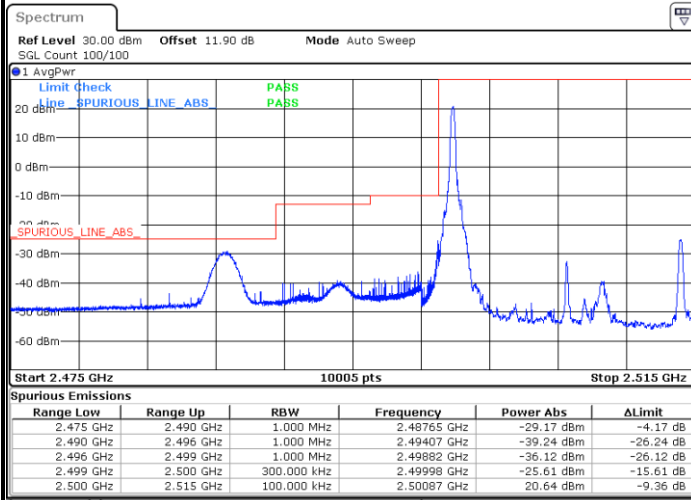


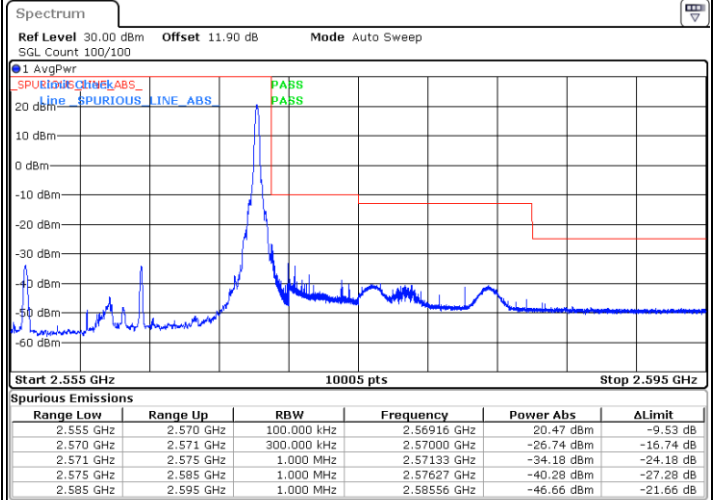


LTE Band 7 / 15MHz / QPSK

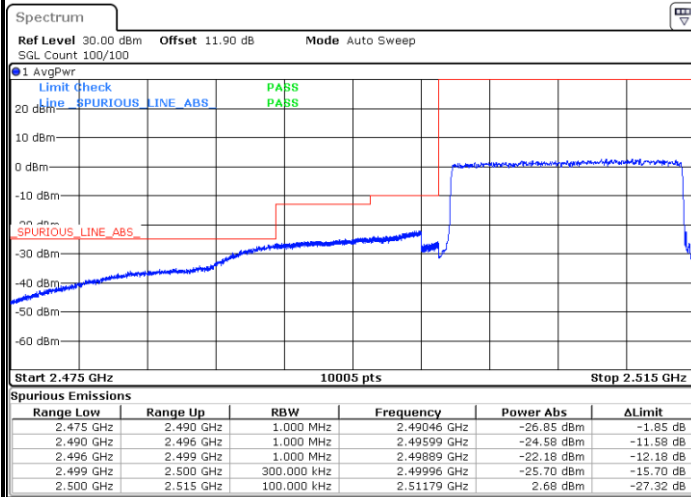
Lowest Band Edge / 1 RB



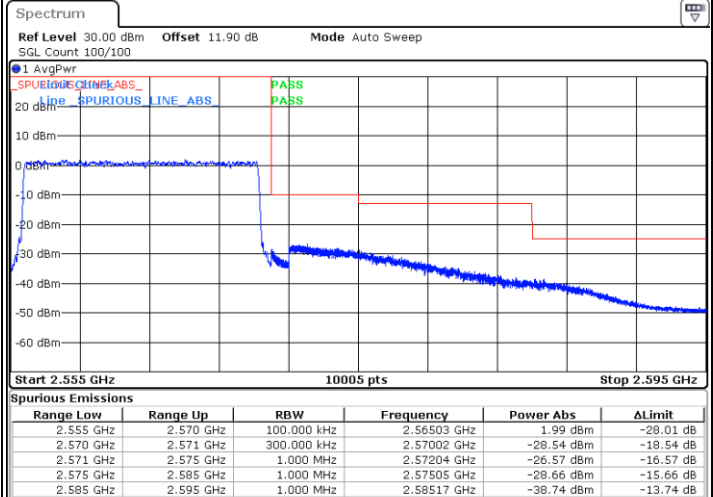
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



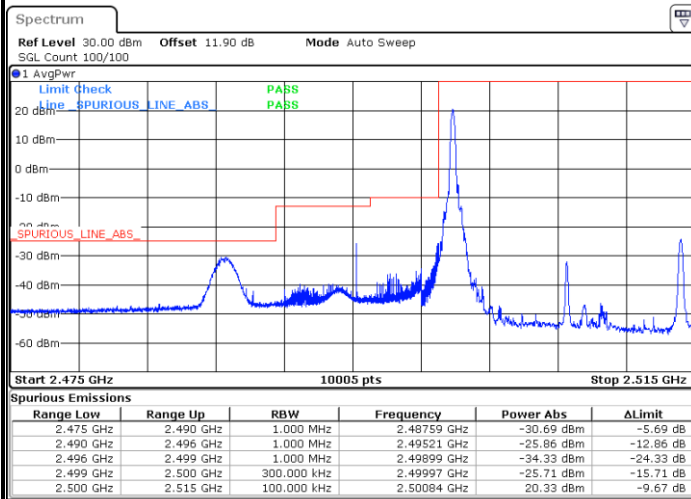
Highest Band Edge / Full RB



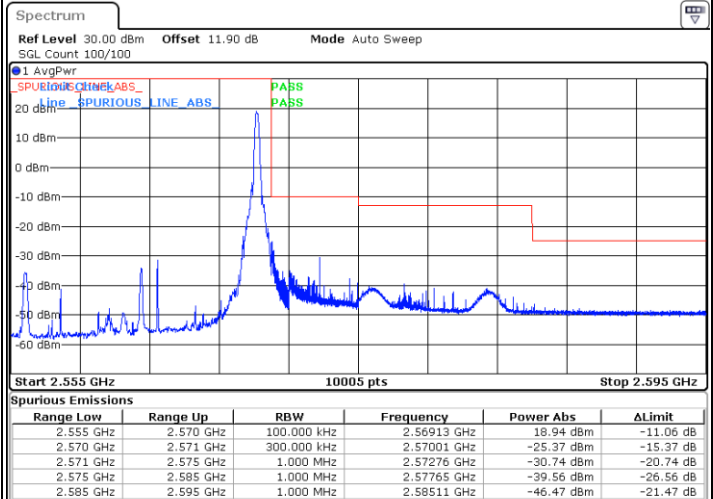


LTE Band 7 / 15MHz / 16QAM

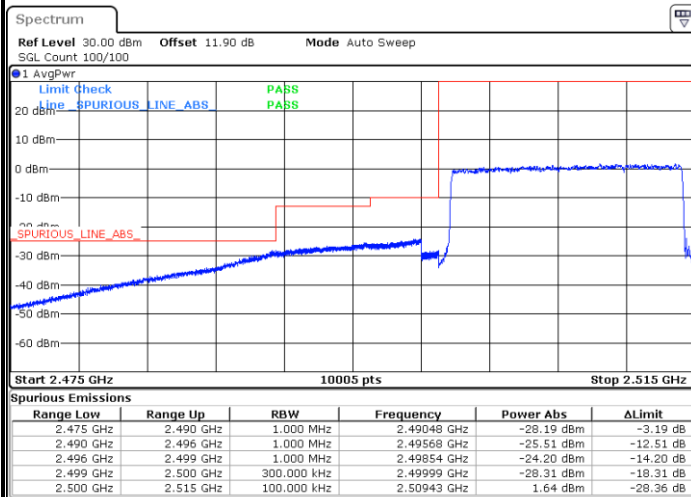
Lowest Band Edge / 1 RB



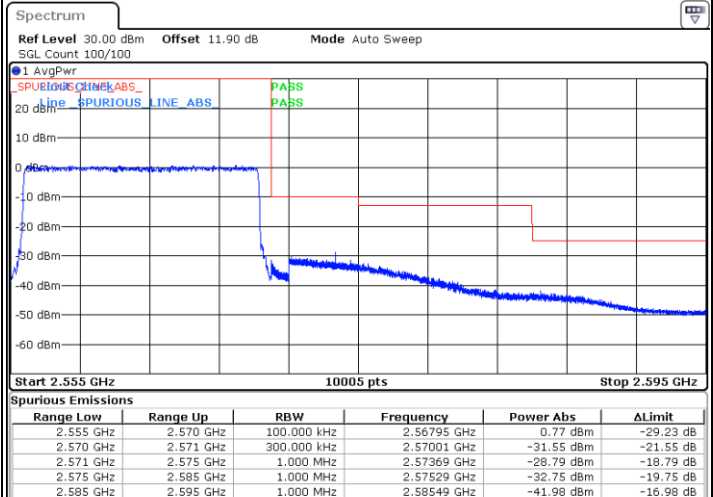
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



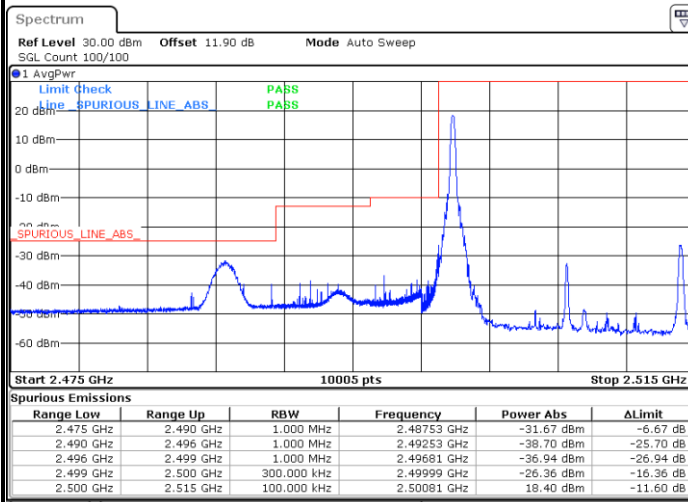
Highest Band Edge / Full RB



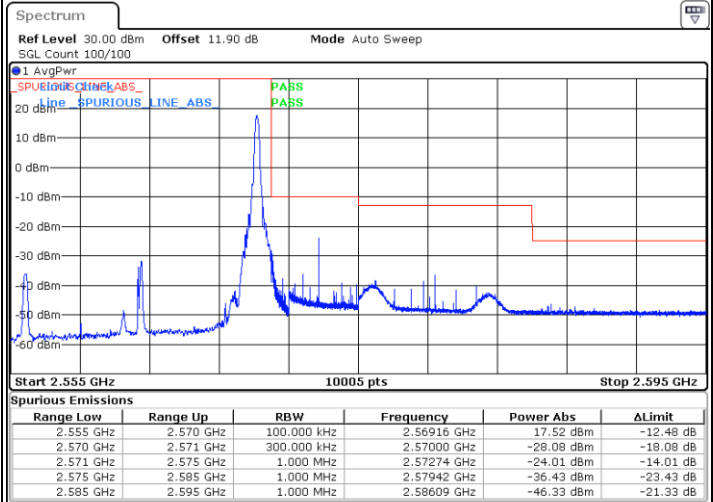


LTE Band 7 / 15MHz / 64QAM

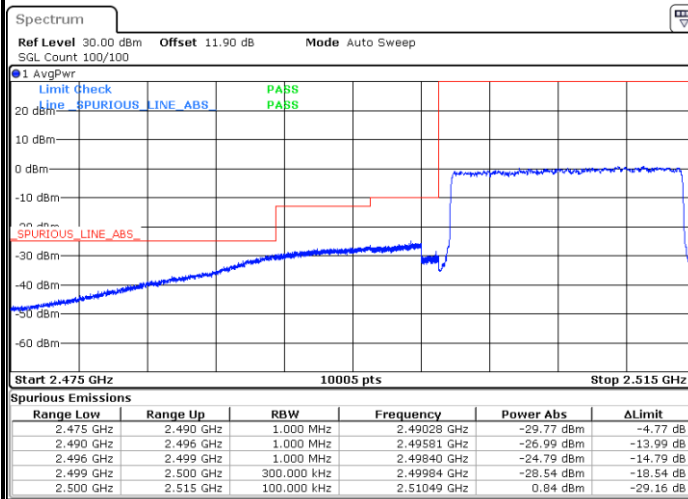
Lowest Band Edge / 1 RB



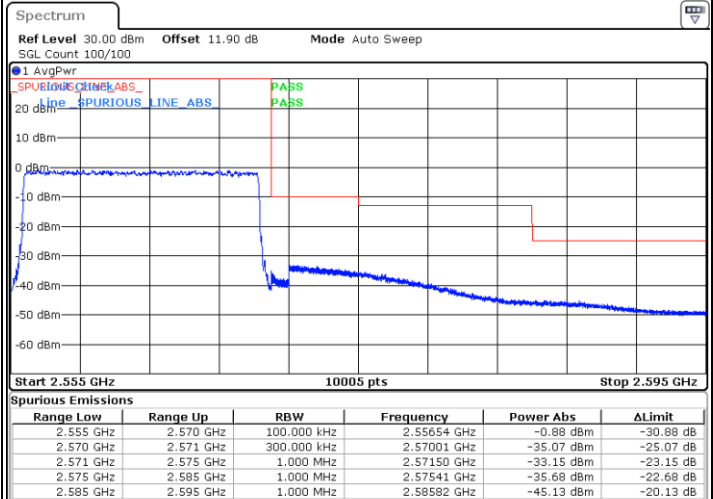
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



