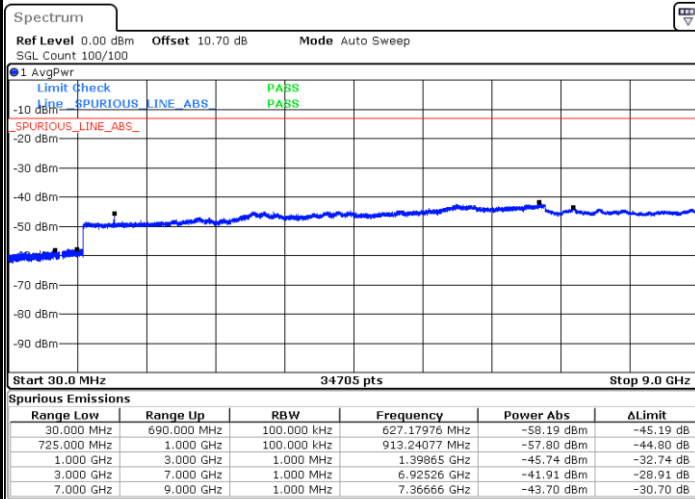




Conducted Spurious Emission

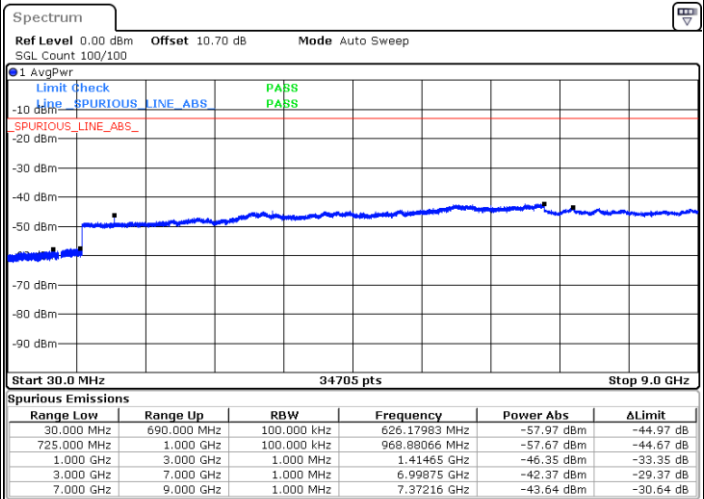
LTE Band 12 / 1.4MHz

Lowest Channel / QPSK



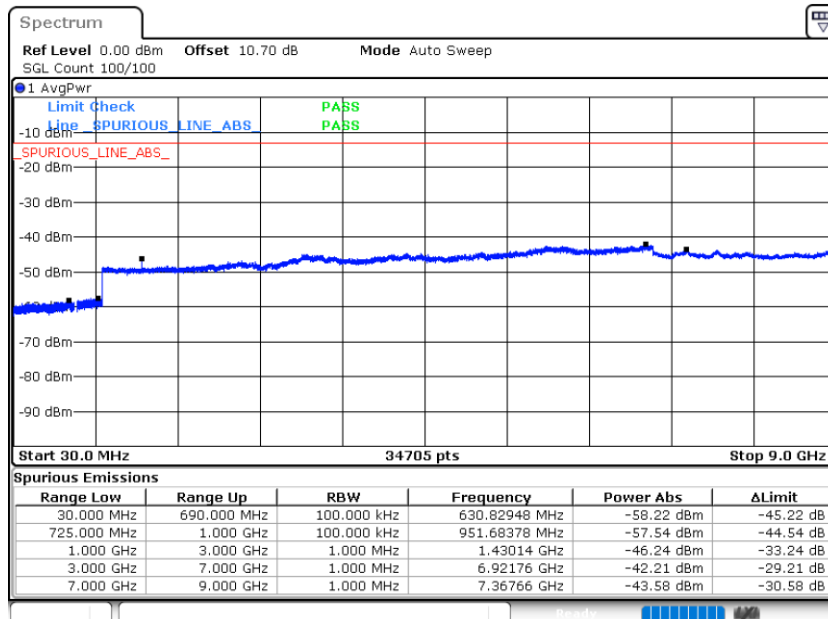
Date: 21.APR.2022 16:38:28

Middle Channel / QPSK



Date: 21.APR.2022 16:41:31

Highest Channel / QPSK



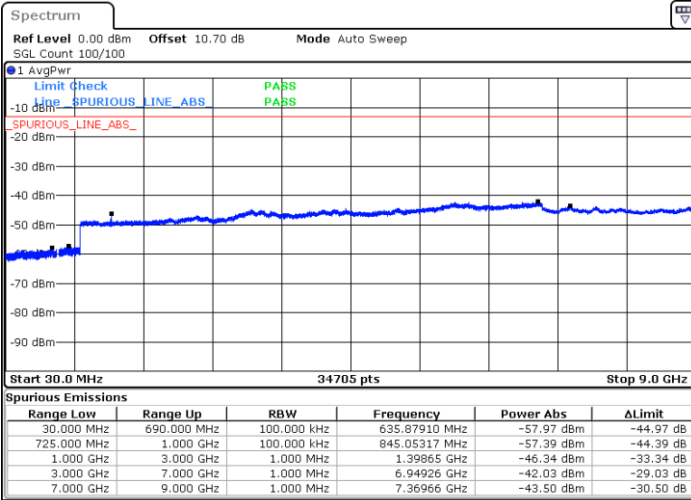
Date: 21.APR.2022 16:47:26



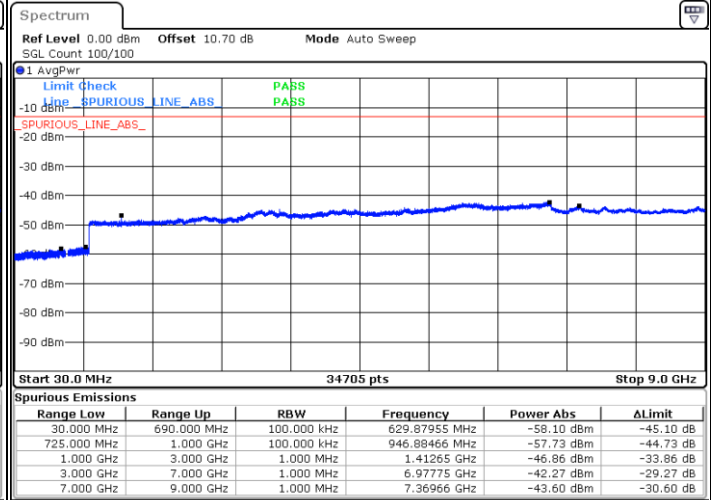
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

