

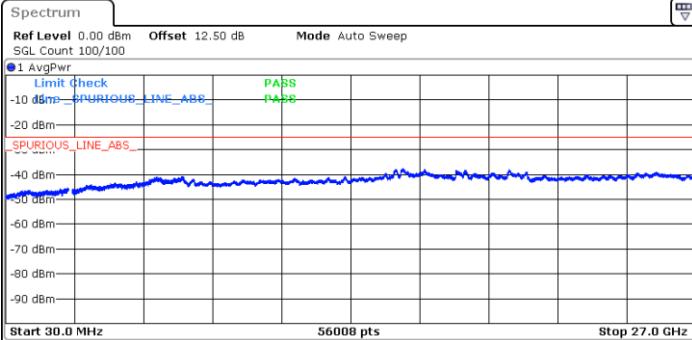


LTE Band 7C / 20MHz+15MHz

QPSK

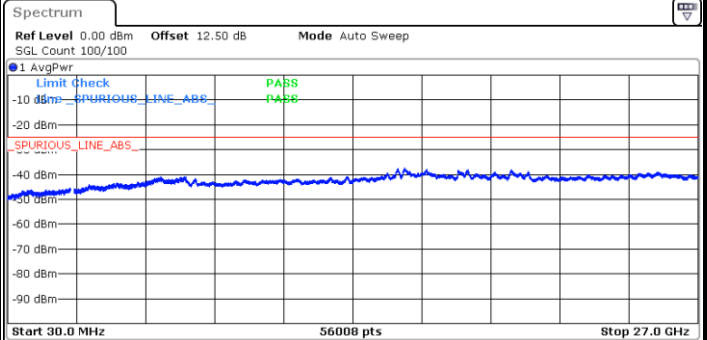
Highest Channel / 1RB0 and 1RB74

Highest Channel / 1RB99 and 1RB0



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	957.09895 MHz	-46.31 dBm	-21.31 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46191 GHz	-45.54 dBm	-20.54 dB
2.615 GHz	3.000 GHz	1.000 MHz	2.96739 GHz	-45.25 dBm	-20.25 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91526 GHz	-40.92 dBm	-15.92 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.35219 GHz	-41.90 dBm	-16.90 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.28484 GHz	-40.95 dBm	-15.95 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.53106 GHz	-37.53 dBm	-12.53 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.69116 GHz	-38.18 dBm	-13.18 dB

Date: 19.APR.2022 16:04:13



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	944.49525 MHz	-46.22 dBm	-21.22 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.47113 GHz	-45.48 dBm	-20.48 dB
2.615 GHz	3.000 GHz	1.000 MHz	2.96142 GHz	-45.33 dBm	-20.33 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.98025 GHz	-40.80 dBm	-15.80 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.35569 GHz	-41.69 dBm	-16.69 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.29534 GHz	-40.92 dBm	-15.92 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.53806 GHz	-37.47 dBm	-12.47 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.69166 GHz	-38.14 dBm	-13.14 dB

Date: 19.APR.2022 16:02:59

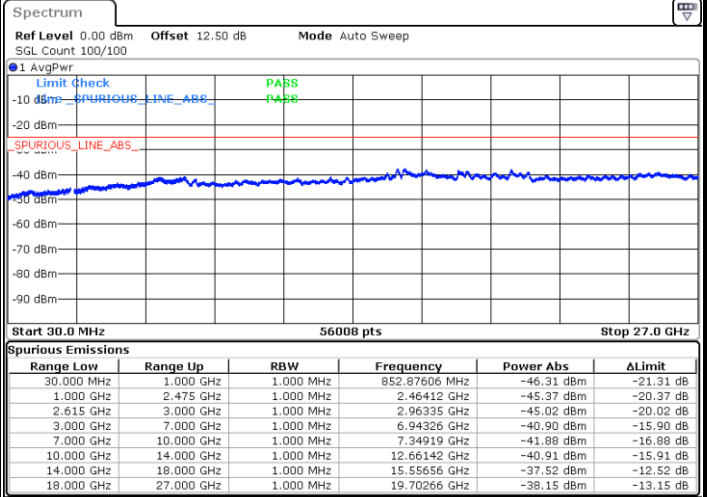
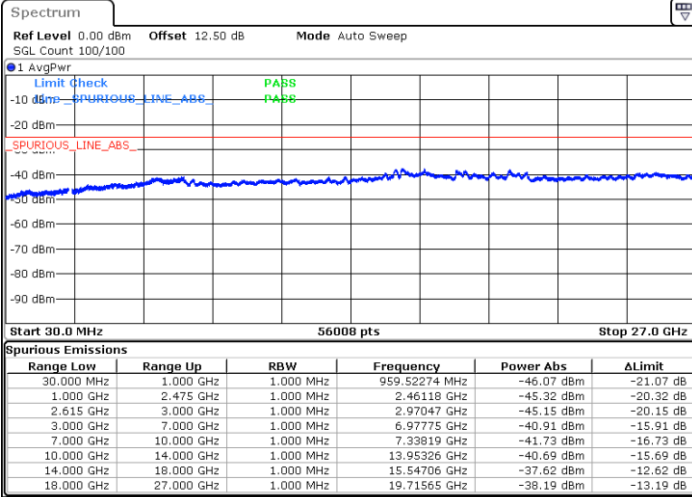


LTE Band 7C / 20MHz+20MHz

QPSK

Lowest Channel / 1RB0 and 1RB99

Lowest Channel / 1RB99 and 1RB0

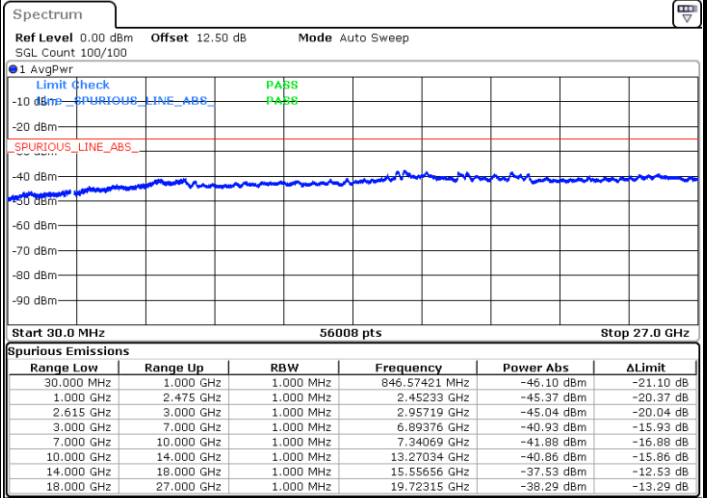
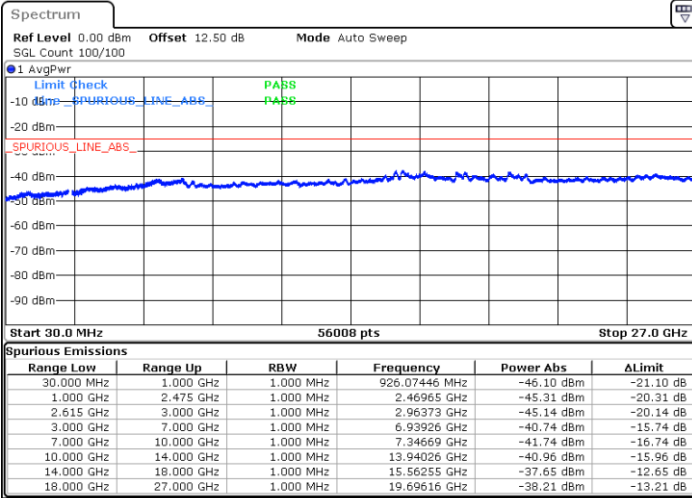


Date: 19.APR.2022 16:42:55

Date: 19.APR.2022 16:41:41

MiddleChannel / 1RB0 and 1RB99

Middle Channel / 1RB99 and 1RB0



Date: 19.APR.2022 16:44:18

Date: 19.APR.2022 16:45:31

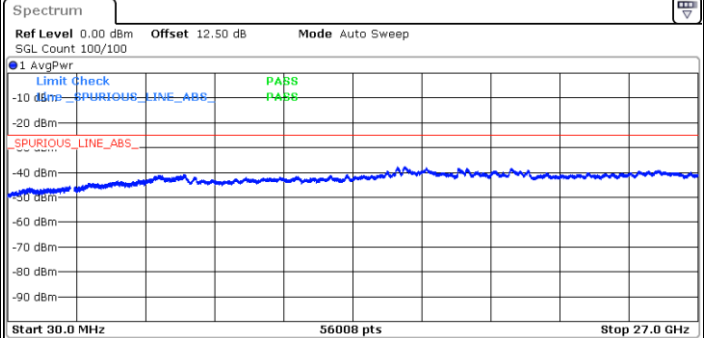
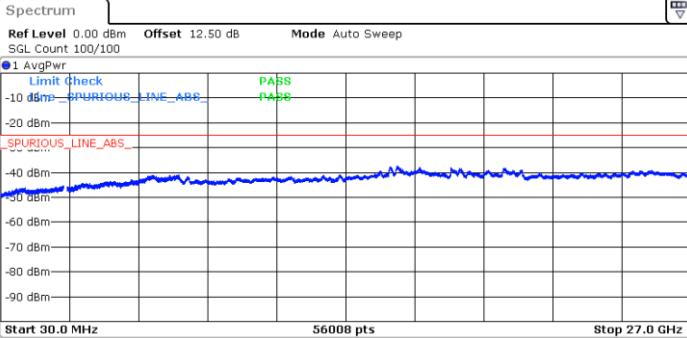


LTE Band 7C / 20MHz+20MHz

QPSK

Highest Channel / 1RB0 and 1RB99

Highest Channel / 1RB99 and 1RB0



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	987.15392 MHz	-46.15 dBm	-21.15 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.45970 GHz	-45.41 dBm	-20.41 dB
2.615 GHz	3.000 GHz	1.000 MHz	2.96681 GHz	-45.17 dBm	-20.17 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.99475 GHz	-41.00 dBm	-16.00 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.34369 GHz	-41.69 dBm	-16.69 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.27284 GHz	-40.85 dBm	-15.85 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.53706 GHz	-37.31 dBm	-12.31 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.70316 GHz	-38.23 dBm	-13.23 dB

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	889.23288 MHz	-46.25 dBm	-21.25 dB
1.000 GHz	2.475 GHz	1.000 MHz	2.46892 GHz	-45.56 dBm	-20.56 dB
2.615 GHz	3.000 GHz	1.000 MHz	2.95988 GHz	-45.02 dBm	-20.02 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.95026 GHz	-40.90 dBm	-15.90 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.35369 GHz	-41.86 dBm	-16.86 dB
10.000 GHz	14.000 GHz	1.000 MHz	13.29634 GHz	-40.78 dBm	-15.78 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.55306 GHz	-37.56 dBm	-12.56 dB
18.000 GHz	27.000 GHz	1.000 MHz	19.69816 GHz	-38.24 dBm	-13.24 dB

Date: 19.APR.2022 16:30:51

Date: 19.APR.2022 16:29:37



LTE Band 12

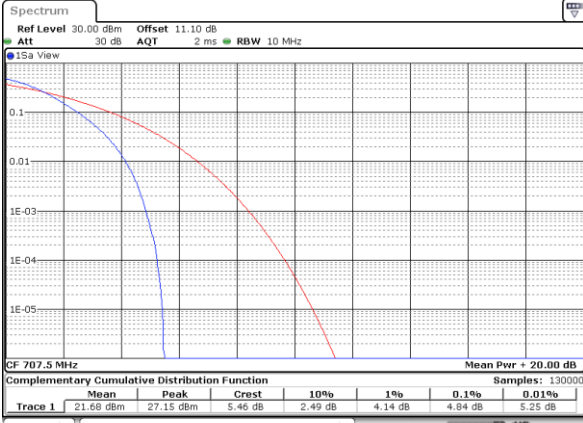
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.84	5.91	6.32	-	PASS



LTE Band 12 / 10MHz / QPSK

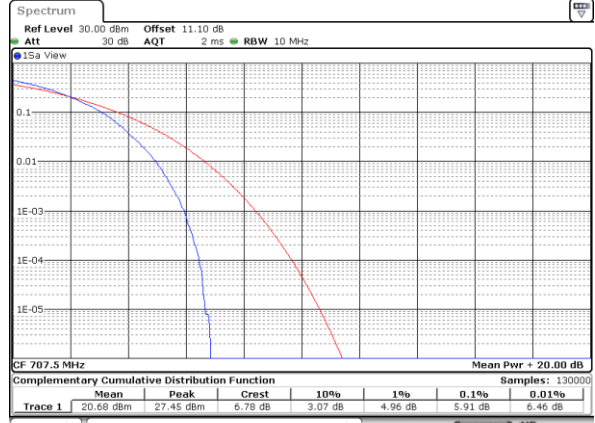
Middle Channel / Full RB



Date: 28.FEB.2022 17:00:16

LTE Band 12 / 10MHz / 16QAM

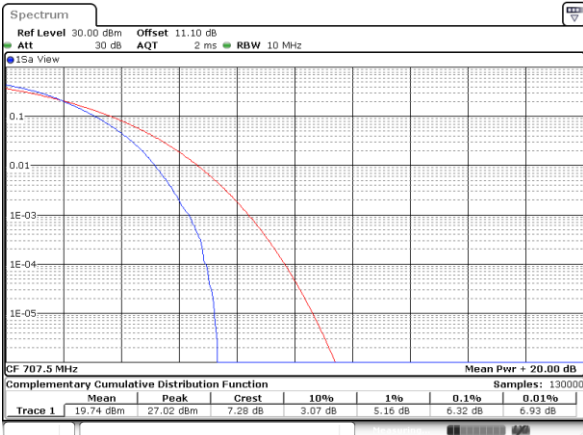
Middle Channel / Full RB



Date: 28.FEB.2022 16:59:51

LTE Band 12 / 10MHz / 64QAM

Middle Channel / Full RB



Date: 28.FEB.2022 16:59:26



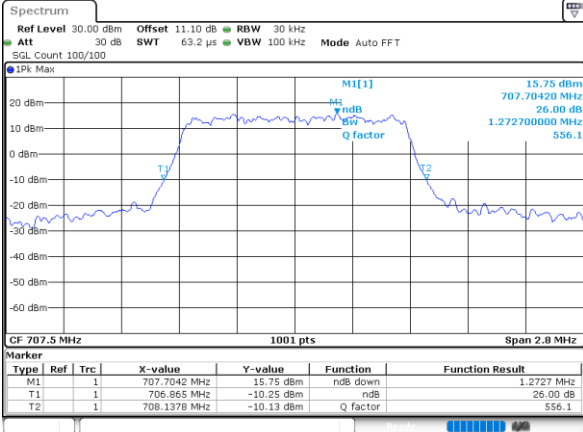
26dB Bandwidth

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
Middle CH	1.27	1.25	3.00	3.00	4.97	4.83	9.65	9.65	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.30	-	3.02	-	4.95	-	9.89	-	-	-	-	-



