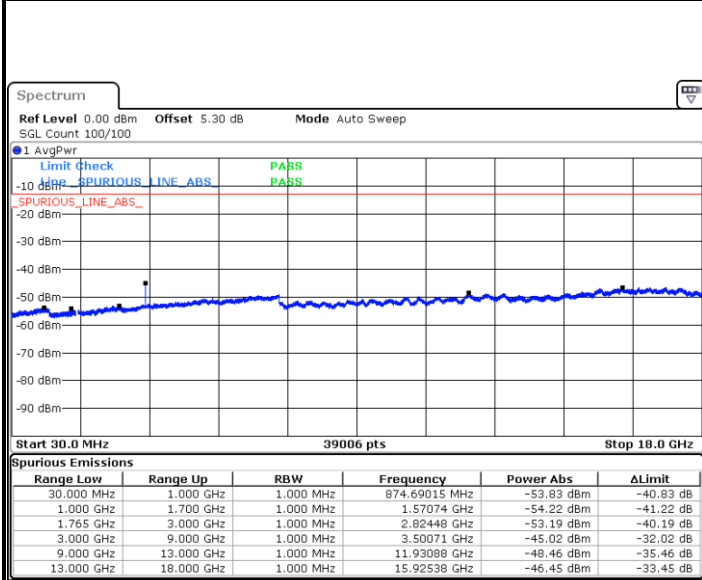




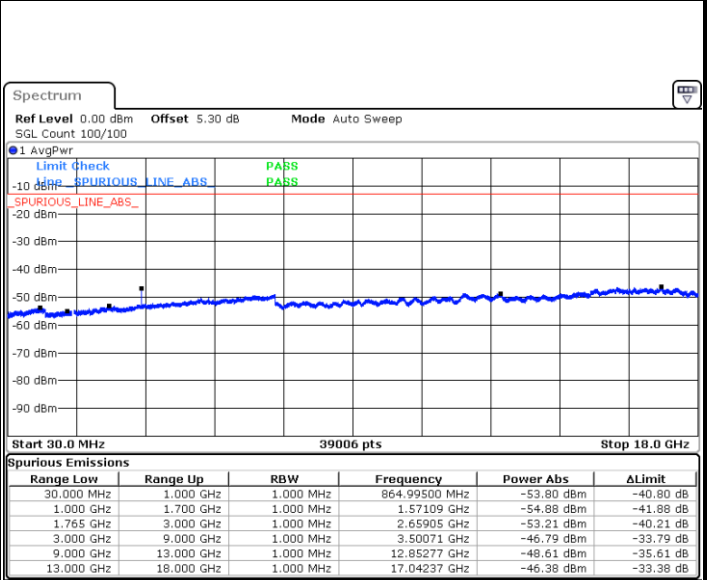
LTE Band 4 / 5MHz

Highest Channel / QPSK



Date: 17.NOV.2020 15:50:14

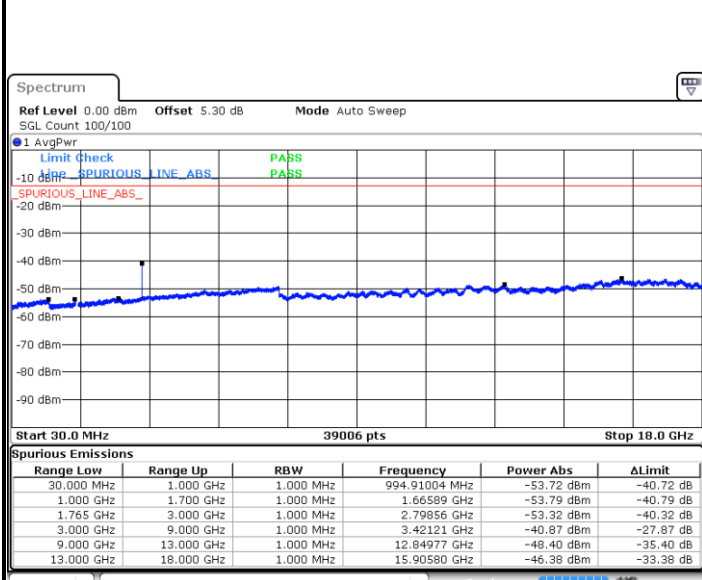
Highest Channel / 16QAM



Date: 17.NOV.2020 15:51:08

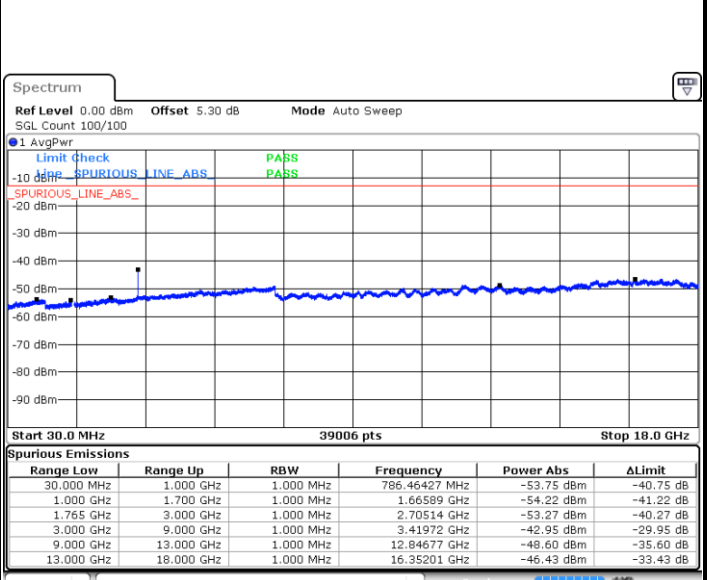
LTE Band 4 / 10MHz

Lowest Channel / QPSK



Date: 17.NOV.2020 15:58:49

Lowest Channel / 16QAM



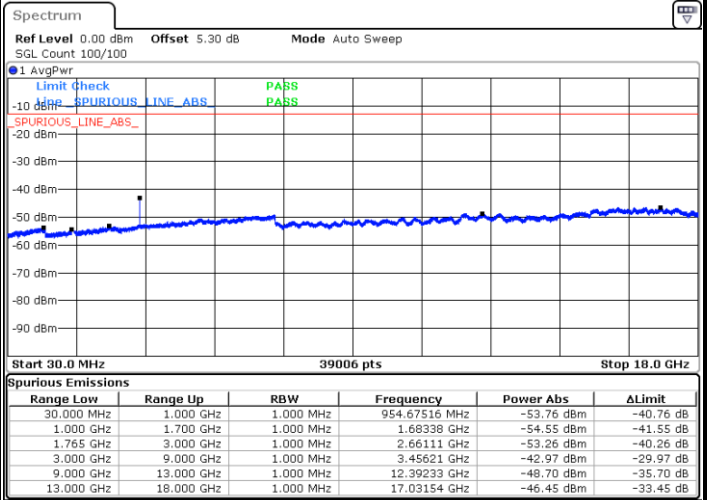
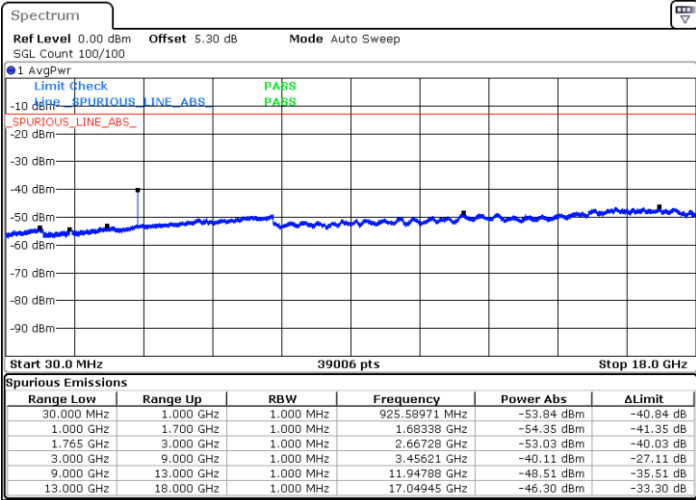
Date: 17.NOV.2020 15:59:43



LTE Band 4 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

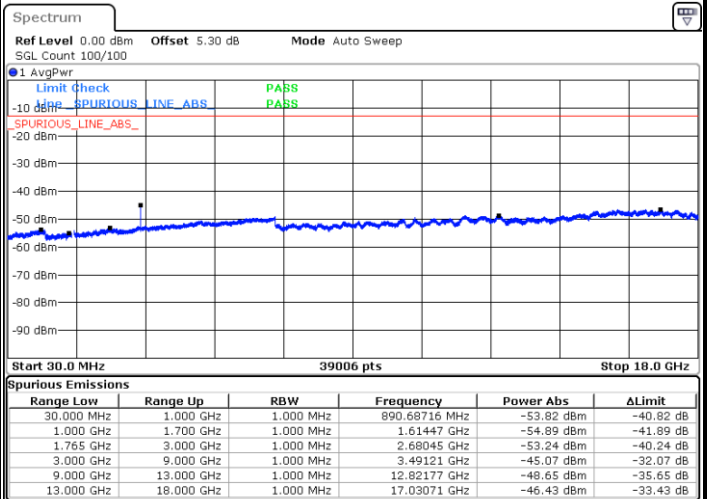
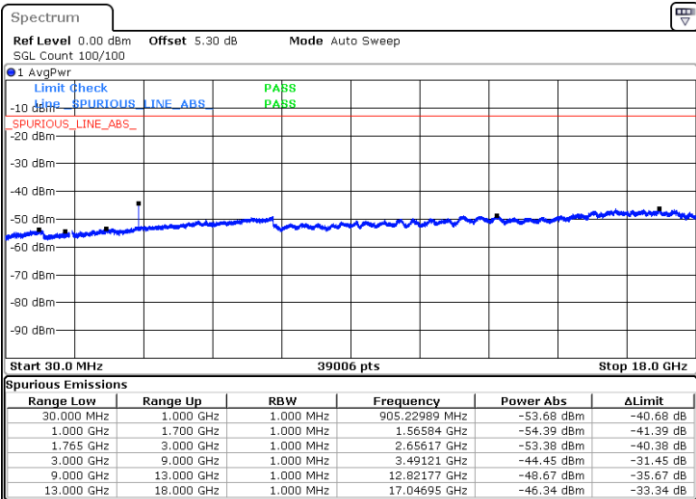


Date: 17.NOV.2020 16:01:17

Date: 17.NOV.2020 16:02:12

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.NOV.2020 16:08:16

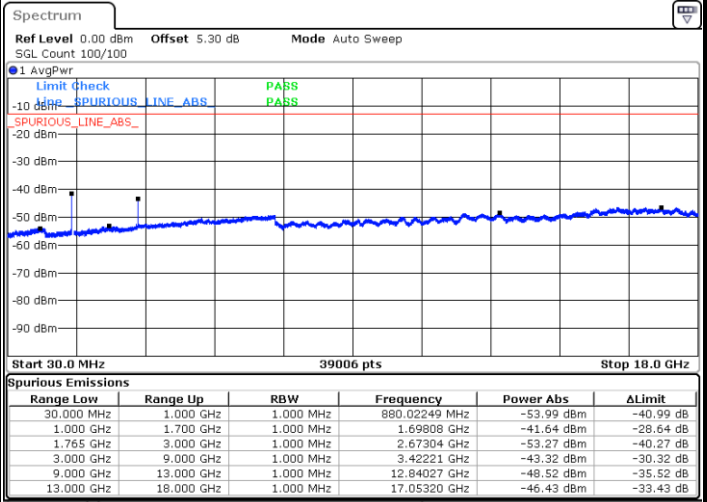
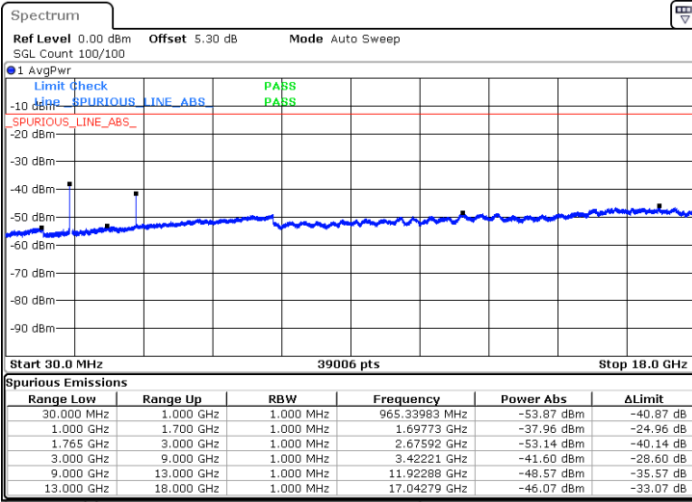
Date: 17.NOV.2020 16:09:10



LTE Band 4 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

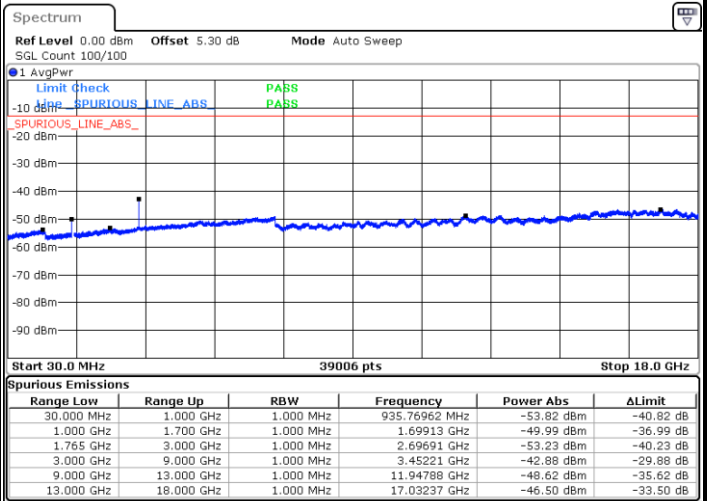
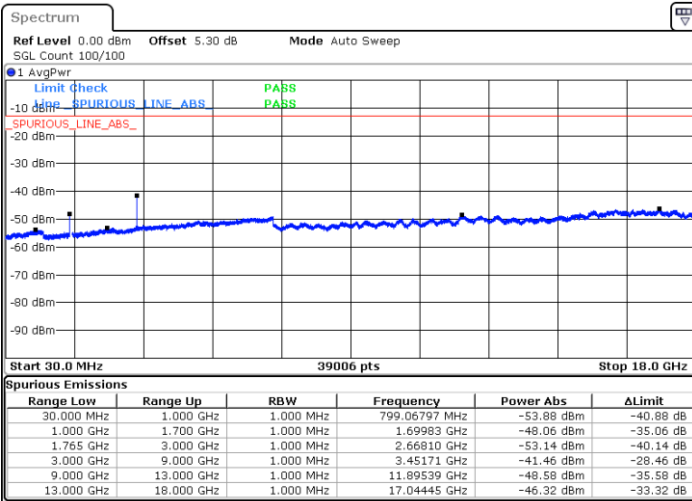