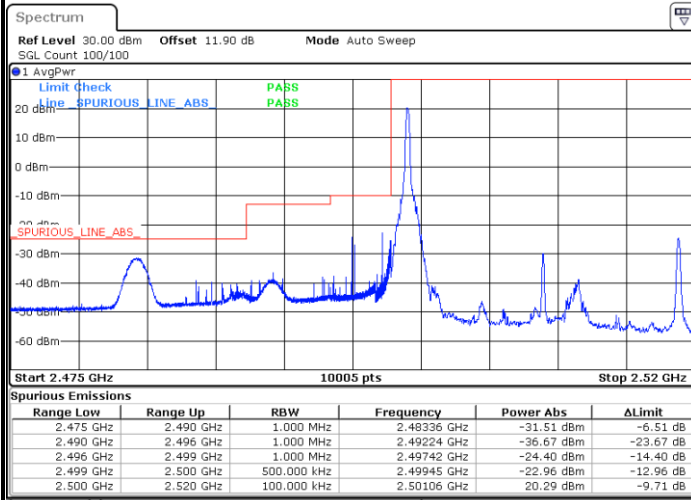
Highest Band Edge / Full RB



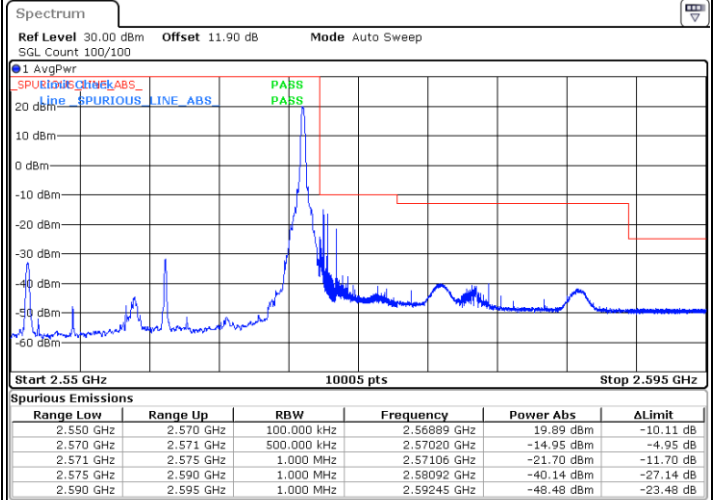


LTE Band 7 / 20MHz / QPSK

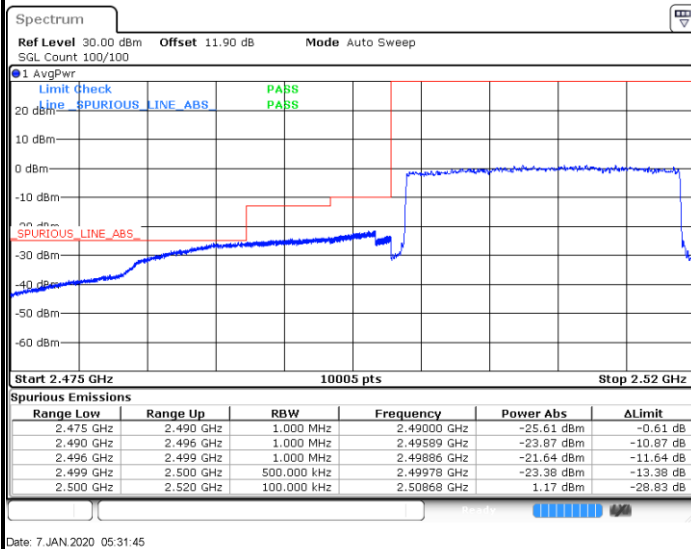
Lowest Band Edge / 1 RB



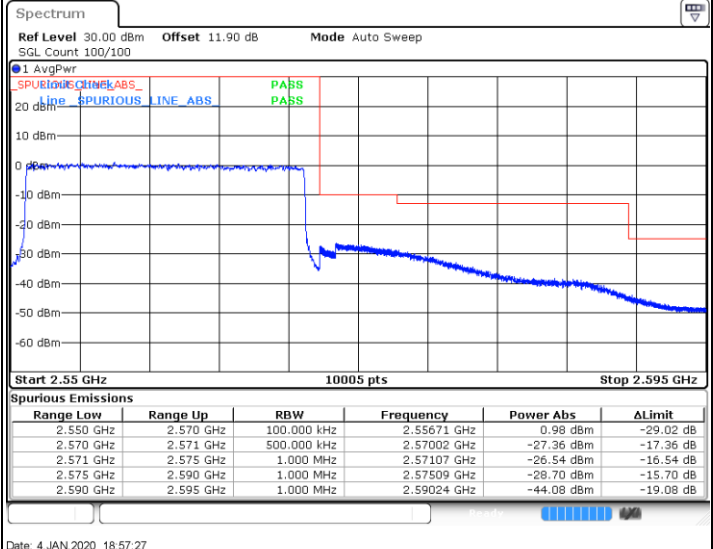
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



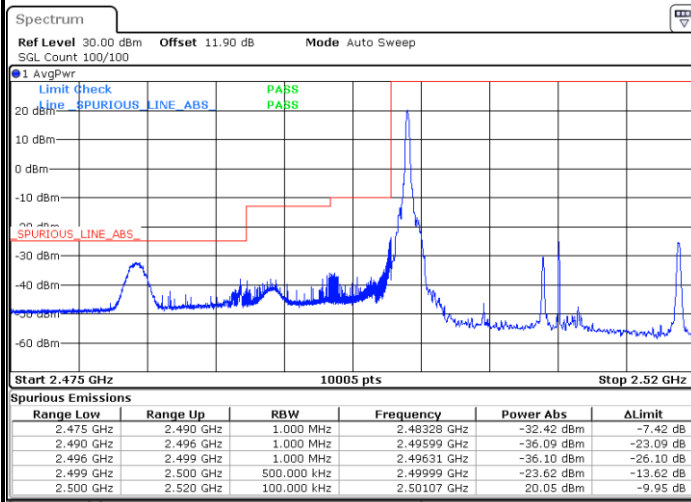
Highest Band Edge / Full RB



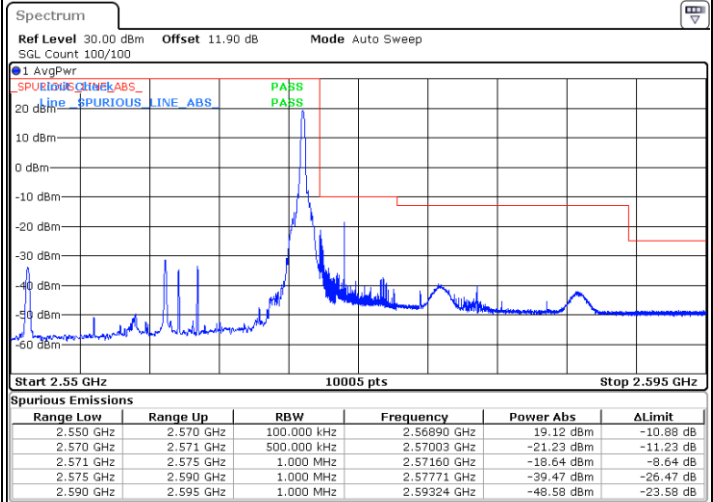


LTE Band 7 / 20MHz / 16QAM

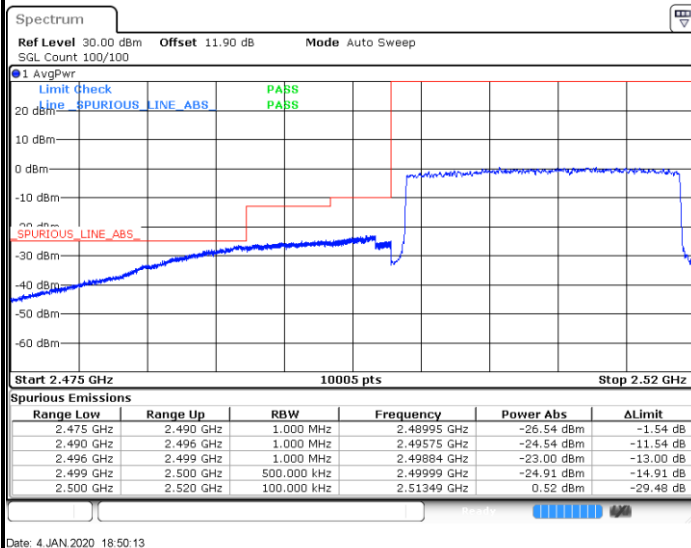
Lowest Band Edge / 1 RB



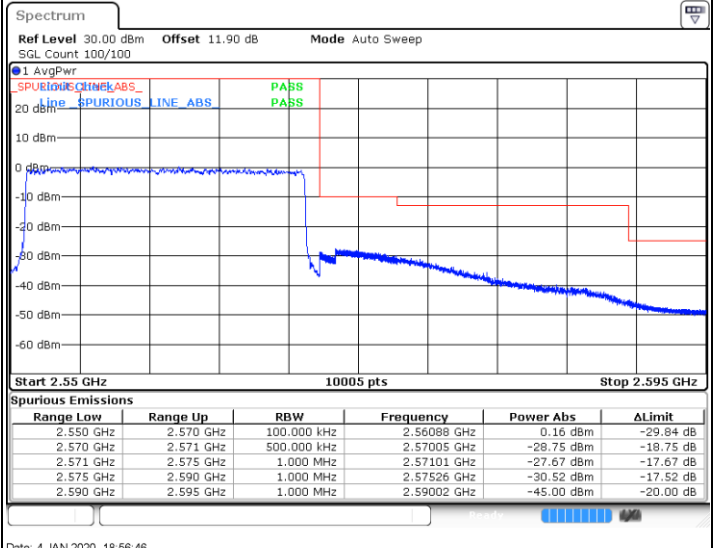
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