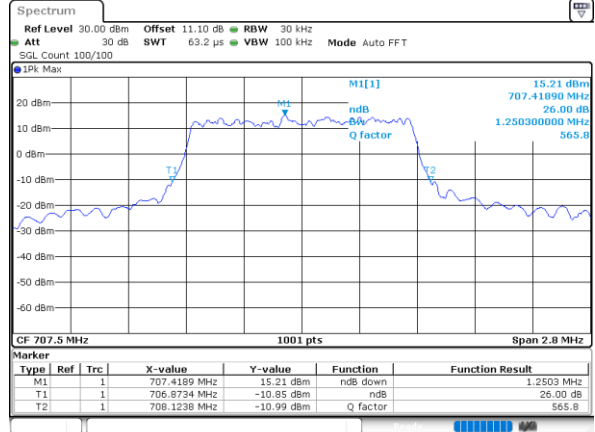
LTE Band 12

Middle Channel / 1.4MHz / QPSK



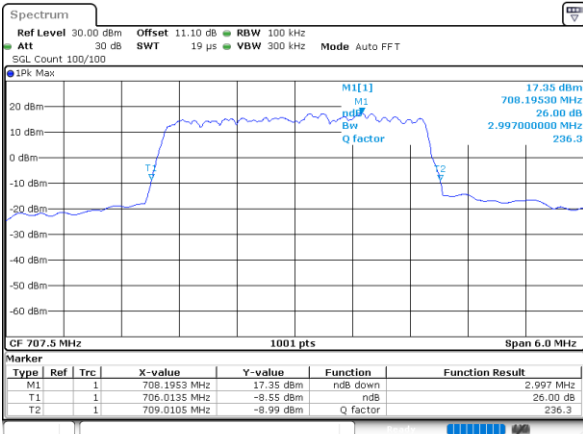
Date: 28.FEB.2022 16:00:56

Middle Channel / 1.4MHz / 16QAM



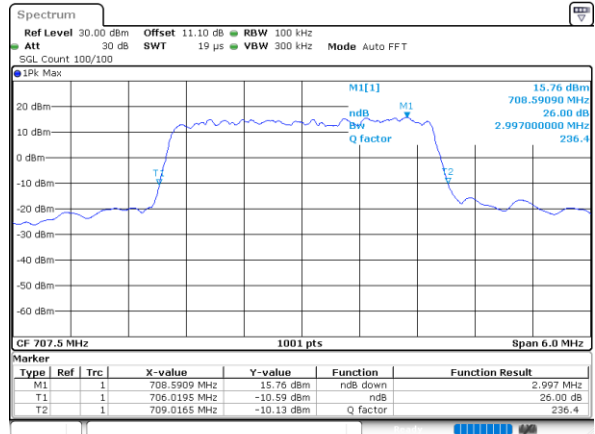
Date: 28.FEB.2022 16:01:19

Middle Channel / 3MHz / QPSK



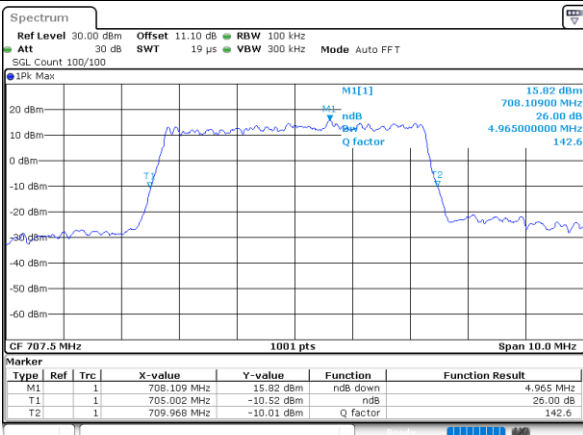
Date: 28.FEB.2022 16:16:54

Middle Channel / 3MHz / 16QAM



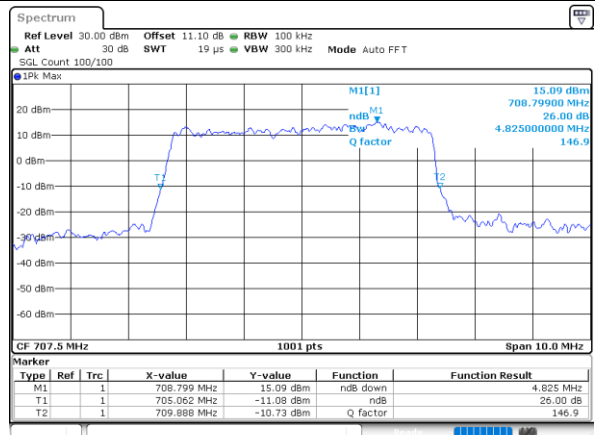
Date: 28.FEB.2022 16:17:18

Middle Channel / 5MHz / QPSK



Date: 28.FEB.2022 16:37:13

Middle Channel / 5MHz / 16QAM

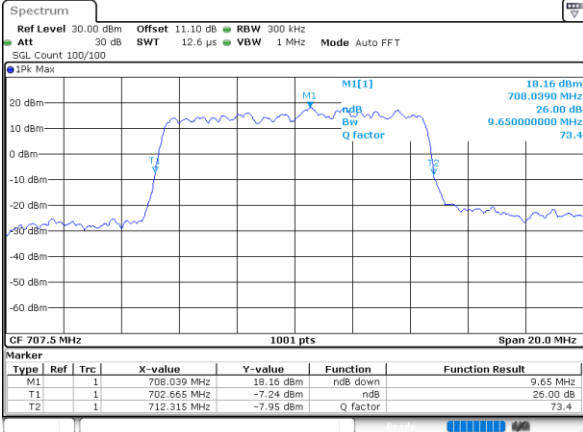


Date: 28.FEB.2022 16:37:36



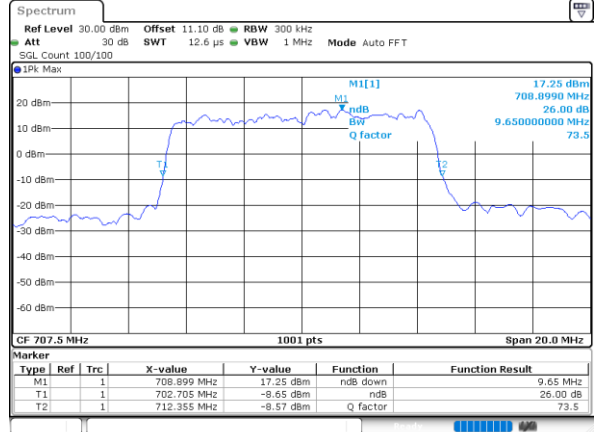
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 28.FEB.2022 16:48:40

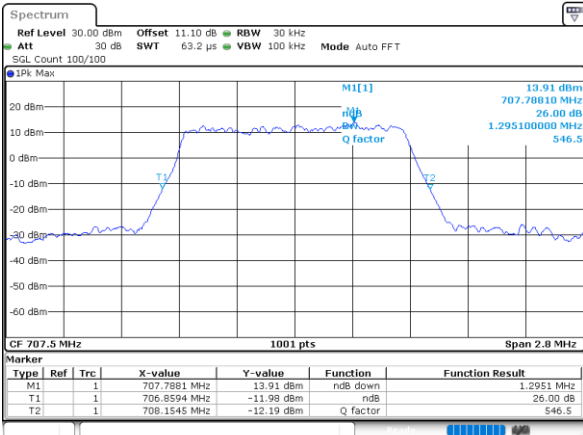
Middle Channel / 10MHz / 16QAM



Date: 28.FEB.2022 16:49:11

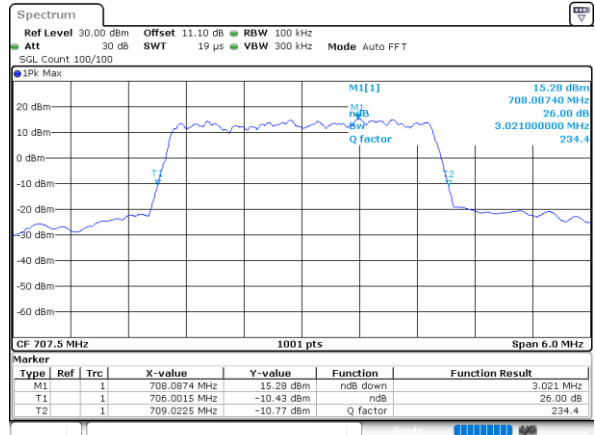
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



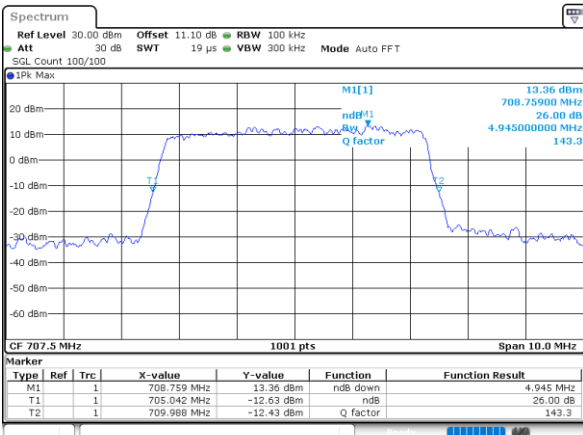
Date: 28.FEB.2022 16:09:23

Middle Channel / 3MHz / 64QAM



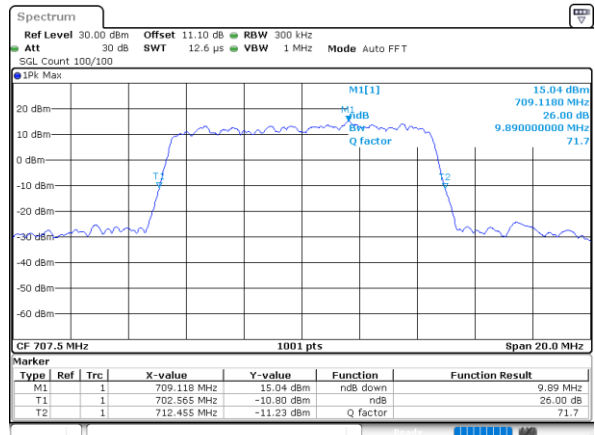
Date: 28.FEB.2022 16:25:21

Middle Channel / 5MHz / 64QAM



Date: 28.FEB.2022 16:29:42

Middle Channel / 10MHz / 64QAM



Date: 28.FEB.2022 16:57:15



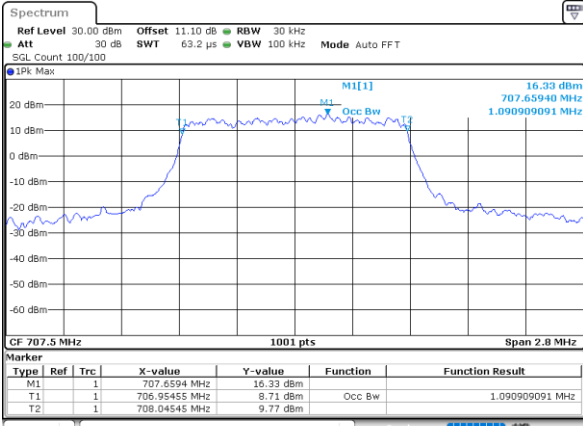
Occupied Bandwidth

Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.09	2.72	2.73	4.49	4.48	8.95	8.93	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	1.09	-	2.70	-	4.50	-	8.97	-	-	-	-	-