Date: 17.NOV.2020 16:15:58

Date: 17.NOV.2020 16:16:52

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 17.NOV.2020 16:18:27

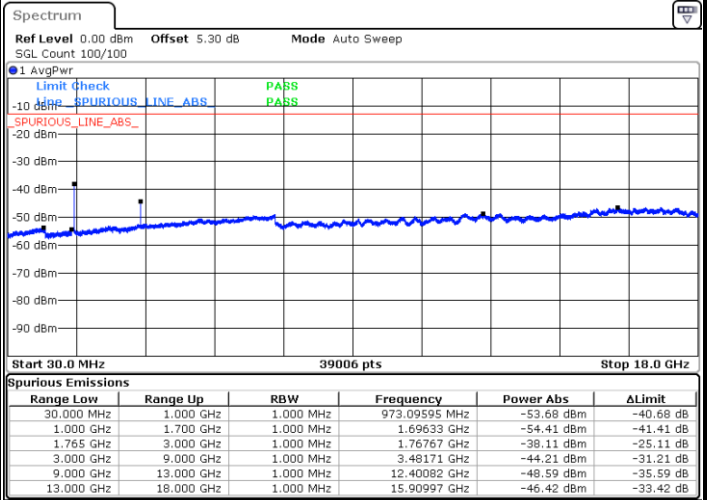
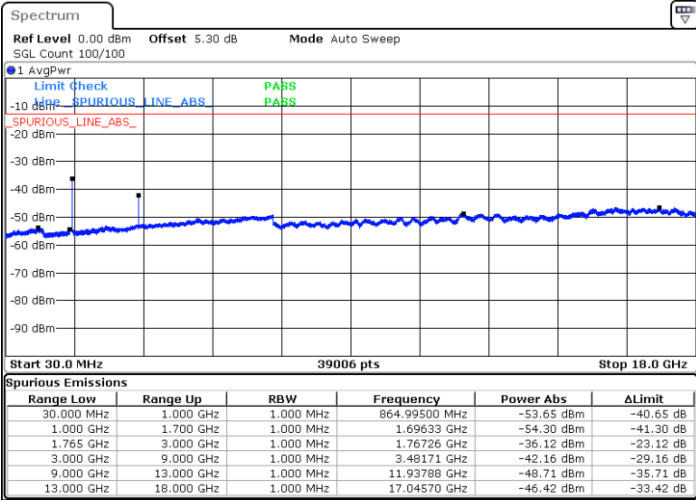
Date: 17.NOV.2020 16:19:21



LTE Band 4 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



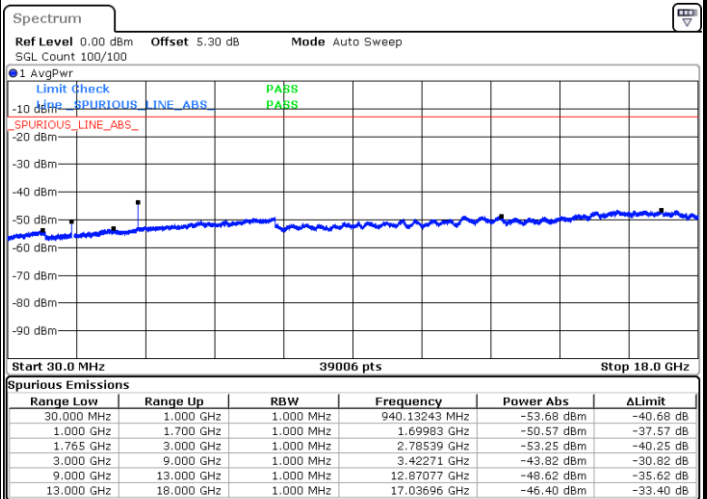
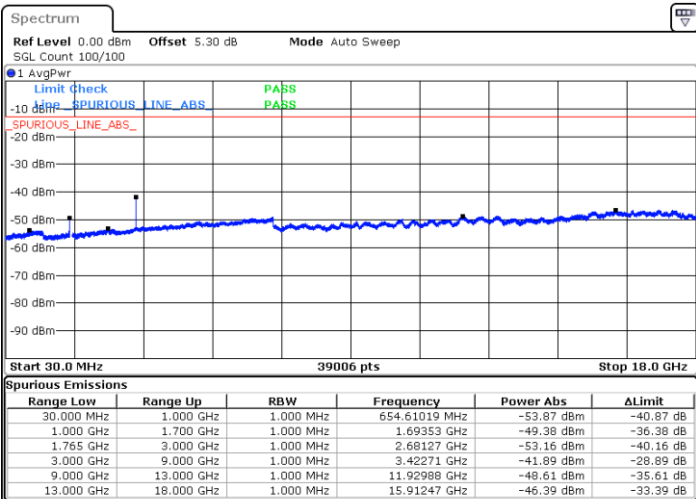
Date: 17.NOV.2020 16:25:25

Date: 17.NOV.2020 16:26:19

LTE Band 4 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 17.NOV.2020 16:33:01

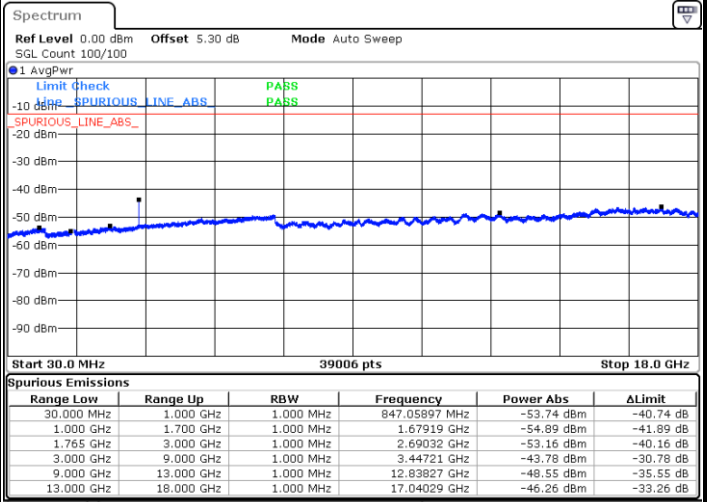
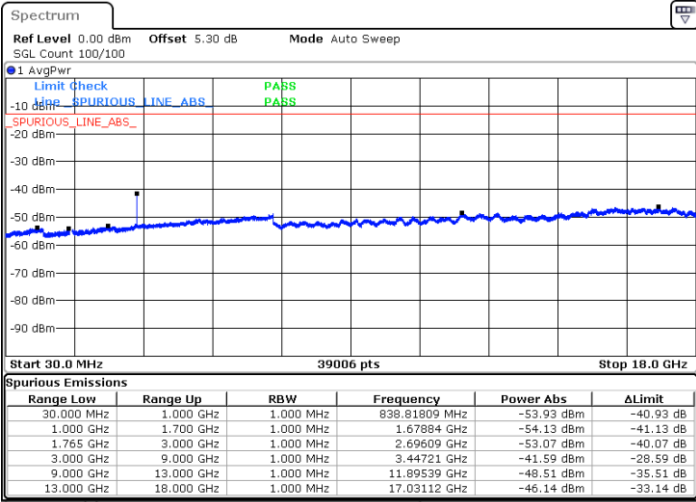
Date: 17.NOV.2020 16:33:55



LTE Band 4 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

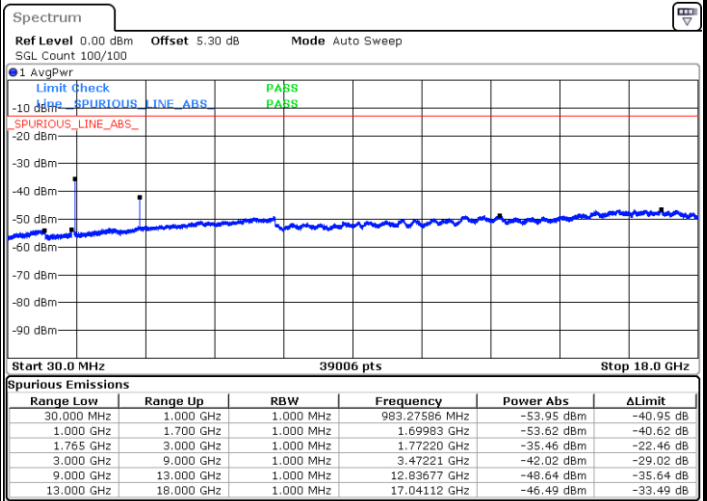
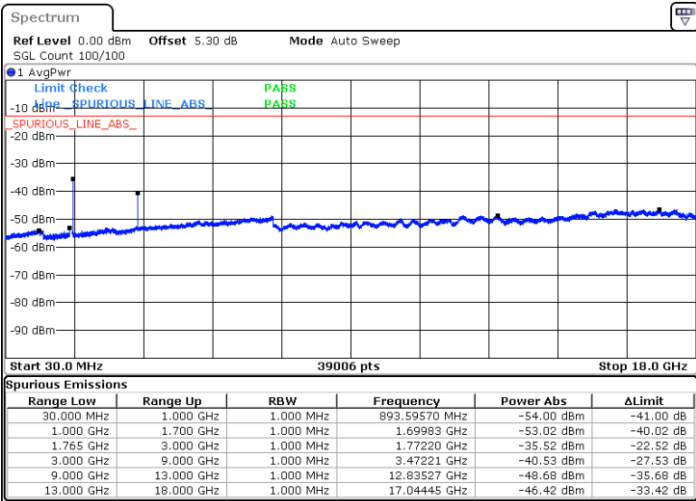


Date: 17.NOV.2020 16:35:30

Date: 17.NOV.2020 16:36:24

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 17.NOV.2020 16:42:28

Date: 17.NOV.2020 16:43:22



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0021	
20	Maximum Voltage	0.0010	
20	Normal Voltage	0.0026	
20	Battery End Point	0.0005	

Note:

1. Normal Voltage =3.8 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.3V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## LTE Band 12

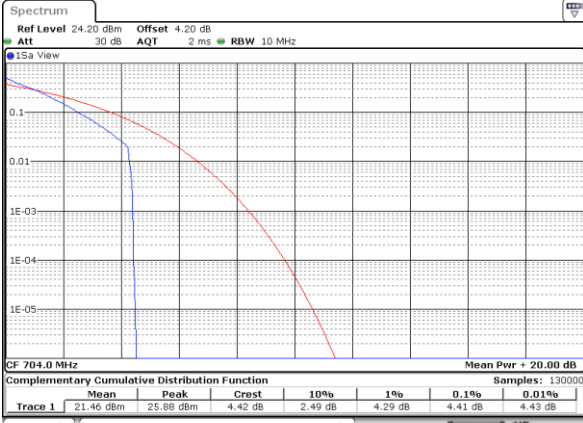
### Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.41	4.93	5.04	5.83	PASS
Middle CH	4.41	4.99	5.28	5.91	
Highest CH	4.43	4.90	5.04	5.86	



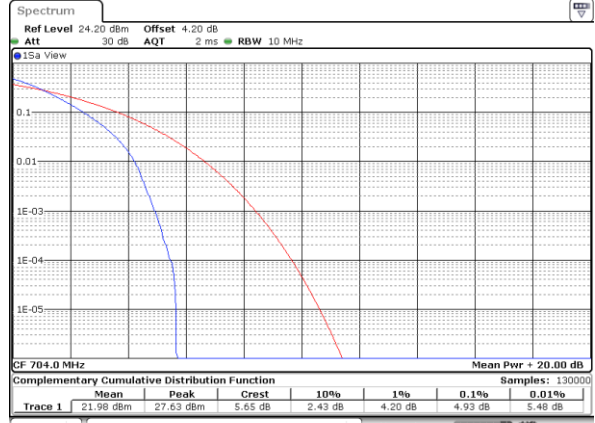
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