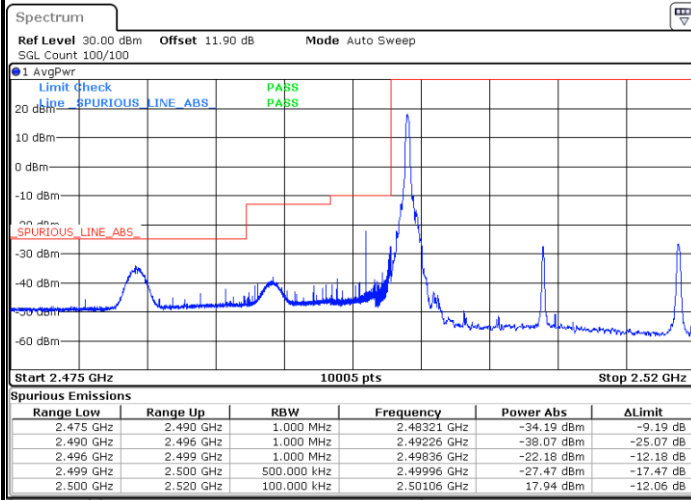
Highest Band Edge / Full RB



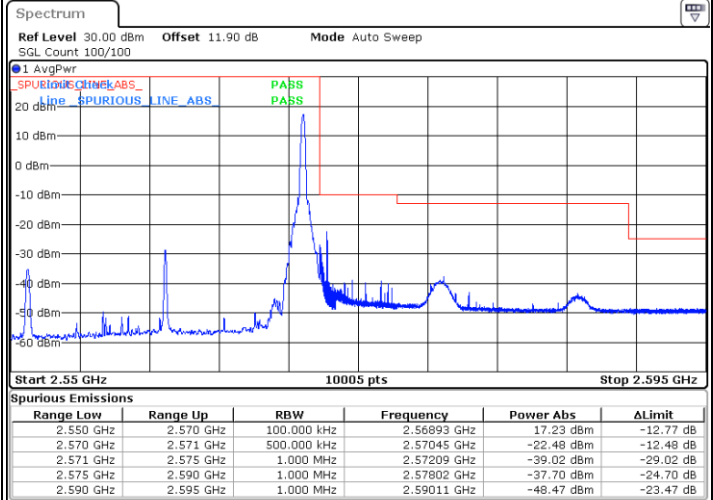


LTE Band 7 / 20MHz / 64QAM

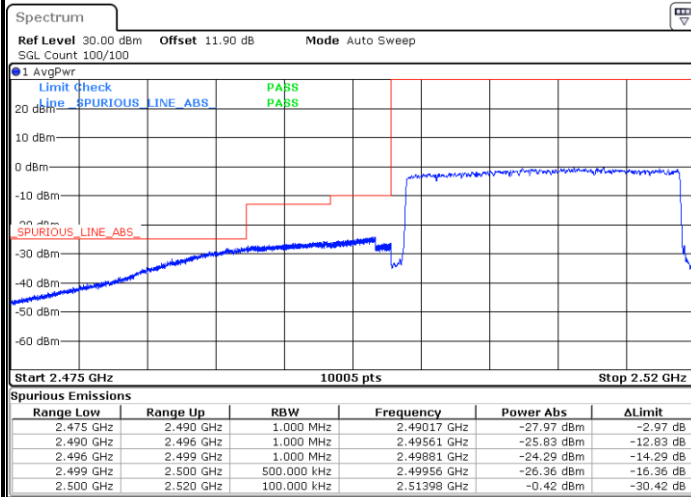
Lowest Band Edge / 1 RB



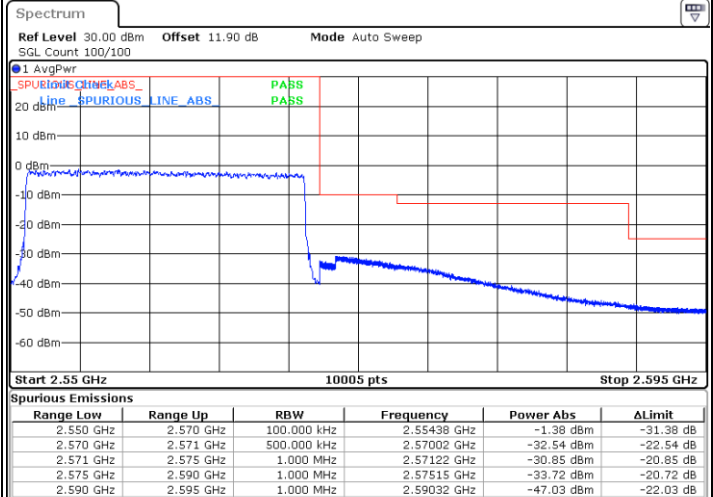
Highest Band Edge / 1 RB

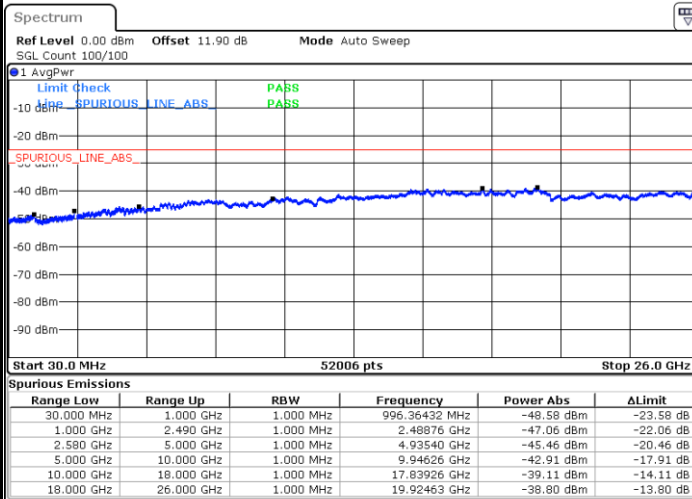


Lowest Band Edge / Full RB

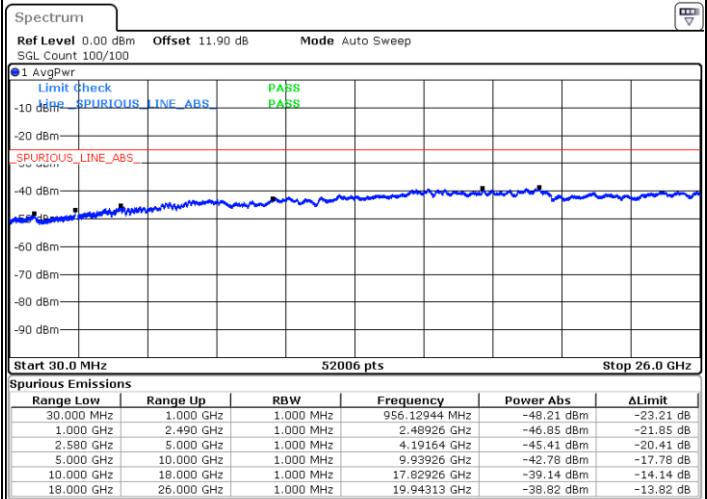


Highest Band Edge / Full RB

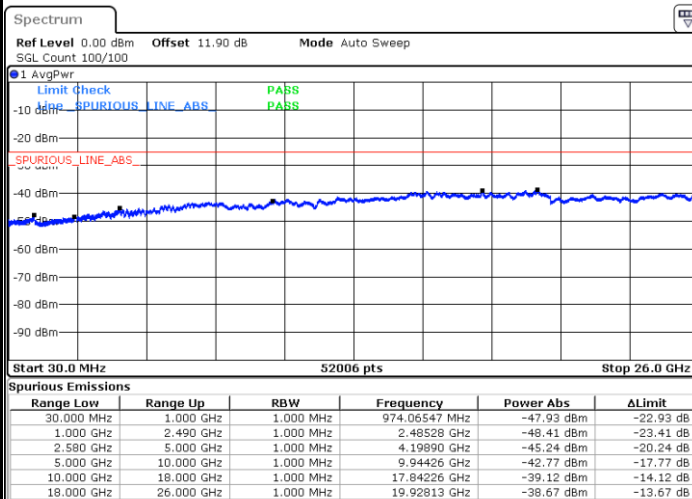


**Conducted Spurious Emission****LTE Band 7 / 5MHz****Lowest Channel / QPSK**

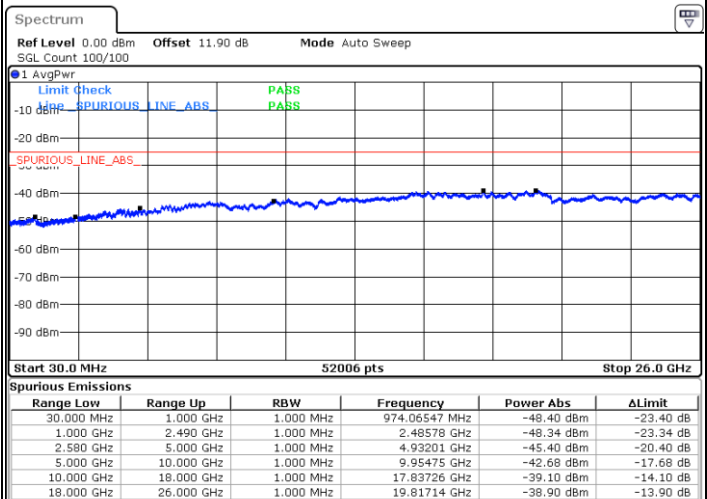
Date: 4 JAN 2020 17:55:40

Lowest Channel / 16QAM

Date: 4 JAN 2020 17:56:24

Middle Channel / QPSK

Date: 4 JAN 2020 17:57:54

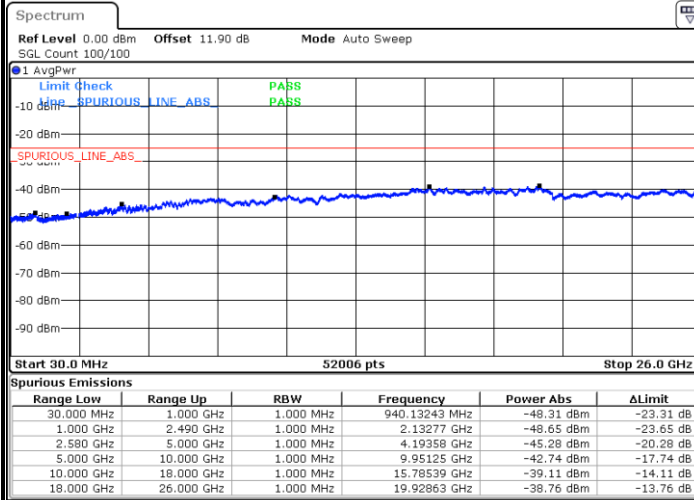
Middle Channel / 16QAM

Date: 4 JAN 2020 17:58:37



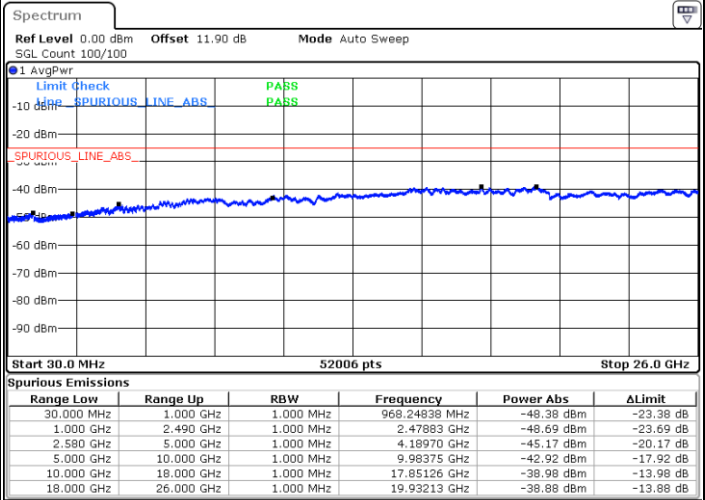
LTE Band 7 / 5MHz

Highest Channel / QPSK



Date: 4 JAN 2020 18:02:55

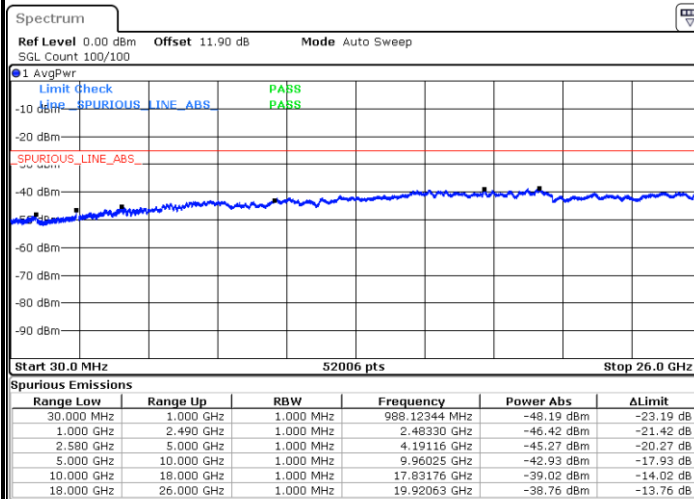
Highest Channel / 16QAM



Date: 4 JAN 2020 18:03:39

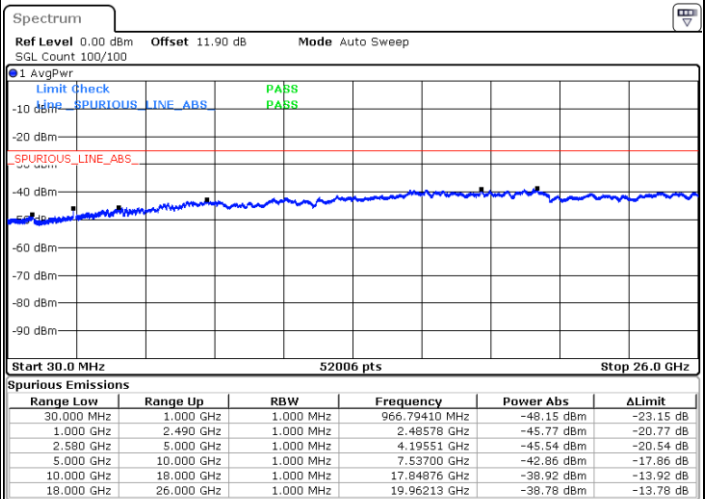
LTE Band 7 / 10MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 18:14:06