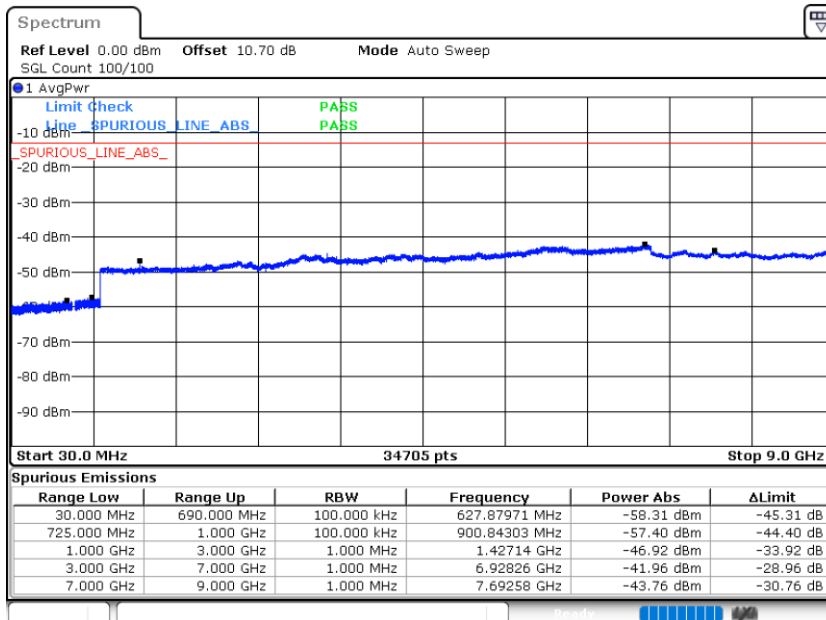


Date: 21.APR.2022 16:58:27



Date: 21.APR.2022 17:01:26

Highest Channel / QPSK



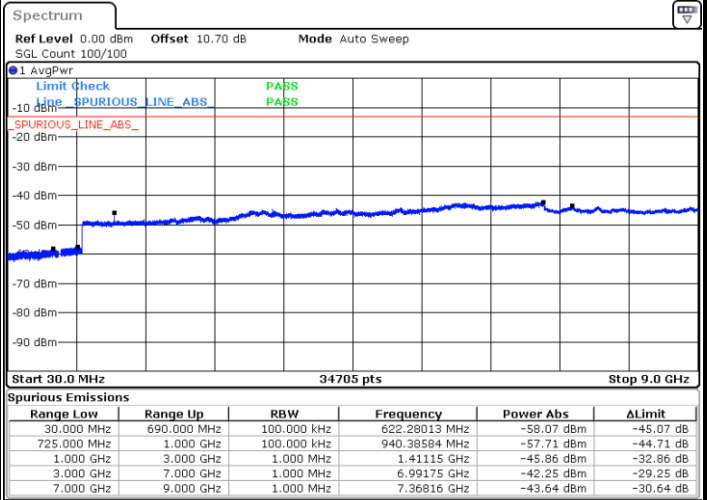
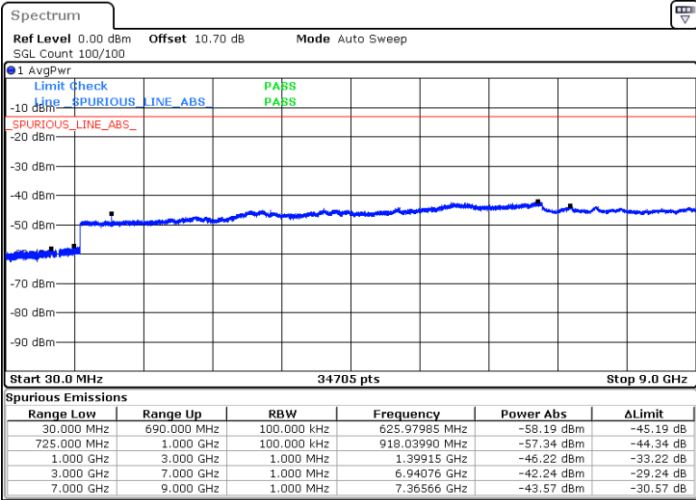
Date: 21.APR.2022 17:07:19