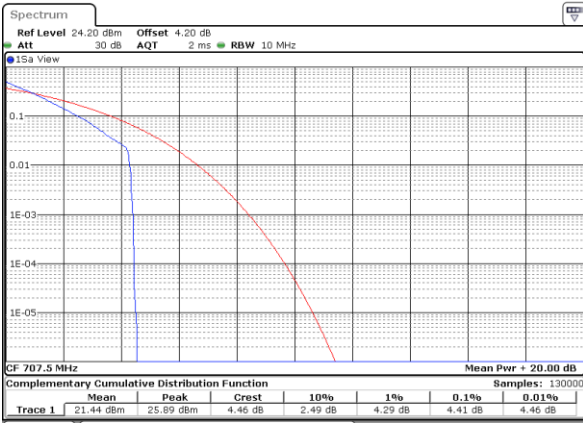
Date: 17.NOV.2020 19:02:52

Lowest Channel / Full RB



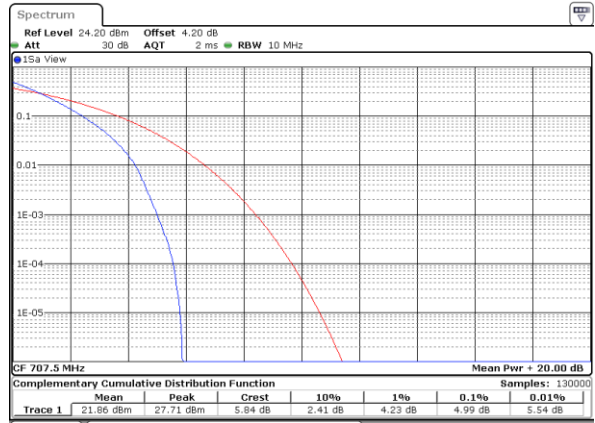
Date: 17.NOV.2020 19:03:10

Middle Channel / 1RB



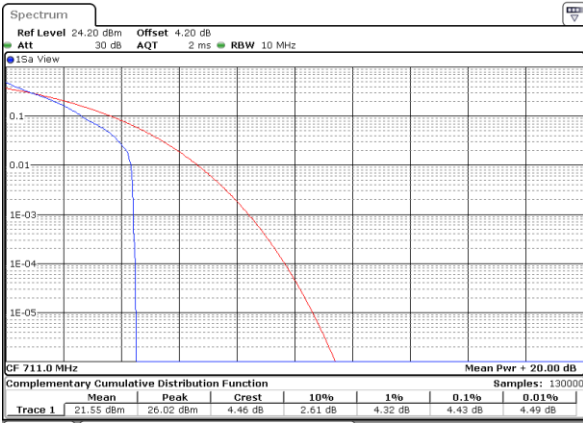
Date: 17.NOV.2020 19:06:11

Middle Channel / Full RB



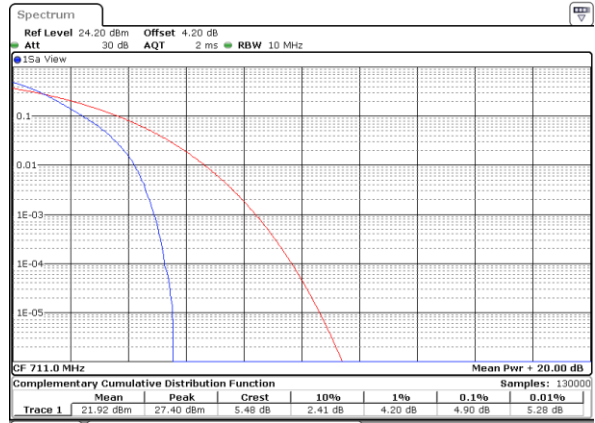
Date: 17.NOV.2020 19:03:39

Highest Channel / 1RB



Date: 17.NOV.2020 19:06:40

Highest Channel / Full RB



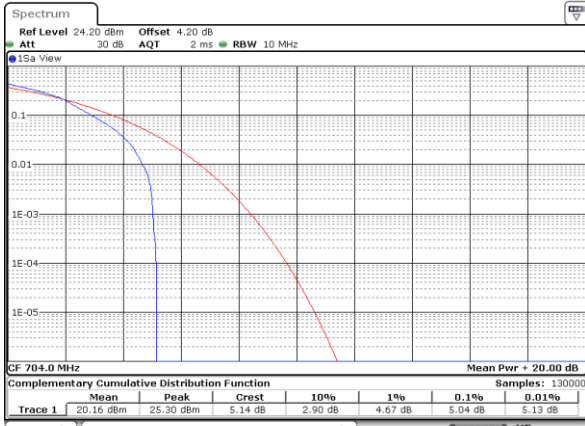
Date: 17.NOV.2020 19:06:50





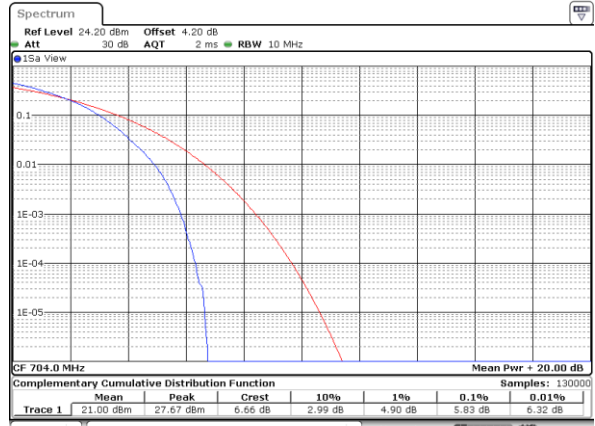
LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



Date: 17 NOV 2020 19:02:42

Lowest Channel / Full RB



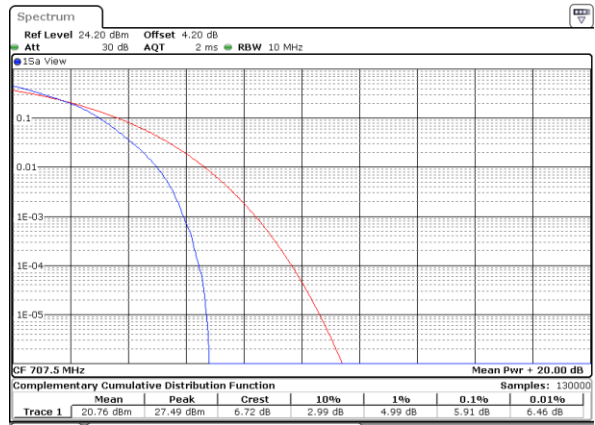
Date: 17 NOV 2020 19:03:20

Middle Channel / 1RB



Date: 17 NOV 2020 19:06:20

Middle Channel / Full RB



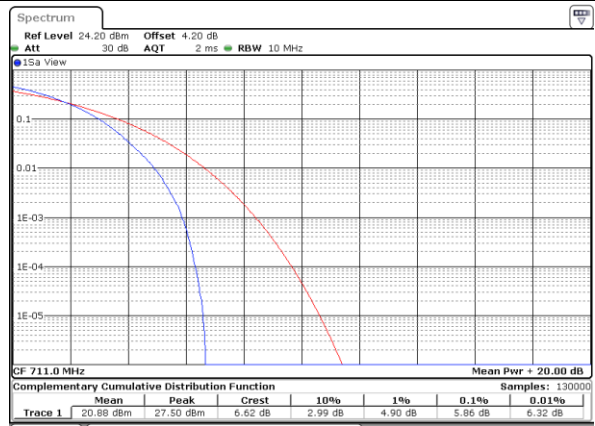
Date: 17 NOV 2020 19:03:29

Highest Channel / 1RB



Date: 17 NOV 2020 19:06:30

Highest Channel / Full RB



Date: 17 NOV 2020 19:06:59



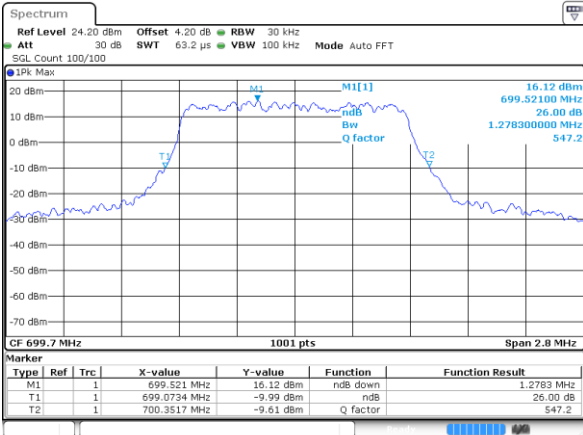
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz					
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM				
Lowest CH	1.28	1.27	3.03	3.01	4.89	4.94	9.83	9.69	-	-	-	-
Middle CH	1.27	1.30	3.00	3.03	4.90	4.90	9.87	9.69	-	-	-	-
Highest CH	1.29	1.29	3.01	3.05	4.94	4.87	9.79	9.93	-	-	-	-



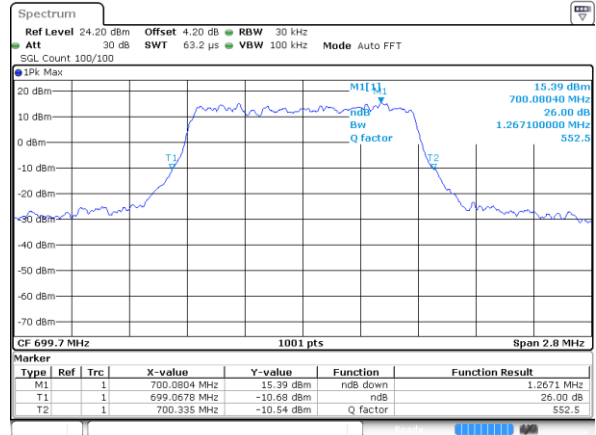
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