Lowest Channel / 16QAM

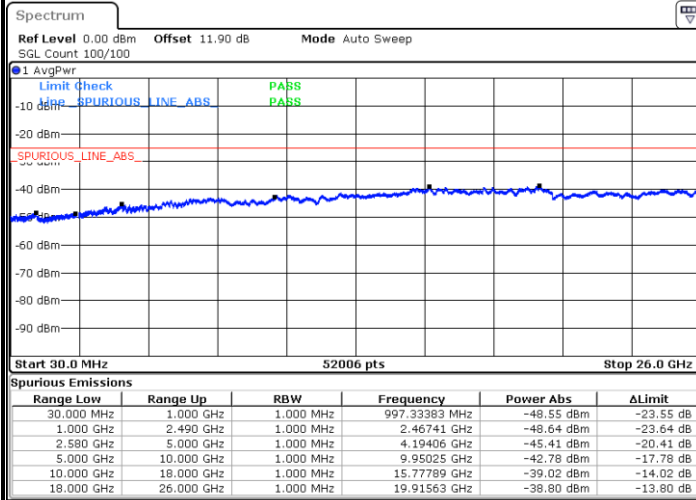


Date: 4 JAN 2020 18:14:50



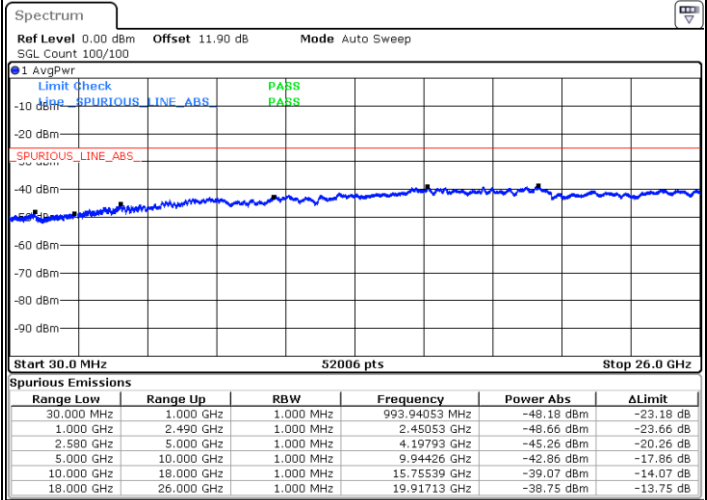
LTE Band 7 / 10MHz

Middle Channel / QPSK



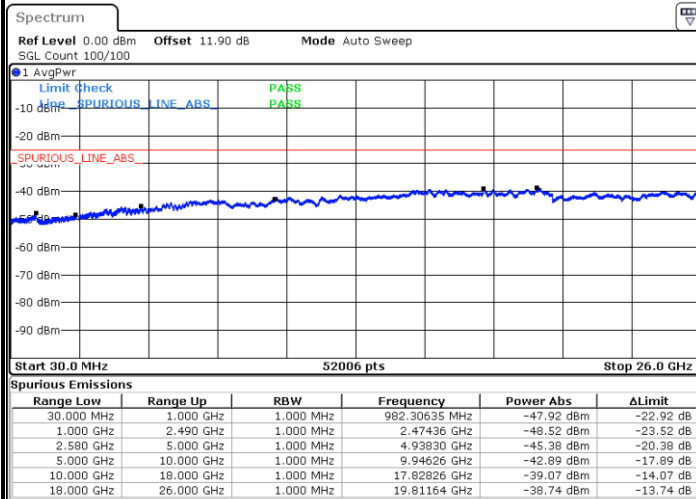
Date: 4 JAN 2020 18:16:20

Middle Channel / 16QAM



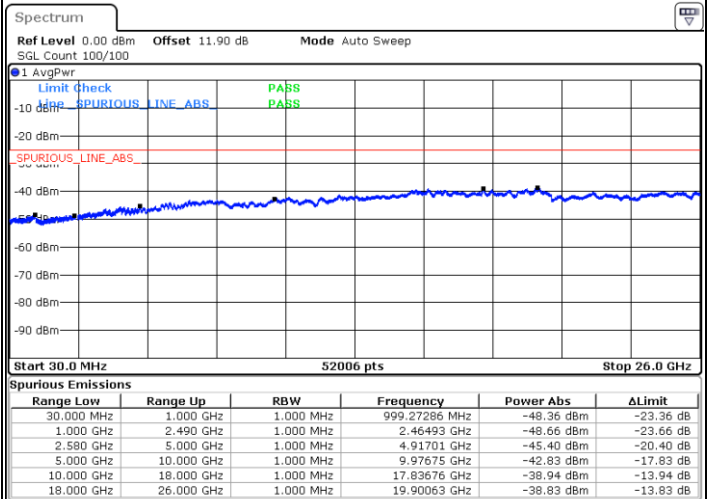
Date: 4 JAN 2020 18:17:03

Highest Channel / QPSK



Date: 4 JAN 2020 18:21:21

Highest Channel / 16QAM

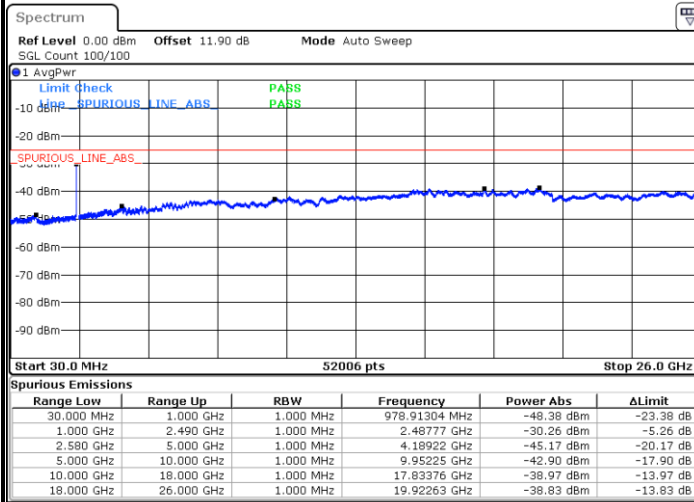


Date: 4 JAN 2020 18:22:05



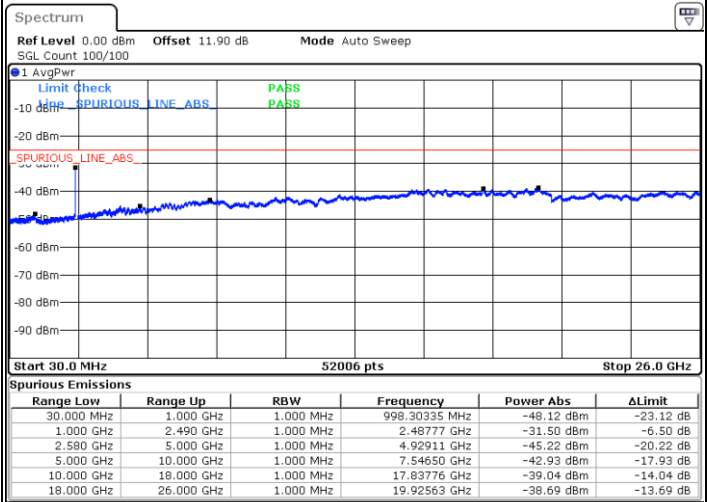
LTE Band 7 / 15MHz

Lowest Channel / QPSK



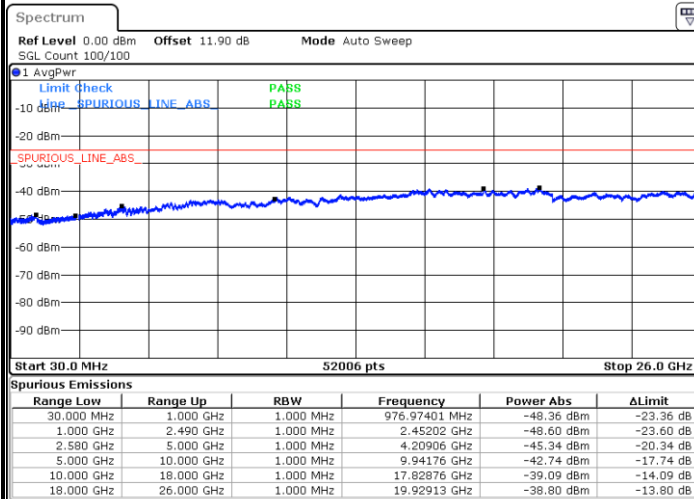
Date: 4 JAN 2020 18:32:32

Lowest Channel / 16QAM



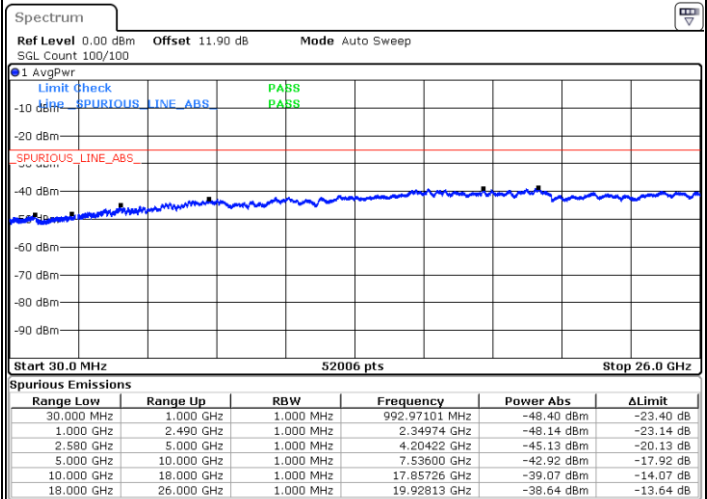
Date: 4 JAN 2020 18:33:16

Middle Channel / QPSK



Date: 4 JAN 2020 18:34:45

Middle Channel / 16QAM

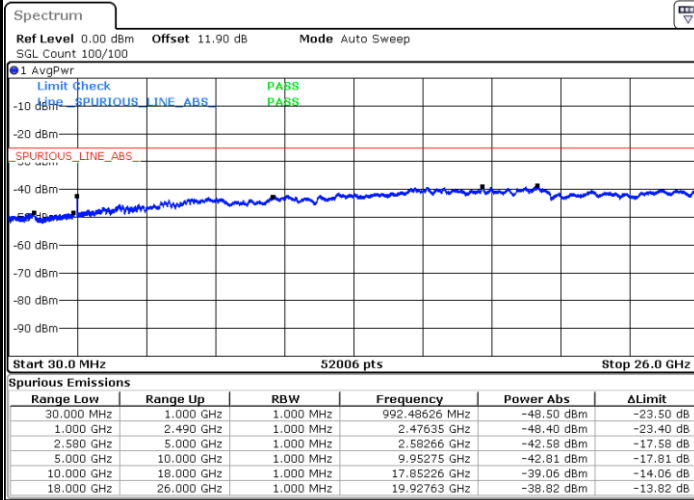


Date: 4 JAN 2020 18:35:28



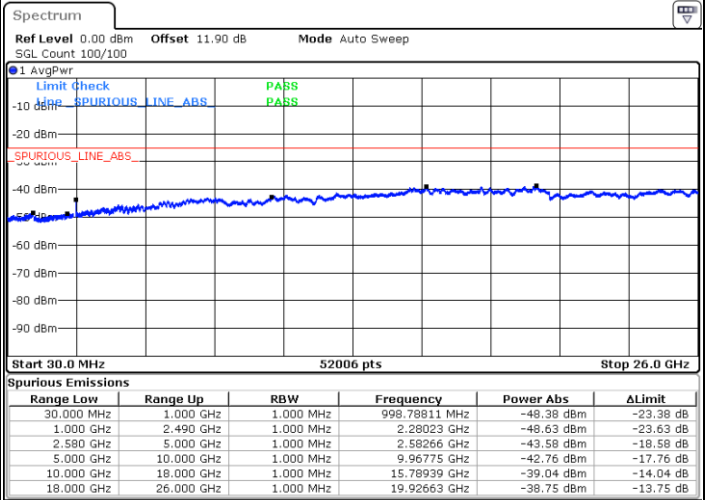
LTE Band7 / 15MHz

Highest Channel / QPSK



Date: 4 JAN 2020 18:39:46

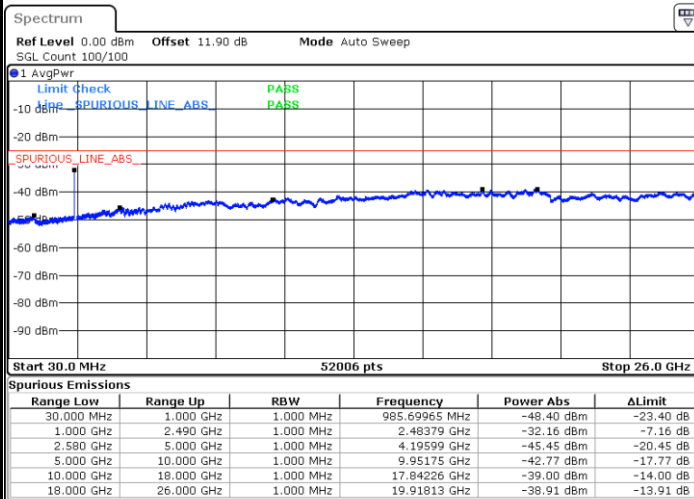
Highest Channel / 16QAM



Date: 4 JAN 2020 18:40:29

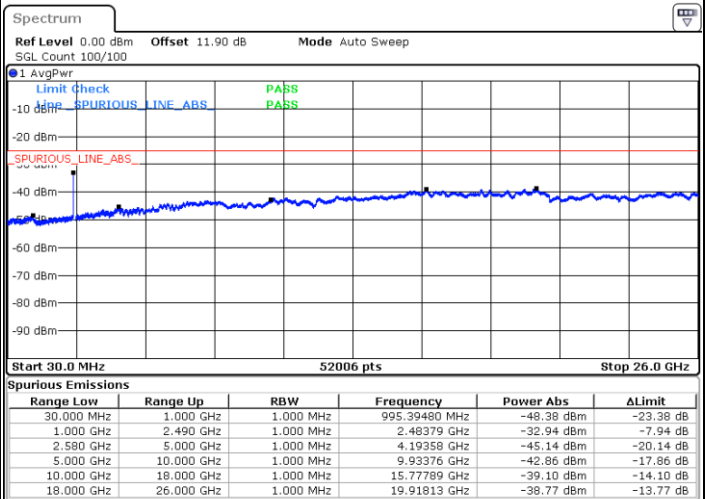
LTE Band 7 / 20MHz

Lowest Channel / QPSK



Date: 4 JAN 2020 18:50:57

Lowest Channel / 16QAM

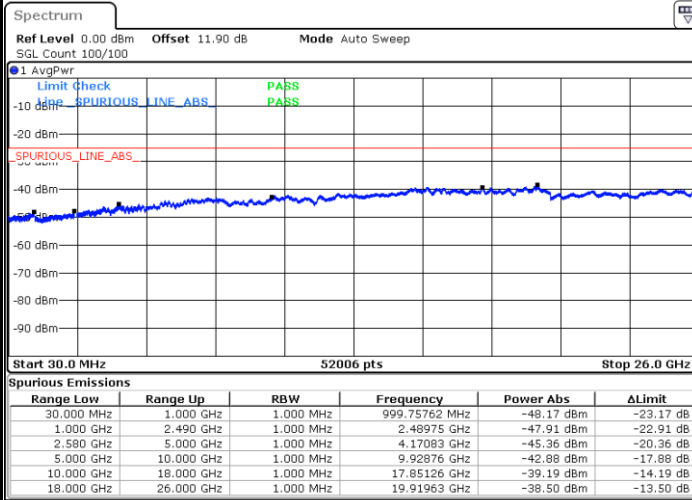


Date: 4 JAN 2020 18:51:41



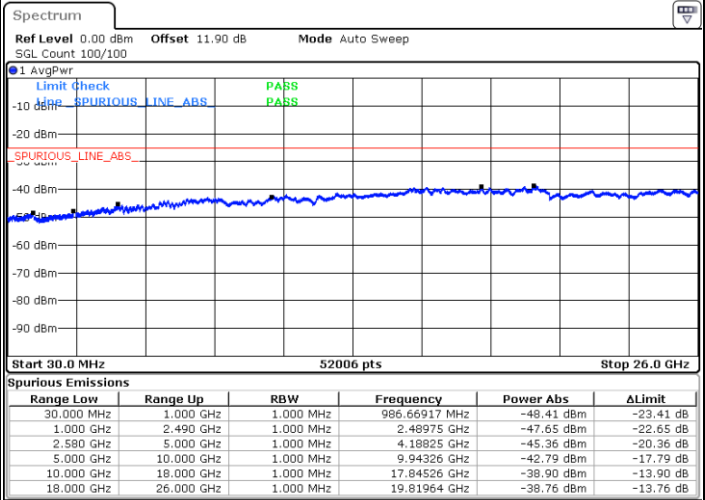
LTE Band 7 / 20MHz