LTE Band 12 / 5MHz

Lowest Channel / QPSK

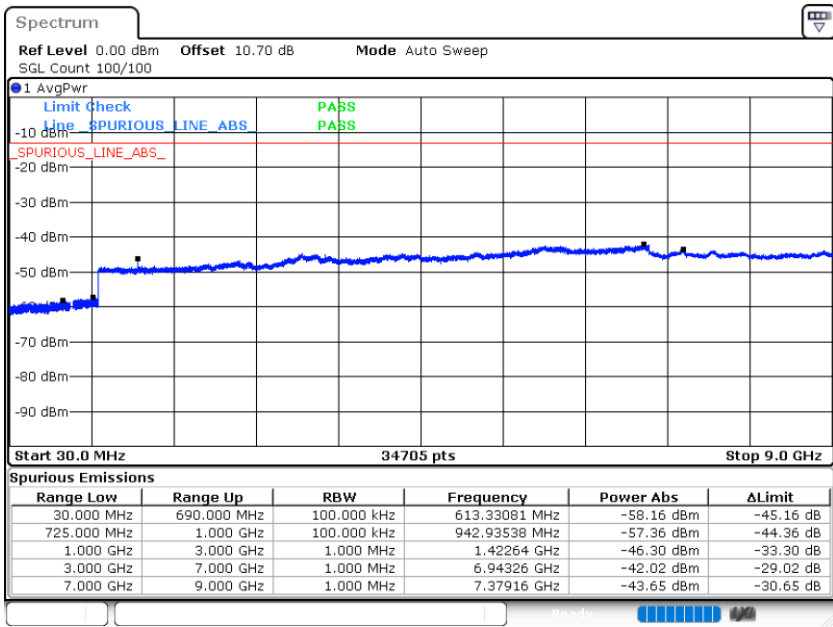
Middle Channel / QPSK



Date: 21.APR.2022 17:23:39

Date: 21.APR.2022 17:26:37

Highest Channel / QPSK

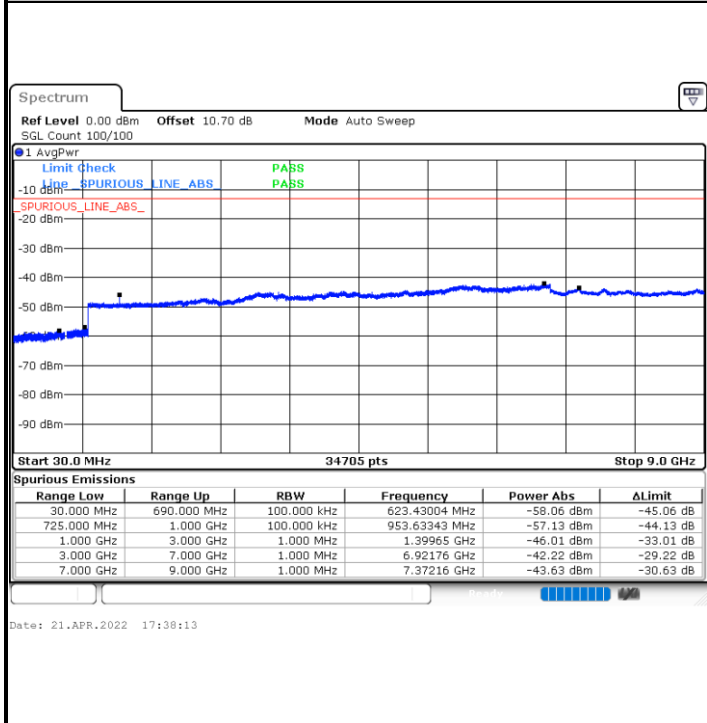


Date: 21.APR.2022 17:32:31

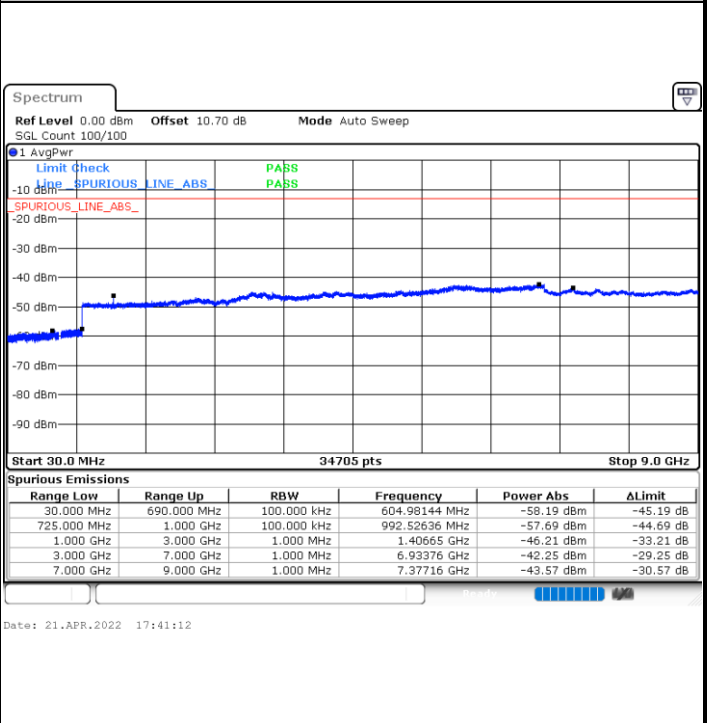


LTE Band 12 / 10MHz

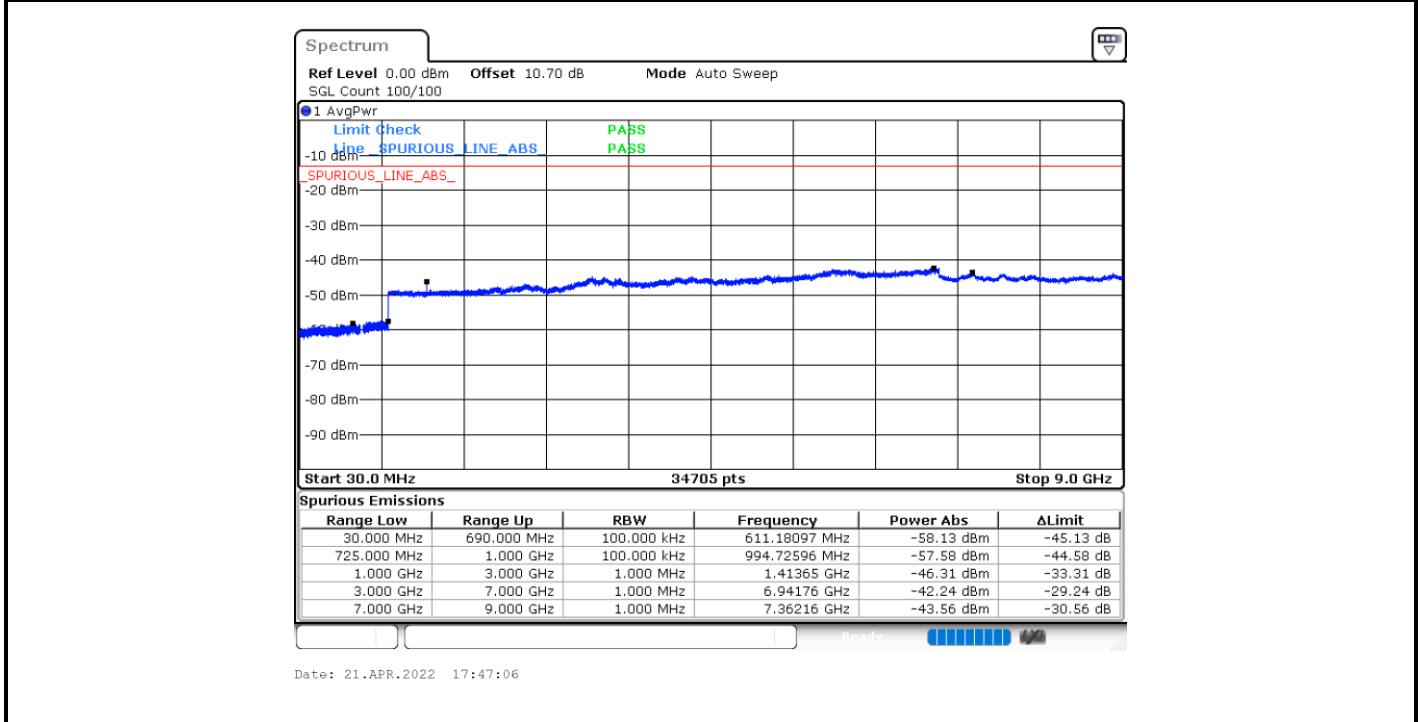
Lowest Channel / QPSK



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	0.0030	PASS
40	Normal Voltage	0.0102	
30	Normal Voltage	0.0058	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0158	
0	Normal Voltage	0.0143	
-10	Normal Voltage	0.0194	
-20	Normal Voltage	0.0182	
-30	Normal Voltage	0.0045	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

Note:

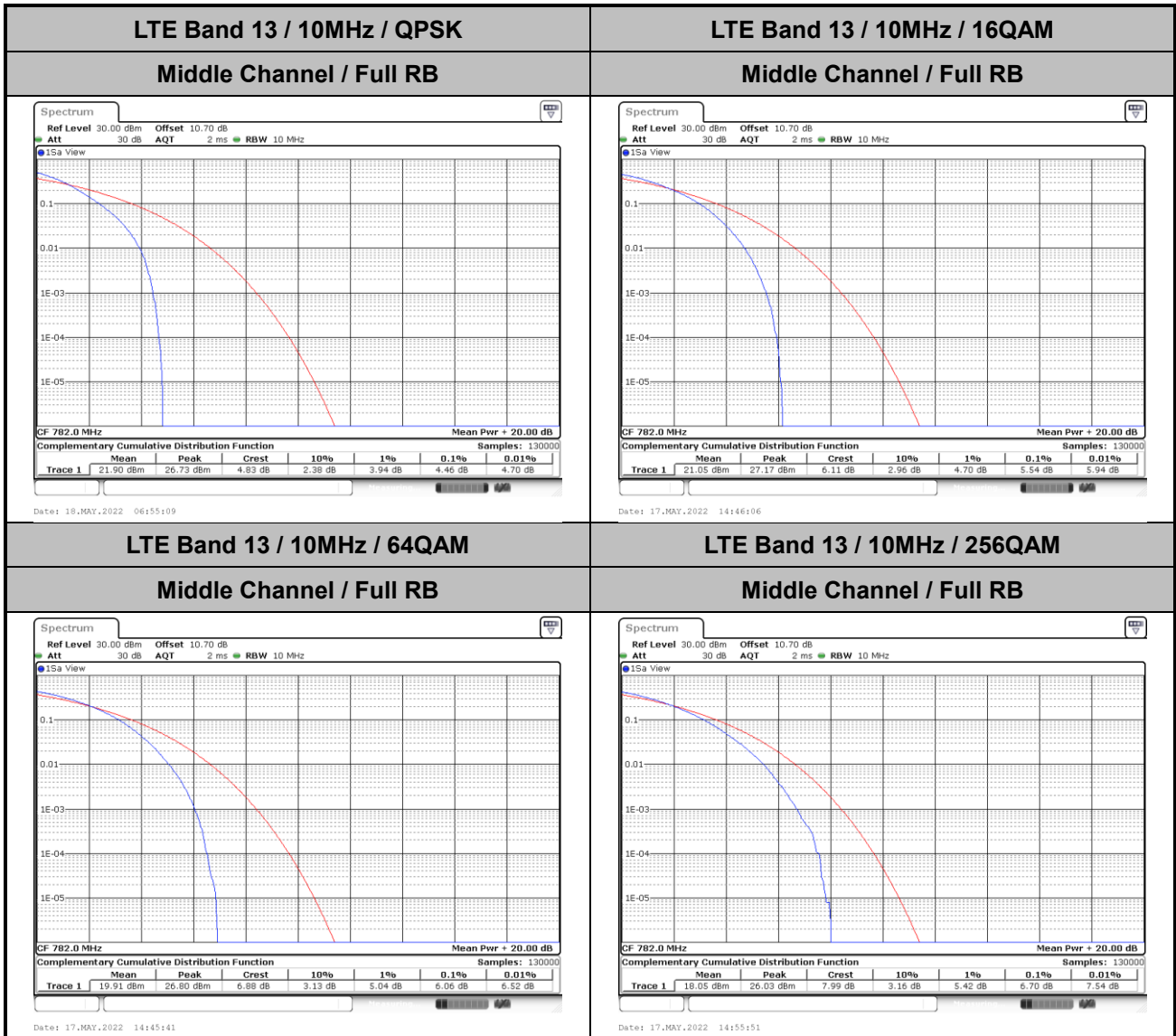
1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.30 V. ; Maximum Voltage = 4.25 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



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	4.46	5.54	6.06	6.70	PASS





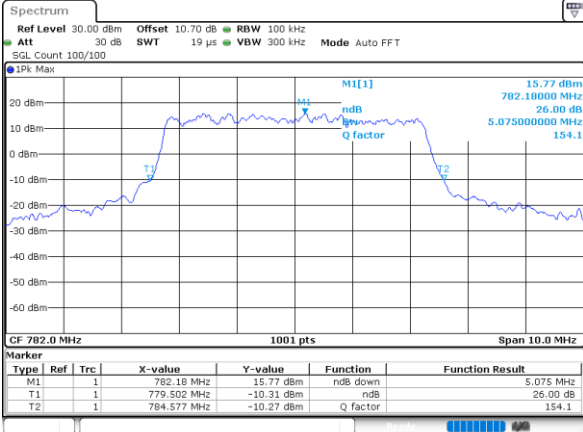
26dB Bandwidth

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	-	-	-	-	5.08	5.11	9.87	9.69	-	-	-	-
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	-	-	-	-	5.04	5.10	9.87	9.81	-	-	-	-