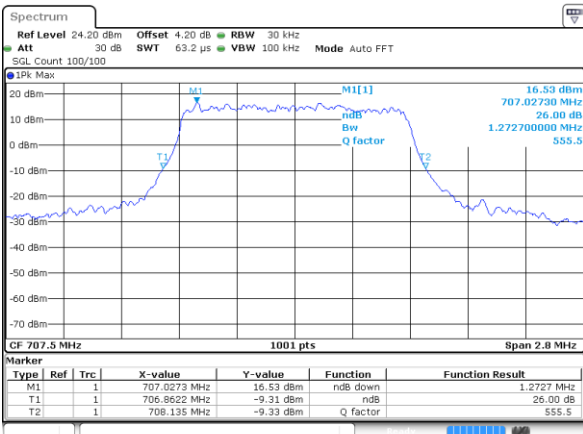
Date: 17 NOV 2020 17:01:39

Lowest Channel / 1.4MHz / 16QAM



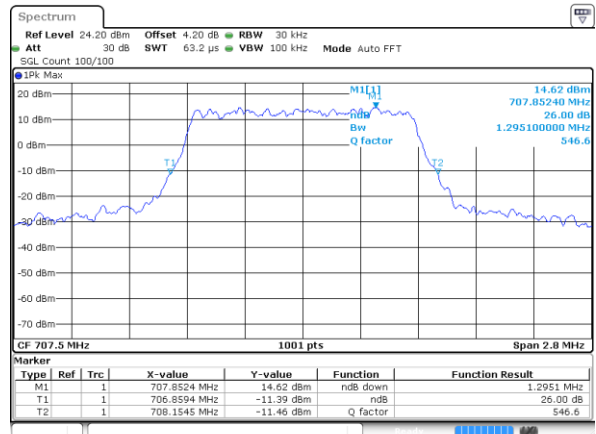
Date: 17 NOV 2020 17:01:29

Middle Channel / 1.4MHz / QPSK



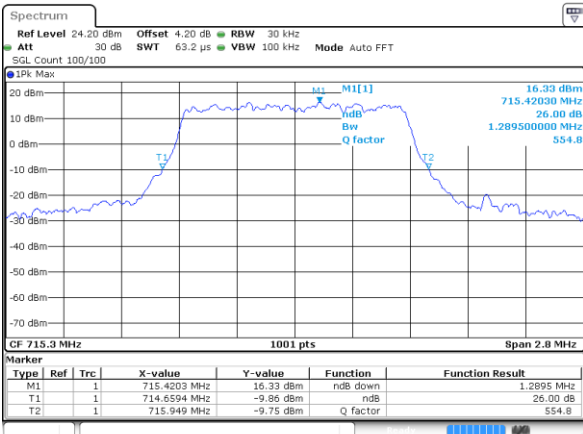
Date: 17 NOV 2020 17:01:10

Middle Channel / 1.4MHz / 16QAM



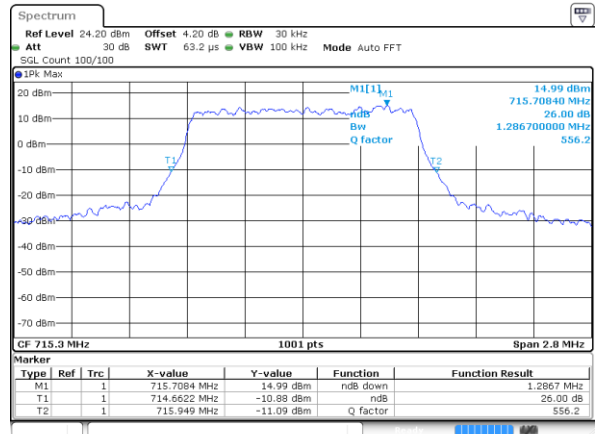
Date: 17 NOV 2020 17:01:19

Highest Channel / 1.4MHz / QPSK



Date: 17 NOV 2020 17:01:00

Highest Channel / 1.4MHz / 16QAM

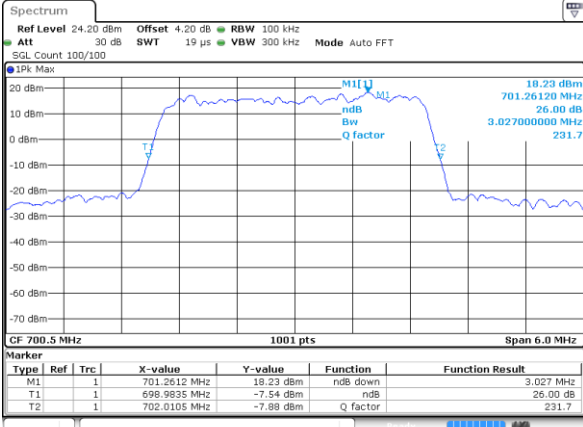


Date: 17 NOV 2020 17:00:50



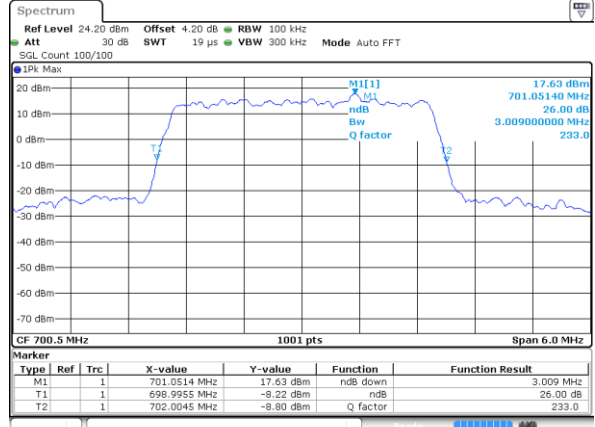
LTE Band 12

Lowest Channel / 3MHz / QPSK



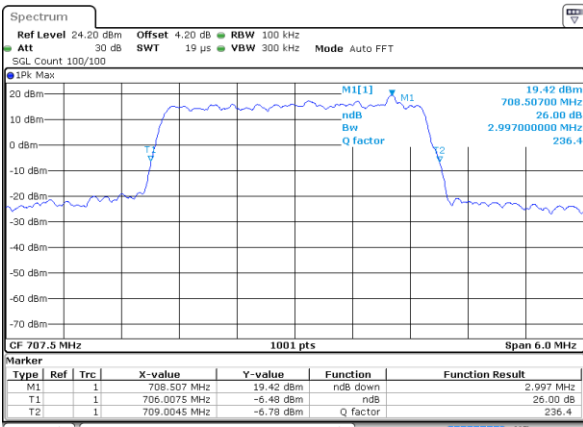
Date: 17.NOV.2020 17:18:49

Lowest Channel / 3MHz / 16QAM



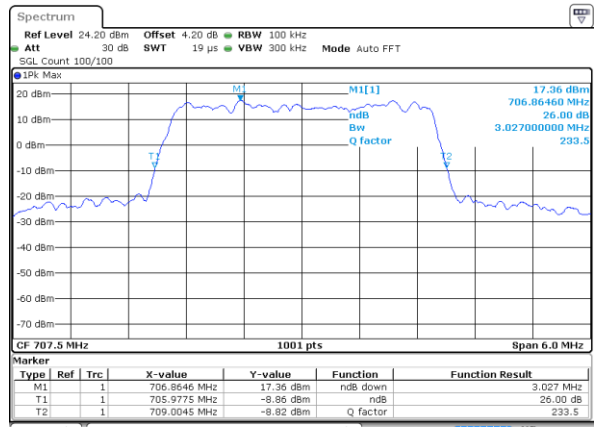
Date: 17.NOV.2020 17:18:39

Middle Channel / 3MHz / QPSK



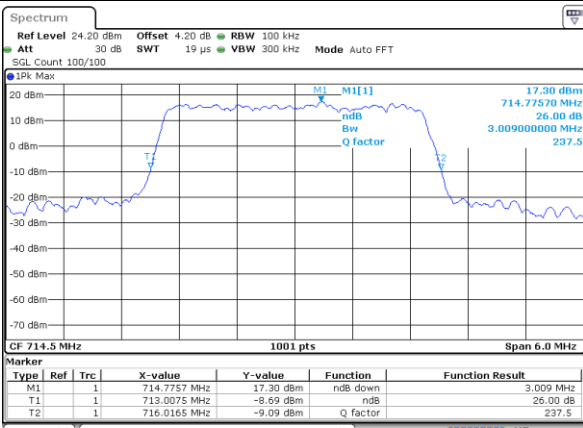
Date: 17.NOV.2020 17:18:19

Middle Channel / 3MHz / 16QAM



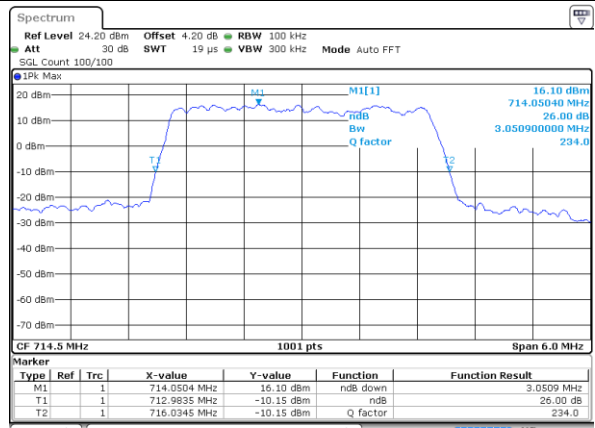
Date: 17.NOV.2020 17:18:29

Highest Channel / 3MHz / QPSK



Date: 17.NOV.2020 17:18:09

Highest Channel / 3MHz / 16QAM

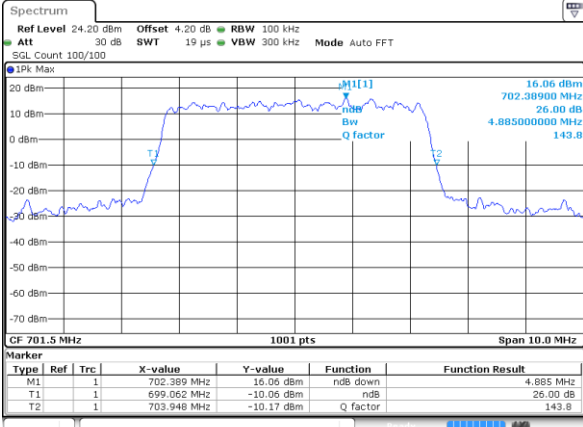


Date: 17.NOV.2020 17:17:59



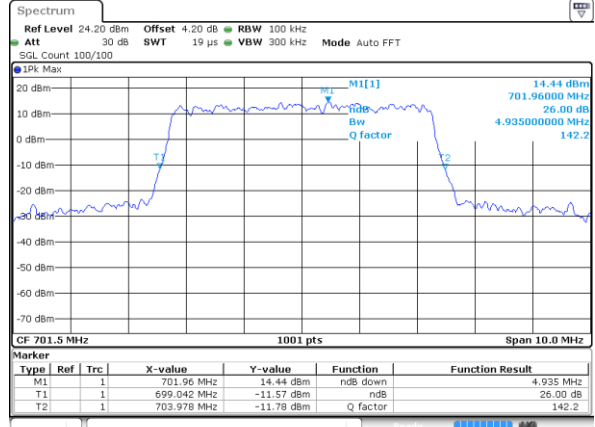
LTE Band 12

Lowest Channel / 5MHz / QPSK



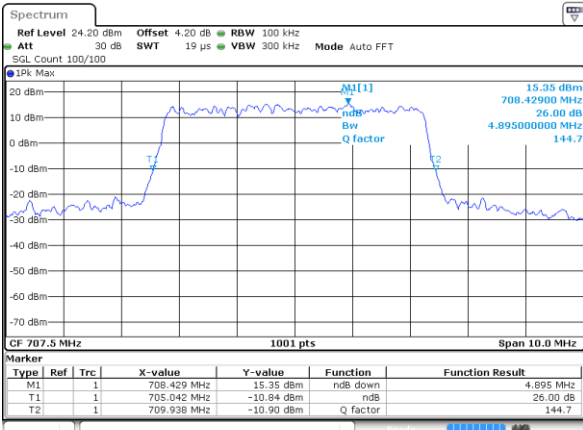
Date: 17 NOV 2020 17:37:07

Lowest Channel / 5MHz / 16QAM



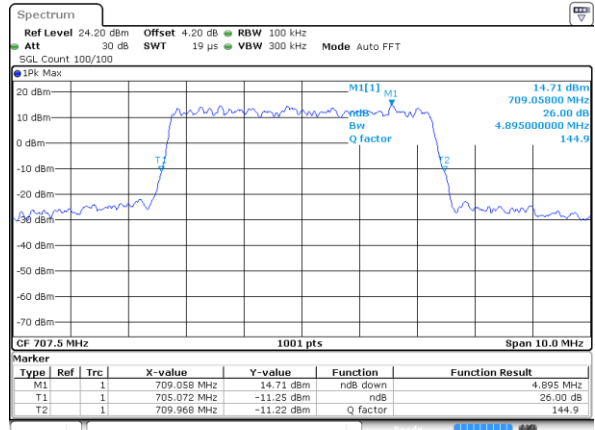
Date: 17 NOV 2020 17:36:57

Middle Channel / 5MHz / QPSK



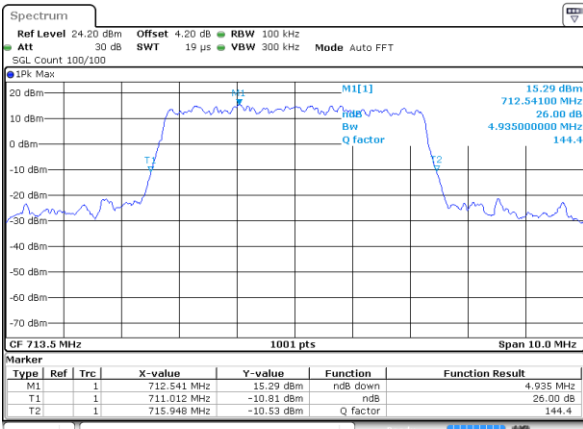
Date: 17 NOV 2020 17:36:37

Middle Channel / 5MHz / 16QAM



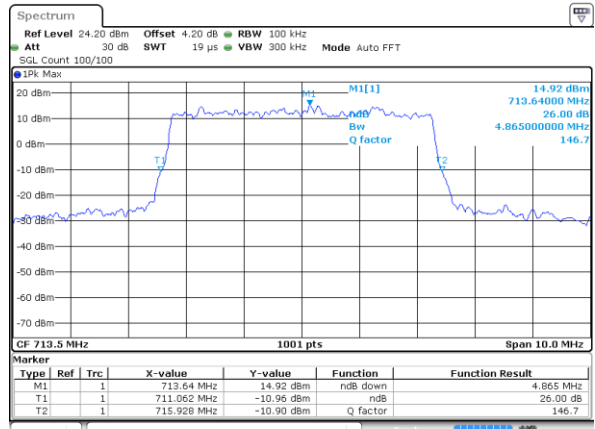
Date: 17 NOV 2020 17:36:47

Highest Channel / 5MHz / QPSK



Date: 17 NOV 2020 17:36:27

Highest Channel / 5MHz / 16QAM

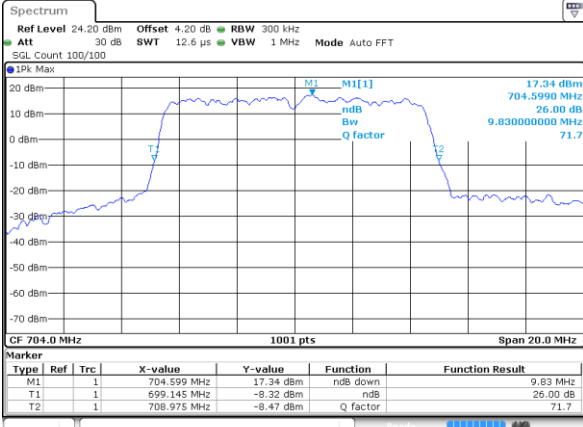


Date: 17 NOV 2020 17:36:17



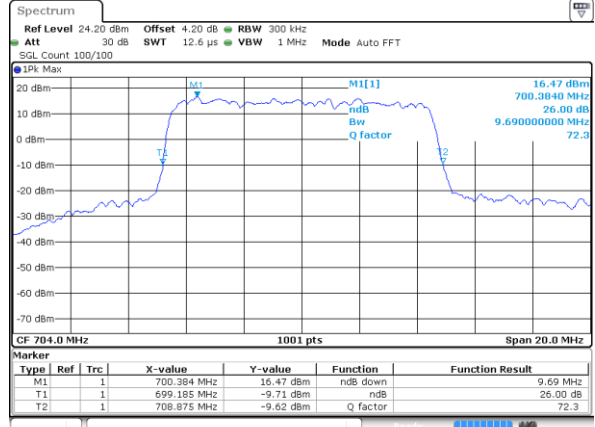
LTE Band 12

Lowest Channel / 10MHz / QPSK



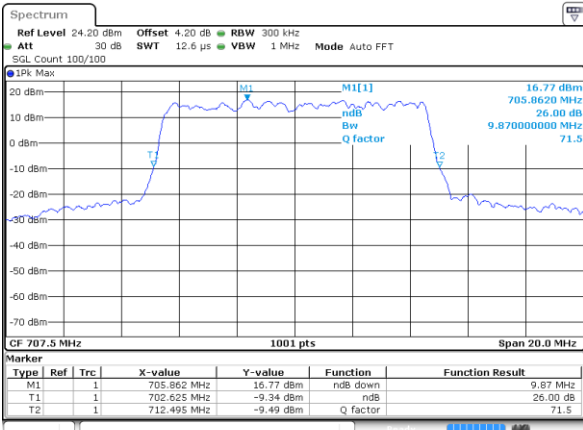
Date: 17 NOV 2020 18:47:12

Lowest Channel / 10MHz / 16QAM



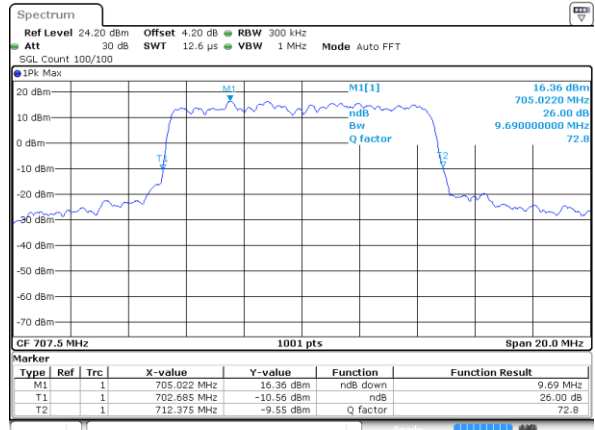
Date: 17 NOV 2020 18:47:02

Middle Channel / 10MHz / QPSK



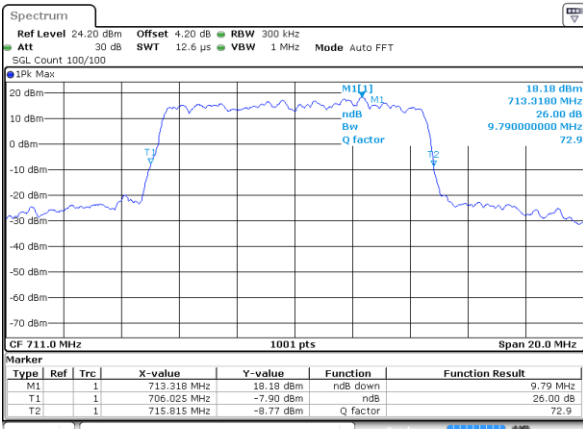
Date: 17 NOV 2020 18:46:42

Middle Channel / 10MHz / 16QAM



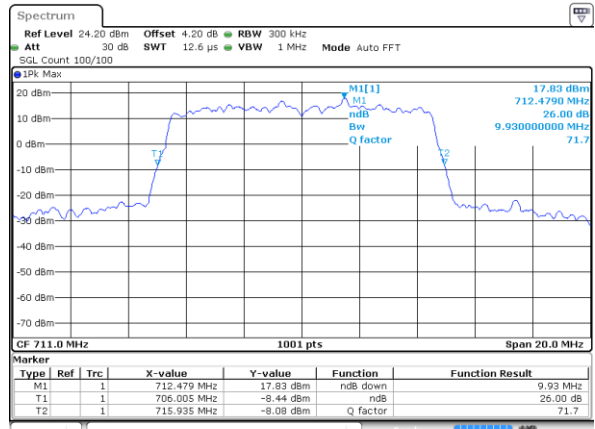
Date: 17 NOV 2020 18:46:52

Highest Channel / 10MHz / QPSK



Date: 17 NOV 2020 18:46:32

Highest Channel / 10MHz / 16QAM



Date: 17 NOV 2020 18:46:22



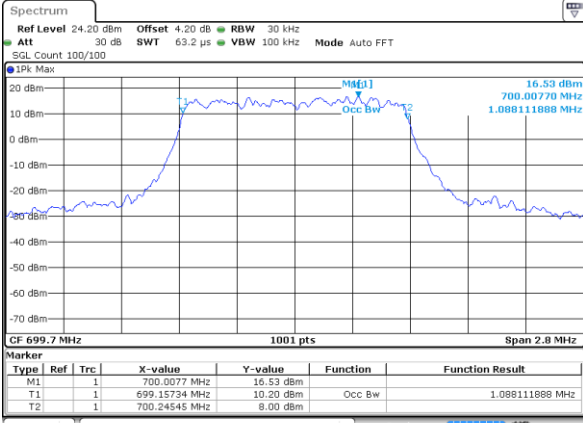
### Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz					
BW	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM				
Lowest CH	1.09	1.09	2.72	2.72	4.47	4.49	8.97	8.95	-	-	-	-
Middle CH	1.10	1.10	2.72	2.72	4.50	4.49	9.05	9.01	-	-	-	-
Highest CH	1.09	1.09	2.70	2.72	4.53	4.51	8.99	9.01	-	-	-	-