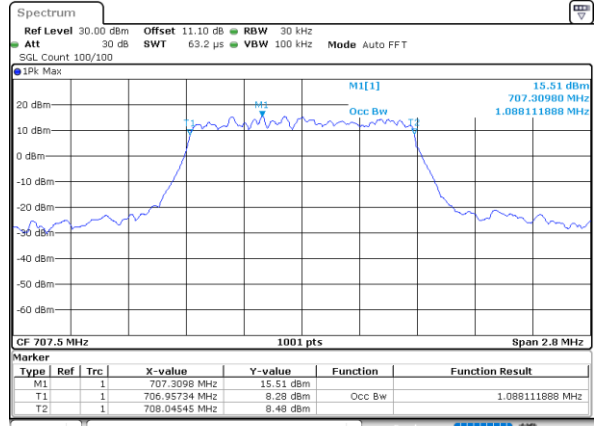


LTE Band 12

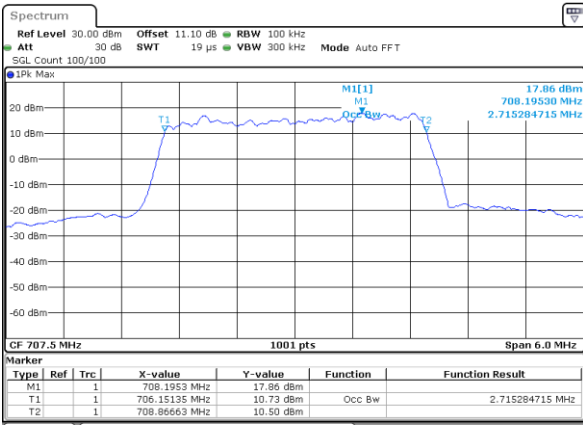
Middle Channel / 1.4MHz / QPSK



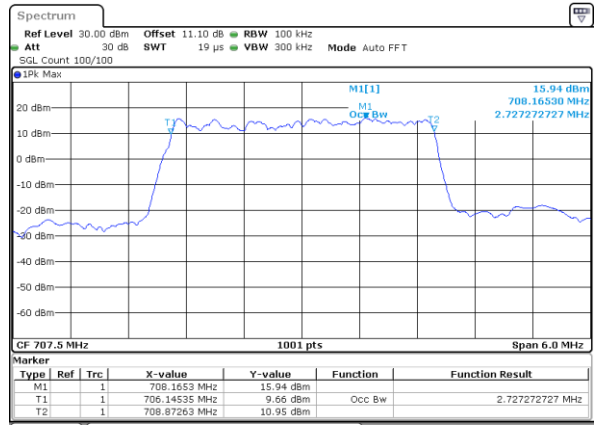
Middle Channel / 1.4MHz / 16QAM



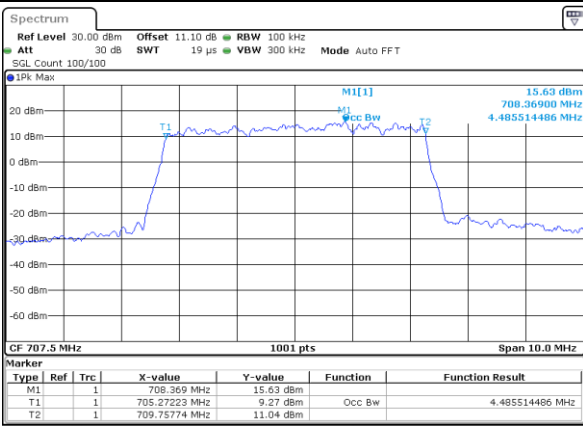
Middle Channel / 3MHz / QPSK



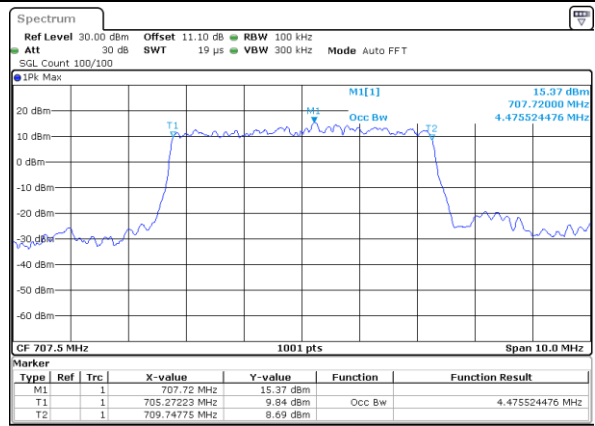
Middle Channel / 3MHz / 16QAM



Middle Channel / 5MHz / QPSK



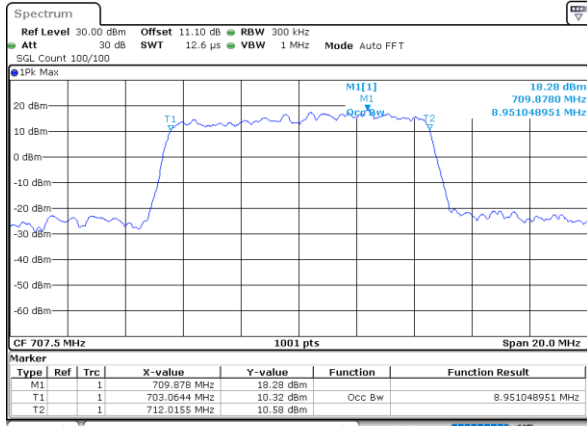
Middle Channel / 5MHz / 16QAM





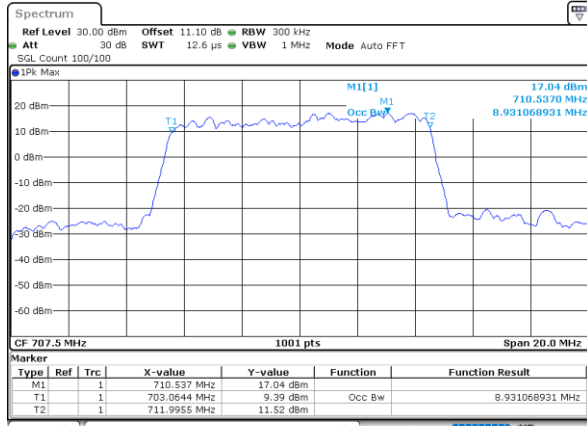
LTE Band 12

Middle Channel / 10MHz / QPSK



Date: 28.FEB.2022 16:48:24

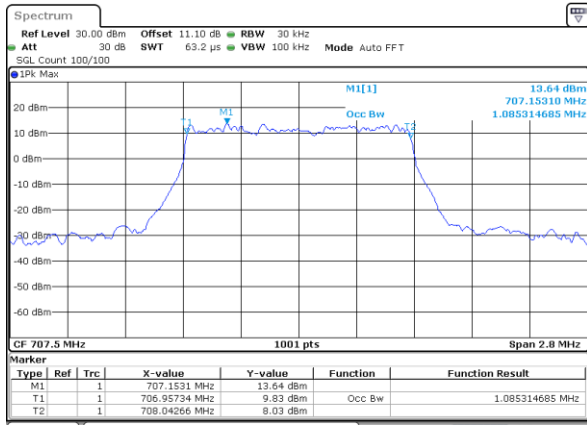
Middle Channel / 10MHz / 16QAM



Date: 28.FEB.2022 16:48:01

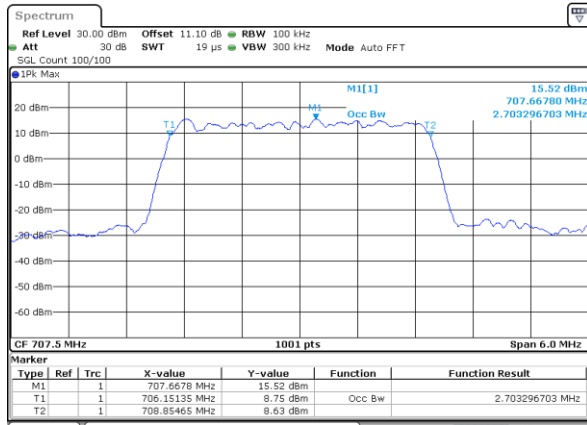
LTE Band 12

Middle Channel / 1.4MHz / 64QAM



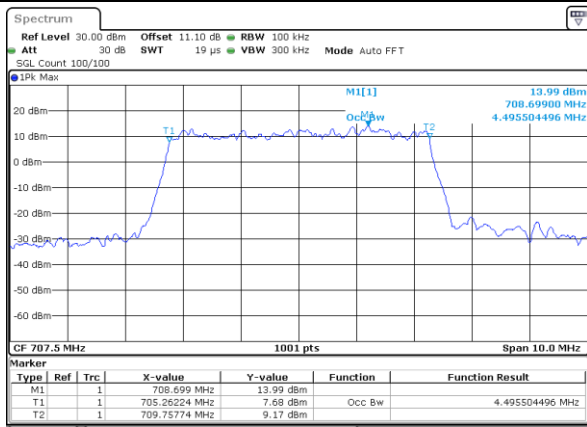
Date: 28.FEB.2022 16:08:59

Middle Channel / 3MHz / 64QAM



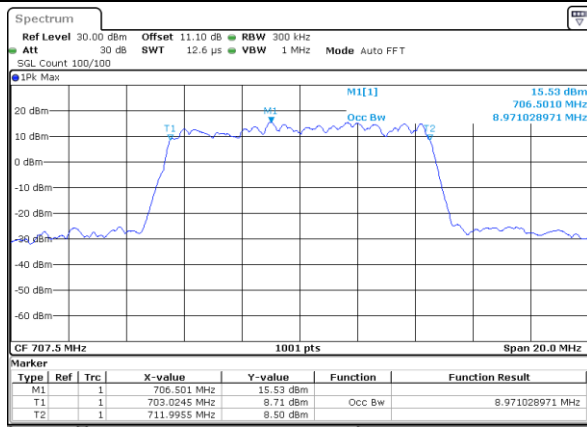
Date: 28.FEB.2022 16:24:57

Middle Channel / 5MHz / 64QAM



Date: 28.FEB.2022 16:29:19

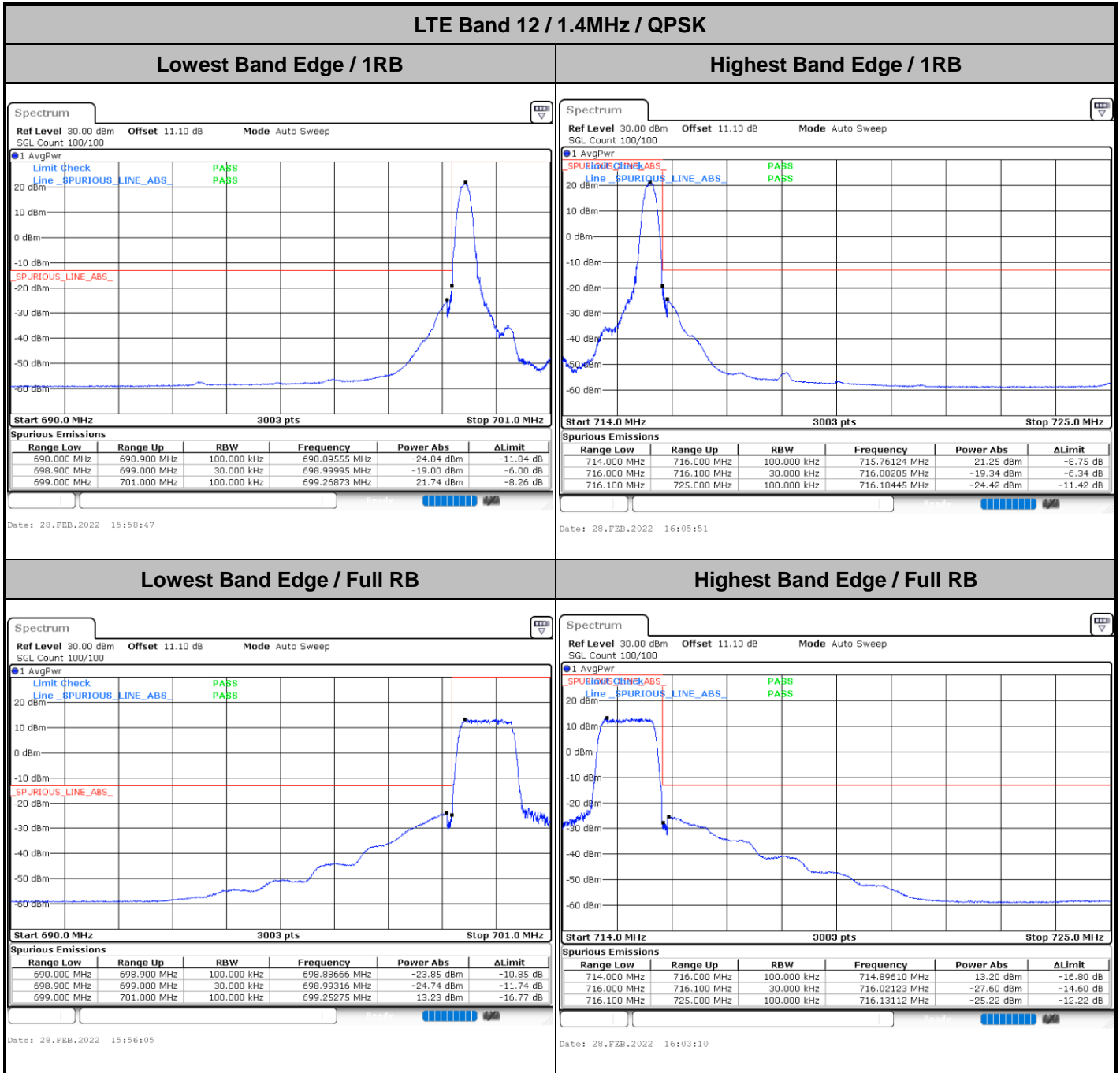
Middle Channel / 10MHz / 64QAM



Date: 28.FEB.2022 16:56:51



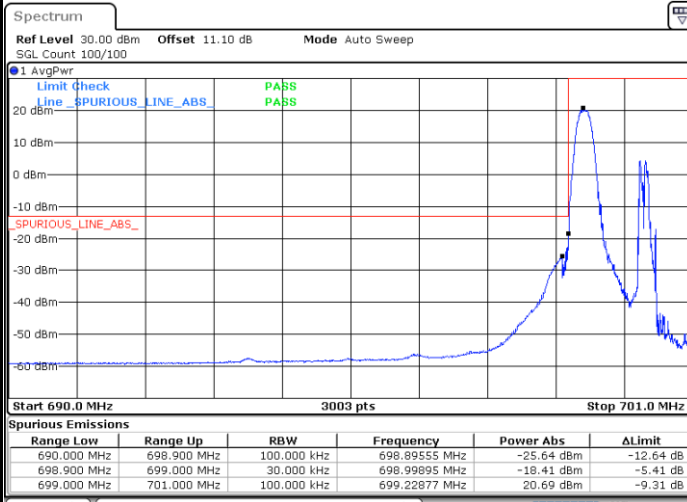
Conducted Band Edge





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



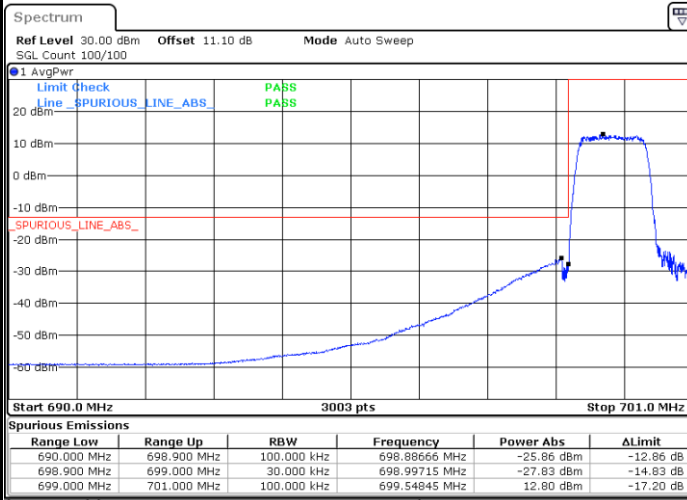
Date: 28.FEB.2022 15:57:53

Highest Band Edge / 1 RB



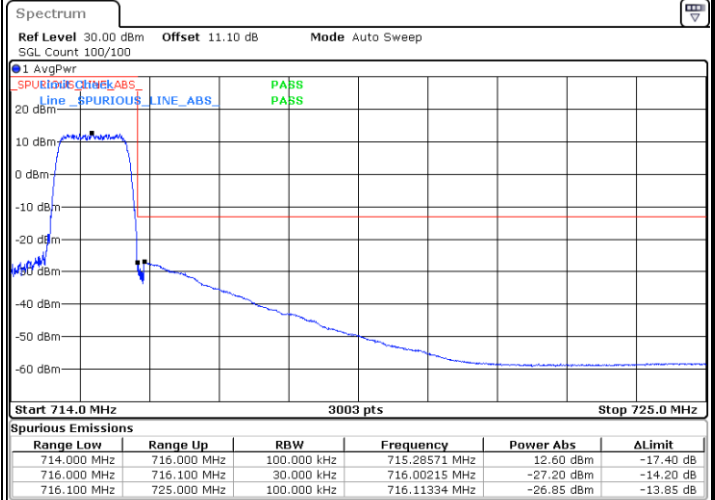
Date: 28.FEB.2022 16:04:57

Lowest Band Edge / Full RB



Date: 28.FEB.2022 15:57:00

Highest Band Edge / Full RB



Date: 28.FEB.2022 16:04:03



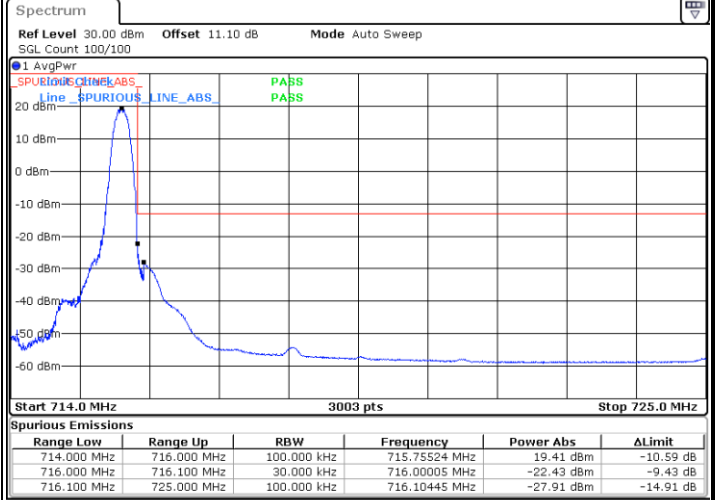
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