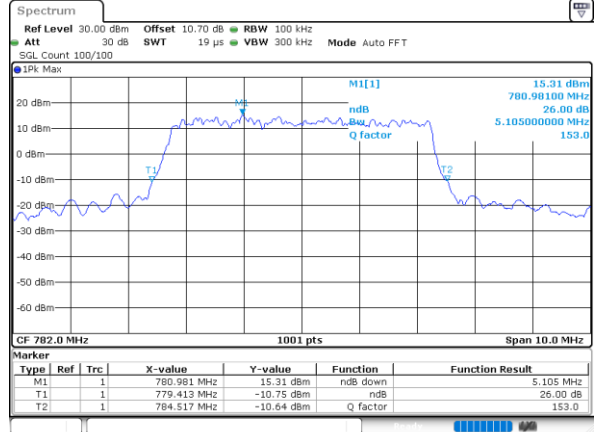
LTE Band 13

Middle Channel / 5MHz / QPSK



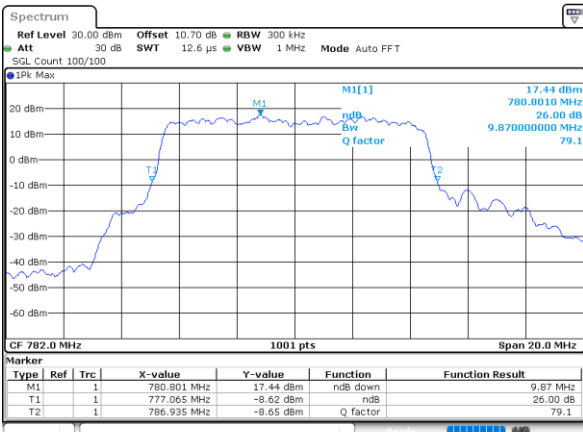
Date: 17.MAY.2022 14:24:49

Middle Channel / 5MHz / 16QAM



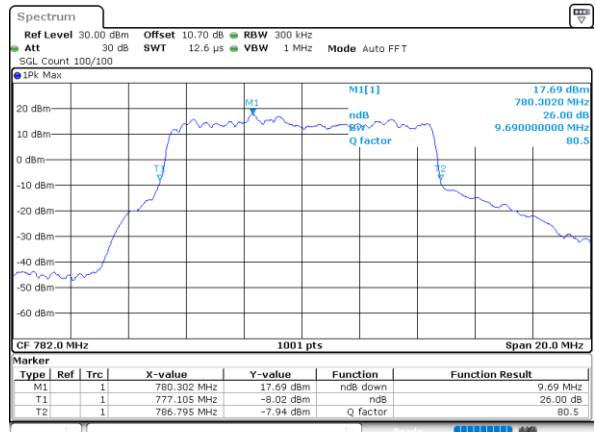
Date: 17.MAY.2022 14:25:13

Middle Channel / 10MHz / QPSK



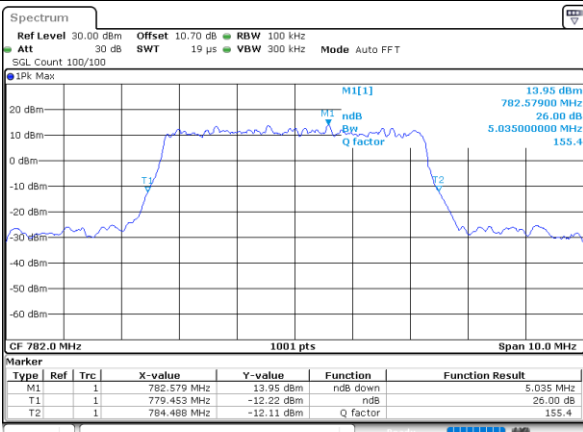
Date: 17.MAY.2022 14:36:04

Middle Channel / 10MHz / 16QAM



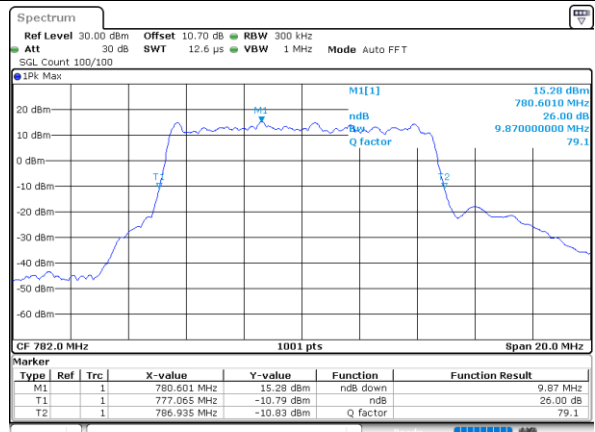
Date: 17.MAY.2022 14:35:41

Middle Channel / 5MHz / 64QAM



Date: 17.MAY.2022 14:32:29

Middle Channel / 10MHz / 64QAM



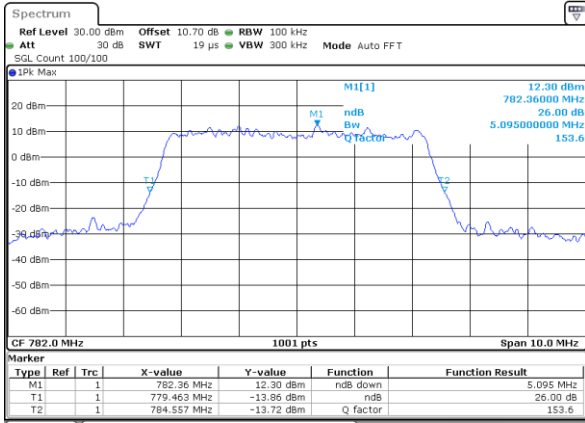
Date: 17.MAY.2022 14:42:52



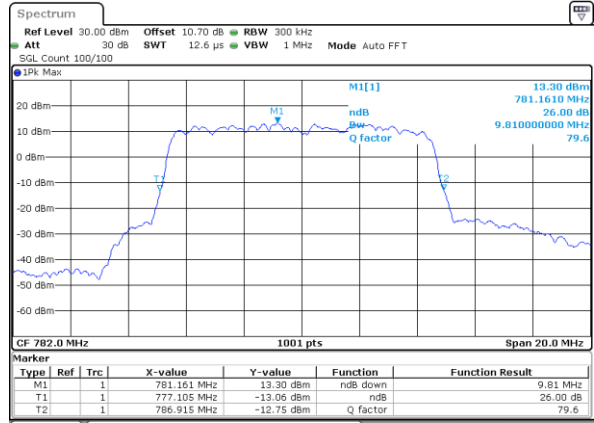
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 17_MAY.2022 14:48:47



Date: 17_MAY.2022 14:53:01



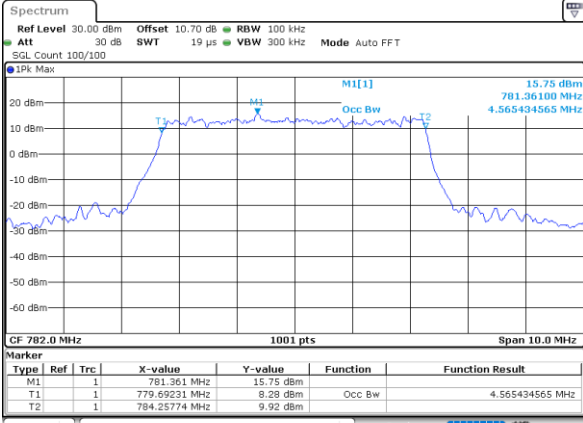
Occupied Bandwidth

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	-	-	-	-	4.57	4.52	8.97	9.03	-	-	-	-
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	4.50	9.03	9.09	-	-	-	-