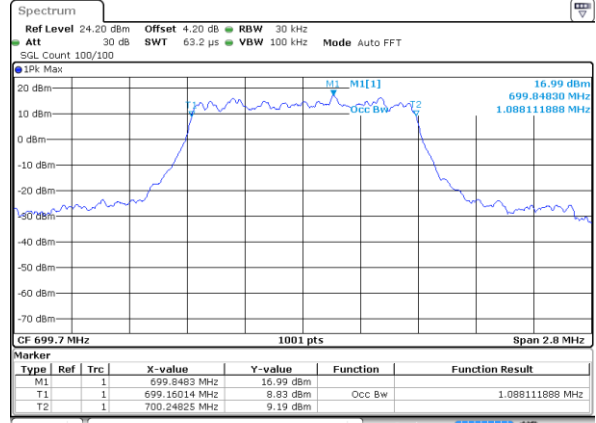
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



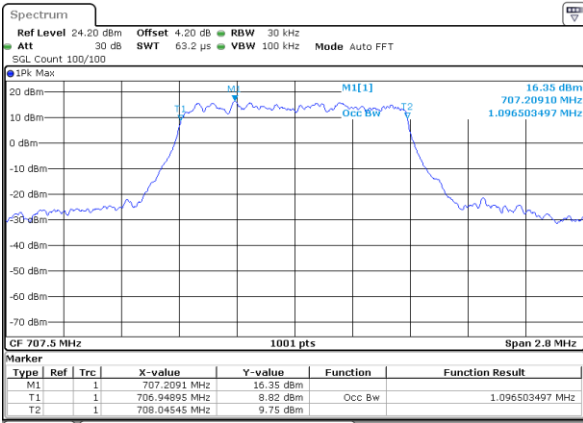
Date: 17 NOV 2020 16:59:50

Lowest Channel / 1.4MHz / 16QAM



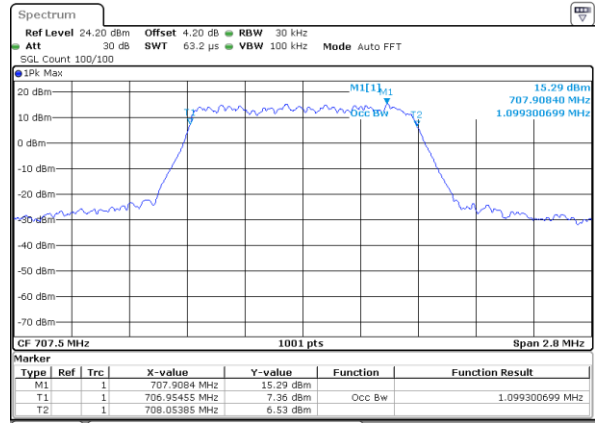
Date: 17 NOV 2020 17:00:00

Middle Channel / 1.4MHz / QPSK



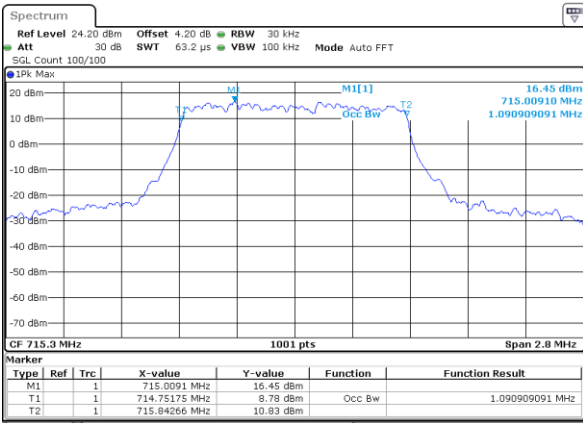
Date: 17 NOV 2020 17:00:20

Middle Channel / 1.4MHz / 16QAM



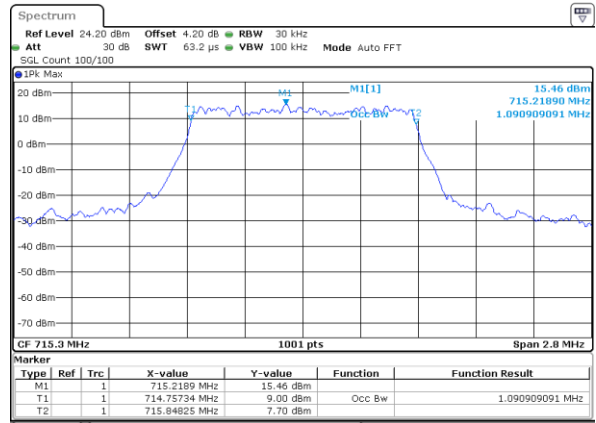
Date: 17 NOV 2020 17:00:10

Highest Channel / 1.4MHz / QPSK



Date: 17 NOV 2020 17:00:30

Highest Channel / 1.4MHz / 16QAM



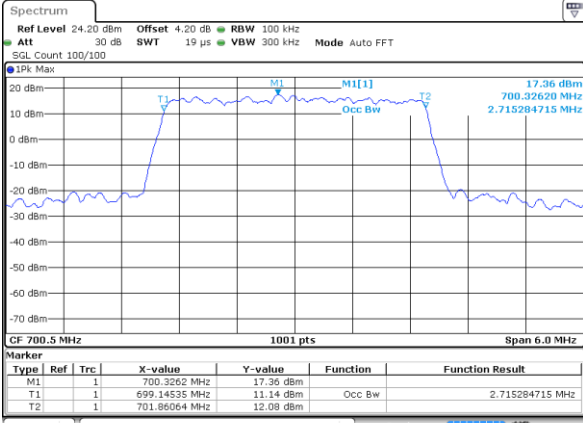
Date: 17 NOV 2020 17:00:40





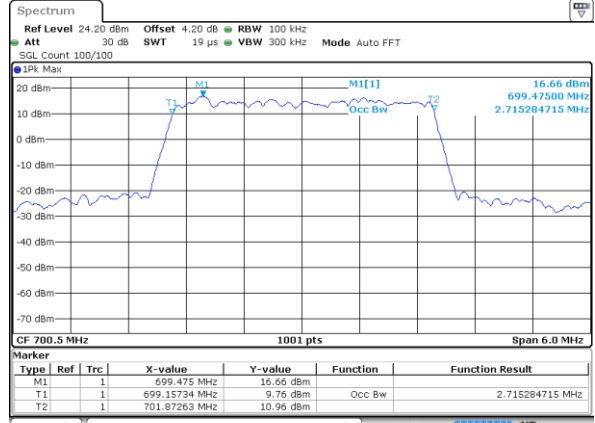
LTE Band 12

Lowest Channel / 3MHz / QPSK



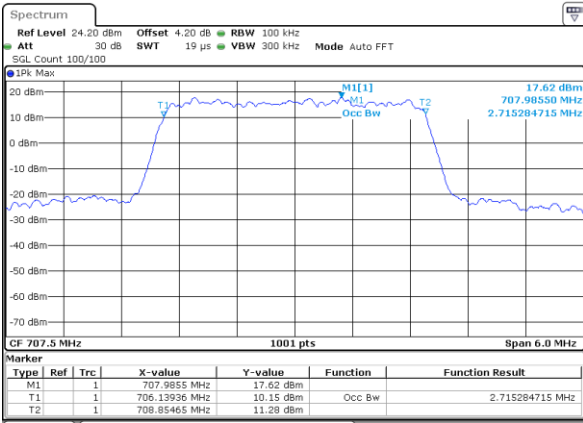
Date: 17 NOV 2020 17:16:59

Lowest Channel / 3MHz / 16QAM



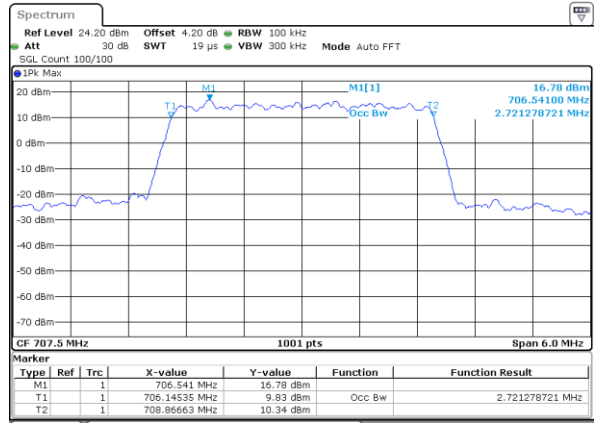
Date: 17 NOV 2020 17:17:09

Middle Channel / 3MHz / QPSK



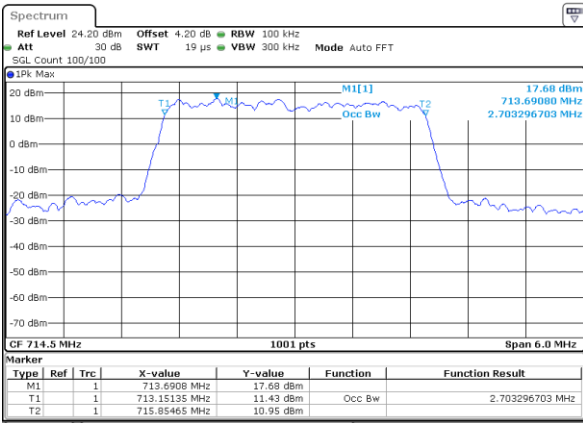
Date: 17 NOV 2020 17:17:29

Middle Channel / 3MHz / 16QAM



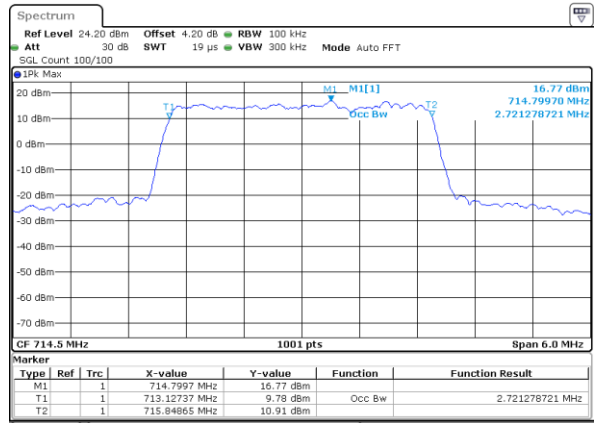
Date: 17 NOV 2020 17:17:19

Highest Channel / 3MHz / QPSK



Date: 17 NOV 2020 17:17:39

Highest Channel / 3MHz / 16QAM

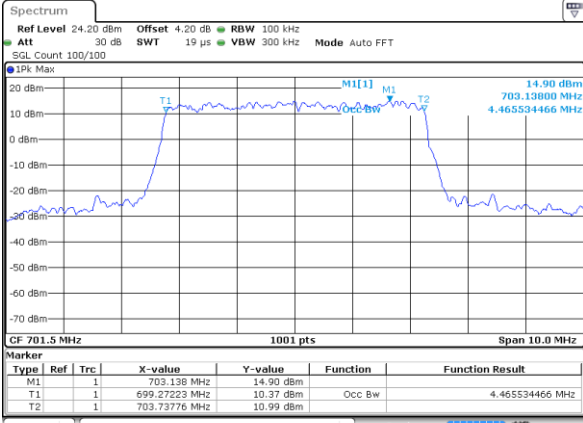


Date: 17 NOV 2020 17:17:49



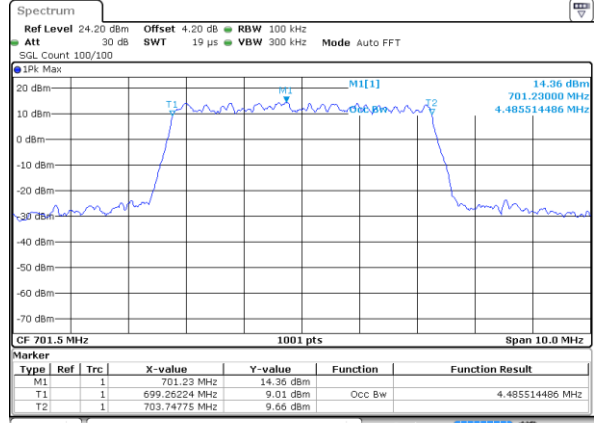
LTE Band 12

Lowest Channel / 5MHz / QPSK



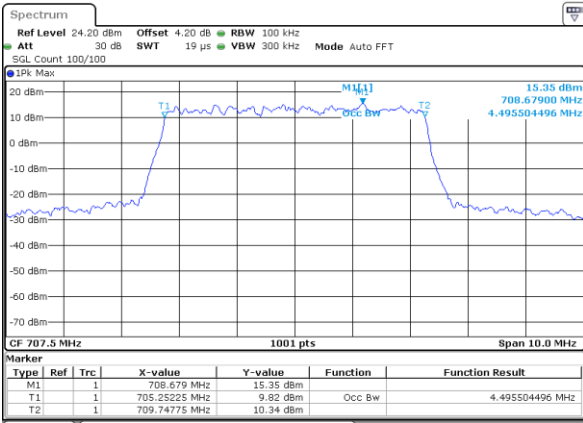
Date: 17 NOV 2020 17:35:17

Lowest Channel / 5MHz / 16QAM



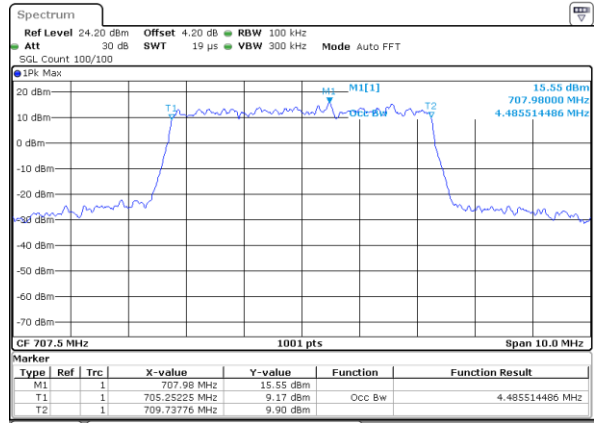
Date: 17 NOV 2020 17:35:27

Middle Channel / 5MHz / QPSK



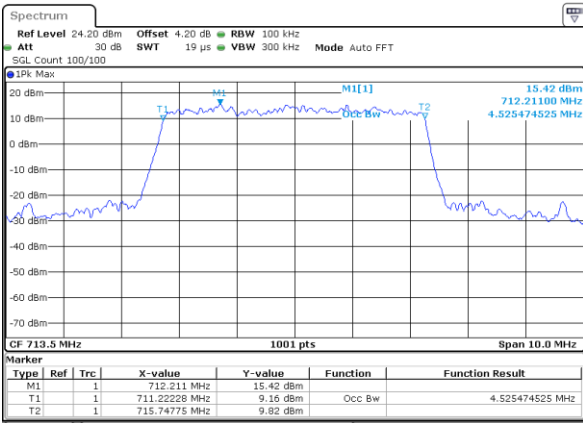
Date: 17 NOV 2020 17:35:47