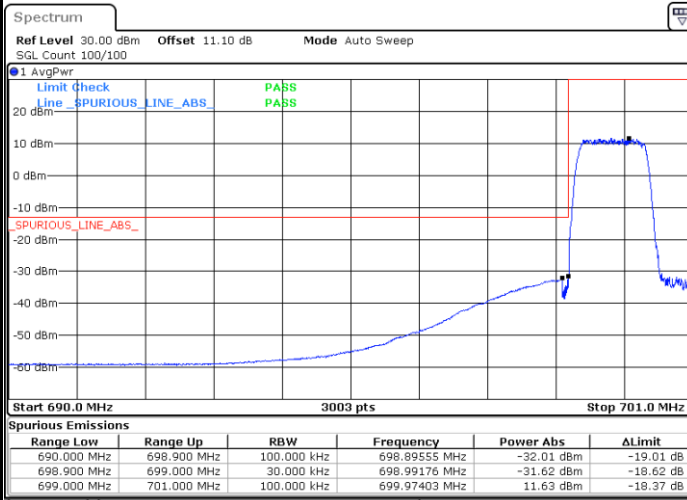
Date: 28.FEB.2022 16:08:35

Highest Band Edge / 1 RB



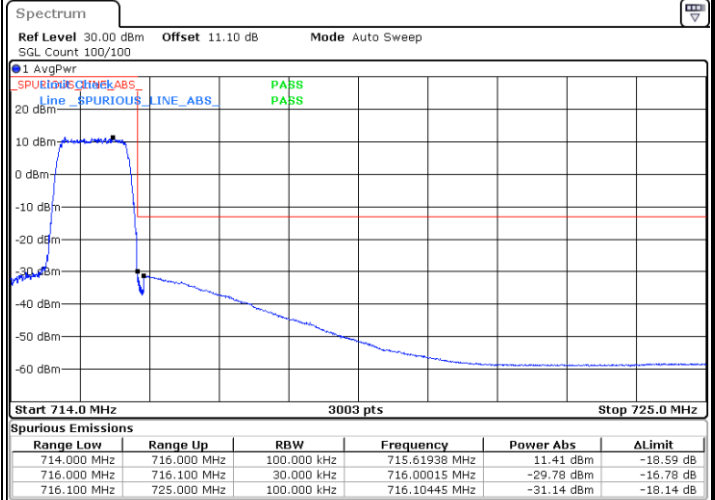
Date: 28.FEB.2022 16:11:09

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:07:42

Highest Band Edge / Full RB

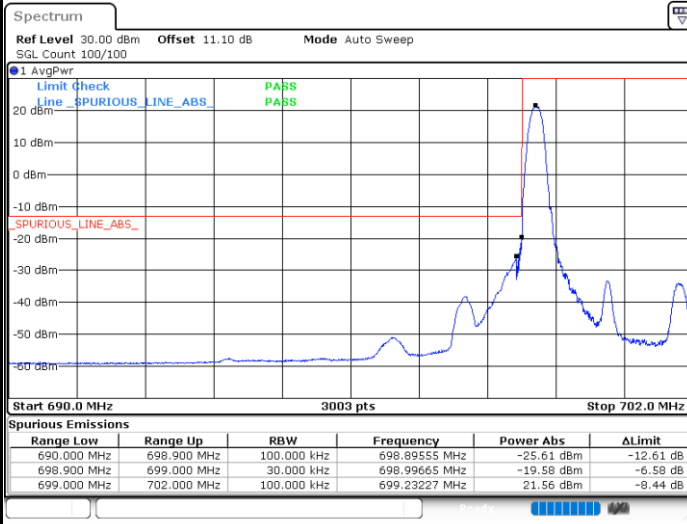


Date: 28.FEB.2022 16:10:16



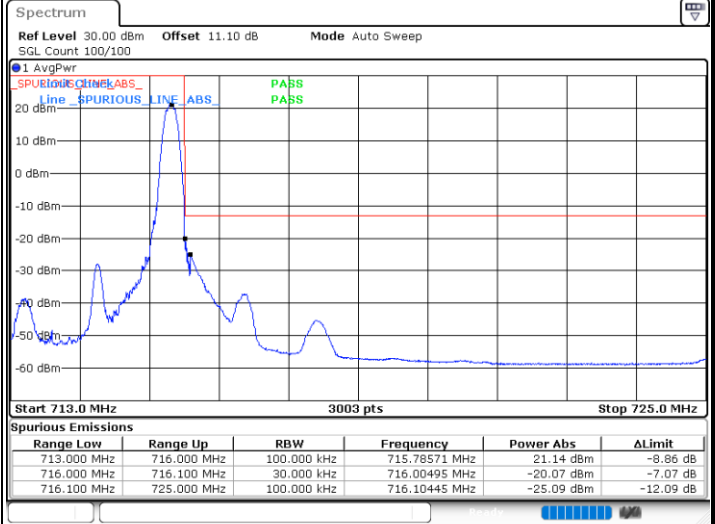
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



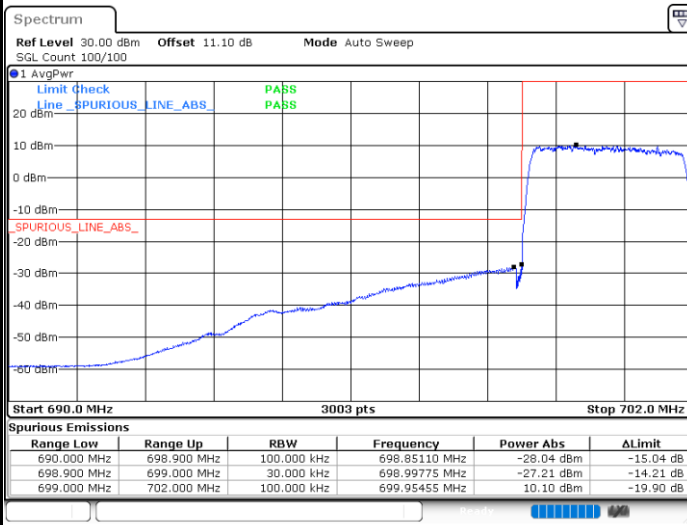
Date: 28.FEB.2022 16:14:45

Highest Band Edge / 1 RB



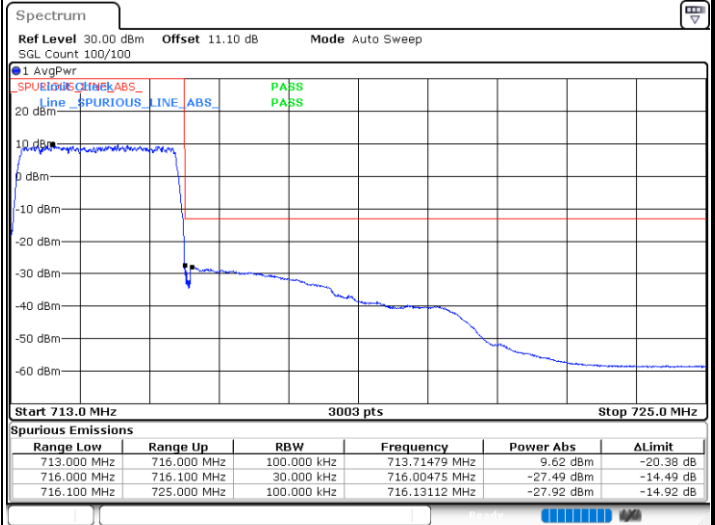
Date: 28.FEB.2022 16:21:48

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:12:03

Highest Band Edge / Full RB

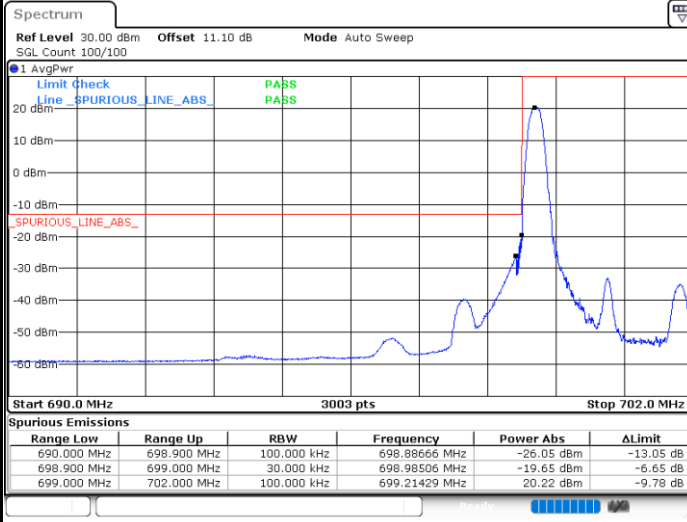


Date: 28.FEB.2022 16:19:08

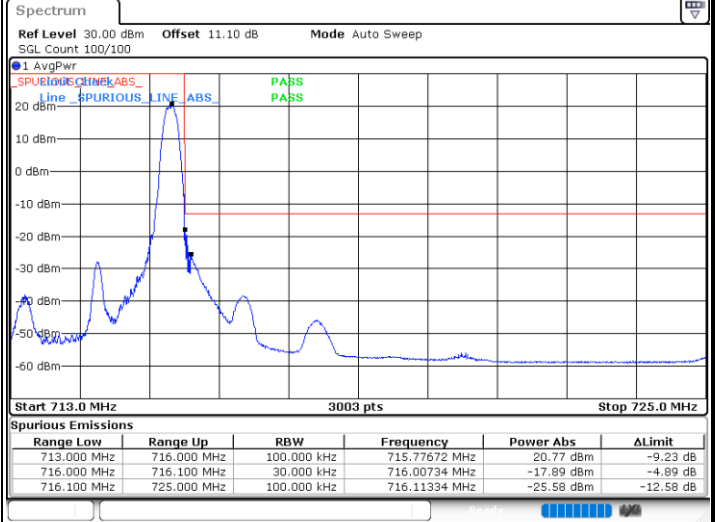


LTE Band 12 / 3MHz / 16QAM

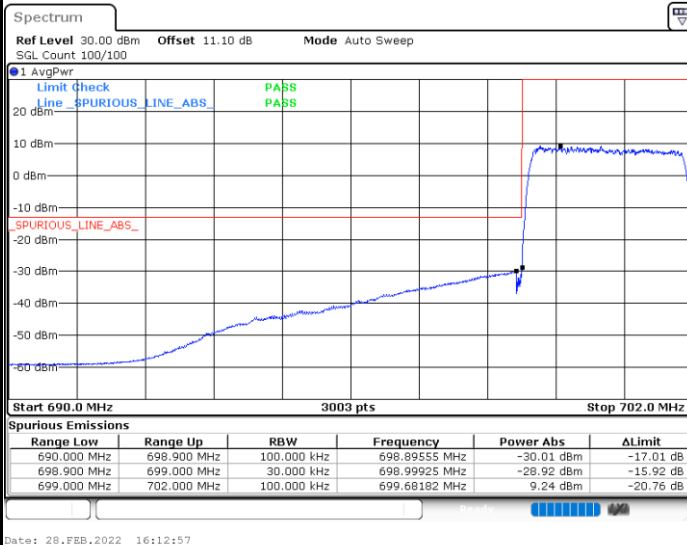
Lowest Band Edge / 1 RB



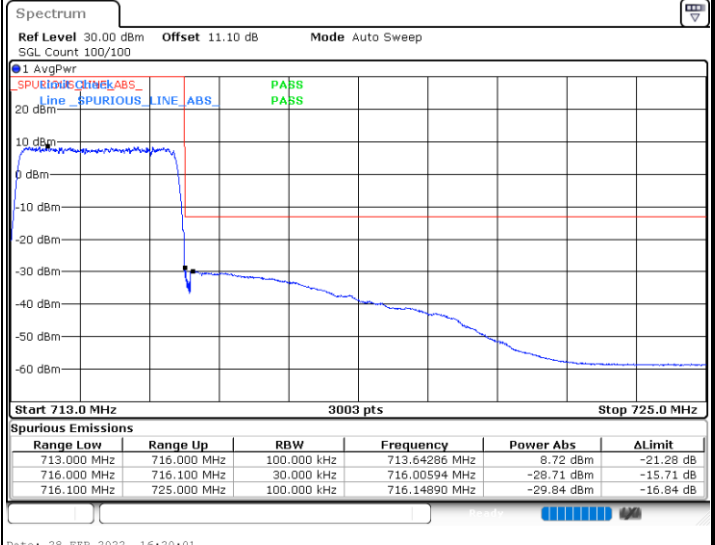
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



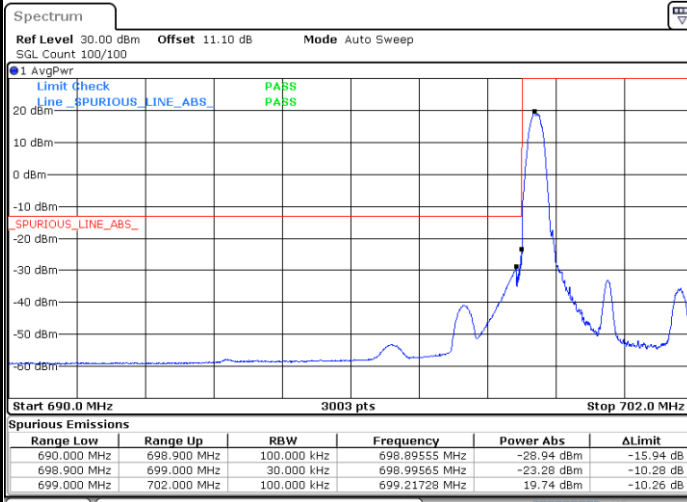
Highest Band Edge / Full RB





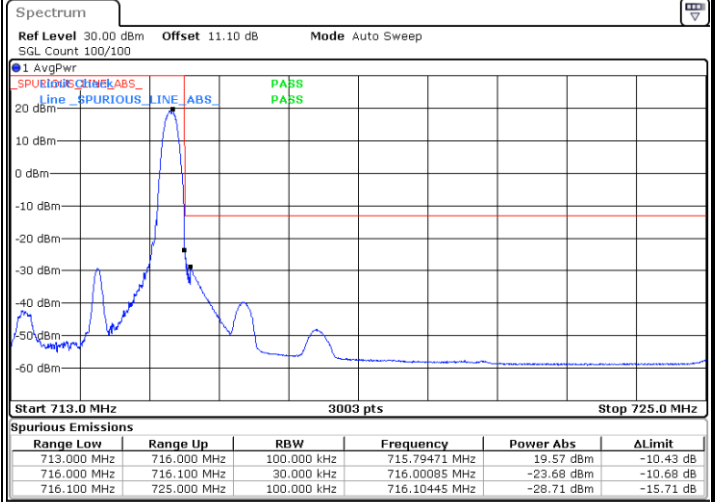
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



