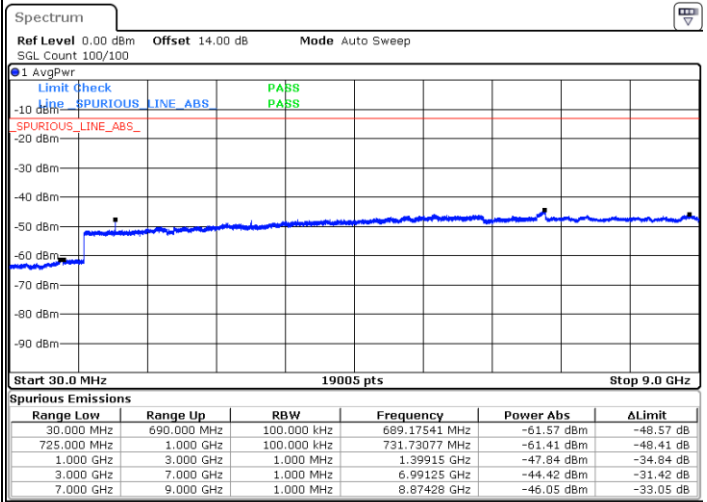
LTE Band 12 / 5MHz

Lowest Channel / QPSK



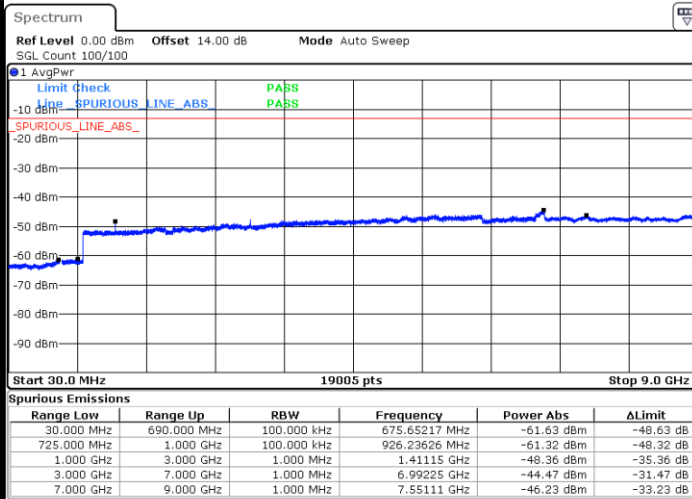
Date: 8.JUL.2020 10:50:03

Lowest Channel / 16QAM



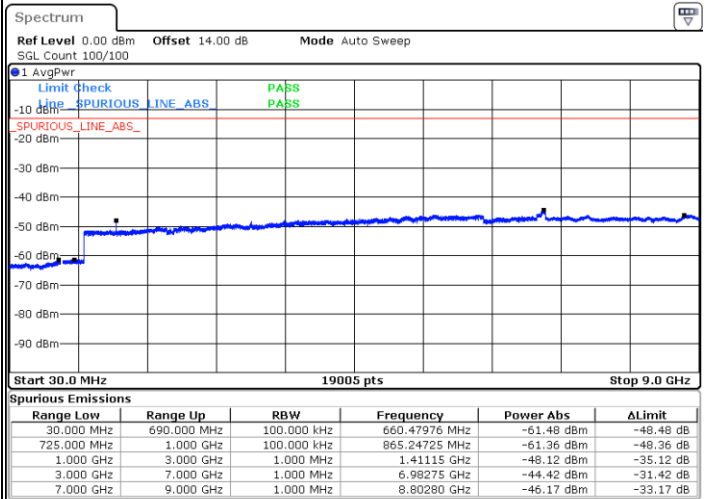
Date: 8.JUL.2020 10:51:00

Middle Channel / QPSK



Date: 8.JUL.2020 10:53:39

Middle Channel / 16QAM

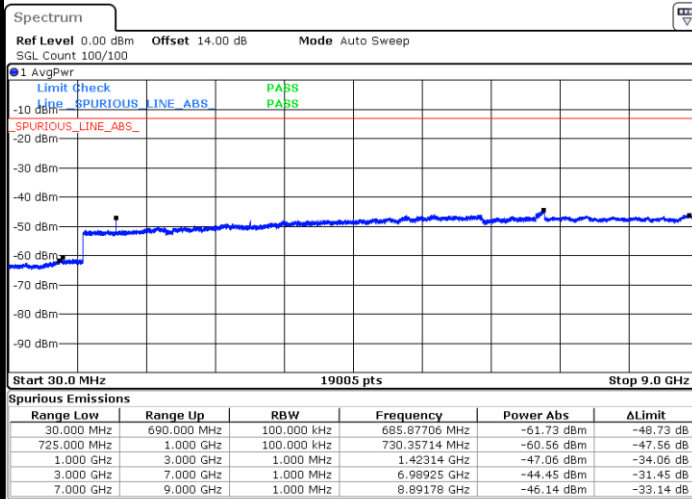


Date: 8.JUL.2020 10:52:42



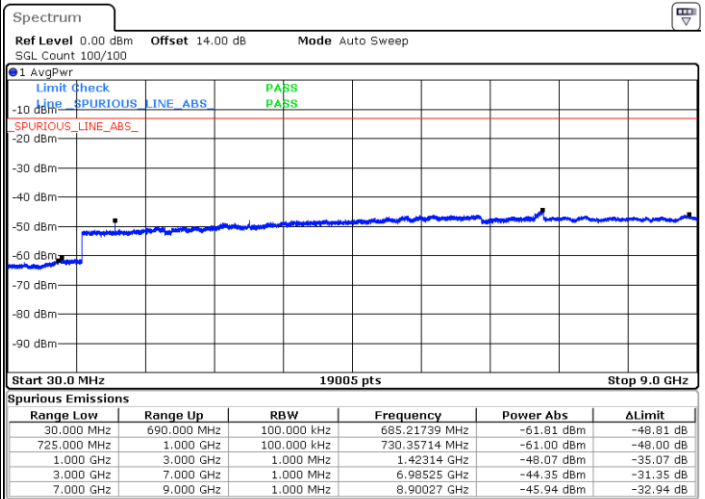
LTE Band 12 / 5MHz

Highest Channel / QPSK



Date: 8.JUL.2020 10:59:57

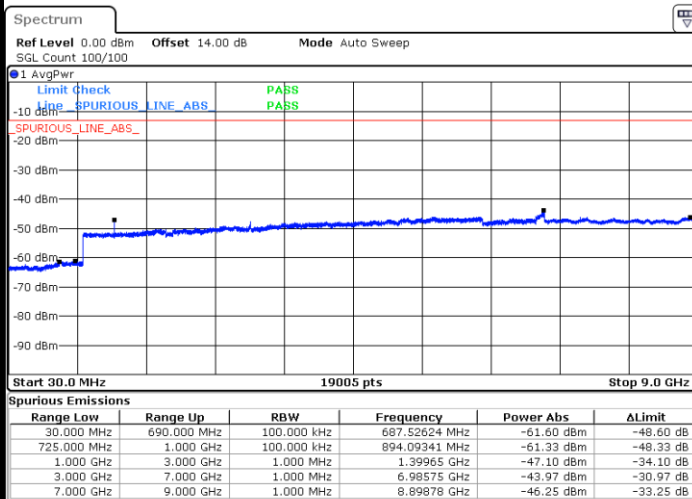
Highest Channel / 16QAM



Date: 8.JUL.2020 10:59:00

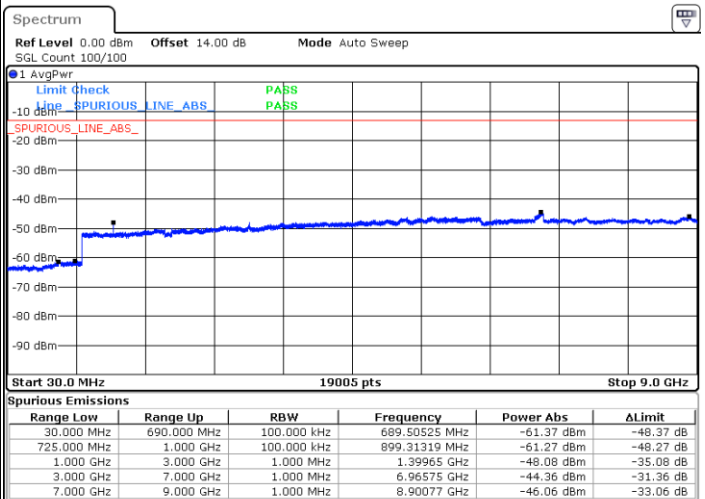
LTE Band 12 / 10MHz

Lowest Channel / QPSK



Date: 8.JUL.2020 11:05:19

Lowest Channel / 16QAM

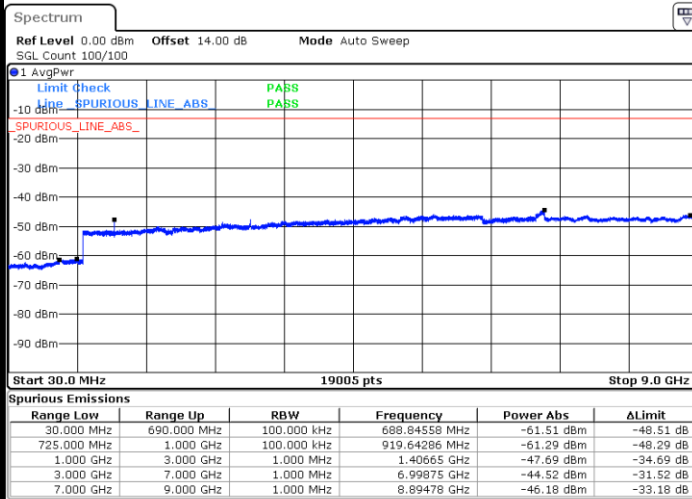