Middle Channel / 5MHz / 16QAM



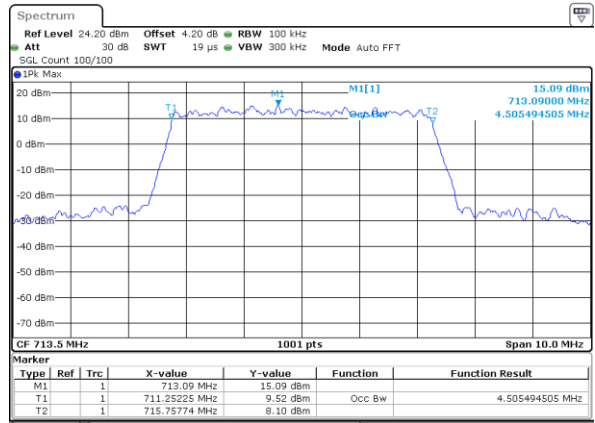
Date: 17 NOV 2020 17:35:37

Highest Channel / 5MHz / QPSK



Date: 17 NOV 2020 17:35:57

Highest Channel / 5MHz / 16QAM

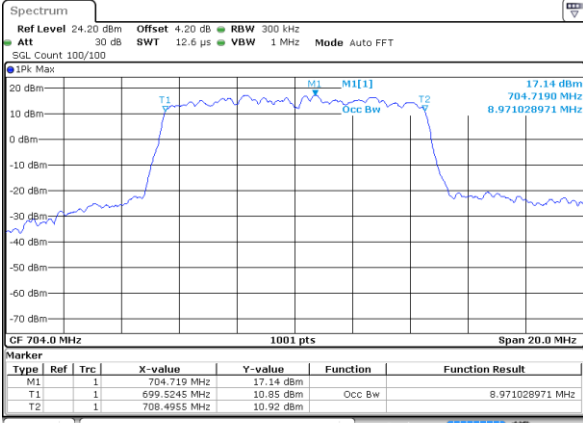


Date: 17 NOV 2020 17:36:07



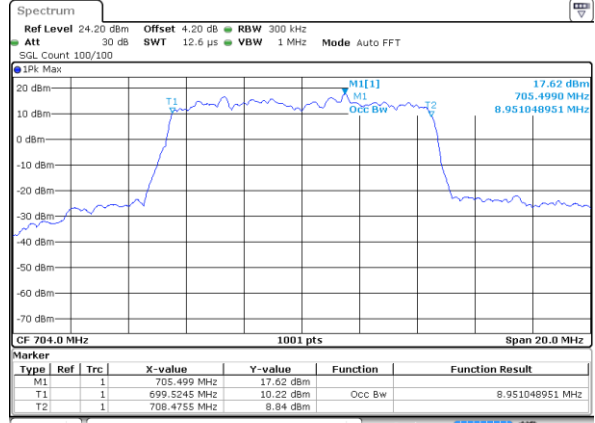
LTE Band 12

Lowest Channel / 10MHz / QPSK



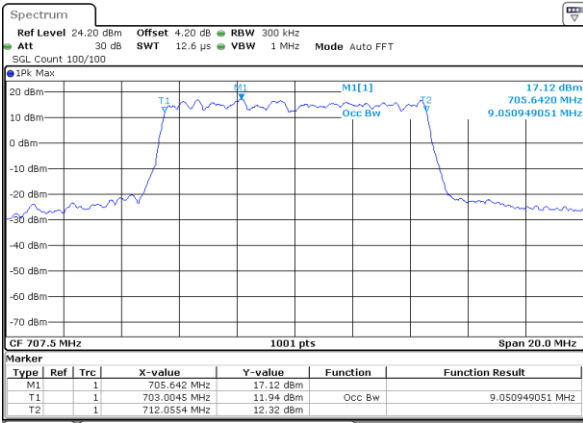
Date: 17 NOV 2020 18:45:23

Lowest Channel / 10MHz / 16QAM



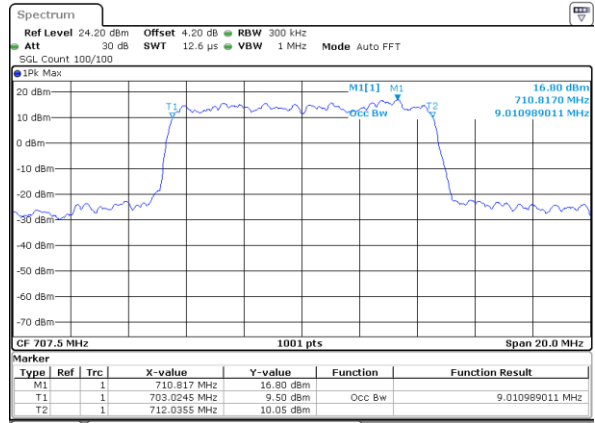
Date: 17 NOV 2020 18:45:33

Middle Channel / 10MHz / QPSK



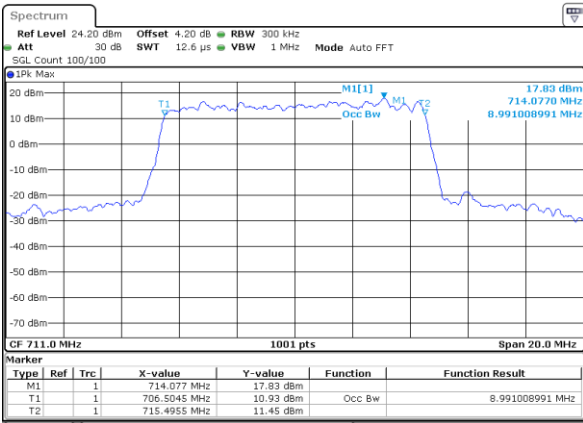
Date: 17 NOV 2020 18:45:53

Middle Channel / 10MHz / 16QAM



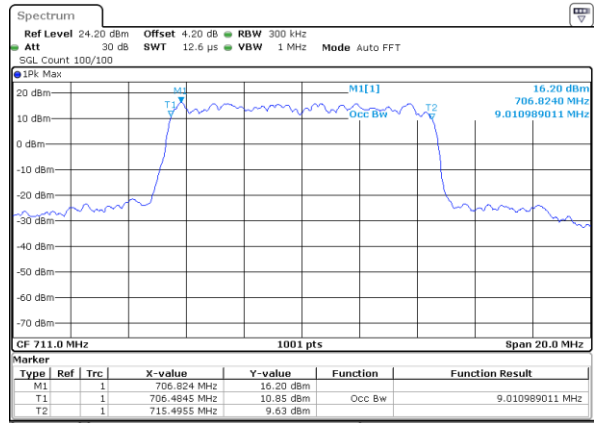
Date: 17 NOV 2020 18:45:43

Highest Channel / 10MHz / QPSK



Date: 17 NOV 2020 18:46:03

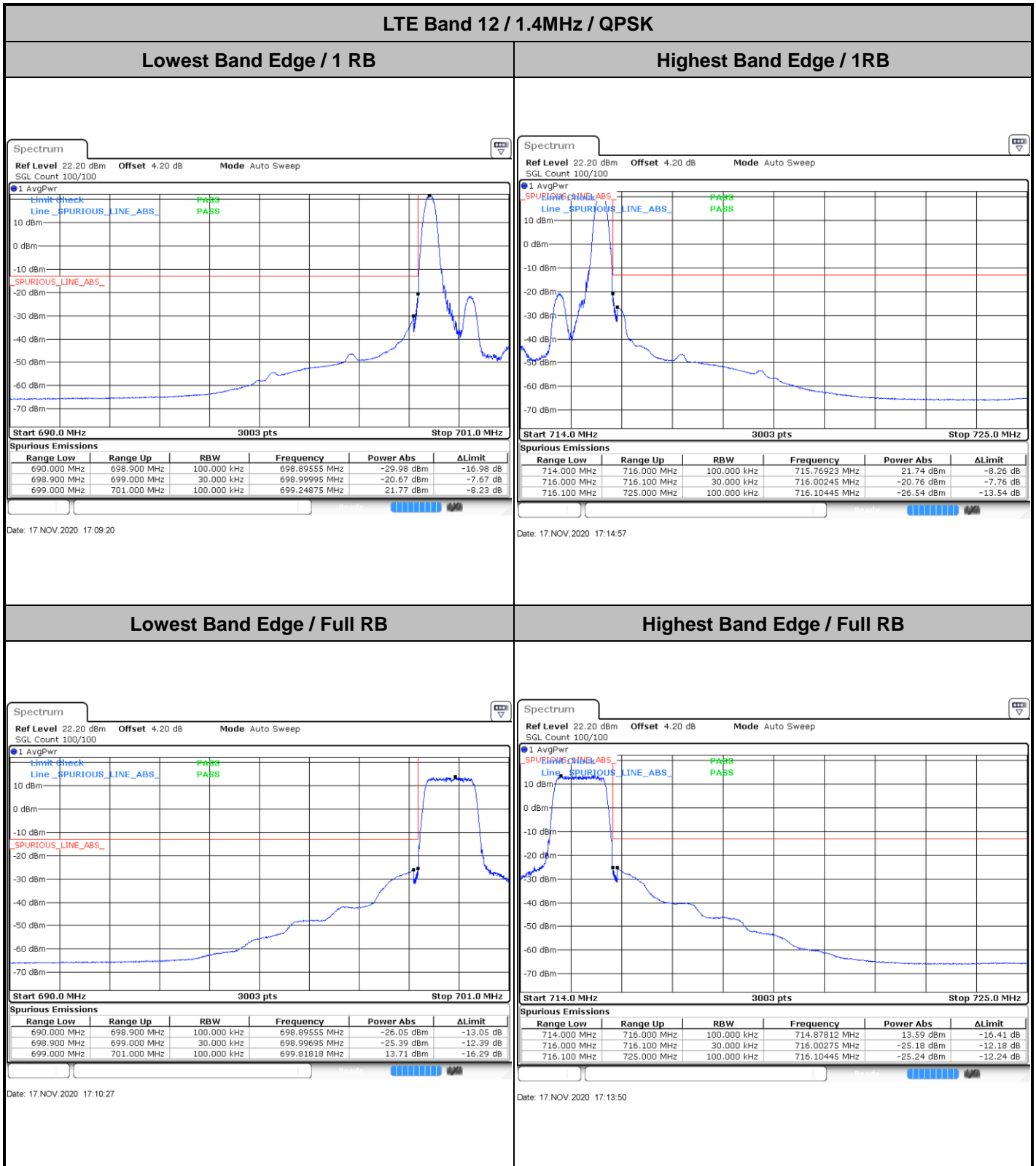
Highest Channel / 10MHz / 16QAM



Date: 17 NOV 2020 18:46:13



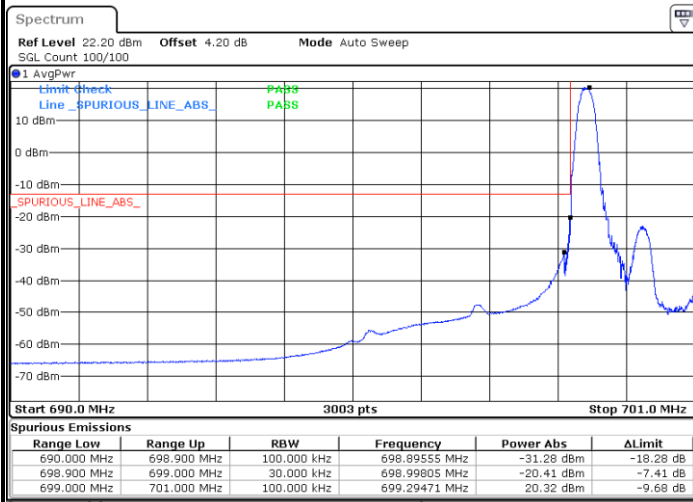
# Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

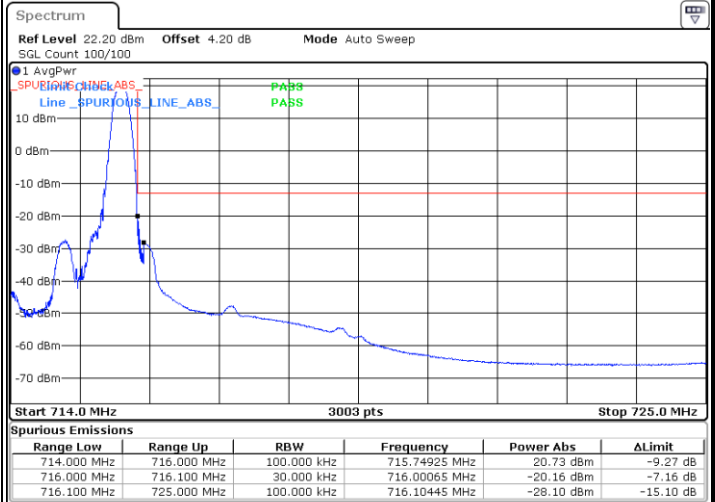
Lowest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.89555 MHz	-31.28 dBm	-18.28 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99805 MHz	-20.41 dBm	-7.41 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.29471 MHz	20.32 dBm	-9.68 dB

Date: 17.NOV.2020 17:08:13

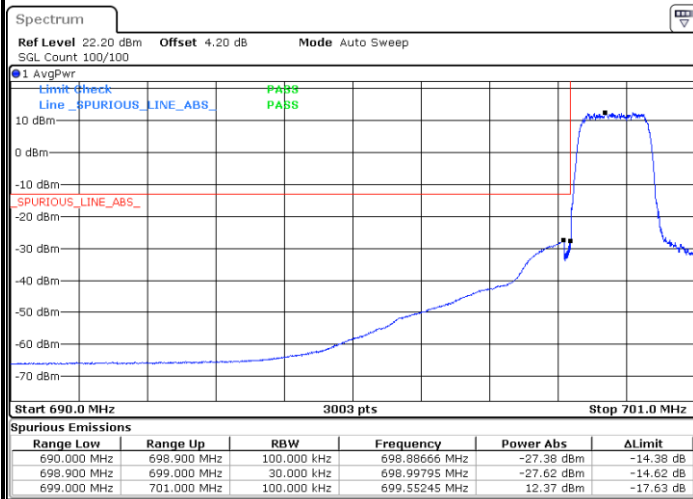
Highest Band Edge / 1 RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	715.74925 MHz	20.73 dBm	-9.27 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00065 MHz	-20.16 dBm	-7.16 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.10445 MHz	-28.10 dBm	-15.10 dB