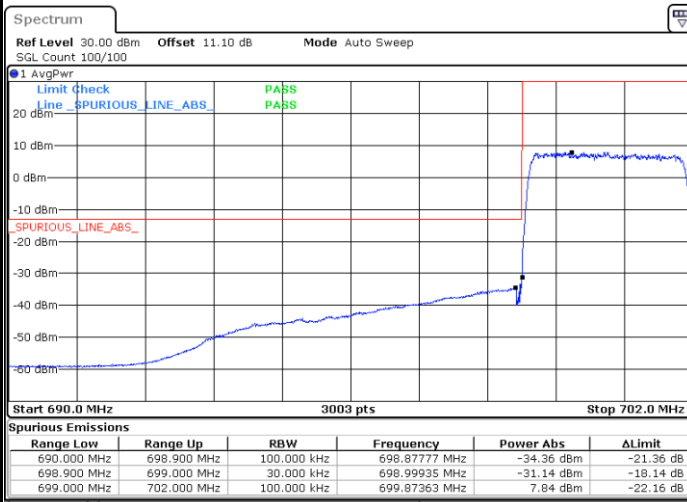
Date: 28.FEB.2022 16:24:33

Highest Band Edge / 1 RB



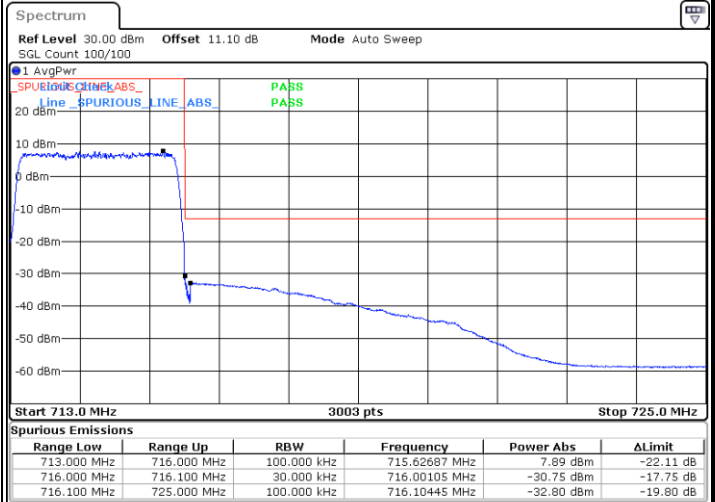
Date: 28.FEB.2022 16:27:08

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:23:40

Highest Band Edge / Full RB

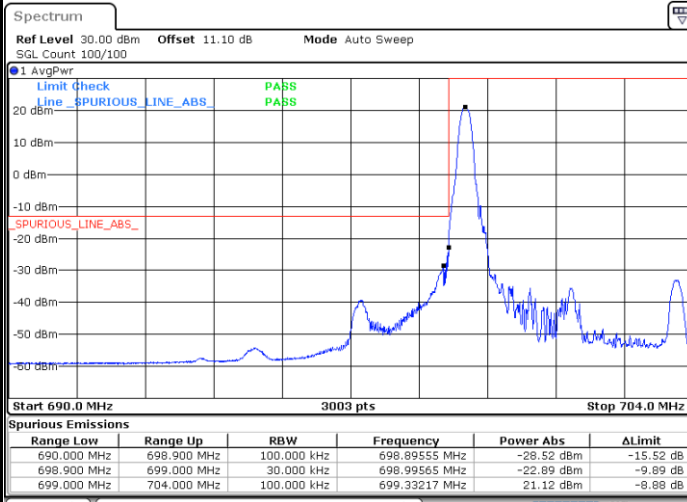


Date: 28.FEB.2022 16:26:14



LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



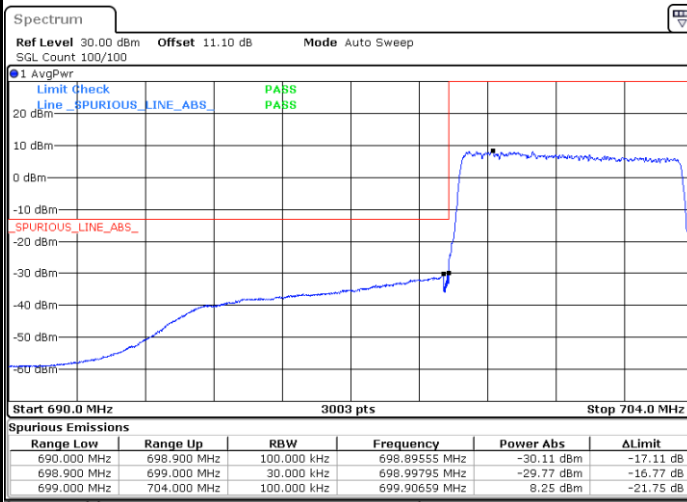
Date: 28.FEB.2022 16:35:04

Highest Band Edge / 1 RB



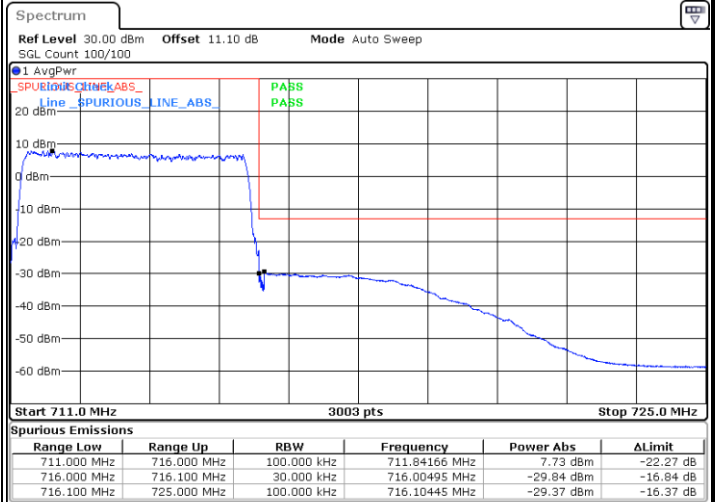
Date: 28.FEB.2022 16:41:13

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:32:24

Highest Band Edge / Full RB

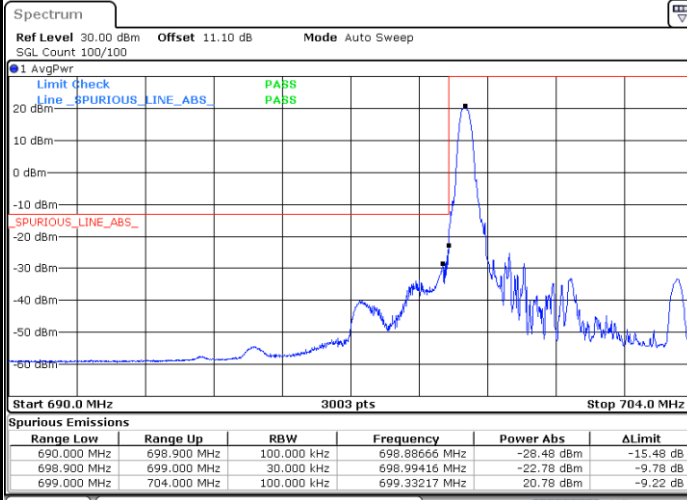


Date: 28.FEB.2022 16:39:26



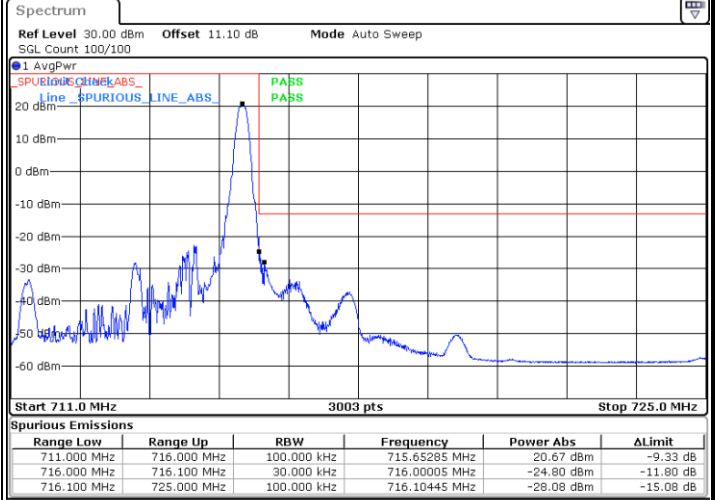
LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