Middle Channel / QPSK



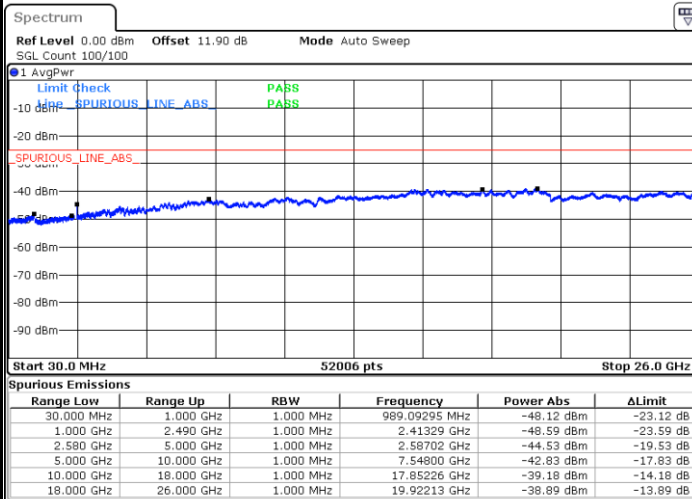
Date: 4 JAN 2020 18:53:11

Middle Channel / 16QAM



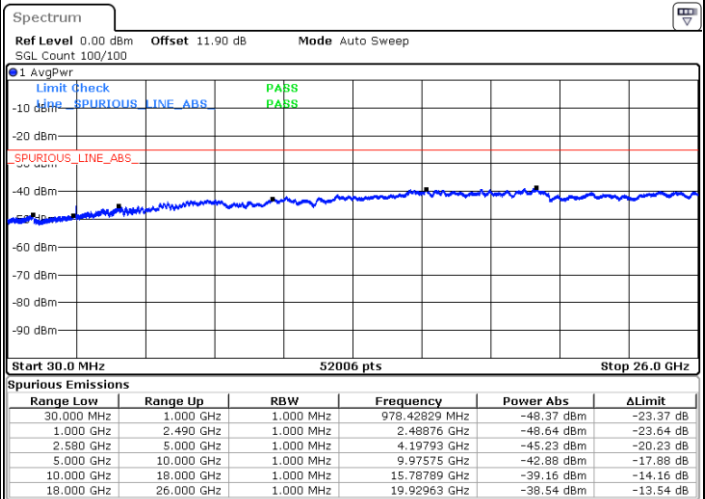
Date: 4 JAN 2020 18:53:53

Highest Channel / QPSK



Date: 4 JAN 2020 18:58:11

Highest Channel / 16QAM

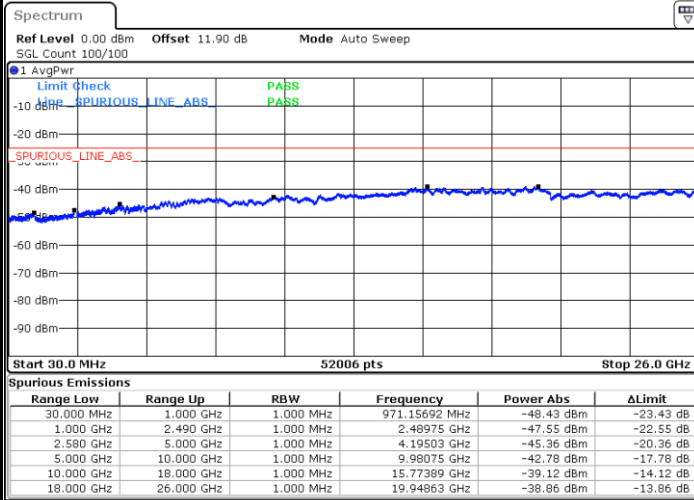


Date: 4 JAN 2020 18:58:55



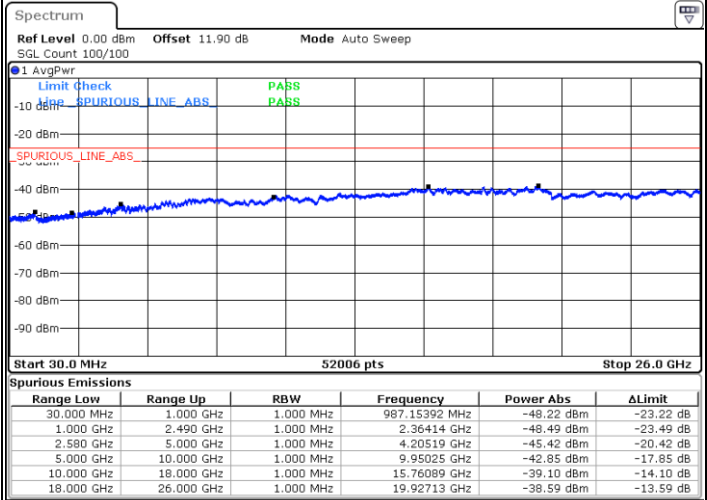
LTE Band 7 / 5MHz

Lowest Channel / 64QAM



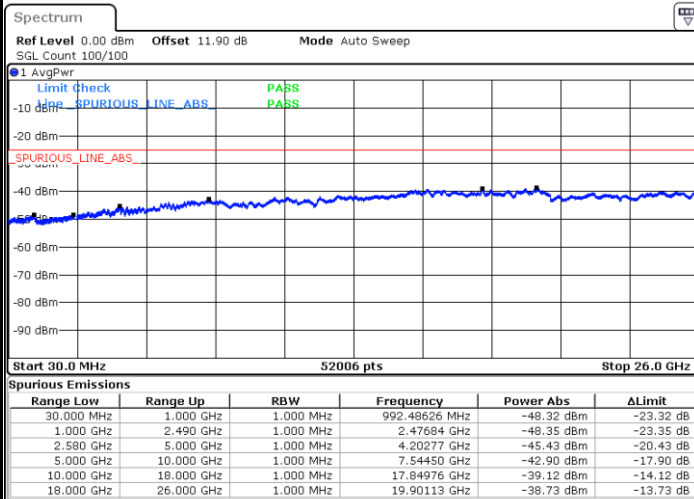
Date: 4 JAN 2020 18:06:10

Middle Channel / 64QAM



Date: 4 JAN 2020 18:07:16

Highest Channel / 64QAM

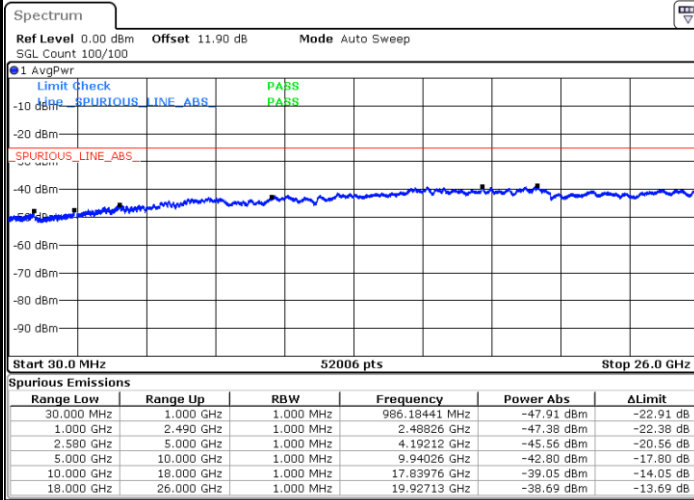


Date: 4 JAN 2020 18:09:47



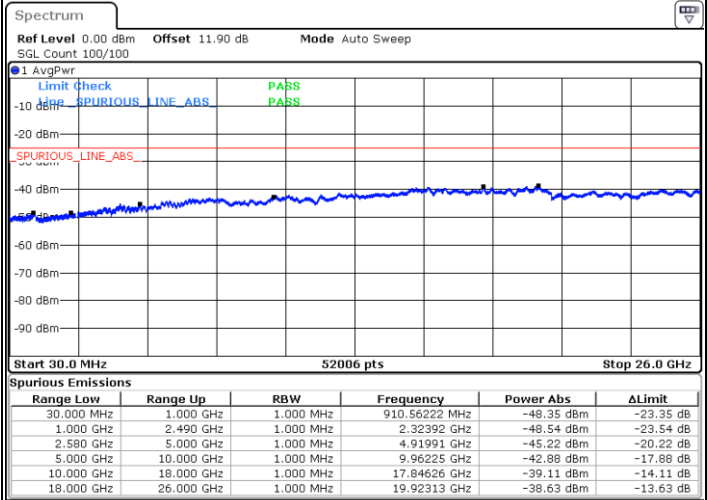
LTE Band 7 / 10MHz

Lowest Channel / 64QAM



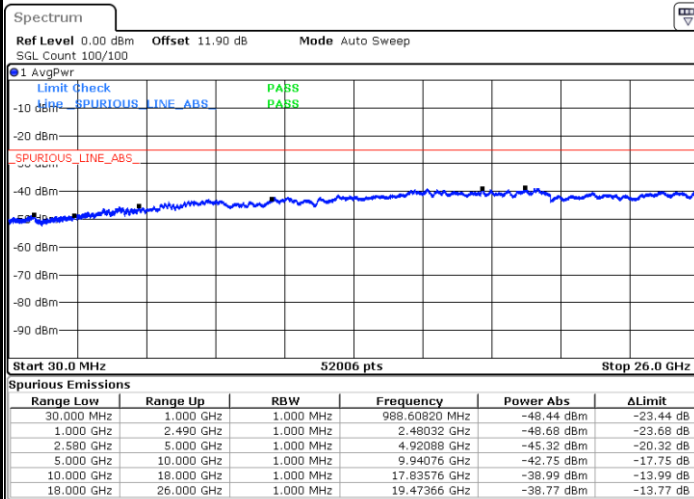
Date: 4 JAN 2020 18:24:35

Middle Channel / 64QAM



Date: 4 JAN 2020 18:25:42

Highest Channel / 64QAM

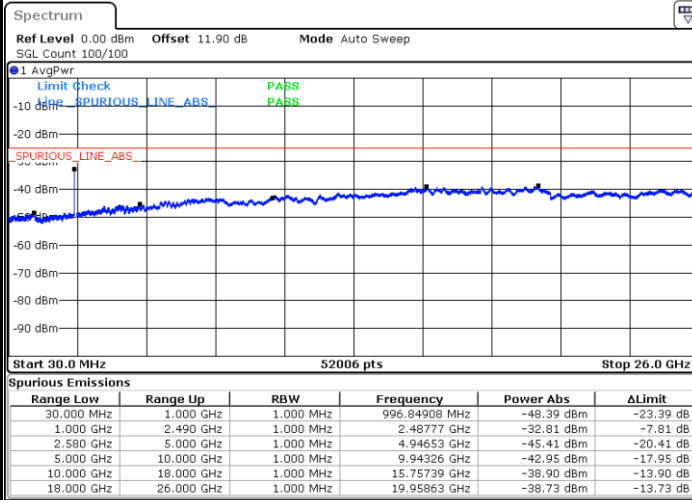


Date: 4 JAN 2020 18:28:13



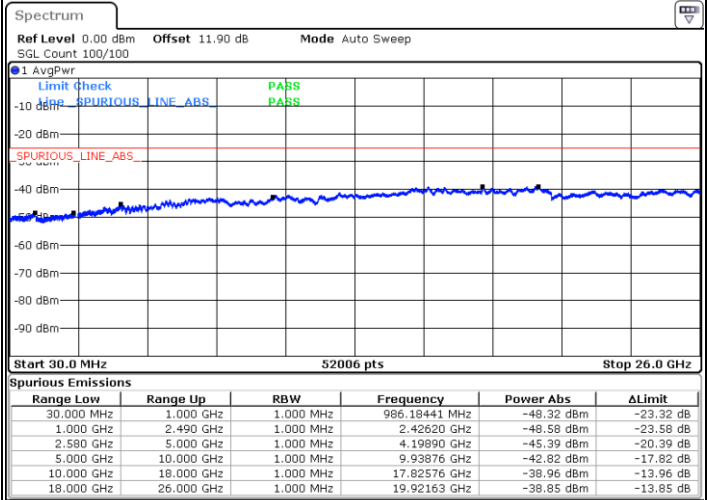
LTE Band 7 / 15MHz

Lowest Channel / 64QAM



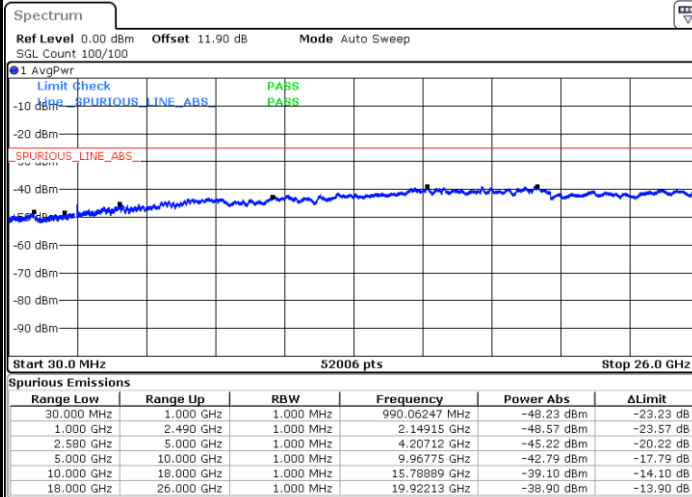
Date: 4 JAN 2020 18:43:00

Middle Channel / 64QAM



Date: 4 JAN 2020 18:44:06

Highest Channel / 64QAM

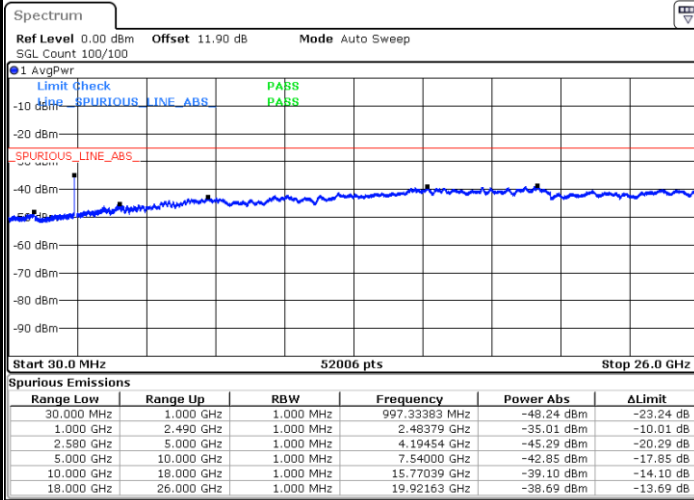


Date: 4 JAN 2020 18:46:37



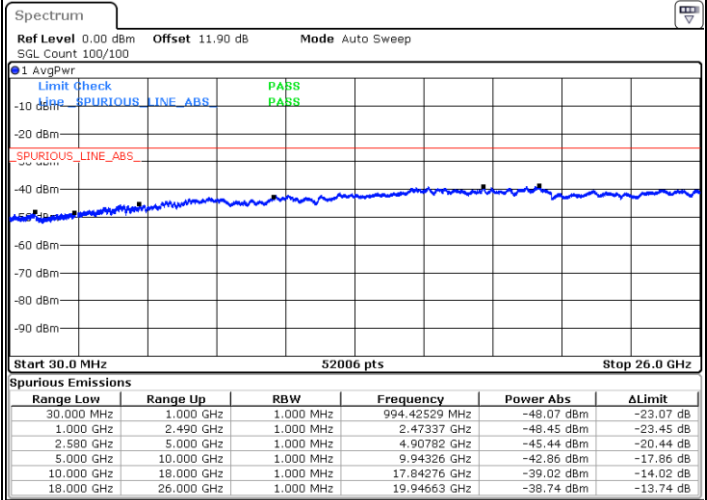
LTE Band 7 / 20MHz

Lowest Channel / 64QAM



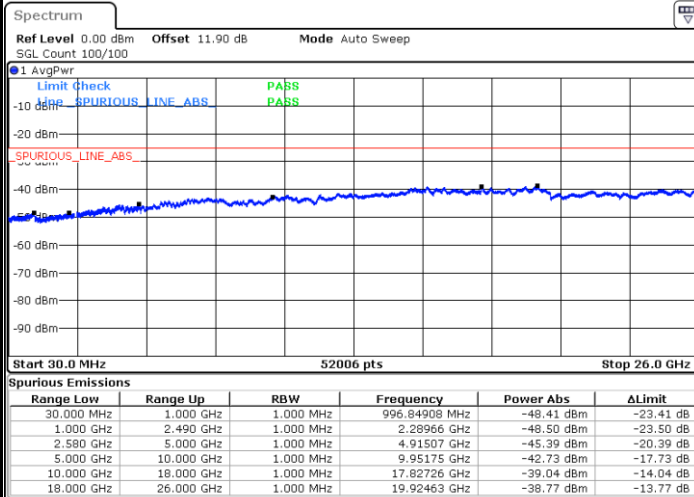