Date: 17.NOV.2020 17:16:04

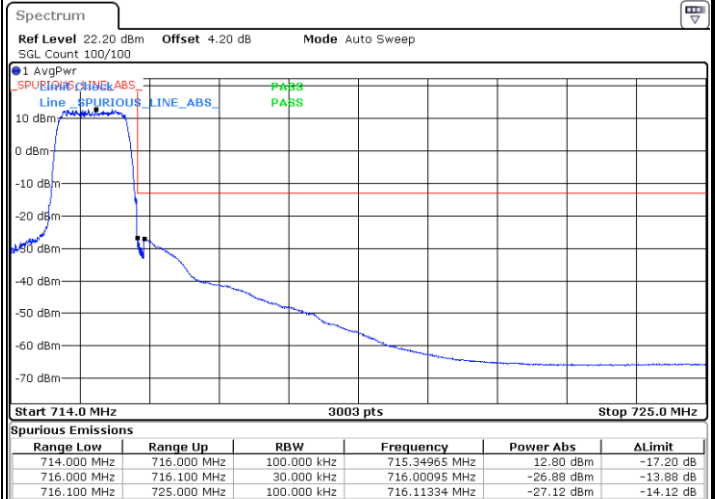
Lowest Band Edge / Full RB



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
690.000 MHz	698.900 MHz	100.000 kHz	698.88666 MHz	-27.38 dBm	-14.38 dB
698.900 MHz	699.000 MHz	30.000 kHz	698.99795 MHz	-27.62 dBm	-14.62 dB
699.000 MHz	701.000 MHz	100.000 kHz	699.55245 MHz	12.37 dBm	-17.63 dB

Date: 17.NOV.2020 17:11:35

Highest Band Edge / Full RB



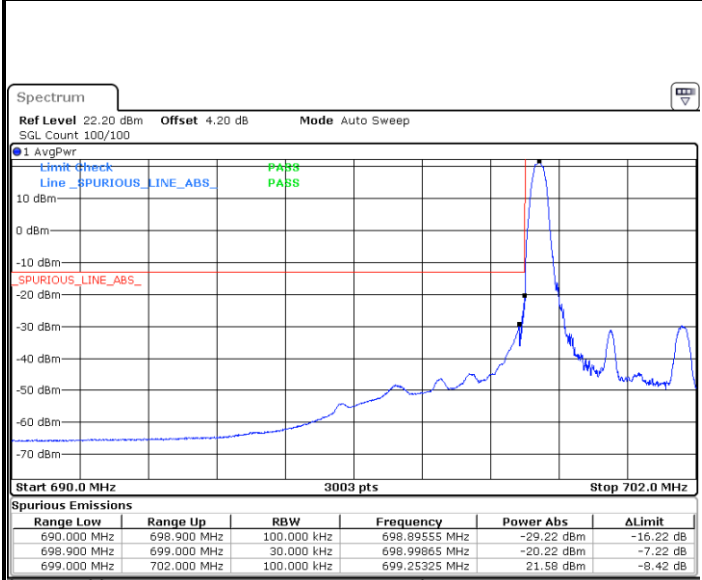
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
714.000 MHz	716.000 MHz	100.000 kHz	715.34965 MHz	12.80 dBm	-17.20 dB
716.000 MHz	716.100 MHz	30.000 kHz	716.00095 MHz	-26.88 dBm	-13.88 dB
716.100 MHz	725.000 MHz	100.000 kHz	716.11334 MHz	-27.12 dBm	-14.12 dB

Date: 17.NOV.2020 17:12:42



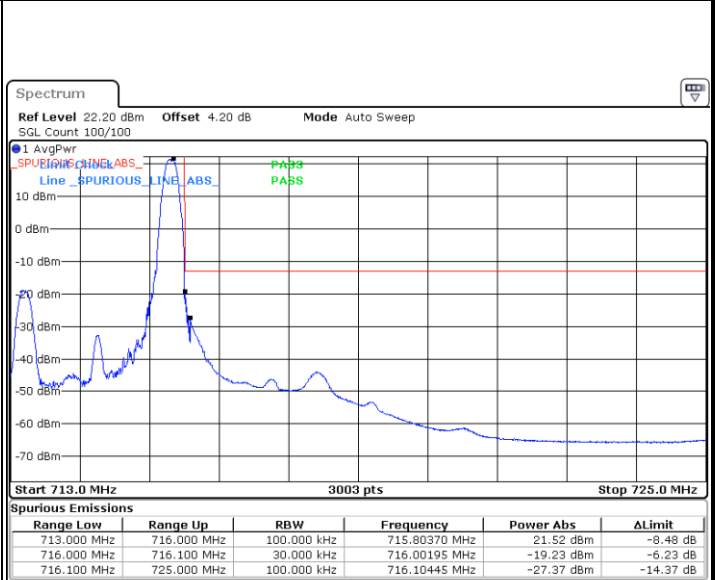
**LTE Band 12 / 3MHz / QPSK**

**Lowest Band Edge / 1RB**



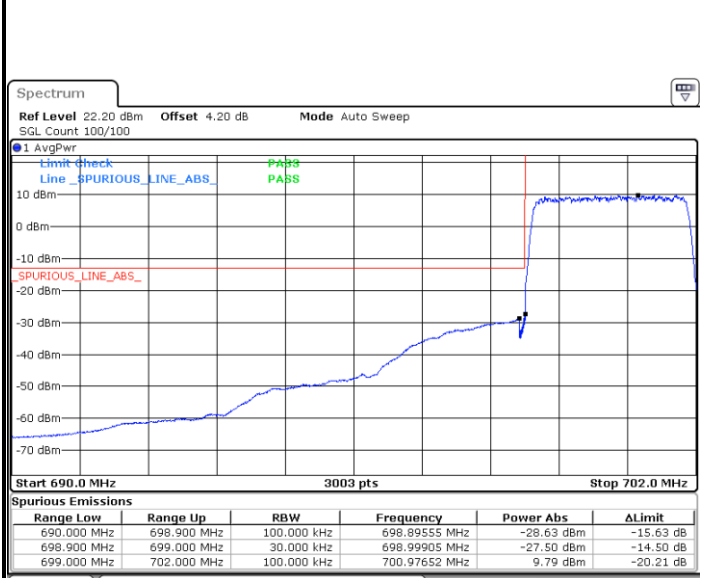
Date: 17.NOV.2020 17:26:30

**Highest Band Edge / 1 RB**



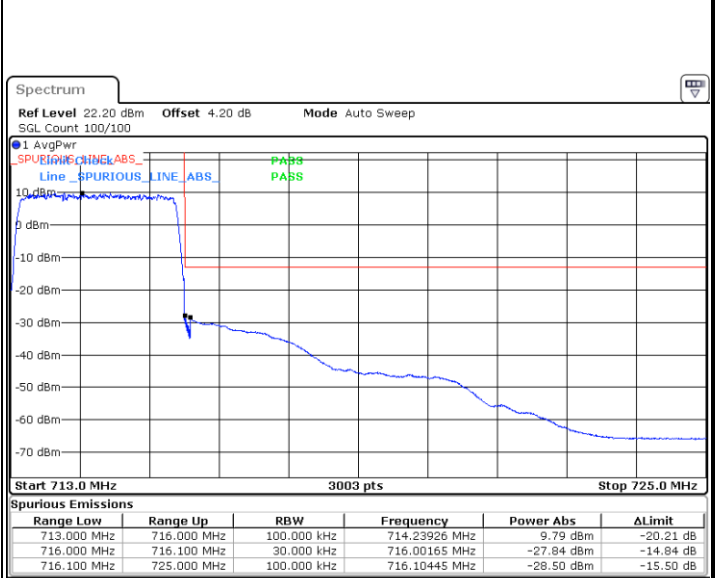
Date: 17.NOV.2020 17:32:07

**Lowest Band Edge / Full RB**



Date: 17.NOV.2020 17:27:37

**Highest Band Edge / Full RB**

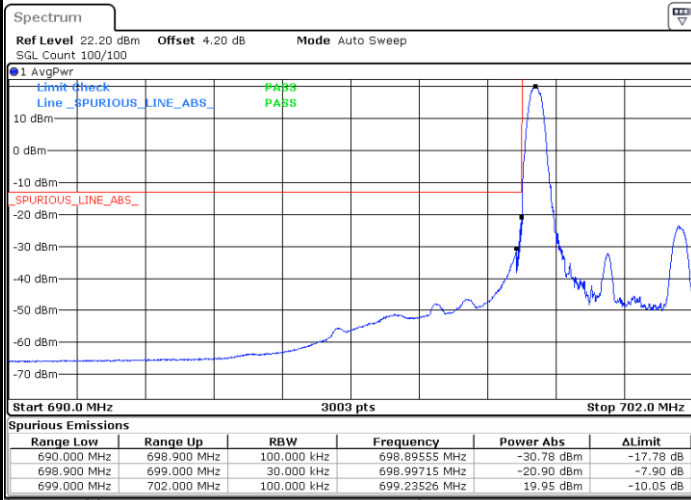


Date: 17.NOV.2020 17:30:59



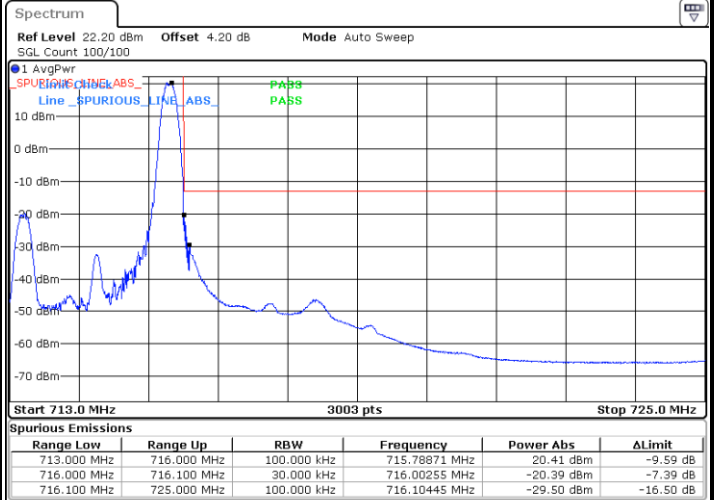
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