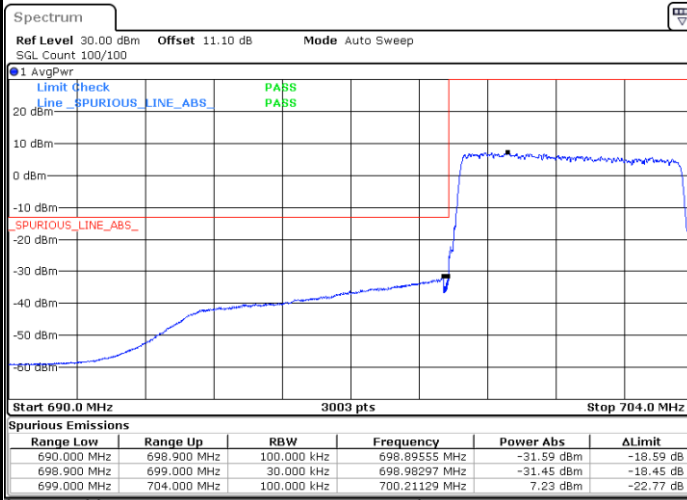
Date: 28.FEB.2022 16:34:11

Highest Band Edge / 1 RB



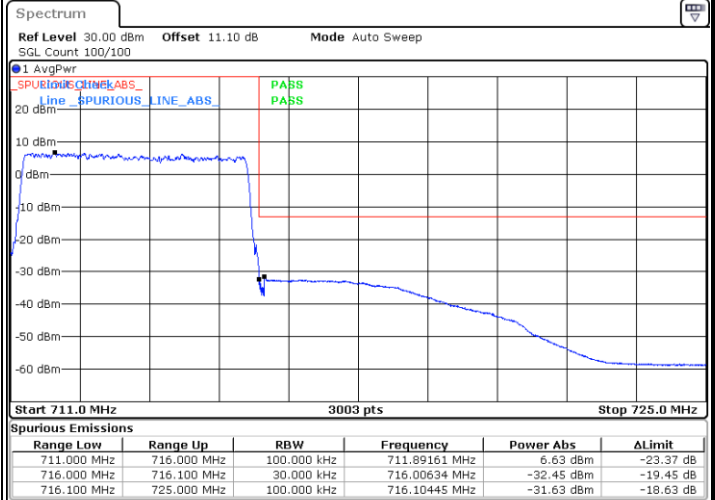
Date: 28.FEB.2022 16:42:07

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:33:17

Highest Band Edge / Full RB

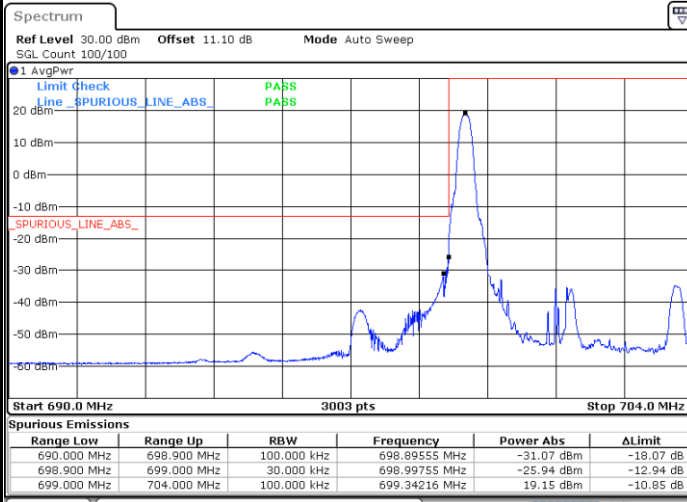


Date: 28.FEB.2022 16:40:20



LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



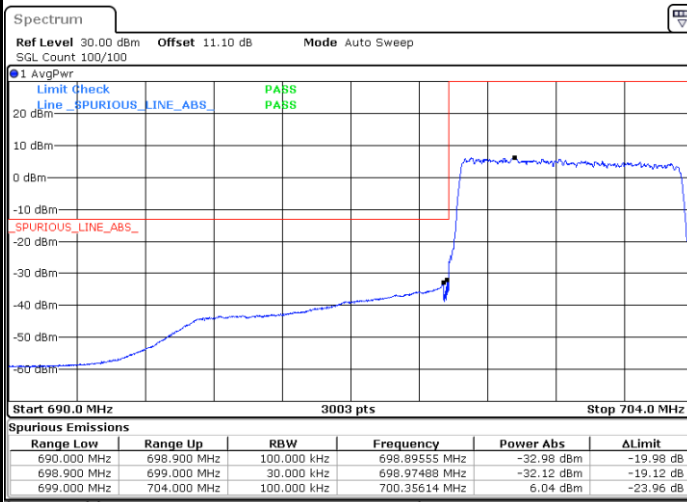
Date: 28.FEB.2022 16:28:55

Highest Band Edge / 1 RB



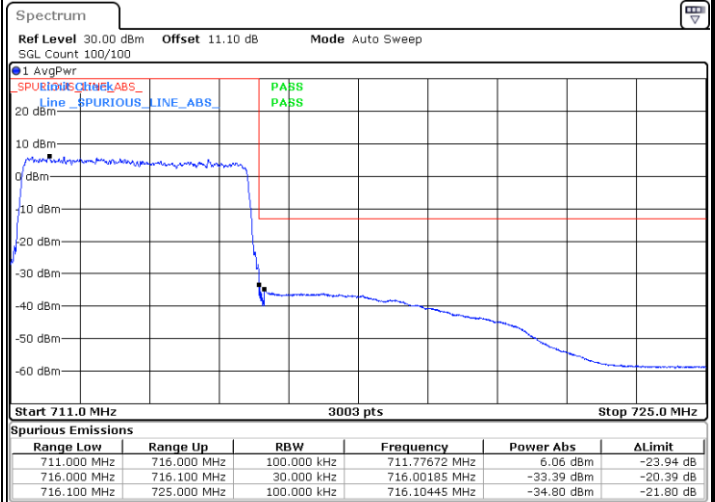
Date: 28.FEB.2022 16:31:31

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:28:01

Highest Band Edge / Full RB

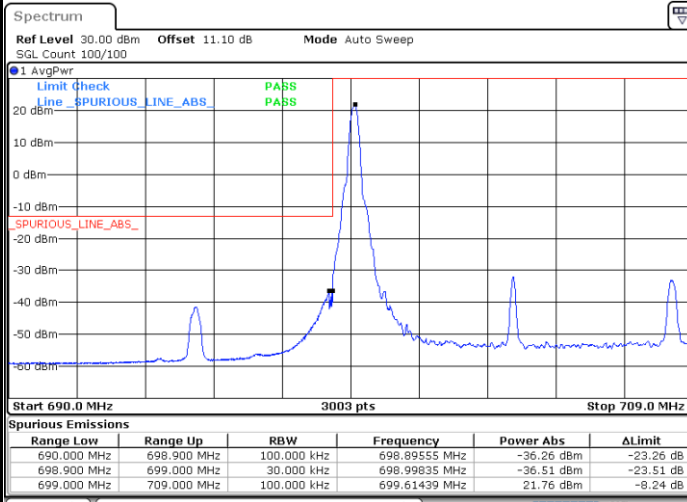


Date: 28.FEB.2022 16:30:37



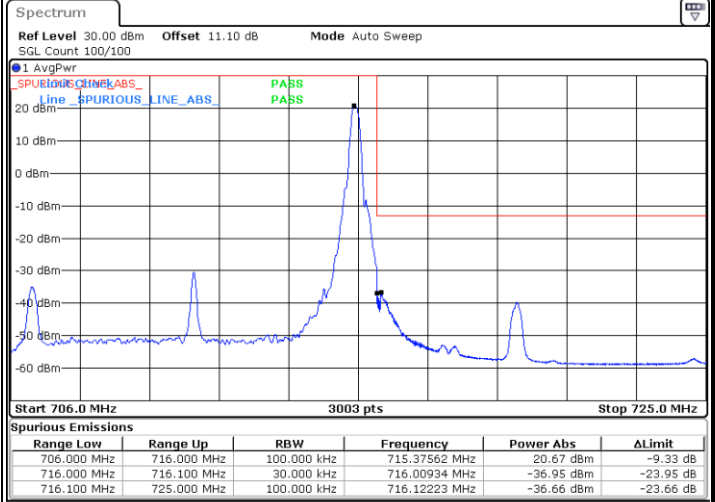
LTE Band 12 / 10MHz / QPSK

Lowest Band Edge / 1 RB



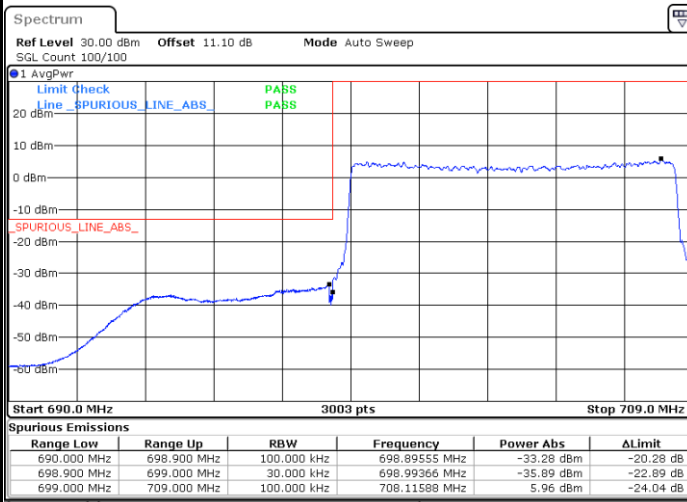
Date: 28.FEB.2022 16:46:39

Highest Band Edge / 1 RB



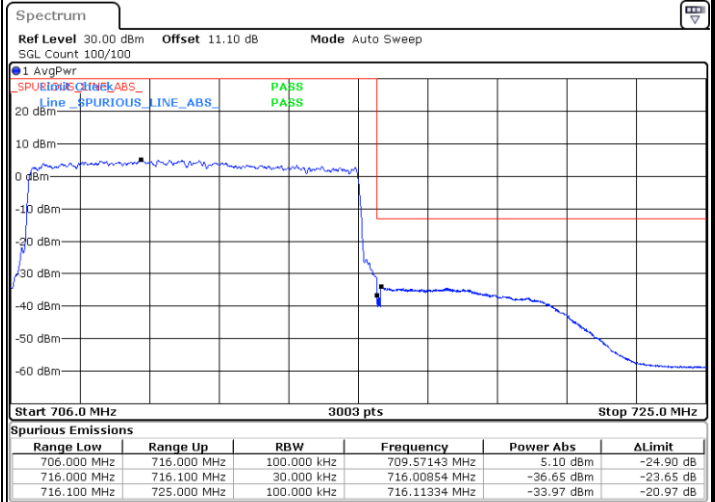
Date: 28.FEB.2022 16:53:42

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:43:59

Highest Band Edge / Full RB

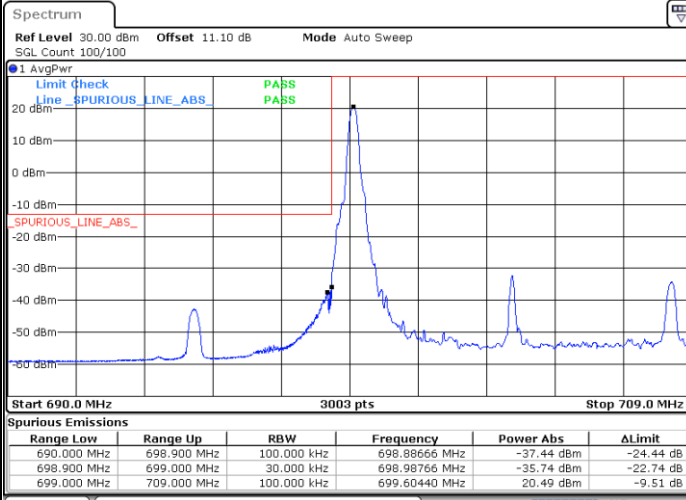


Date: 28.FEB.2022 16:51:01



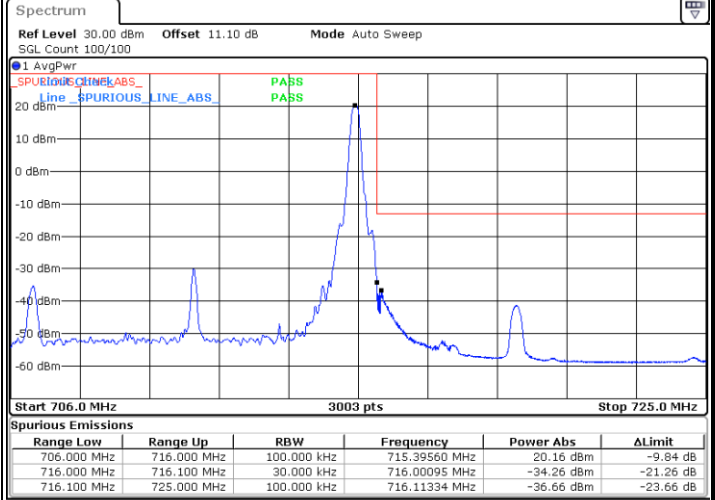
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



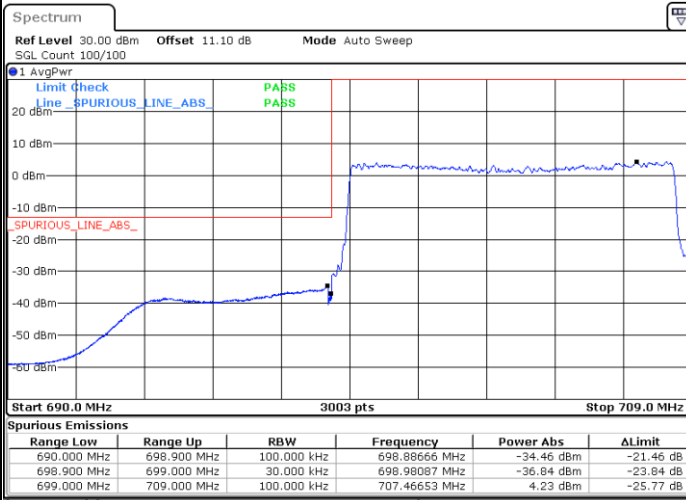
Date: 28.FEB.2022 16:45:46

Highest Band Edge / 1 RB



Date: 28.FEB.2022 16:52:48

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:44:52

Highest Band Edge / Full RB

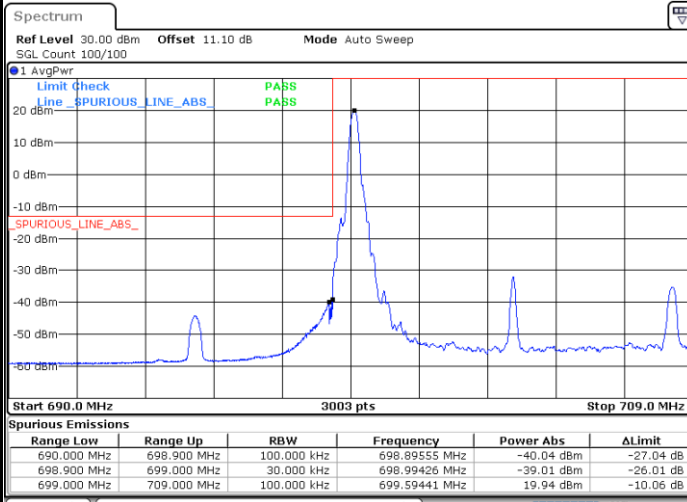


Date: 28.FEB.2022 16:51:55



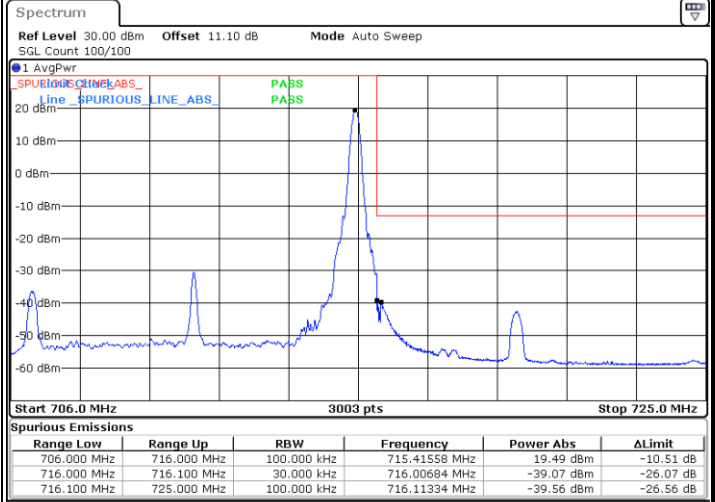
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



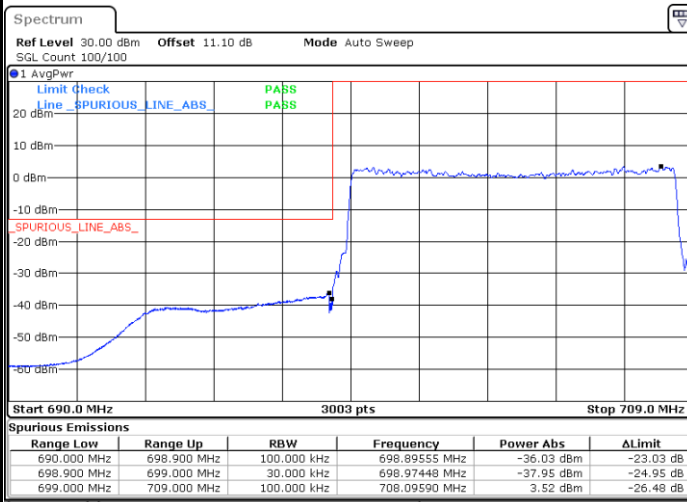
Date: 28.FEB.2022 16:56:27

Highest Band Edge / 1 RB



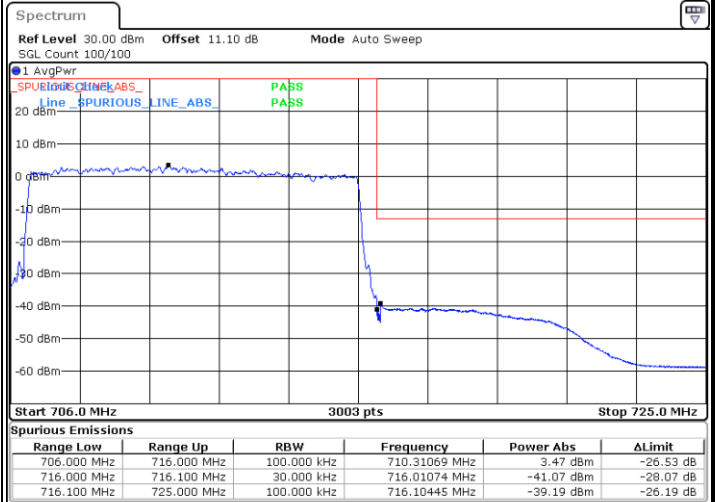
Date: 28.FEB.2022 16:59:01

Lowest Band Edge / Full RB



Date: 28.FEB.2022 16:55:34

Highest Band Edge / Full RB



Date: 28.FEB.2022 16:58:07

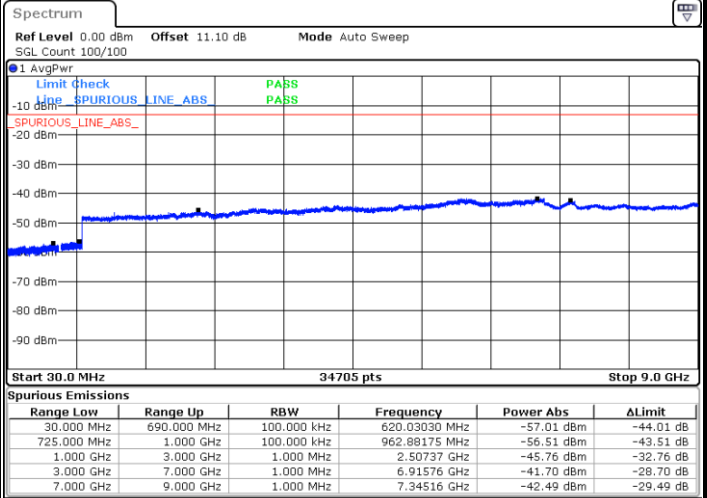
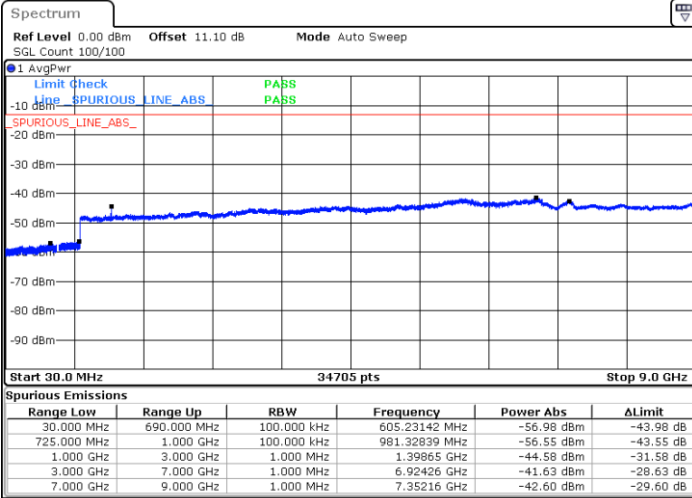