Date: 8.JUL.2020 11:06:16



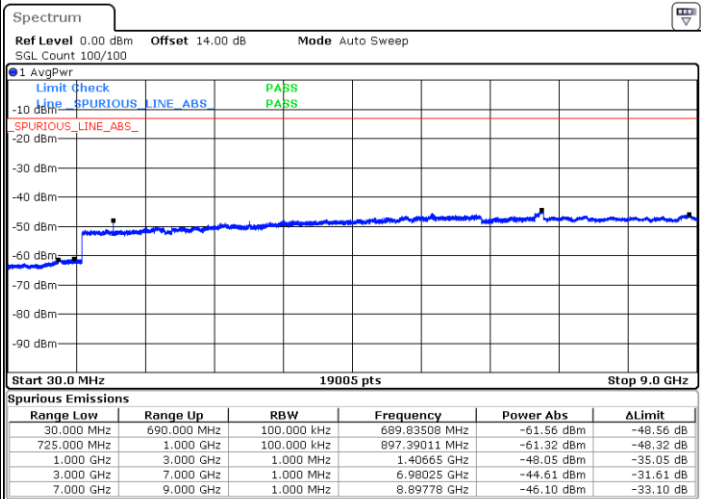
LTE Band 12 / 10MHz

Middle Channel / QPSK



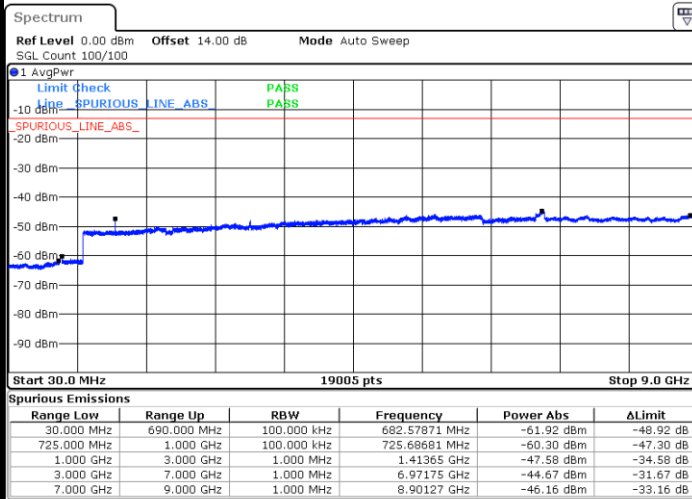
Date: 8.JUL.2020 11:08:54

Middle Channel / 16QAM



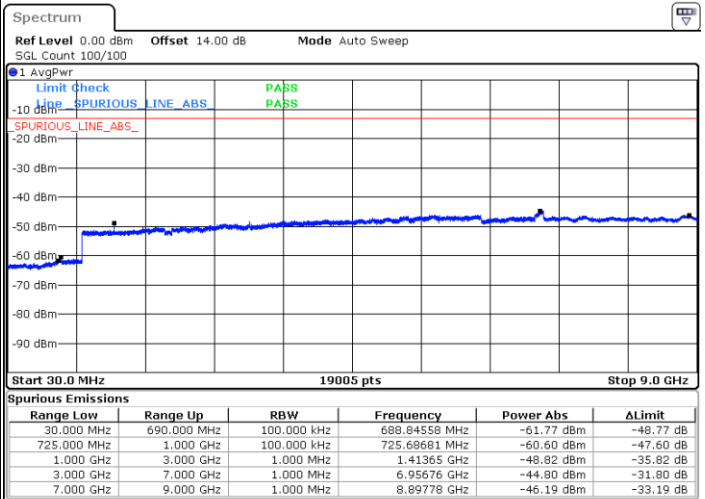
Date: 8.JUL.2020 11:07:57

Highest Channel / QPSK



Date: 8.JUL.2020 11:14:15

Highest Channel / 16QAM

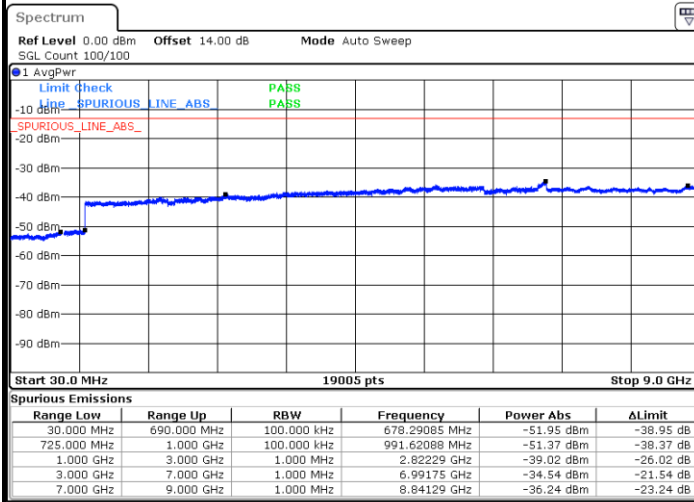


Date: 8.JUL.2020 11:15:12



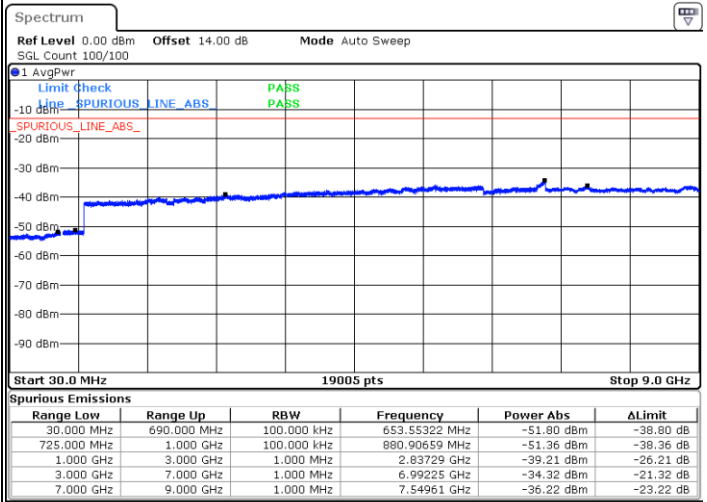
LTE Band 12 / 1.4MHz

Lowest Channel / 64QAM



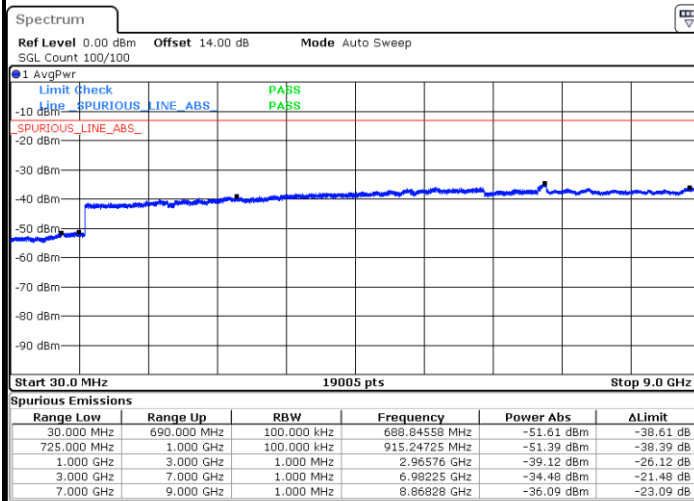
Date: 8.JUL.2020 11:45:42

Middle Channel / 64QAM



Date: 8.JUL.2020 11:47:01

Highest Channel / 64QAM

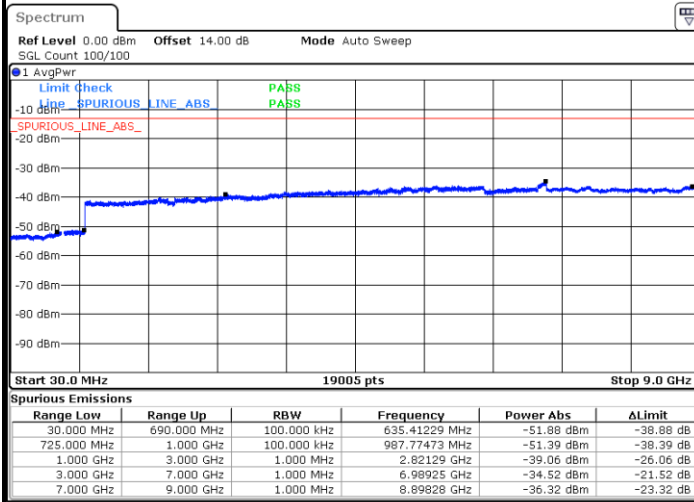


Date: 8.JUL.2020 11:50:10