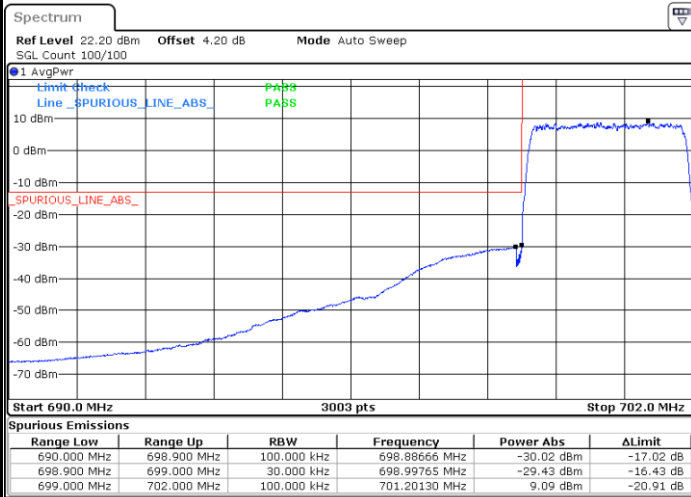
Date: 17.NOV.2020 17:25:22

Highest Band Edge / 1 RB



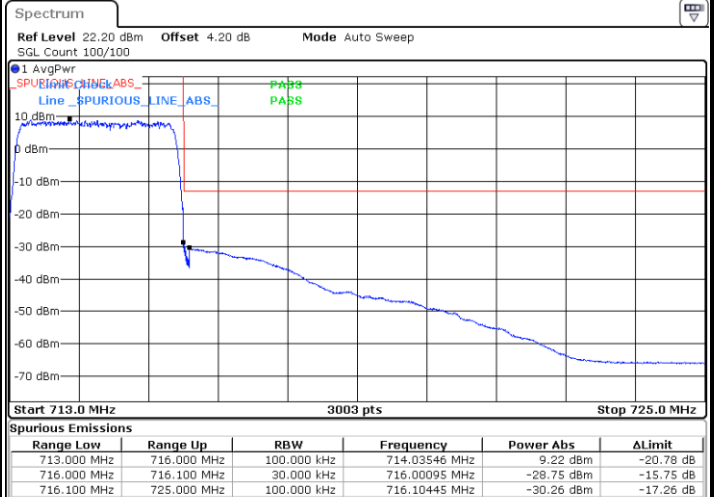
Date: 17.NOV.2020 17:33:14

Lowest Band Edge / Full RB



Date: 17.NOV.2020 17:28:44

Highest Band Edge / Full RB

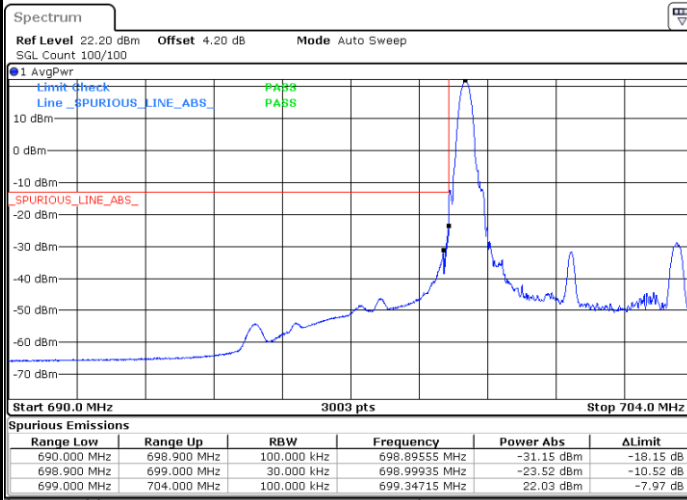


Date: 17.NOV.2020 17:29:52



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



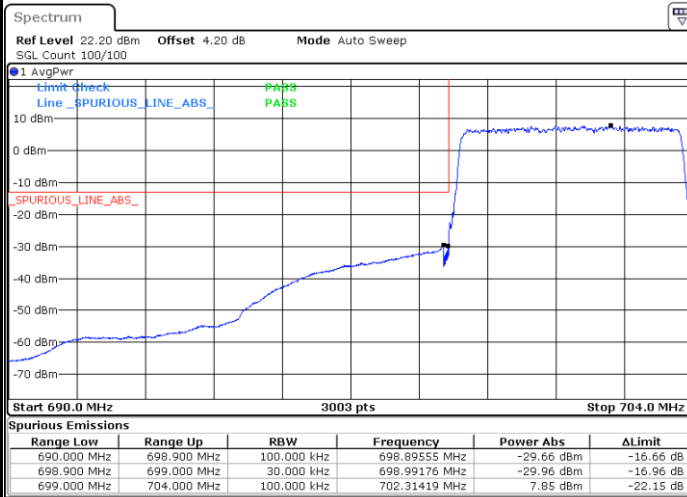
Date: 17.NOV.2020 17:44:47

Highest Band Edge / 1 RB



Date: 17.NOV.2020 17:50:24

Lowest Band Edge / Full RB



Date: 17.NOV.2020 17:45:55

Highest Band Edge / Full RB



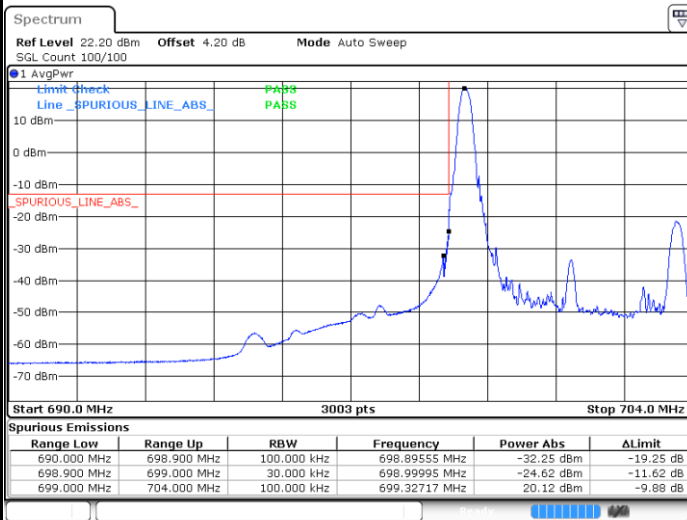
Date: 17.NOV.2020 17:49:17





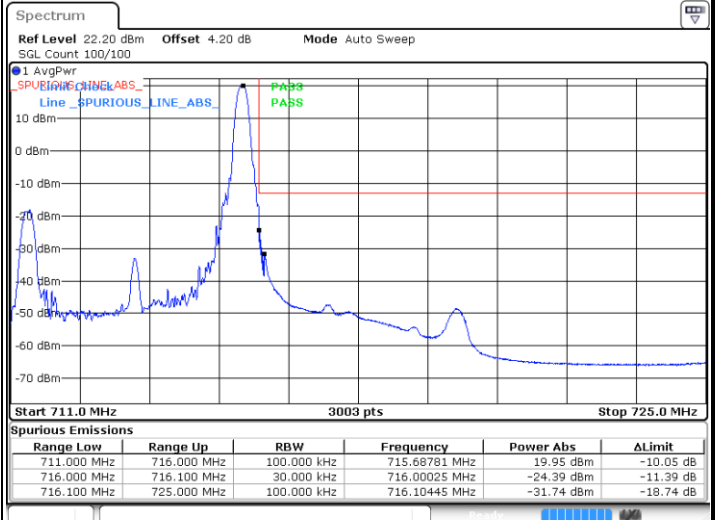
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



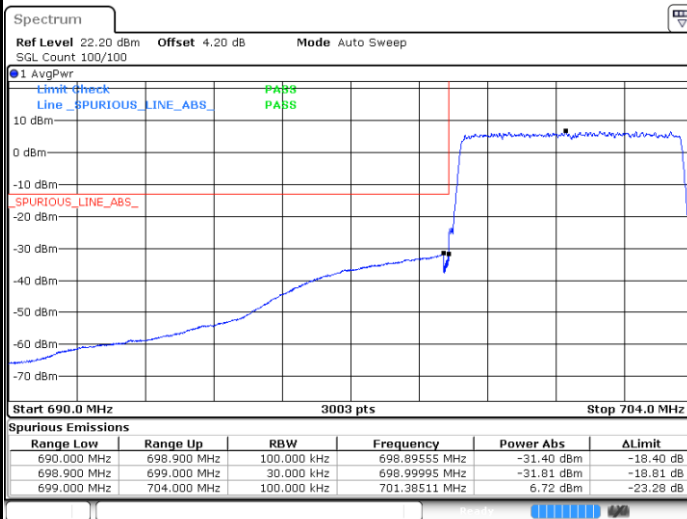
Date: 17.NOV.2020 17:43:40

Highest Band Edge / 1 RB



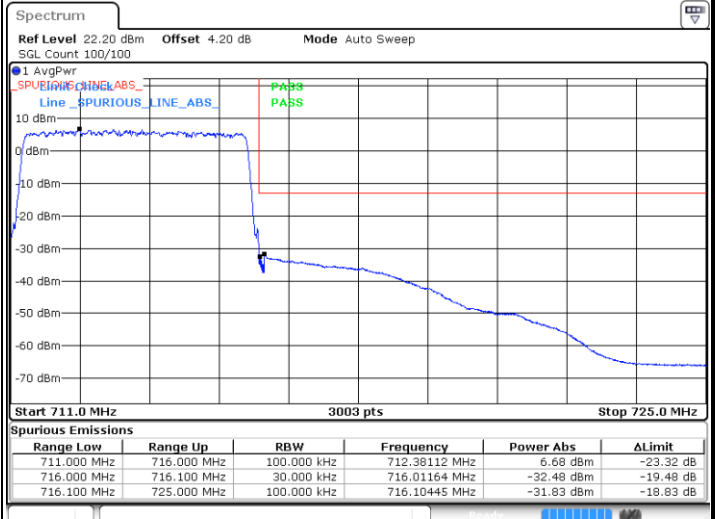
Date: 17.NOV.2020 17:51:32

Lowest Band Edge / Full RB



Date: 17.NOV.2020 17:47:02

Highest Band Edge / Full RB

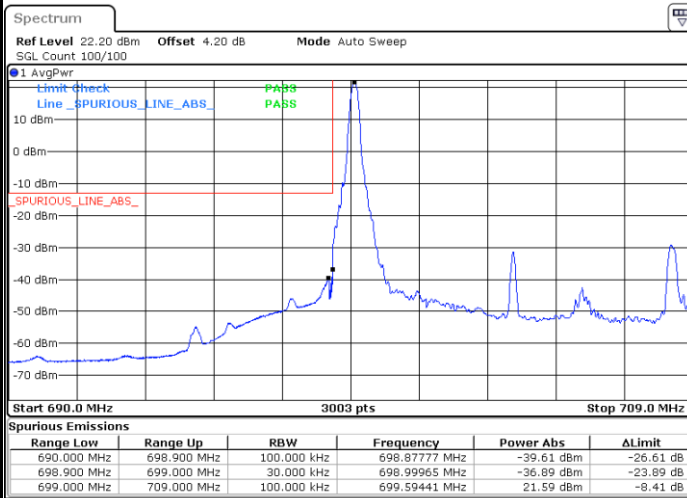


Date: 17.NOV.2020 17:48:09



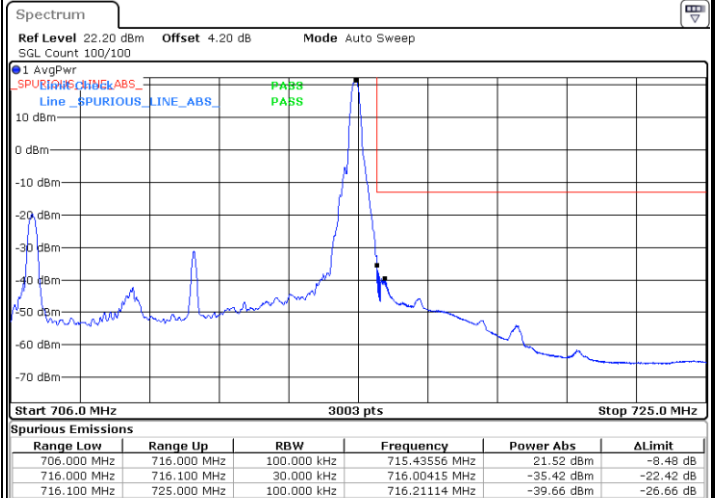
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



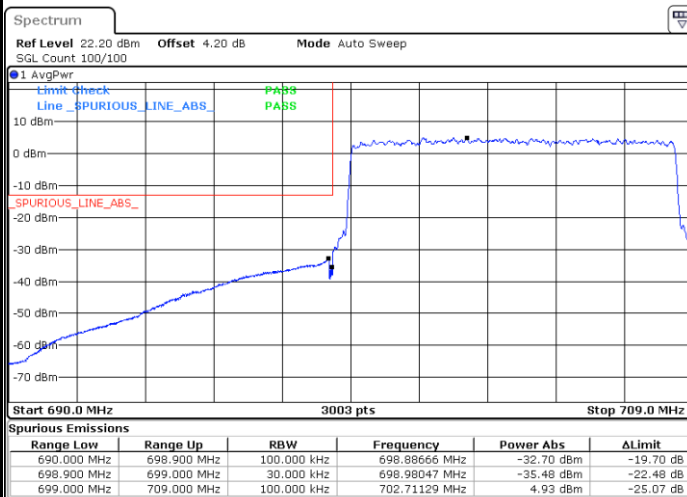
Date: 17.NOV.2020 18:54:53

Highest Band Edge / 1 RB



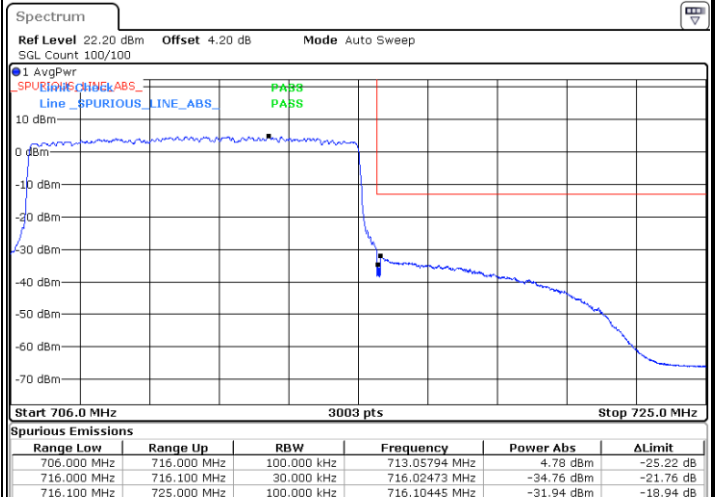
Date: 17.NOV.2020 19:00:30

Lowest Band Edge / Full RB



Date: 17.NOV.2020 18:56:00

Highest Band Edge / Full RB

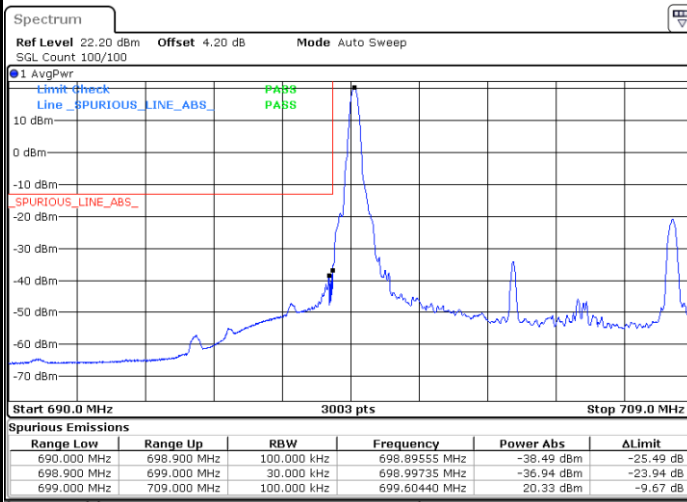


Date: 17.NOV.2020 18:59:23



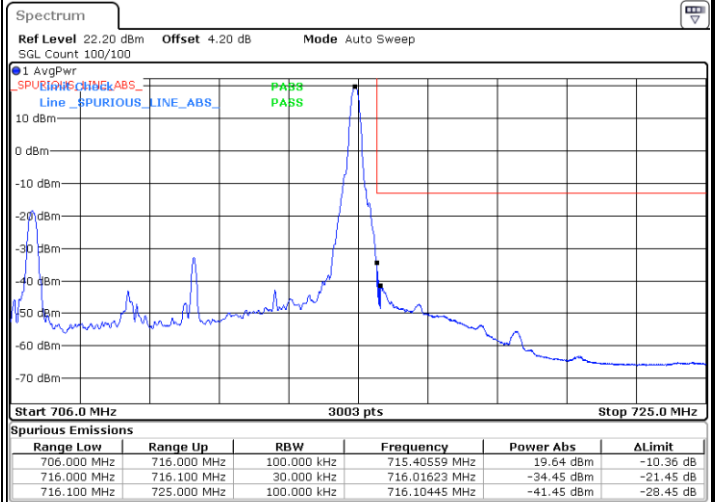
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



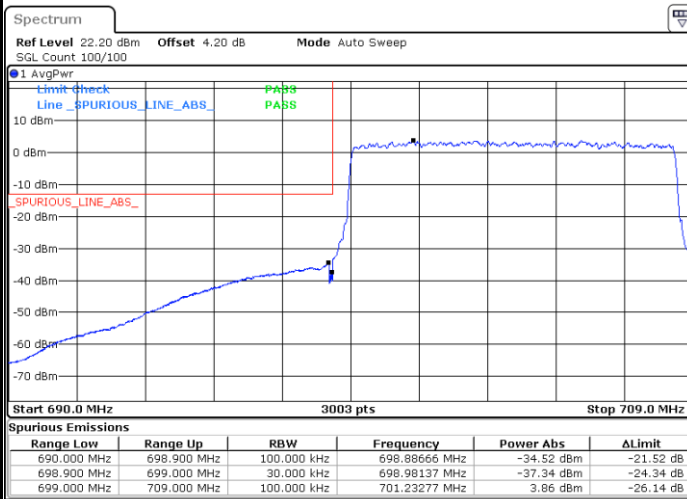
Date: 17.NOV.2020 18:53:45

Highest Band Edge / 1 RB



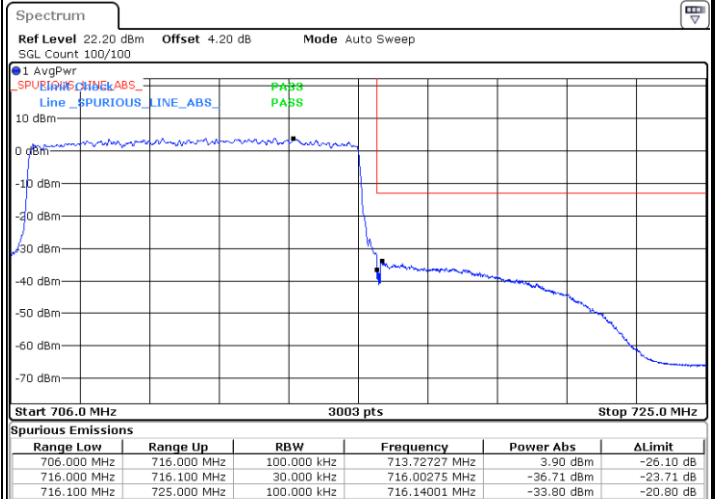
Date: 17.NOV.2020 19:01:37

Lowest Band Edge / Full RB



Date: 17.NOV.2020 18:57:08

Highest Band Edge / Full RB



Date: 17.NOV.2020 18:58:15