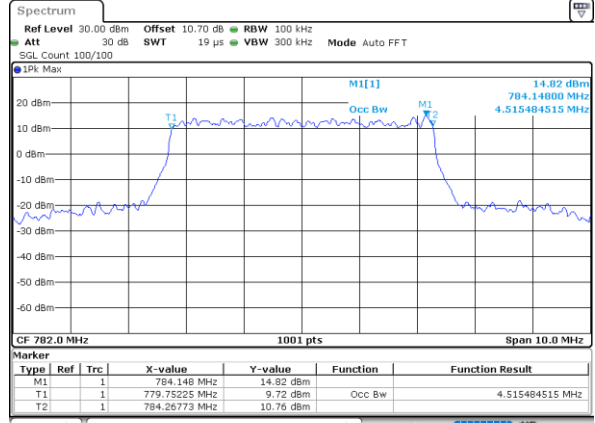
LTE Band 13

Middle Channel / 5MHz / QPSK



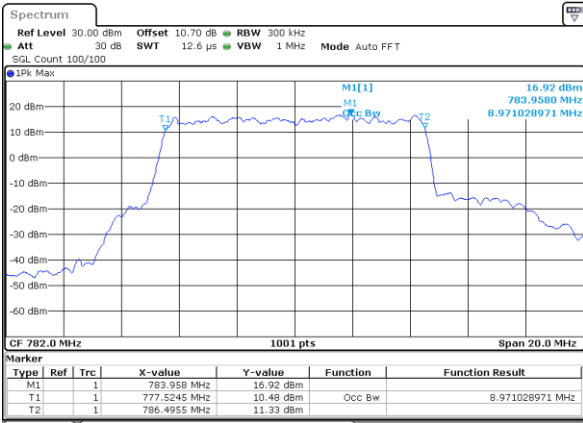
Date: 17.MAY.2022 14:25:59

Middle Channel / 5MHz / 16QAM



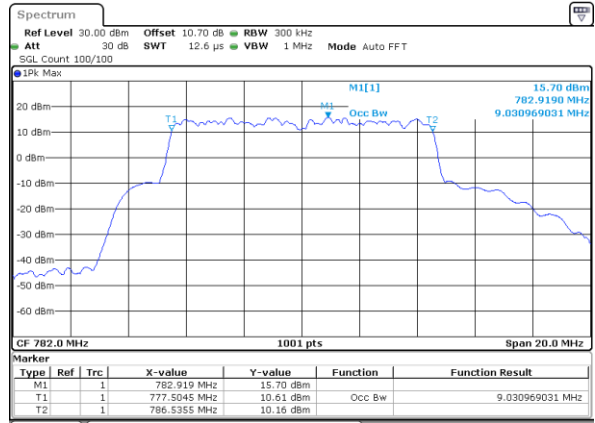
Date: 17.MAY.2022 14:25:36

Middle Channel / 10MHz / QPSK



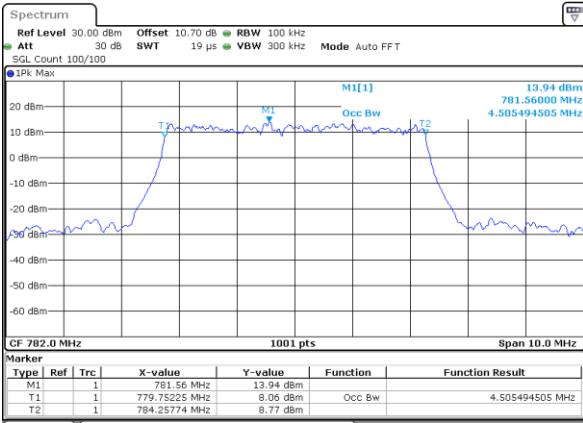
Date: 17.MAY.2022 14:34:54

Middle Channel / 10MHz / 16QAM



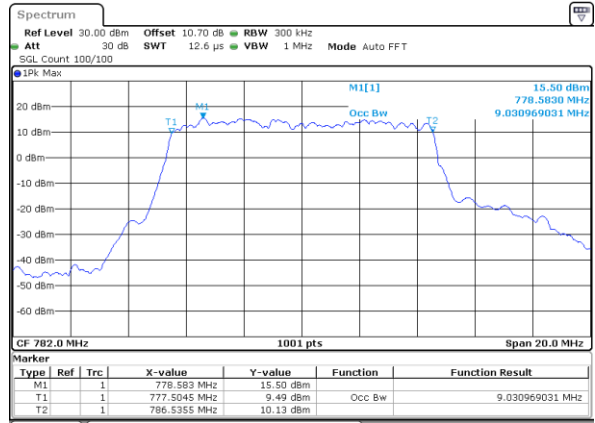
Date: 17.MAY.2022 14:35:17

Middle Channel / 5MHz / 64QAM



Date: 17.MAY.2022 14:32:52

Middle Channel / 10MHz / 64QAM



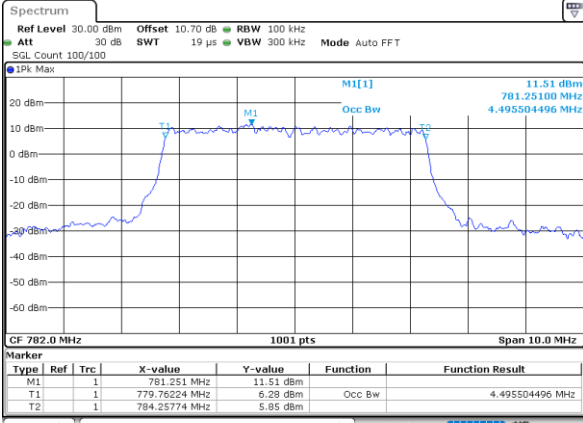
Date: 17.MAY.2022 14:42:29



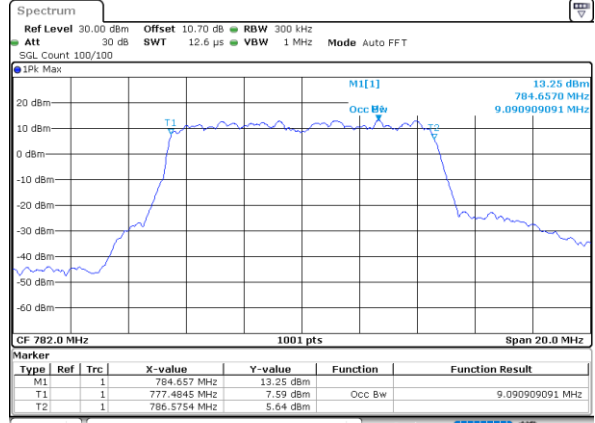