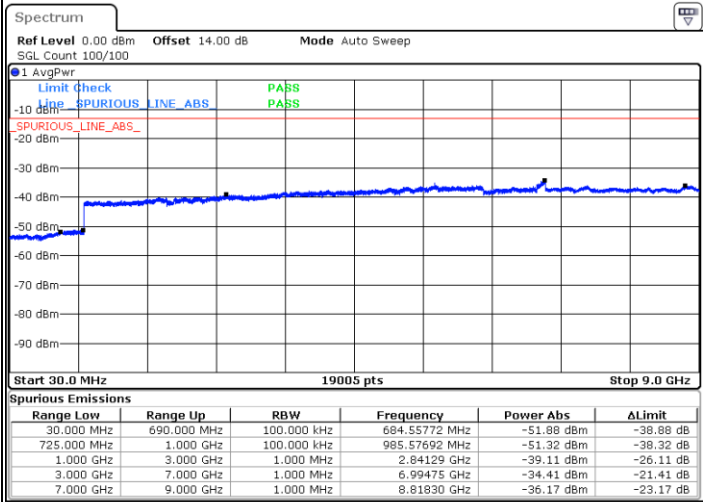
LTE Band 12 / 3MHz

Lowest Channel / 64QAM



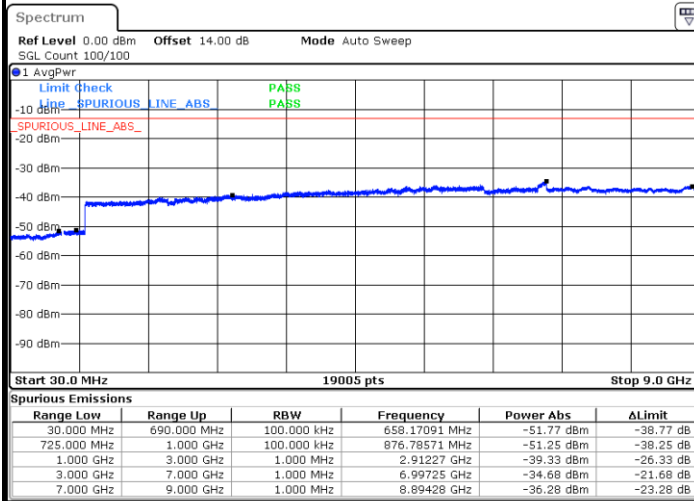
Date: 8.JUL.2020 10:32:35

Middle Channel / 64QAM



Date: 8.JUL.2020 10:33:55

Highest Channel / 64QAM

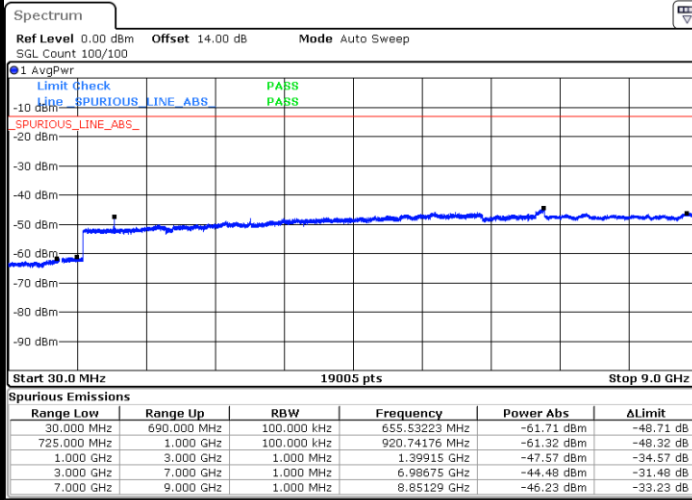


Date: 8.JUL.2020 10:37:04



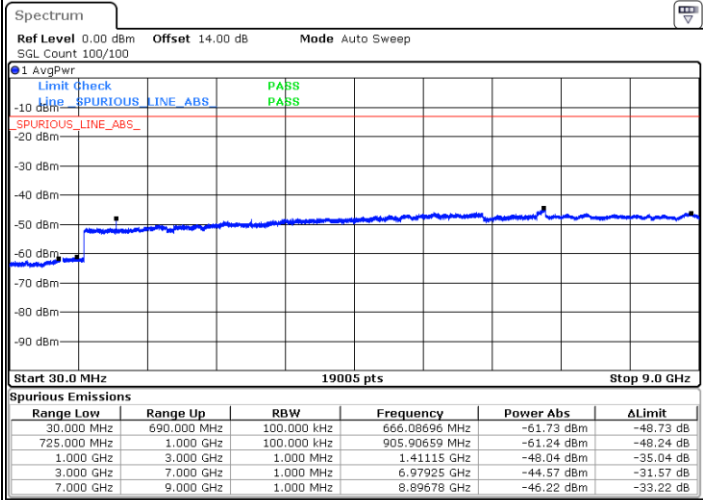
LTE Band 12 / 5MHz

Lowest Channel / 64QAM



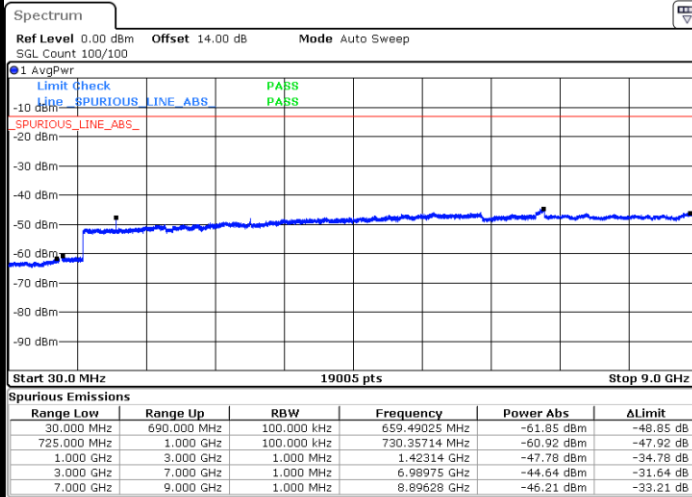
Date: 8.JUL.2020 10:40:13

Middle Channel / 64QAM



Date: 8.JUL.2020 10:41:32

Highest Channel / 64QAM

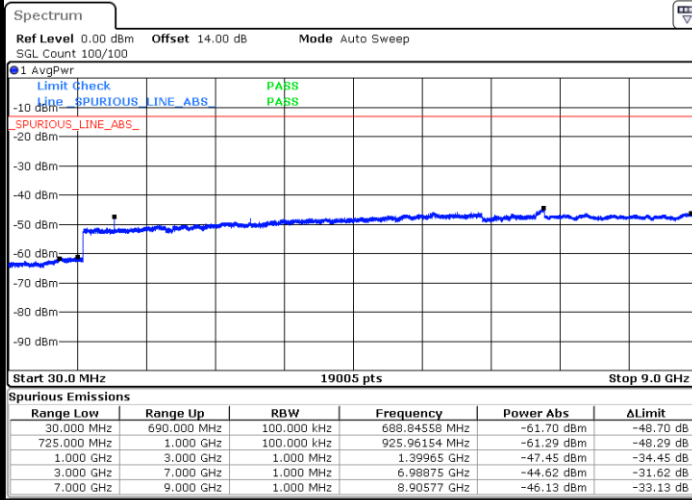


Date: 8.JUL.2020 10:44:42



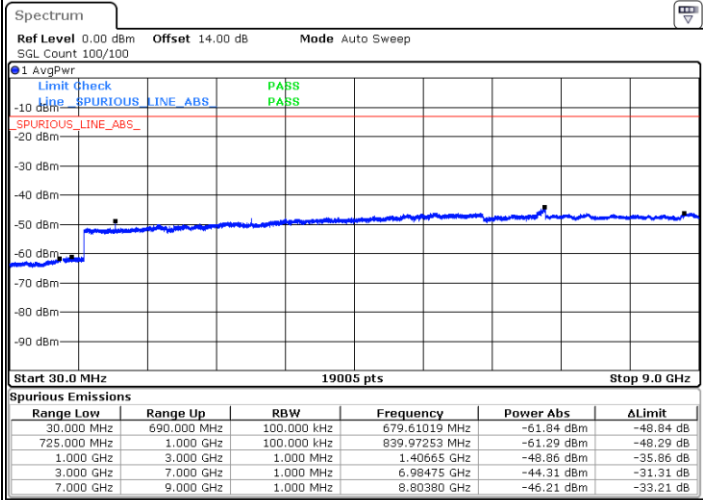
LTE Band 12 / 10MHz

Lowest Channel / 64QAM



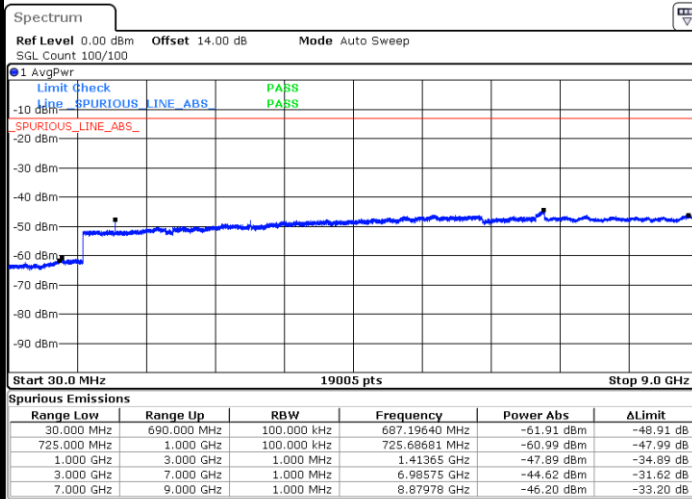
Date: 8.JUL.2020 11:18:21

Middle Channel / 64QAM