Conducted Spurious Emission

LTE Band 12 / 1.4MHz

Lowest Channel / QPSK

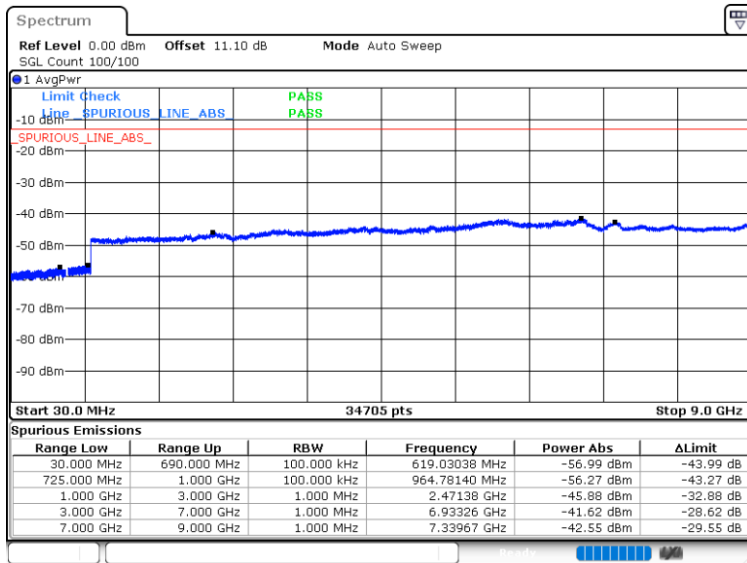
Middle Channel / QPSK



Date: 28.FEB.2022 15:59:44

Date: 28.FEB.2022 16:02:16

Highest Channel / QPSK



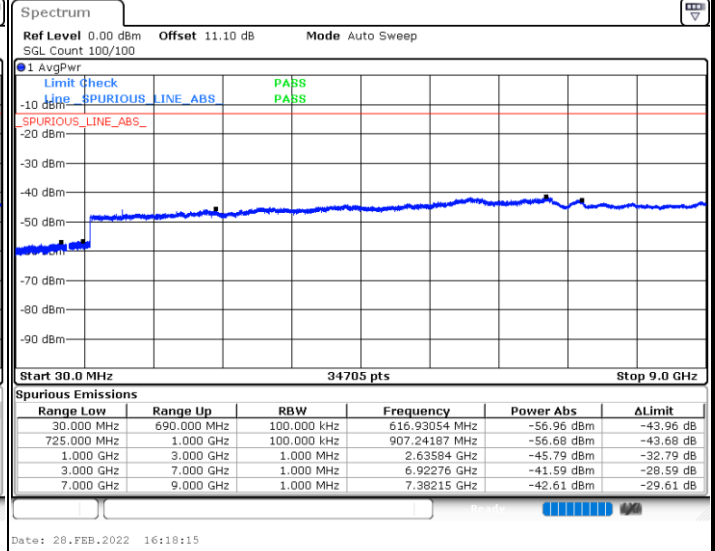
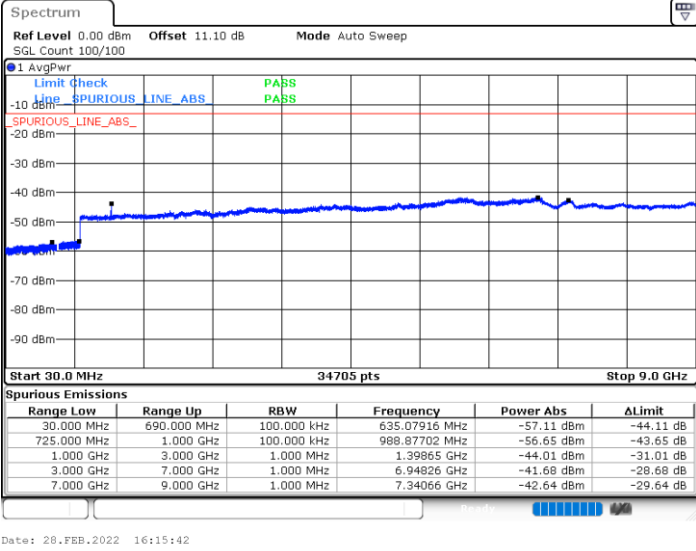
Date: 28.FEB.2022 16:06:48



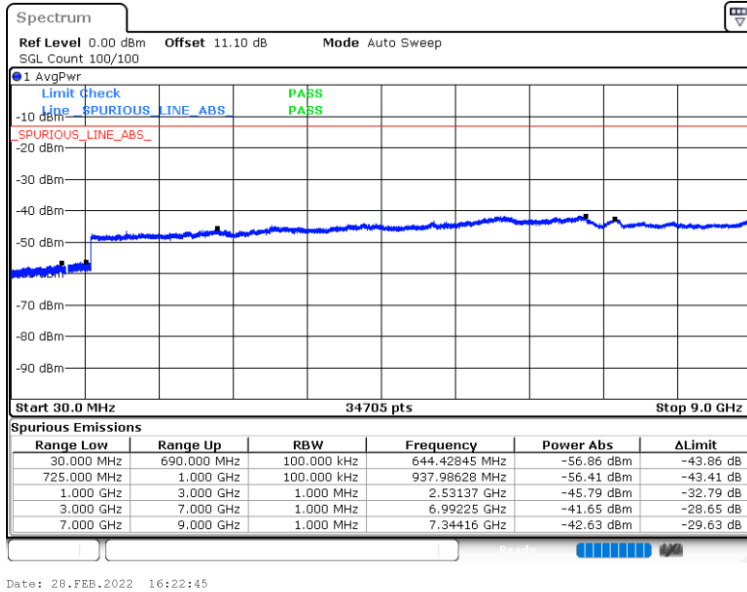
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

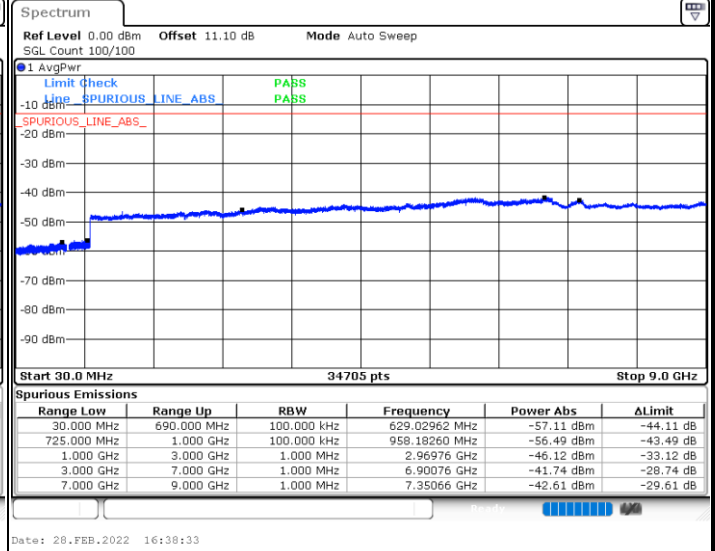
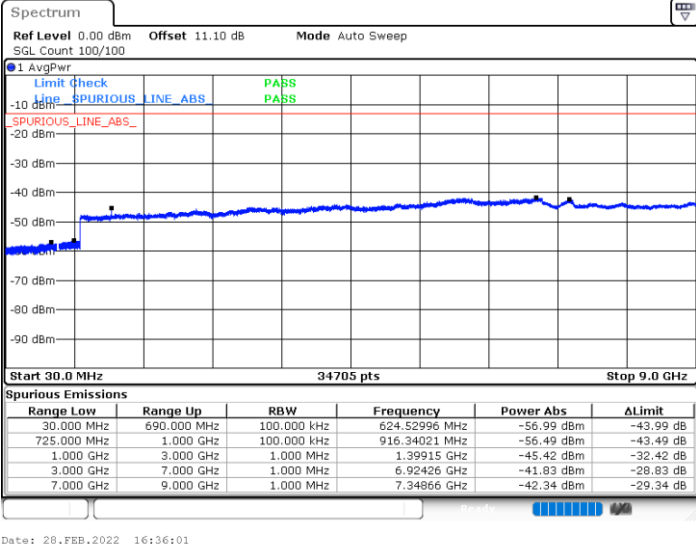




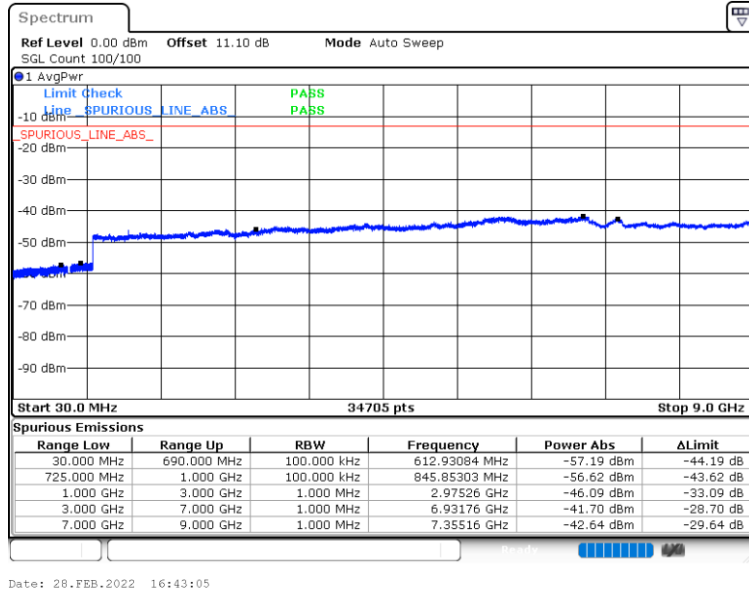
LTE Band 12 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

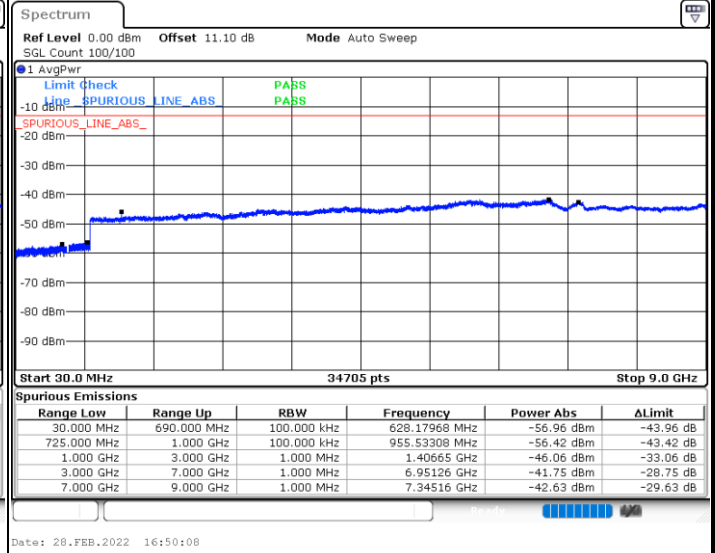
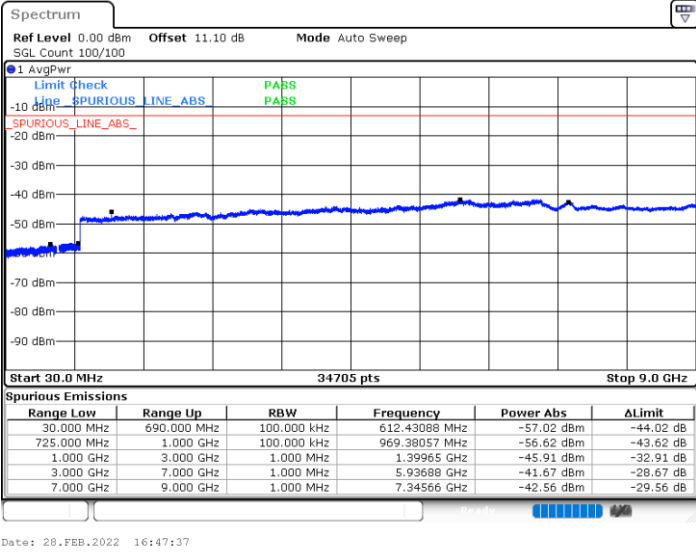




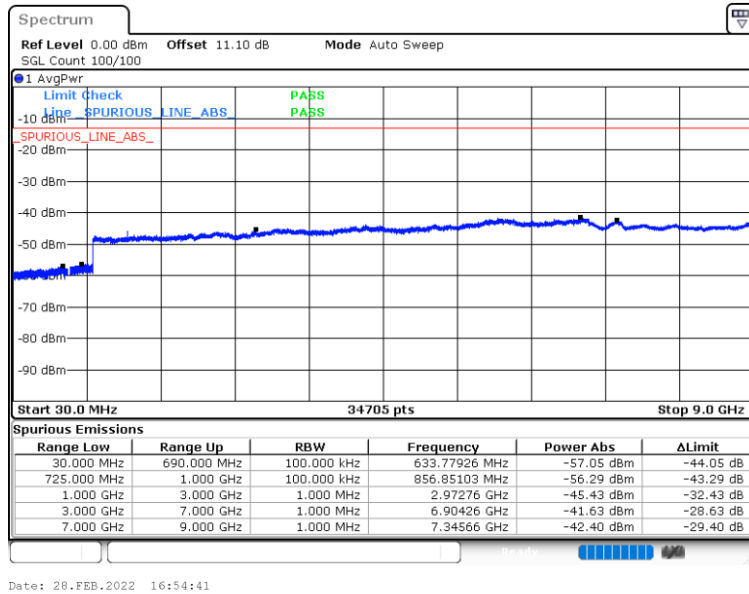
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





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	0.0041	PASS
40	Normal Voltage	0.0024	
30	Normal Voltage	0.0201	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0127	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0212	
-20	Normal Voltage	0.0109	
-30	Normal Voltage	0.0106	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0028	
20	Battery End Point	0.0100	