LTE Band 13

Middle Channel / 5MHz / 256QAM

Middle Channel / 10MHz / 256QAM



Date: 17.MAY.2022 14:49:11



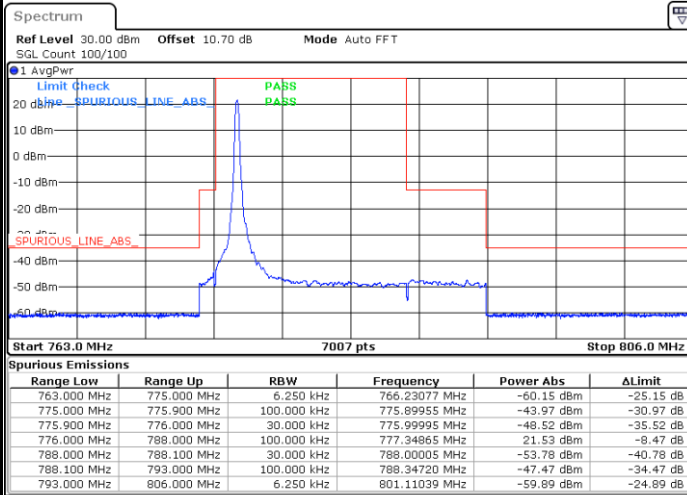
Date: 17.MAY.2022 14:52:38



Conducted Band Edge

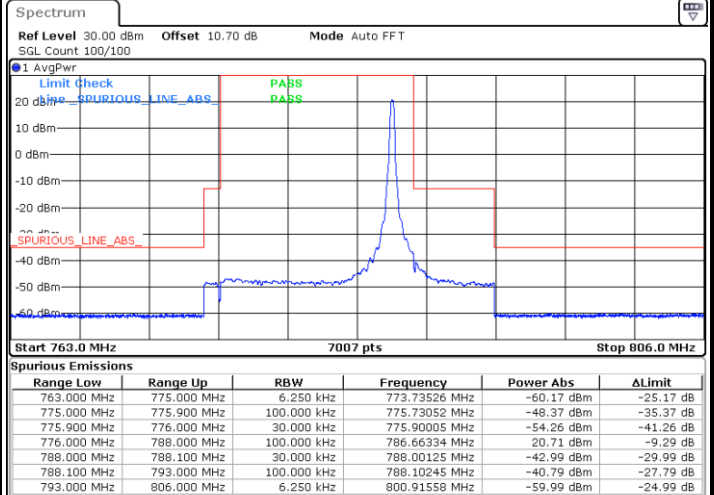
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



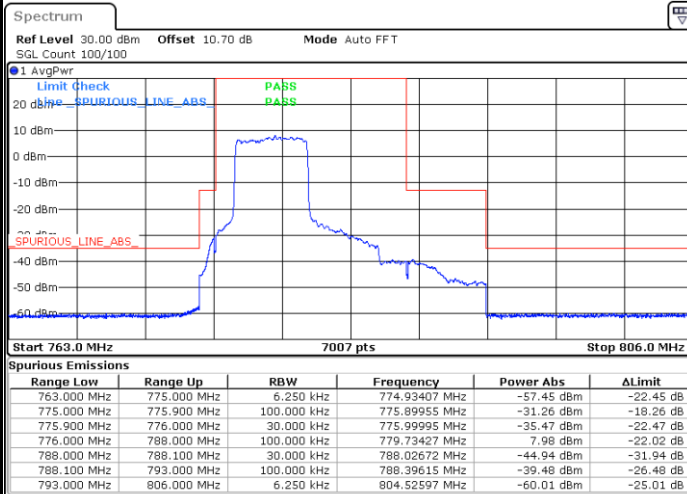
Date: 17.MAY.2022 14:21:59

Highest Band Edge / 1 RB



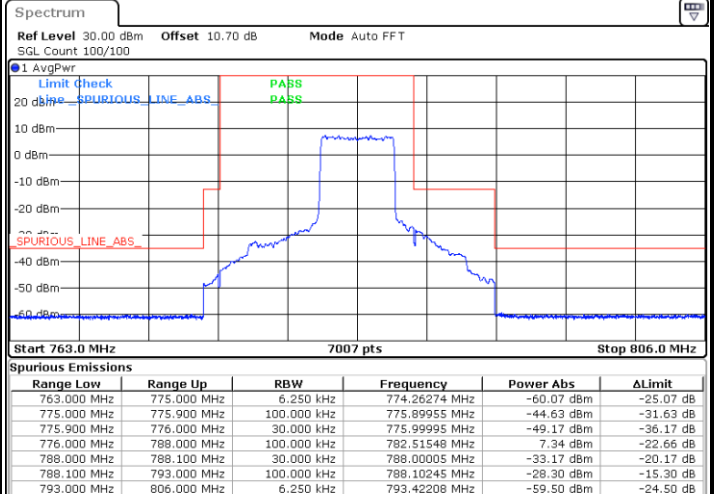
Date: 17.MAY.2022 14:29:13

Lowest Band Edge / Full RB



Date: 17.MAY.2022 14:19:33

Highest Band Edge / Full RB



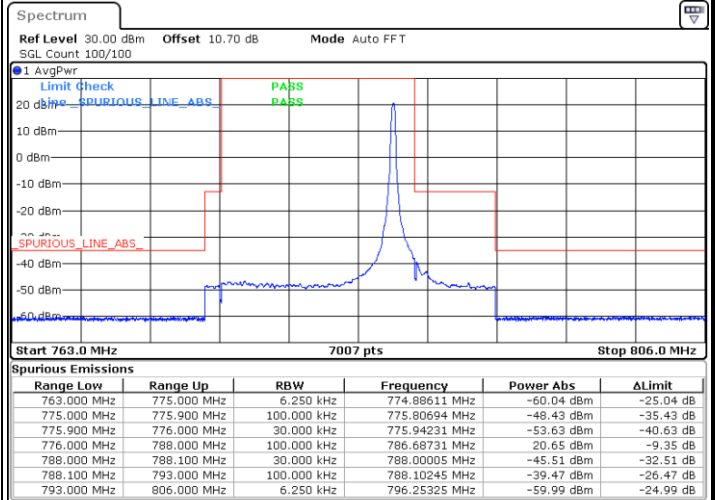
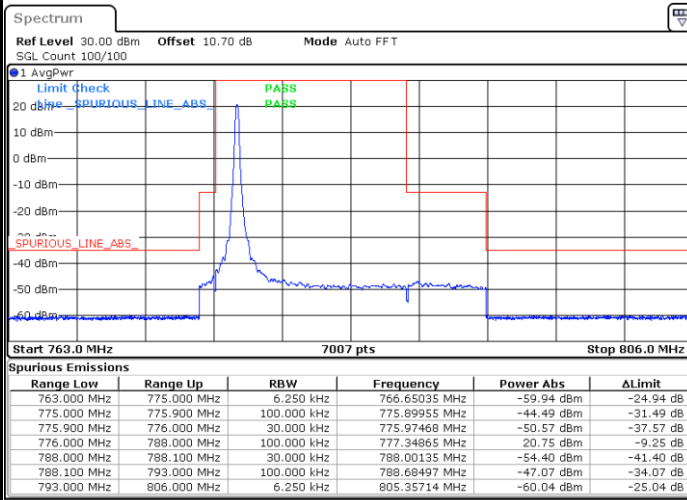
Date: 17.MAY.2022 14:26:47