Date: 8.JUL.2020 11:19:40

Highest Channel / 64QAM



Date: 8.JUL.2020 11:22:49

**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	0.0037	PASS
40	Normal Voltage	0.0016	
30	Normal Voltage	0.0018	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0027	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0018	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

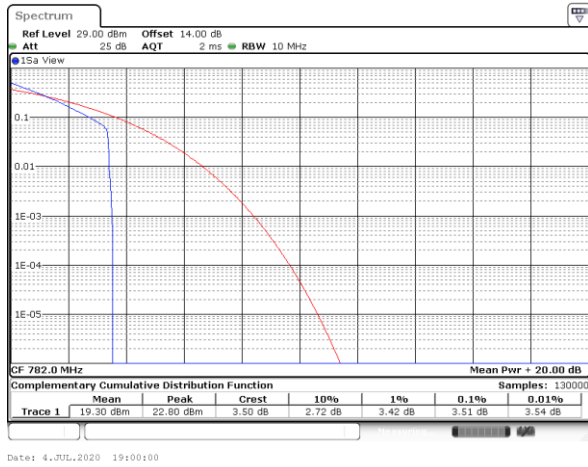
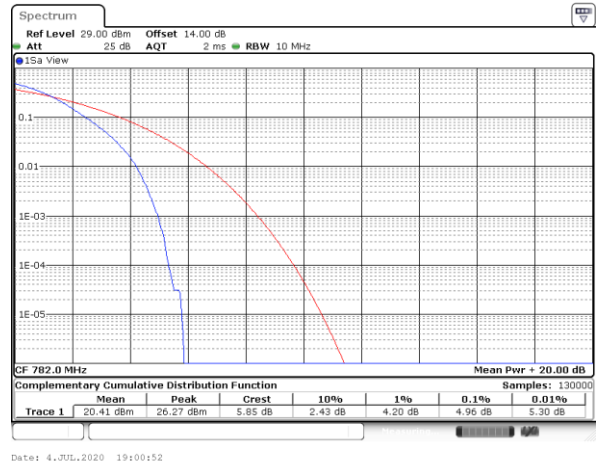
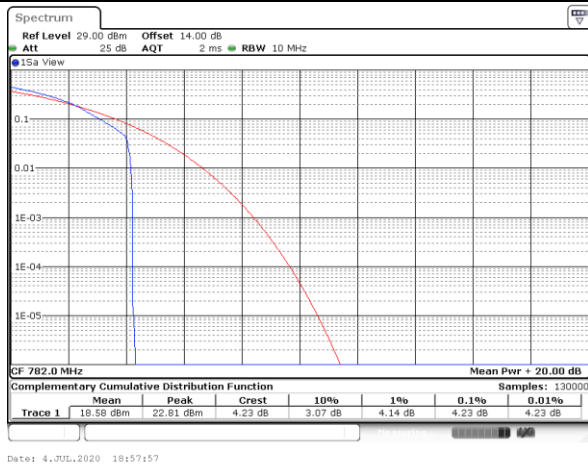
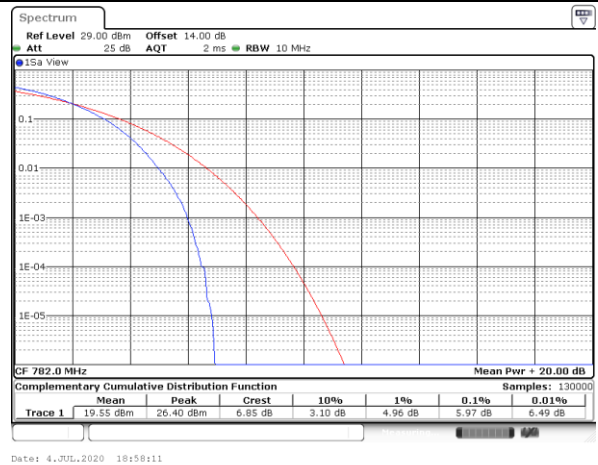
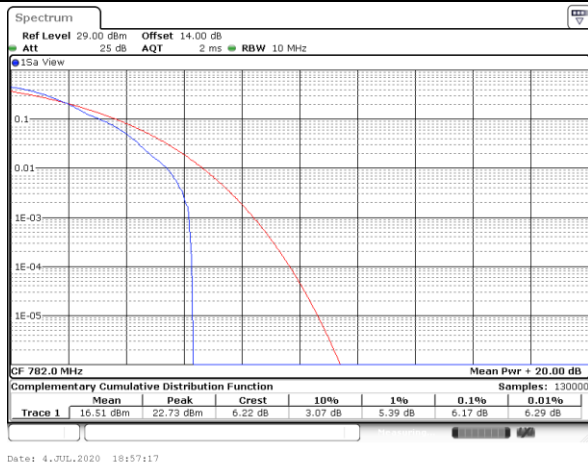
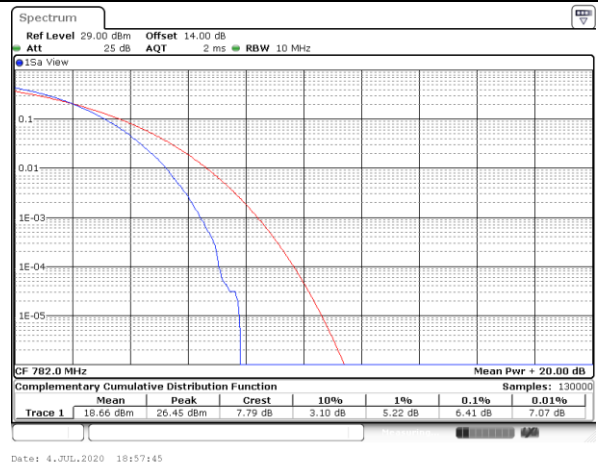
1. Normal Voltage =7.74 V. ; Battery End Point (BEP) =7.2 V. ; Maximum Voltage =8.9 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