Note:

- 1. Normal Voltage =4 V. ; Battery End Point (BEP) =3.8 V. ; Maximum Voltage =4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

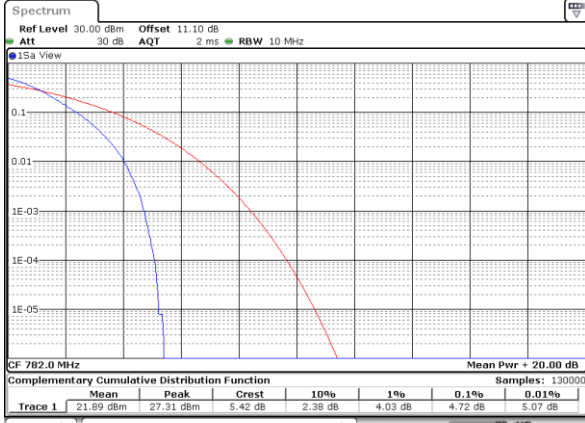
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.72	5.65	6.03	-	PASS



LTE Band 13 / 10MHz / QPSK

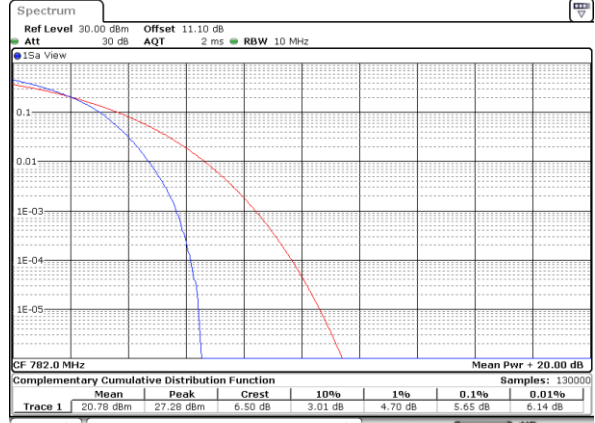
Middle Channel / Full RB



Date: 28.FEB.2022 17:41:40

LTE Band 13 / 10MHz / 16QAM

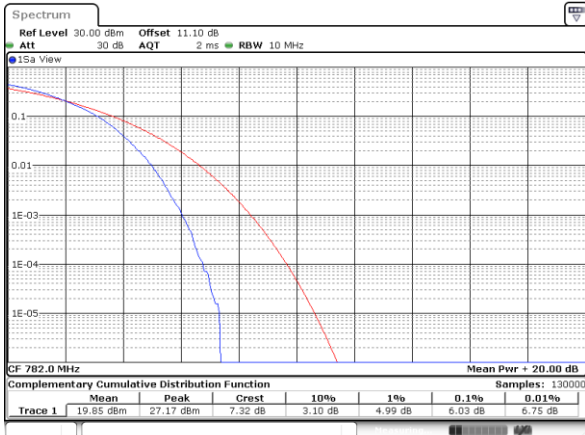
Middle Channel / Full RB



Date: 28.FEB.2022 17:41:23

LTE Band 13 / 10MHz / 64QAM

Middle Channel / Full RB



Date: 28.FEB.2022 17:40:59



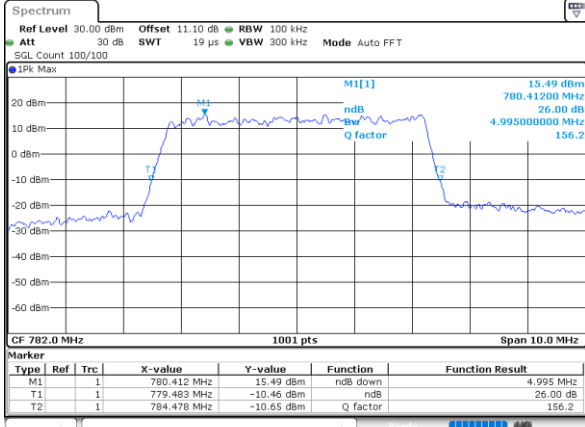
26dB Bandwidth

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
Middle CH	-	-	-	-	5.00	4.93	9.83	9.87	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.91	-	9.79	-	-	-	-	-



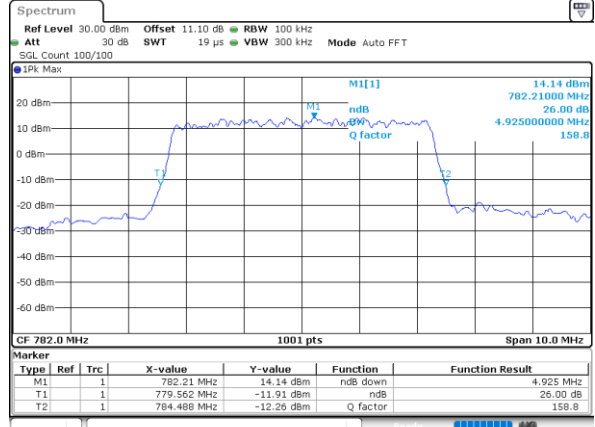
LTE Band 13

Middle Channel / 5MHz / QPSK



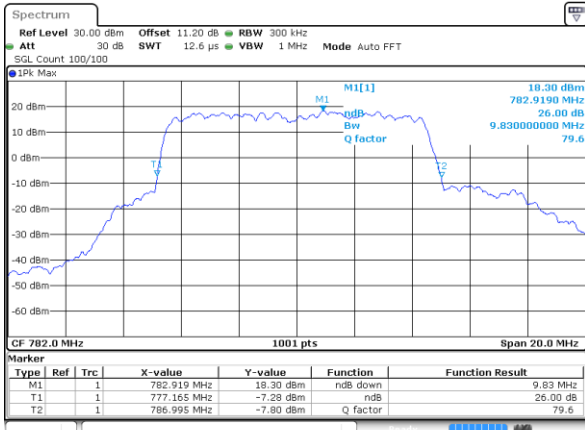
Date: 28.FEB.2022 17:15:50

Middle Channel / 5MHz / 16QAM



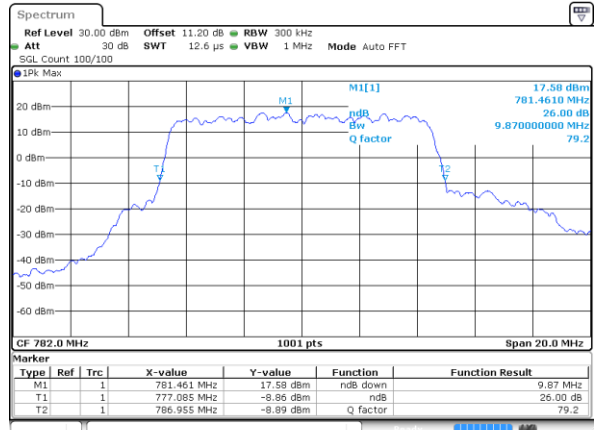
Date: 28.FEB.2022 17:16:21

Middle Channel / 10MHz / QPSK



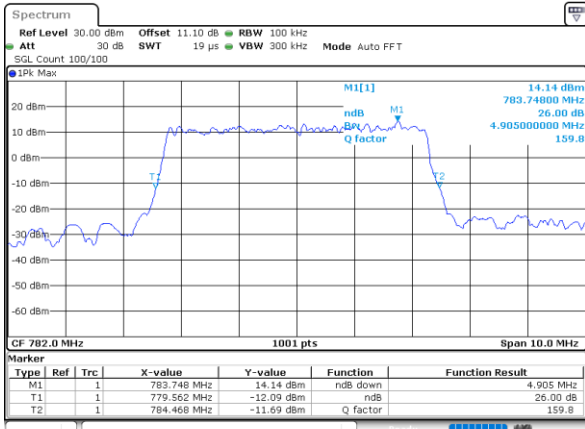
Date: 24 MAR 2021 00:06:31

Middle Channel / 10MHz / 16QAM



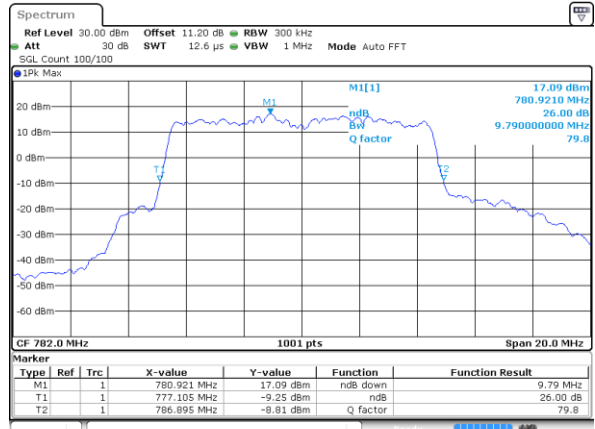
Date: 24 MAR 2021 00:06:08

Middle Channel / 5MHz / 64QAM



Date: 28.FEB.2022 17:23:52

Middle Channel / 10MHz / 64QAM



Date: 24 MAR 2021 00:19:18



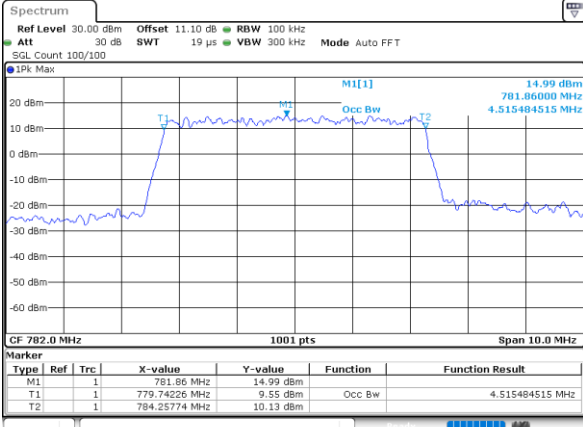
Occupied Bandwidth

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
Middle CH	-	-	-	-	4.52	4.48	9.03	8.99	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Middle CH	-	-	-	-	4.51	-	9.05	-	-	-	-	-



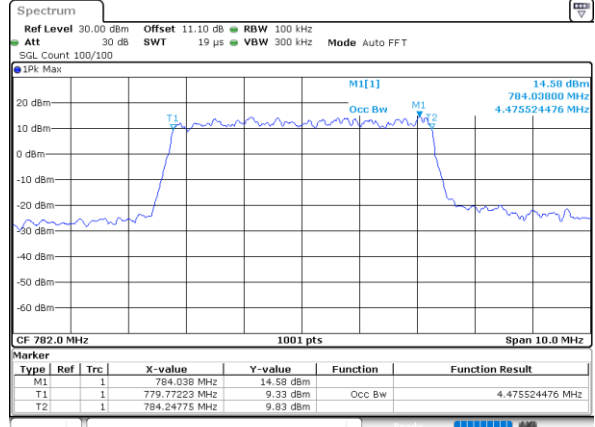
LTE Band 13

Middle Channel / 5MHz / QPSK



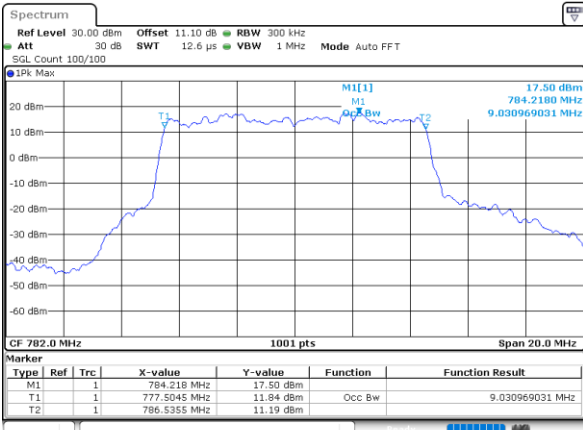
Date: 28.FEB.2022 17:17:08

Middle Channel / 5MHz / 16QAM



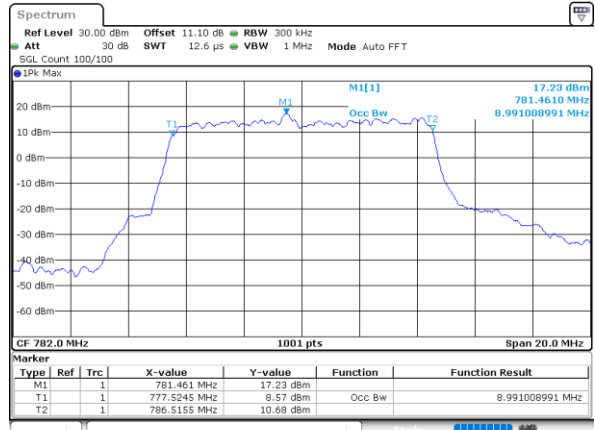
Date: 28.FEB.2022 17:16:45

Middle Channel / 10MHz / QPSK



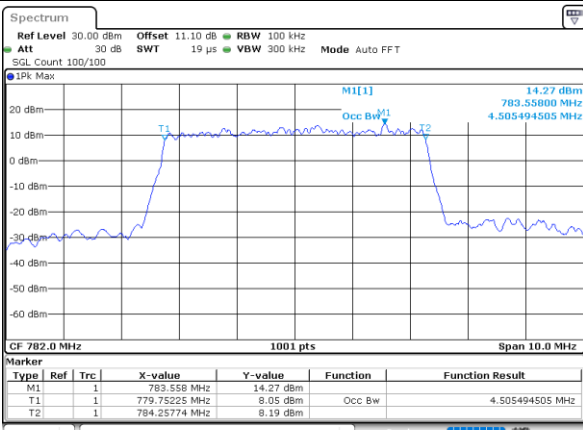
Date: 28.FEB.2022 17:29:45

Middle Channel / 10MHz / 16QAM



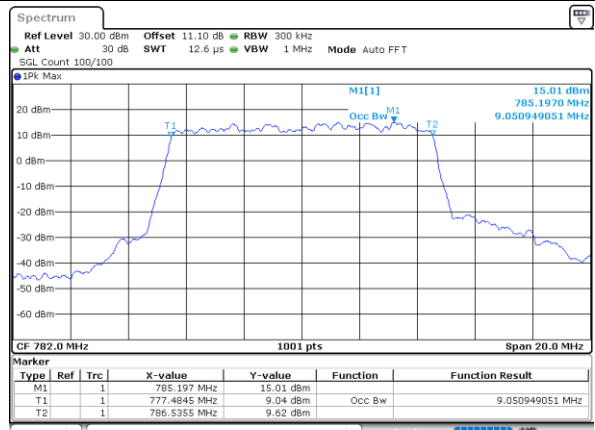
Date: 28.FEB.2022 17:30:08

Middle Channel / 5MHz / 64QAM



Date: 28.FEB.2022 17:24:16

Middle Channel / 10MHz / 64QAM



Date: 28.FEB.2022 17:37:33