Date: 4 JAN 2020 19:01:26

Middle Channel / 64QAM



Date: 4 JAN 2020 19:02:33

Highest Channel / 64QAM



Date: 4 JAN 2020 19:05:03

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	0.0007	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0054	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0052	
0	Normal Voltage	0.0053	
-10	Normal Voltage	0.0058	
-20	Normal Voltage	0.0006	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0057	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0050	

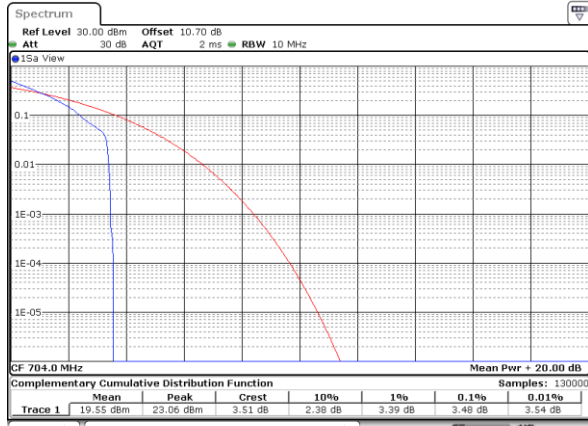
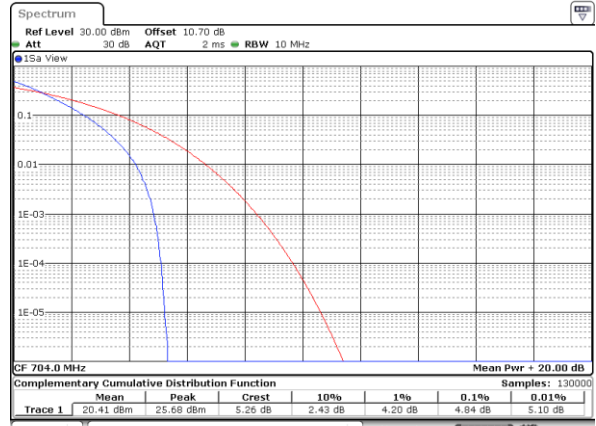
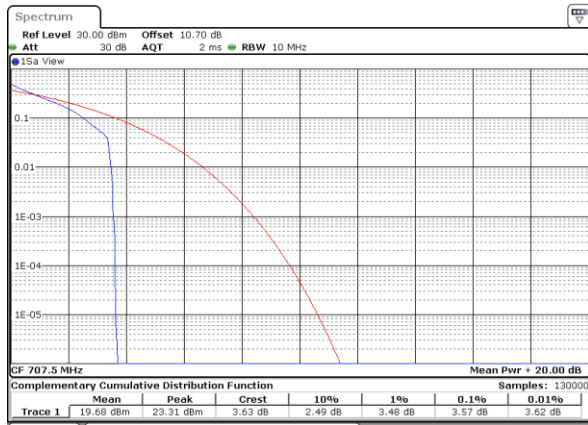
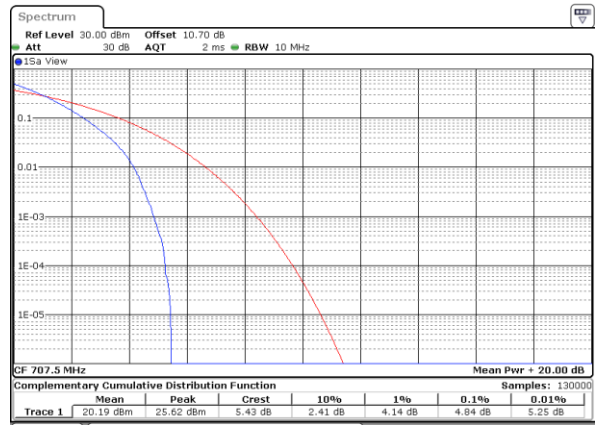
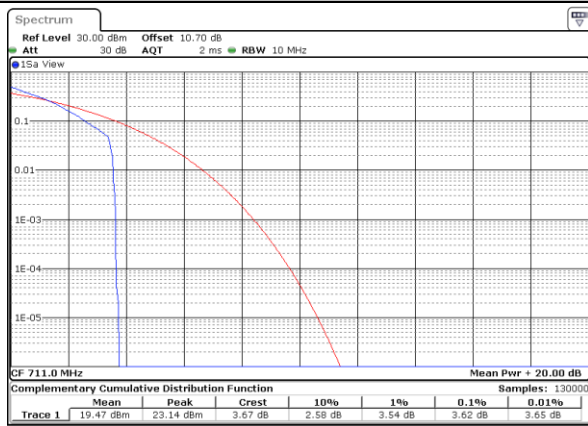
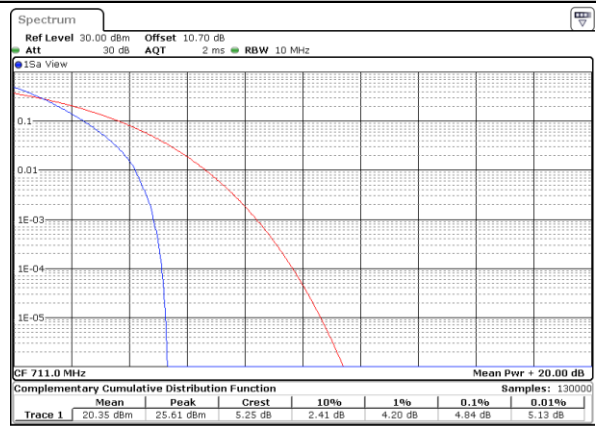
Note:

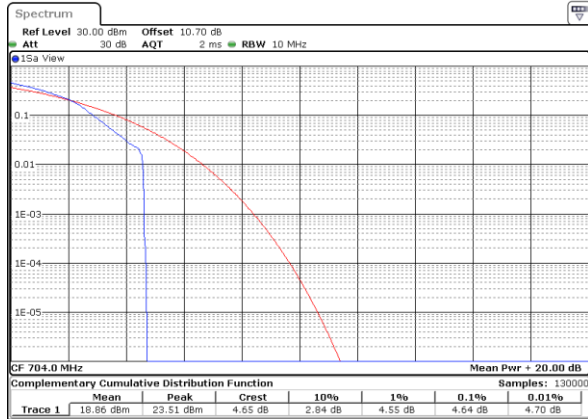
1. Normal Voltage =7.7 V. ; Battery End Point (BEP) =6.9 V. ; Maximum Voltage =8.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

LTE Band 12

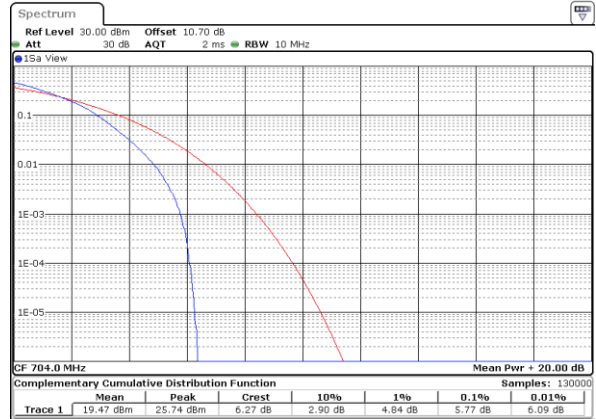
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.48	4.84	4.64	5.77	PASS
Middle CH	3.57	4.84	4.81	5.83	
Highest CH	3.62	4.84	5.22	5.77	
Mode	LTE Band 12 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.09	6.49	-	-	PASS
Middle CH	6.38	6.29	-	-	
Highest CH	6.43	6.23	-	-	

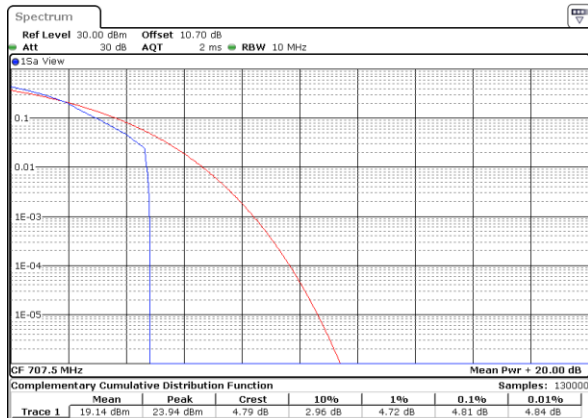
LTE Band 12 / 10MHz / QPSK
Lowest Channel / 1RB