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	3.51	4.96	4.23	5.97	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	6.17	6.41	-	-	
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


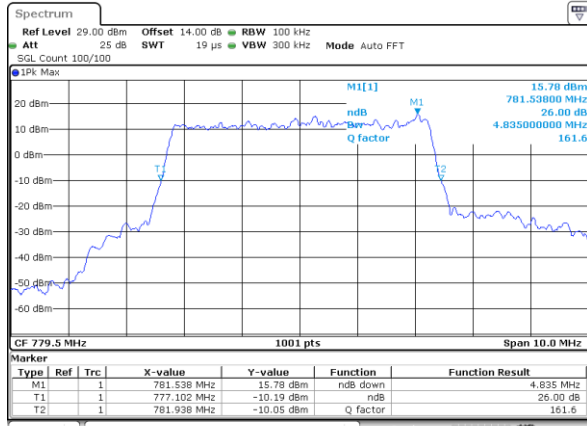
**26dB Bandwidth**

Mode	LTE Band 13 : 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	-	-	-	-	4.84	4.88	-	-	-	-	-	-
Middle CH	-	-	-	-	4.89	4.93	9.73	9.69	-	-	-	-
Highest CH	-	-	-	-	4.88	4.87	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.85	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	-	9.79	-	-	-	-	-
Highest CH	-	-	-	-	4.92	-	-	-	-	-	-	-

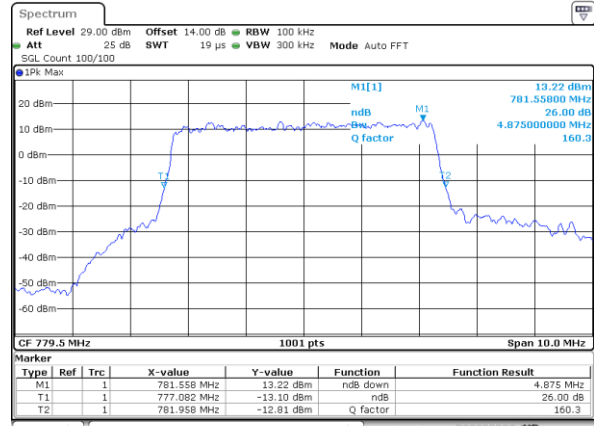


LTE Band 13

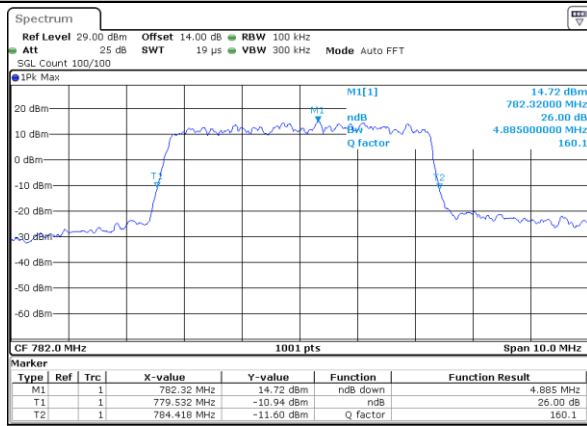
Lowest Channel / 5MHz / QPSK



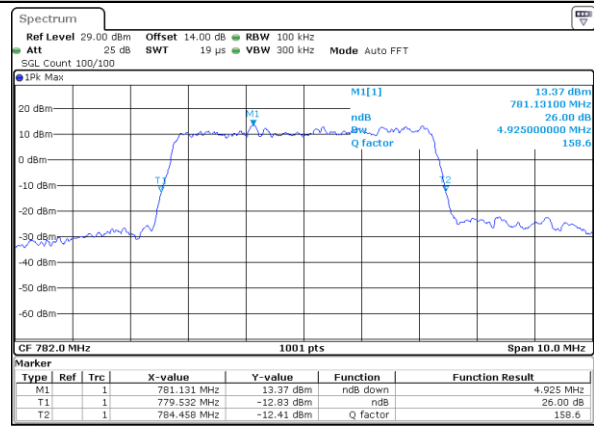
Lowest Channel / 5MHz / 16QAM



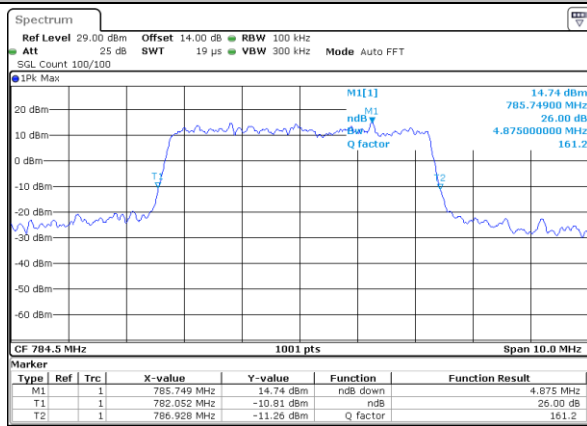
Middle Channel / 5MHz / QPSK



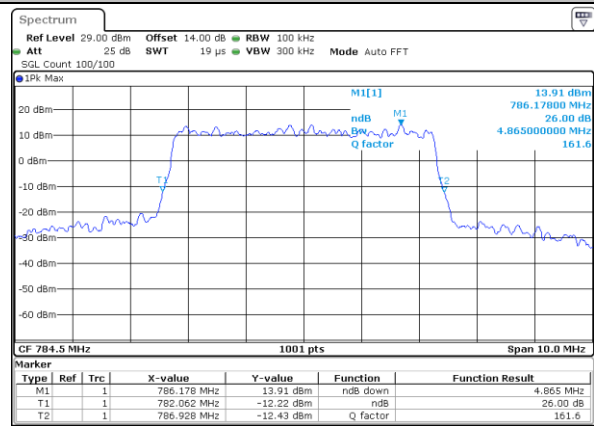
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



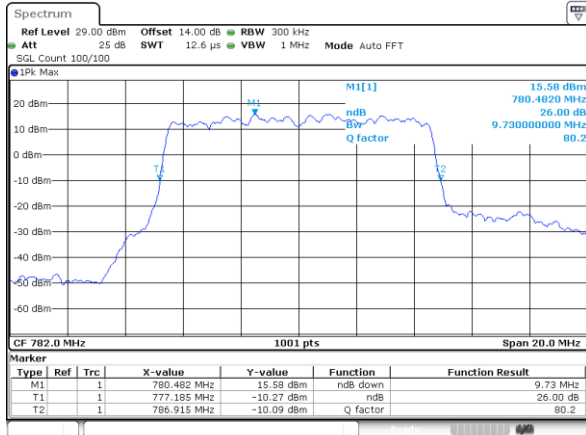
Highest Channel / 5MHz / 16QAM





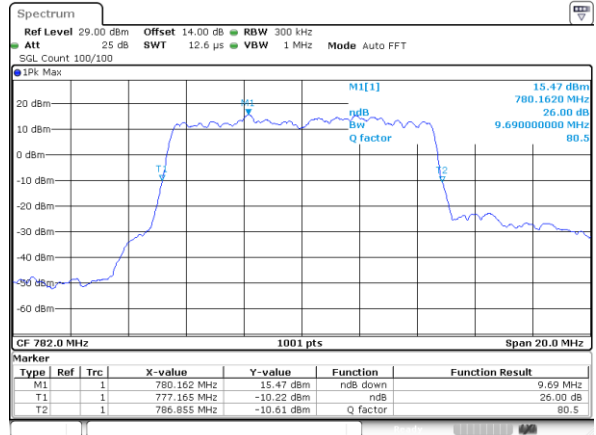
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 4.JUL.2020 18:29:40

Middle Channel / 10MHz / 16QAM

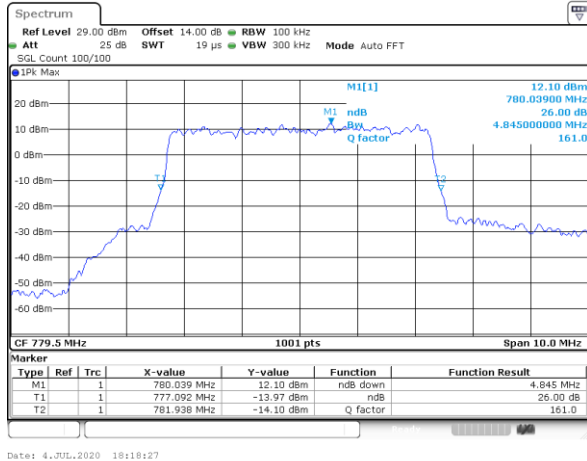


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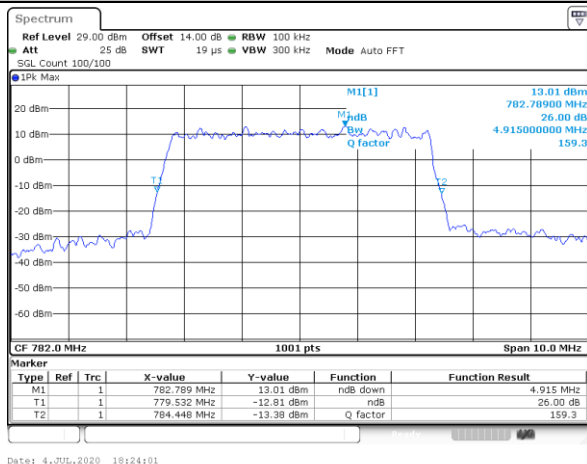


LTE Band 13

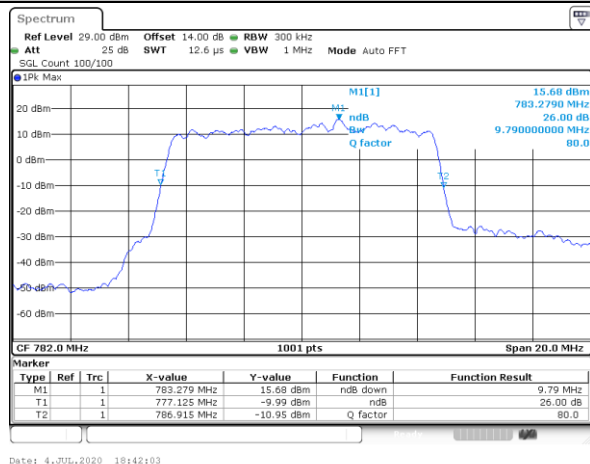
Lowest Channel / 5MHz / 64QAM



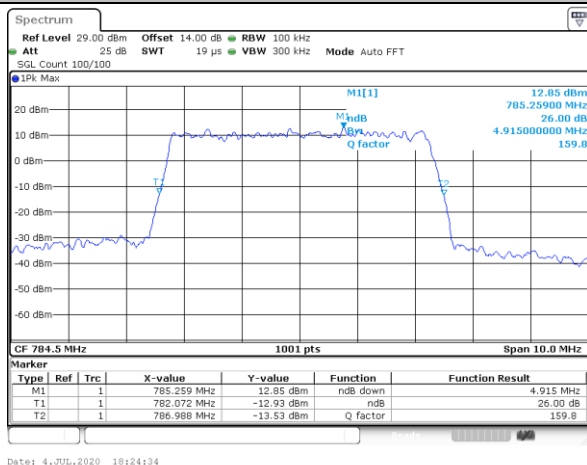
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM



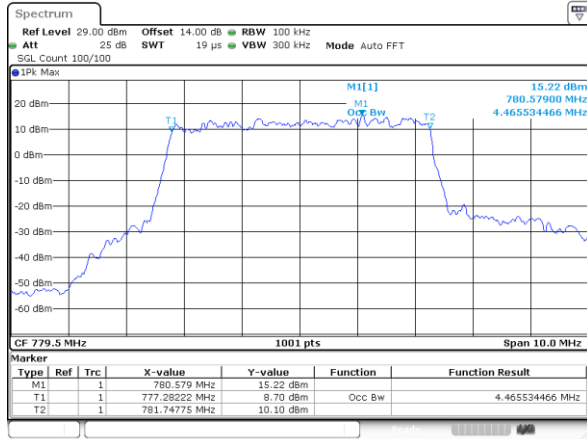
**Occupied Bandwidth**

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.47	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	4.50	8.95	8.91	-	-	-	-
Highest CH	-	-	-	-	4.48	4.48	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.48	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	-	8.97	-	-	-	-	-
Highest CH	-	-	-	-	4.49	-	-	-	-	-	-	-