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


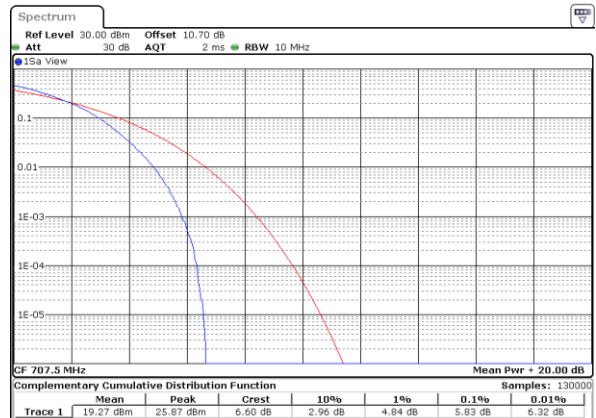
Date: 4 JAN 2020 23:19:06

Lowest Channel / Full RB


Date: 4 JAN 2020 23:18:56

Middle Channel / 1RB


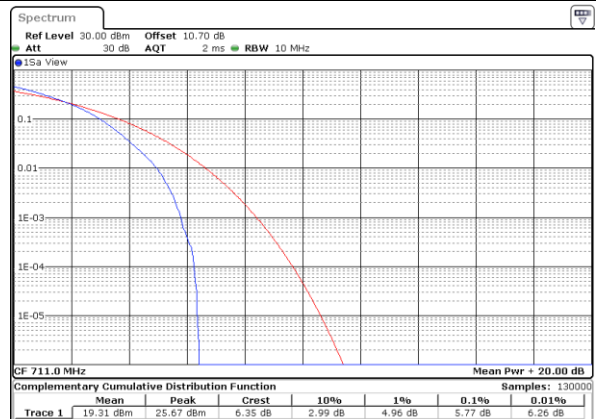
Date: 4 JAN 2020 23:19:16

Middle Channel / Full RB


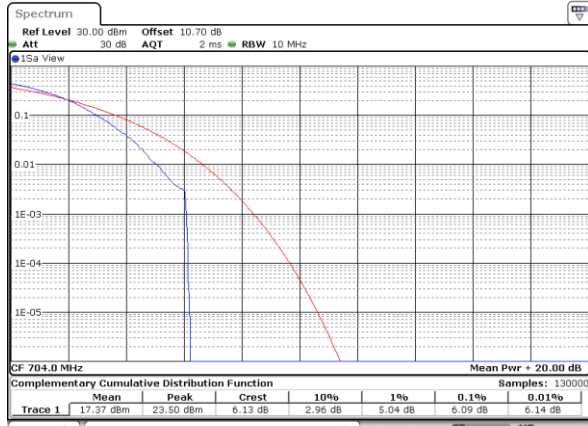
Date: 4 JAN 2020 23:19:26

Highest Channel / 1RB

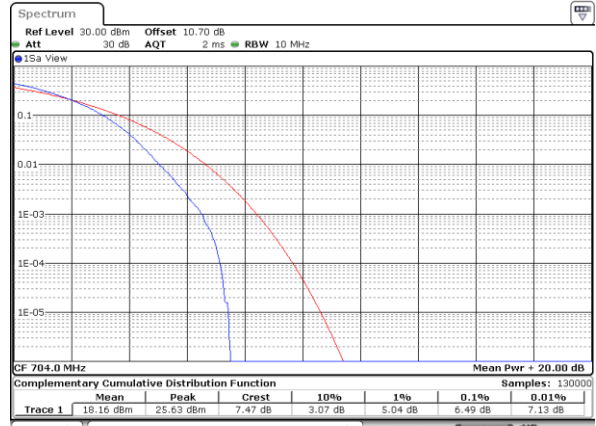

Date: 4 JAN 2020 23:19:46

Highest Channel / Full RB


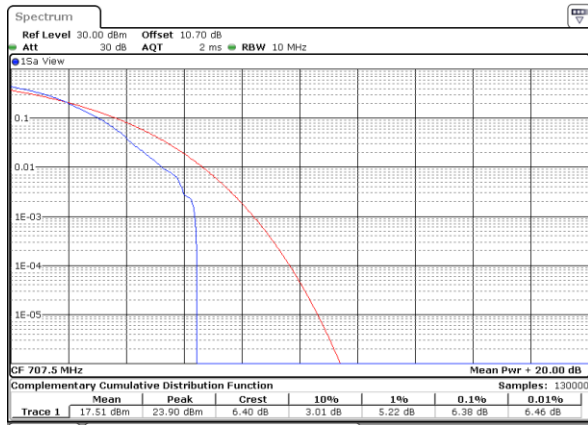
Date: 4 JAN 2020 23:19:36

LTE Band 12 / 10MHz / 64QAM
Lowest Channel / 1RB


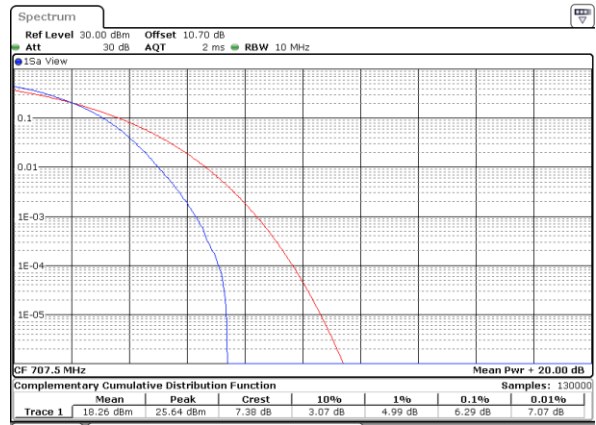
Date: 4 JAN 2020 23:18:06

Lowest Channel / Full RB


Date: 4 JAN 2020 23:17:55

Middle Channel / 1RB


Date: 4 JAN 2020 23:18:15

Middle Channel / Full RB


Date: 4 JAN 2020 23:18:25

Highest Channel / 1RB


Date: 4 JAN 2020 23:18:45

Highest Channel / Full RB


Date: 4 JAN 2020 23:18:35

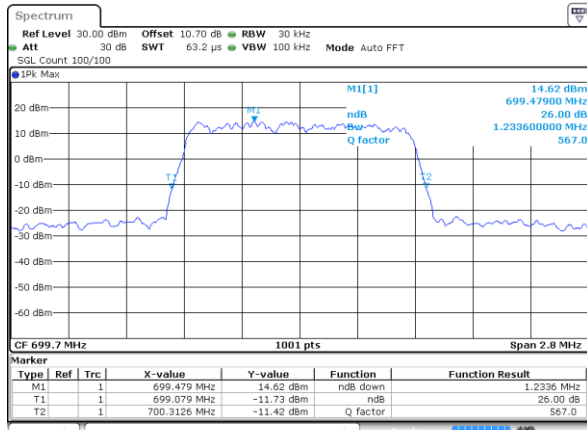
**26dB Bandwidth**

Mode	LTE Band 12 : 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	1.21	2.96	3.03	4.82	4.84	9.91	9.61	-	-	-	-
Middle CH	1.24	1.21	3.01	3.05	4.91	4.83	9.79	9.83	-	-	-	-
Highest CH	1.23	1.23	3.00	3.01	4.84	4.86	9.73	9.65	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.23	-	3.04	-	4.90	-	9.83	-	-	-	-	-
Middle CH	1.23	-	2.99	-	4.88	-	9.69	-	-	-	-	-
Highest CH	1.24	-	3.00	-	4.85	-	9.63	-	-	-	-	-



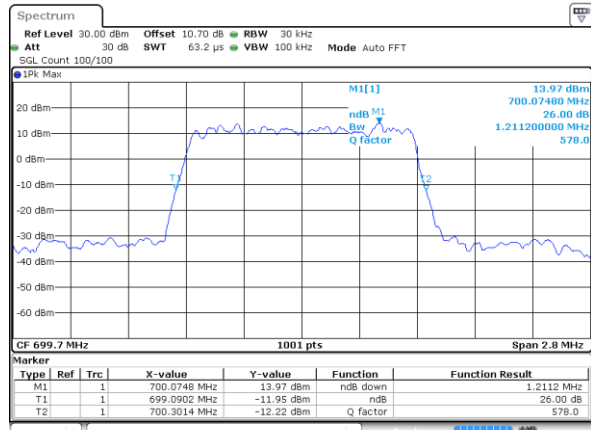
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