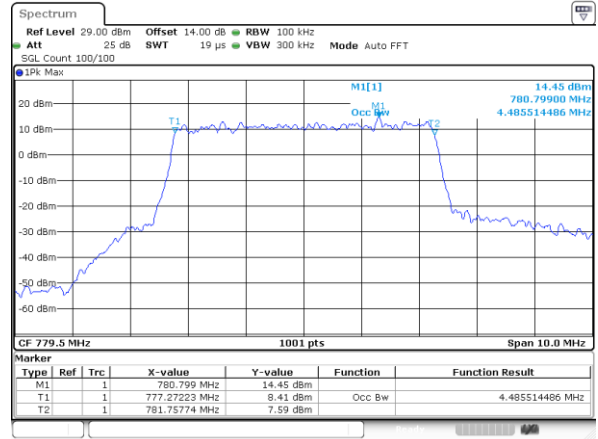


LTE Band 13

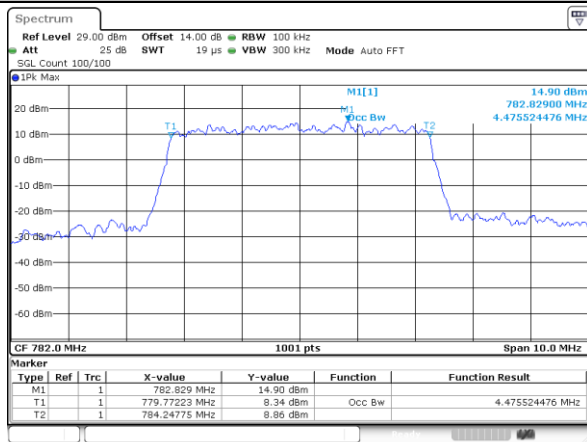
Lowest Channel / 5MHz / QPSK



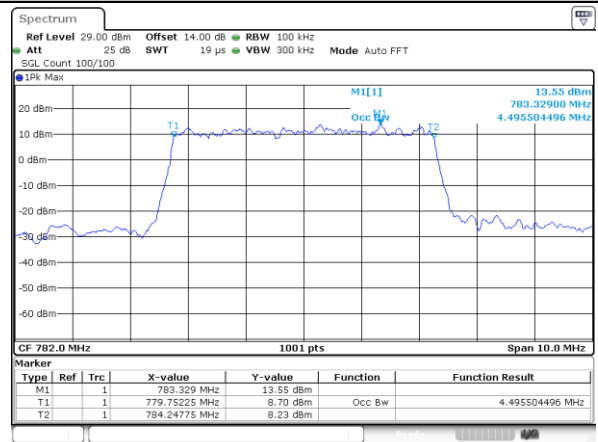
Lowest Channel / 5MHz / 16QAM



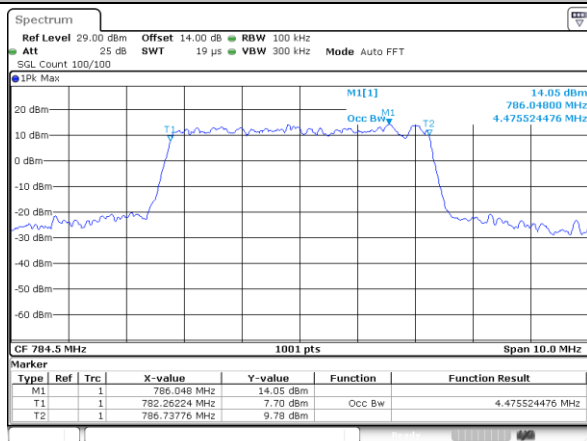
Middle Channel / 5MHz / QPSK



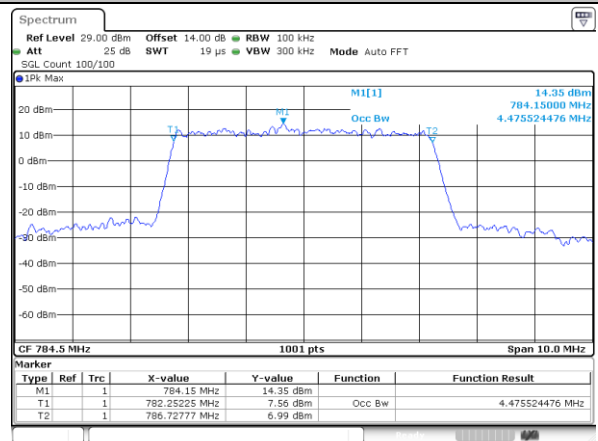
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK



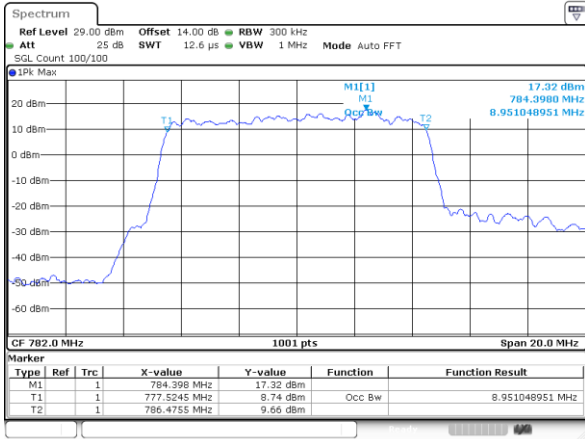
Highest Channel / 5MHz / 16QAM



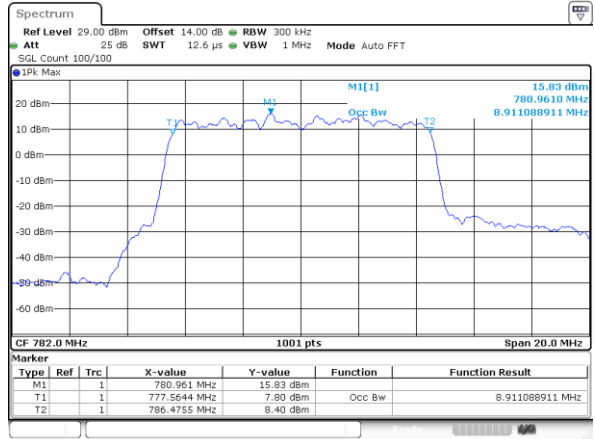


LTE Band 13

Middle Channel / 10MHz / QPSK



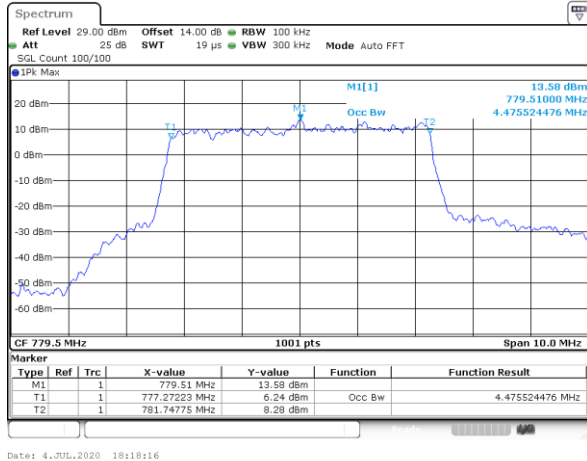
Middle Channel / 10MHz / 16QAM



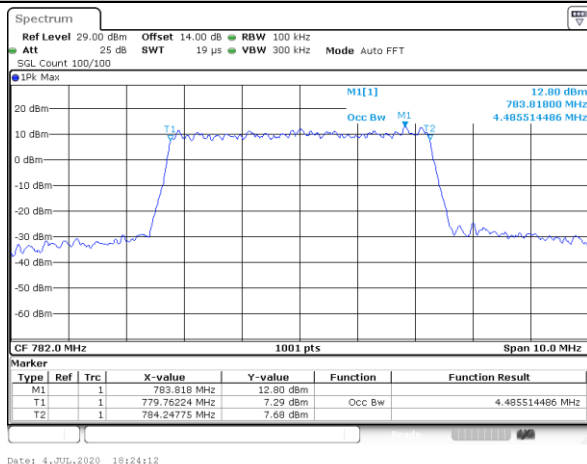


LTE Band 13

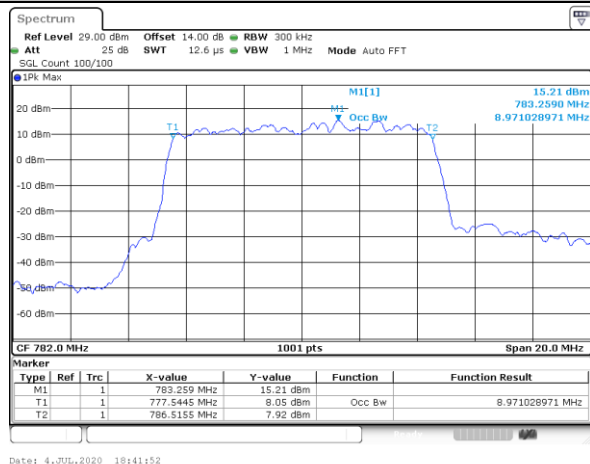
Lowest Channel / 5MHz / 64QAM



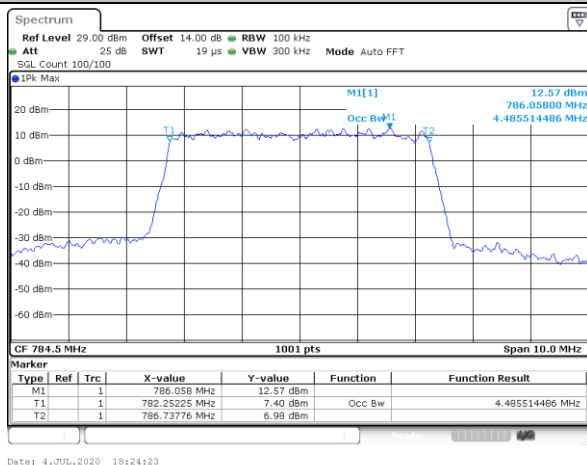
Middle Channel / 5MHz / 64QAM

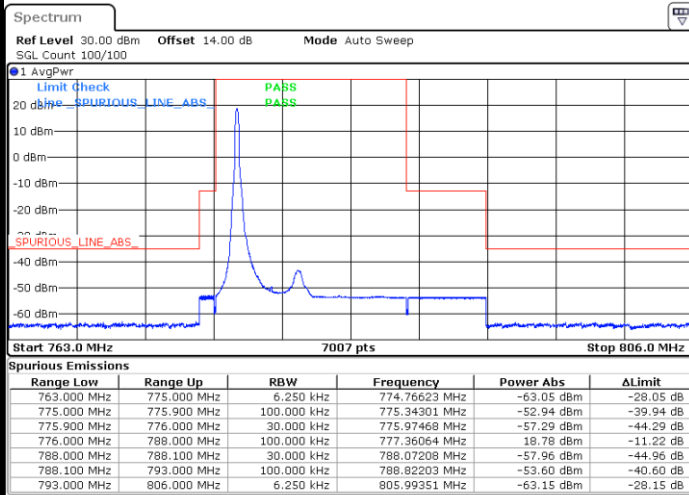
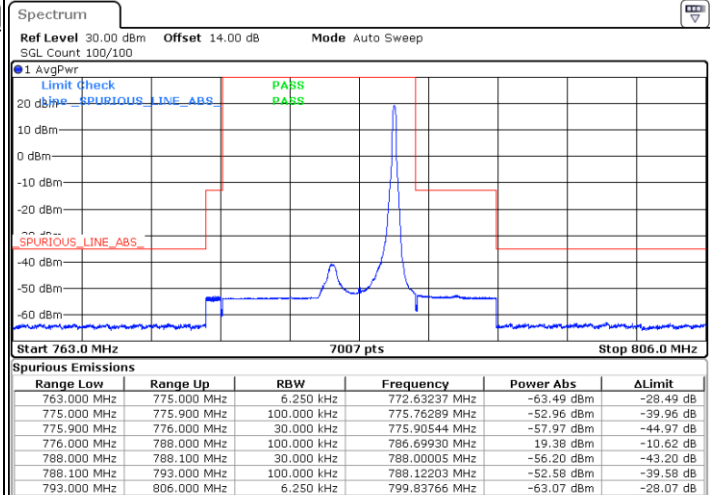
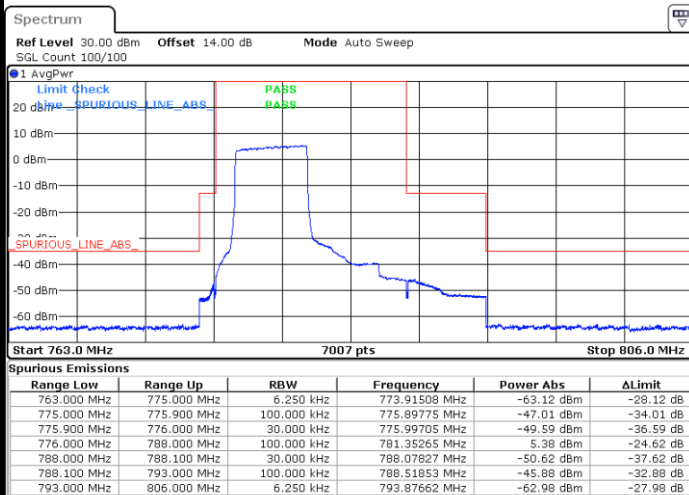
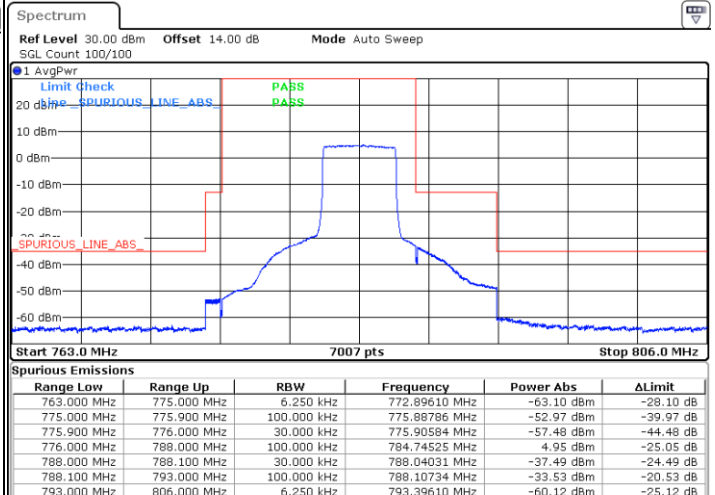


Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

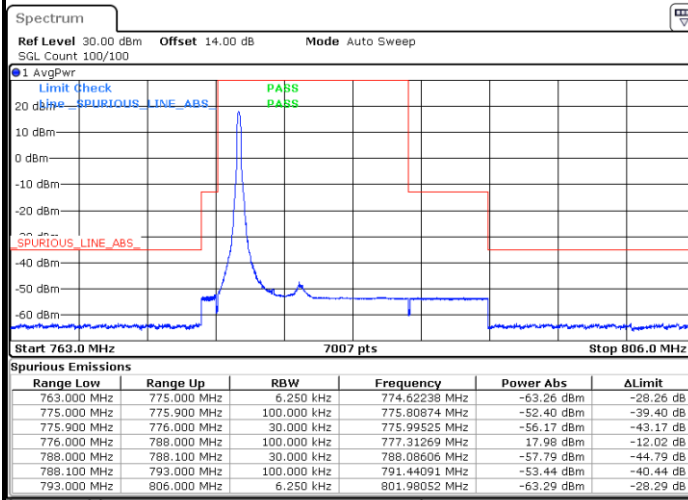


**Conducted Band Edge****LTE Band 13 / 5MHz / QPSK****Lowest Band Edge / 1 RB****Highest Band Edge / 1 RB****Lowest Band Edge / Full RB****Highest Band Edge / Full RB**

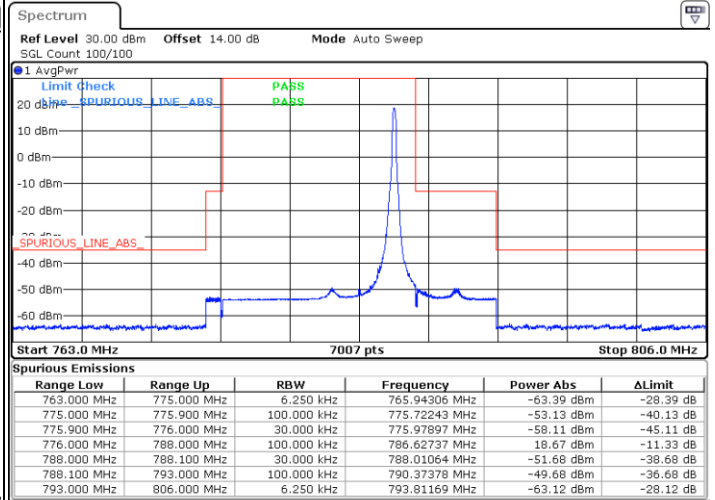


LTE Band 13 / 5MHz / 16QAM

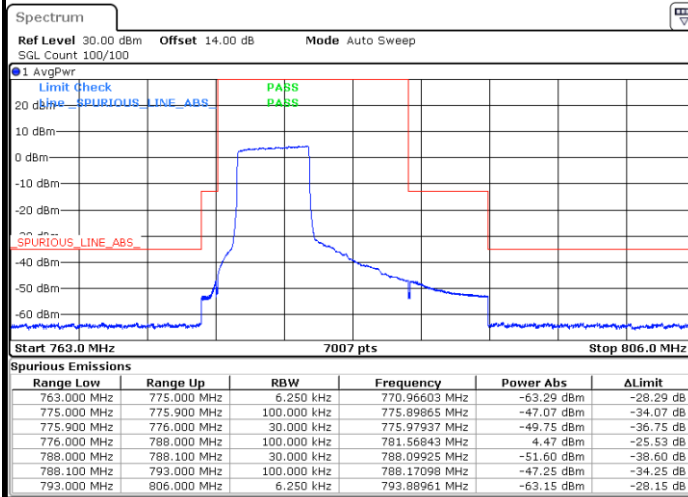
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