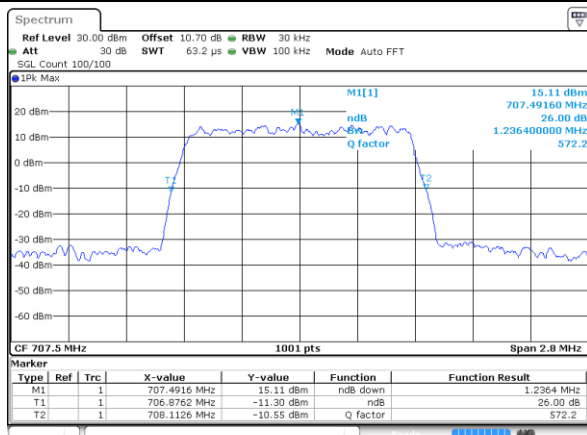
Date: 4 JAN 2020 21:48:57

Lowest Channel / 1.4MHz / 16QAM



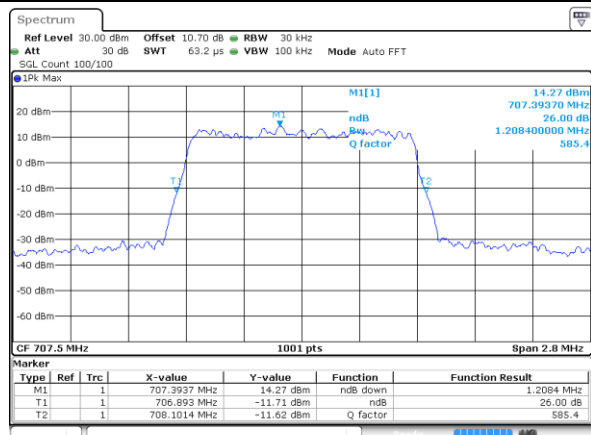
Date: 4 JAN 2020 21:48:45

Middle Channel / 1.4MHz / QPSK



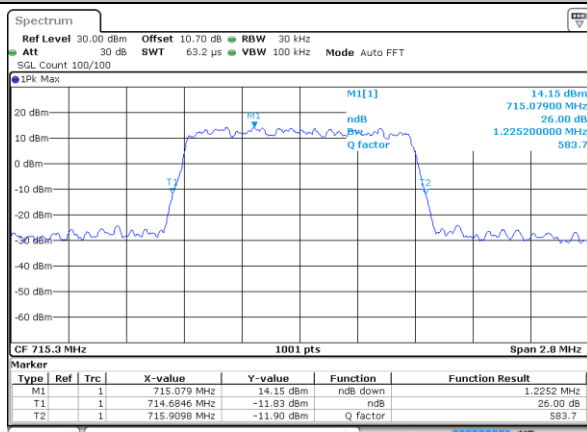
Date: 4 JAN 2020 21:54:57

Middle Channel / 1.4MHz / 16QAM



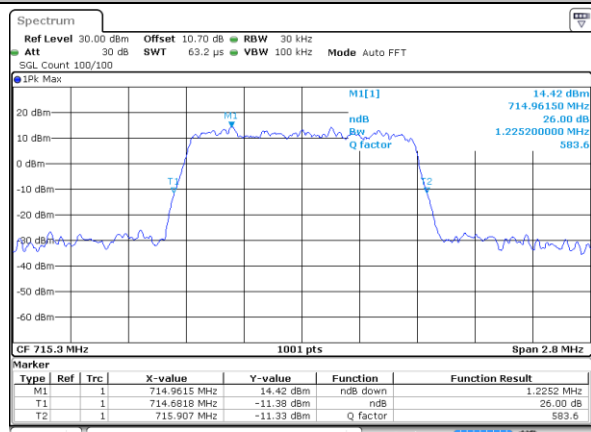
Date: 4 JAN 2020 21:55:09

Highest Channel / 1.4MHz / QPSK



Date: 4 JAN 2020 21:57:18

Highest Channel / 1.4MHz / 16QAM

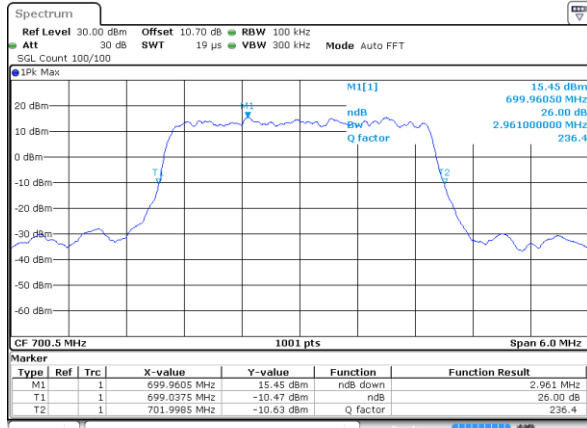


Date: 4 JAN 2020 21:57:06

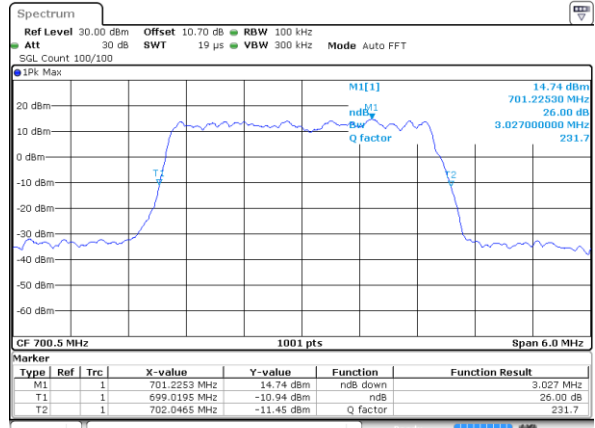


LTE Band 12

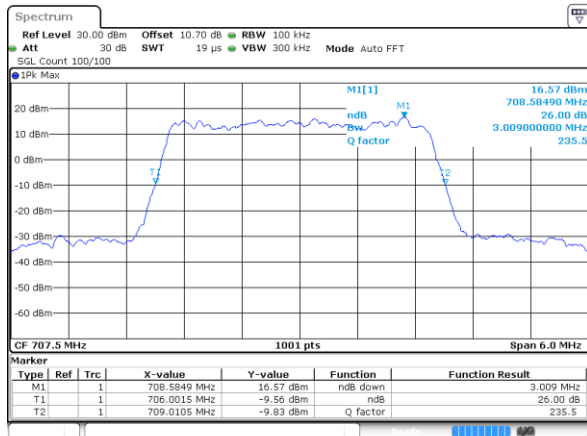
Lowest Channel / 3MHz / QPSK



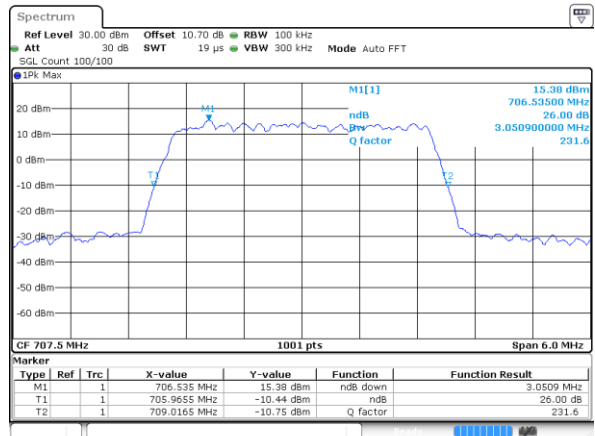
Lowest Channel / 3MHz / 16QAM



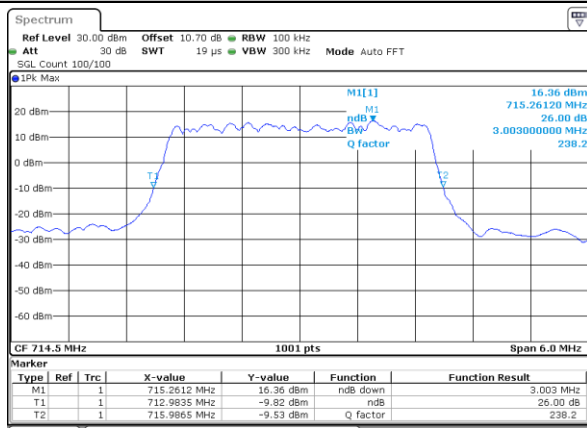
Middle Channel / 3MHz / QPSK



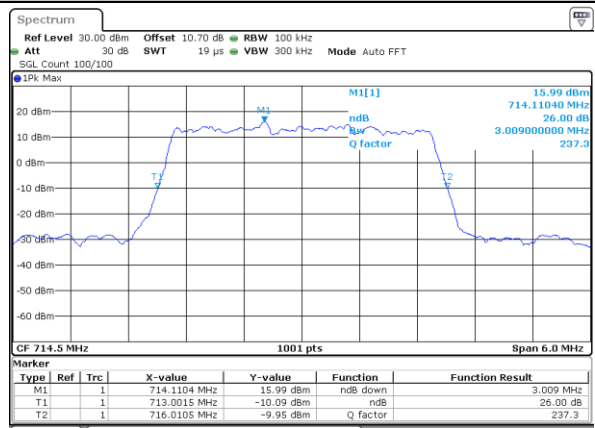
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK



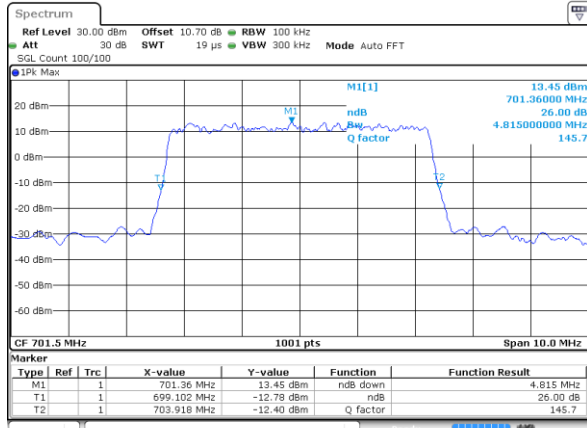
Highest Channel / 3MHz / 16QAM





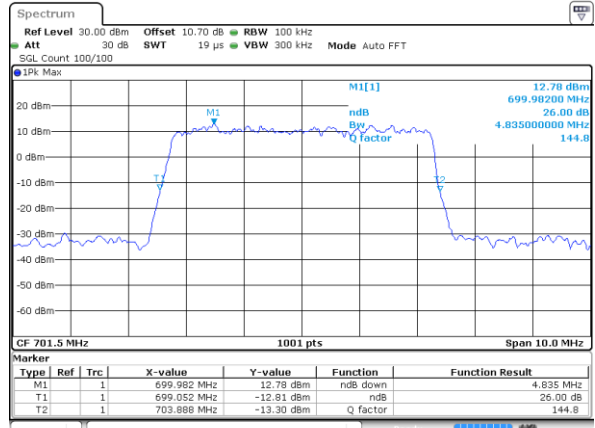
LTE Band 12

Lowest Channel / 5MHz / QPSK



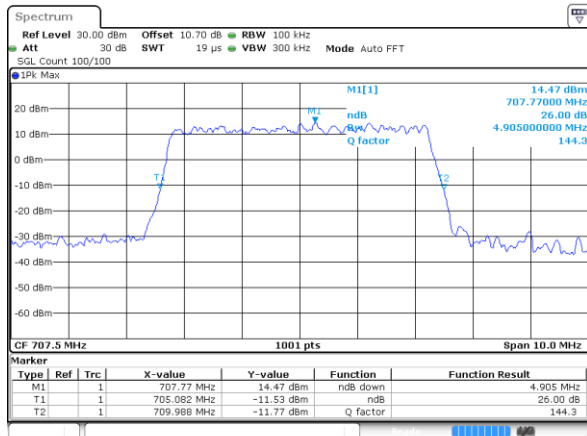
Date: 4 JAN 2020 22:39:56

Lowest Channel / 5MHz / 16QAM



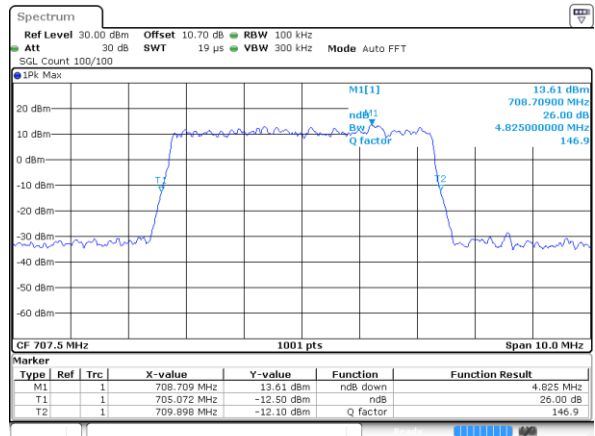
Date: 4 JAN 2020 22:39:44

Middle Channel / 5MHz / QPSK



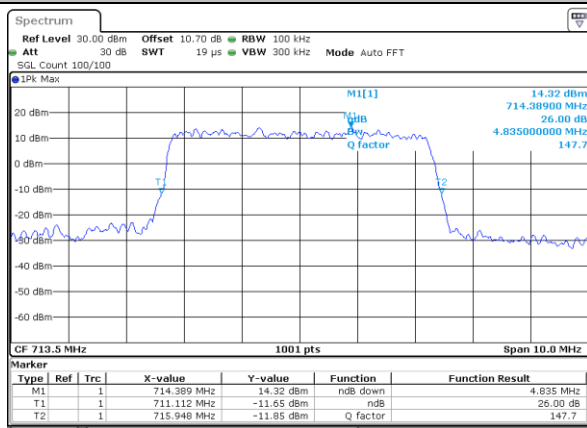
Date: 4 JAN 2020 22:45:56

Middle Channel / 5MHz / 16QAM



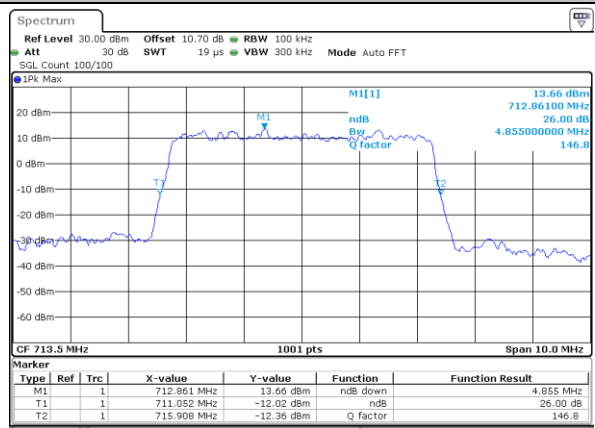
Date: 4 JAN 2020 22:46:07

Highest Channel / 5MHz / QPSK



Date: 4 JAN 2020 22:48:16

Highest Channel / 5MHz / 16QAM

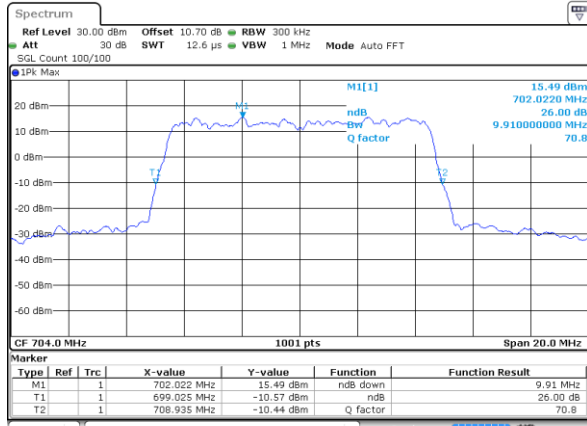


Date: 4 JAN 2020 22:48:04

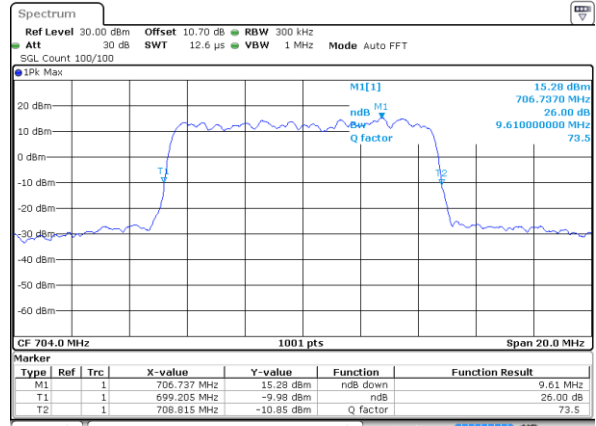


LTE Band 12

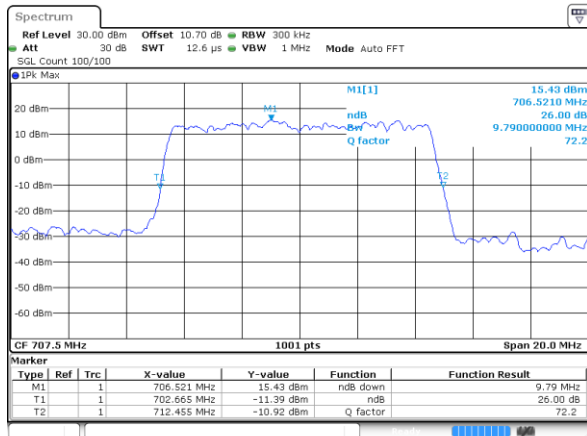
Lowest Channel / 10MHz / QPSK



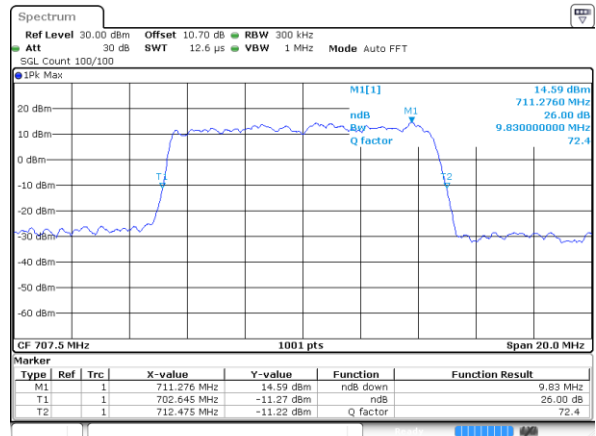
Lowest Channel / 10MHz / 16QAM



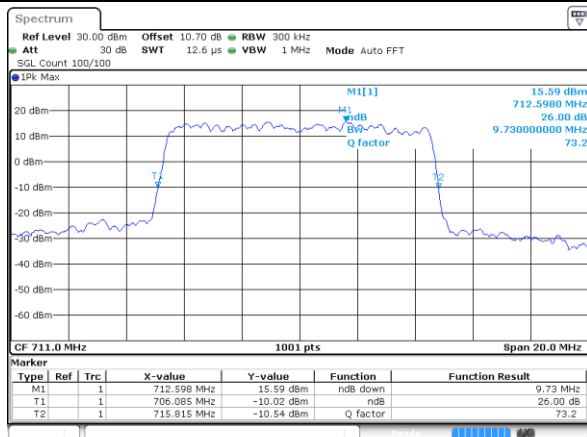
Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM