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

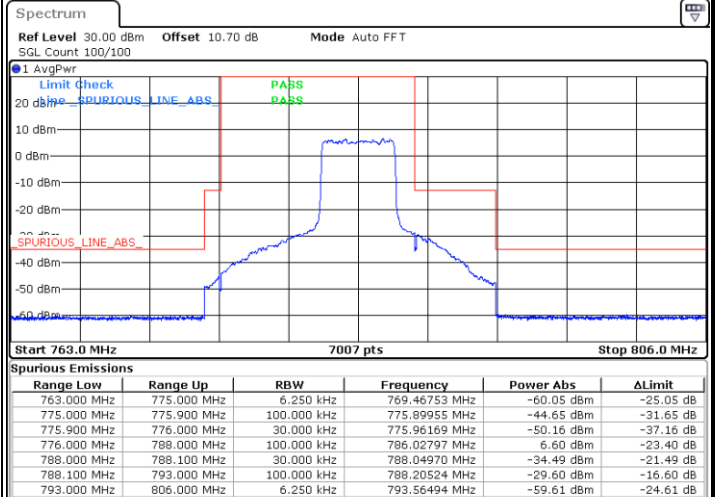
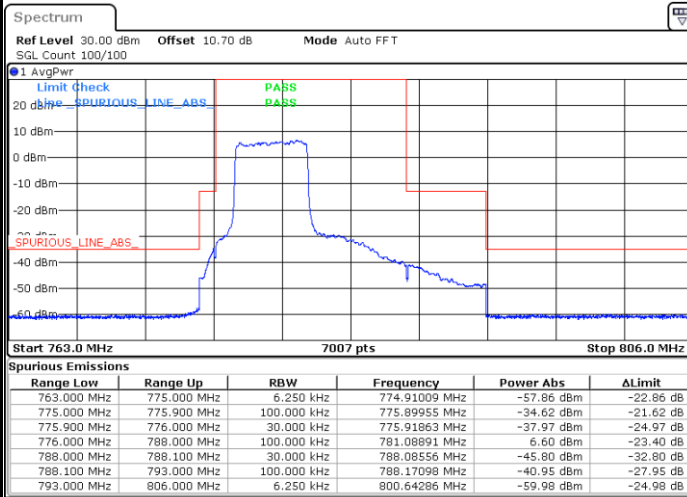


Date: 17.MAY.2022 14:21:10

Date: 17.MAY.2022 14:28:25

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



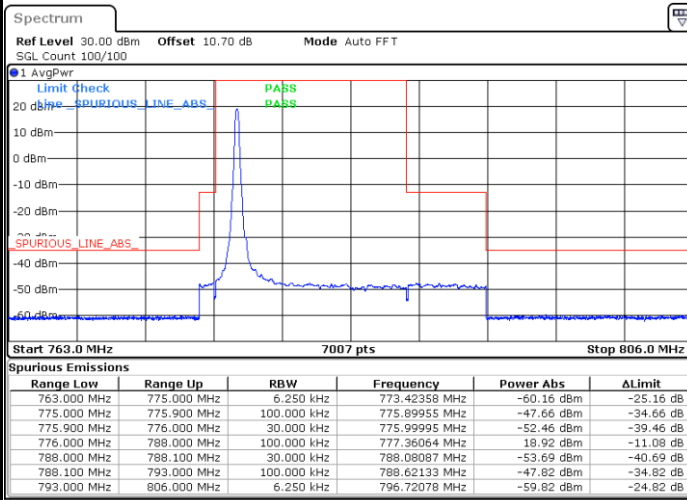
Date: 17.MAY.2022 14:20:22

Date: 17.MAY.2022 14:27:36



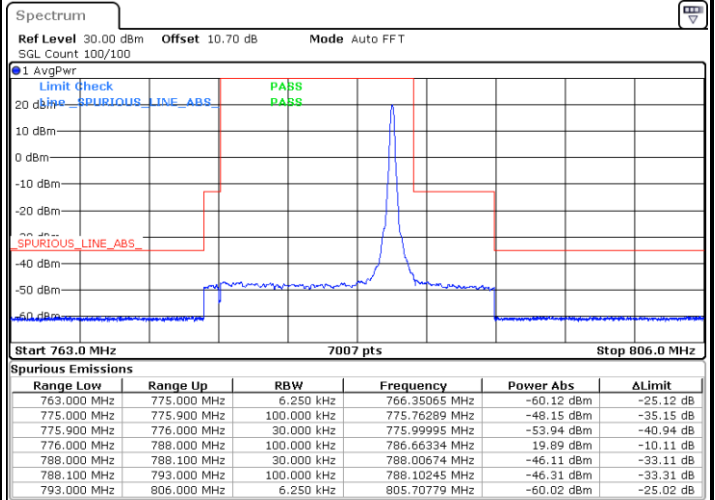
LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB



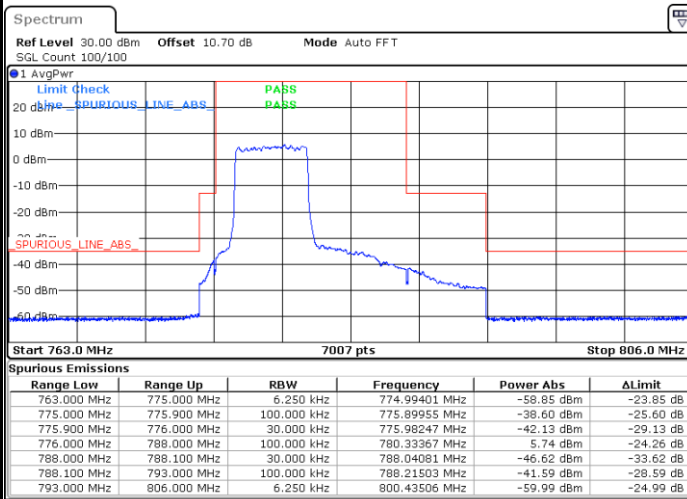
Date: 17.MAY.2022 14:32:04

Highest Band Edge / 1 RB



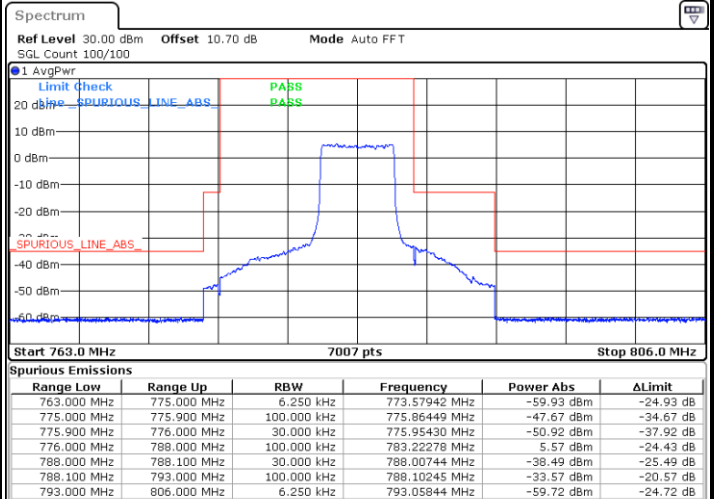
Date: 17.MAY.2022 14:34:29

Lowest Band Edge / Full RB



Date: 17.MAY.2022 14:31:15

Highest Band Edge / Full RB

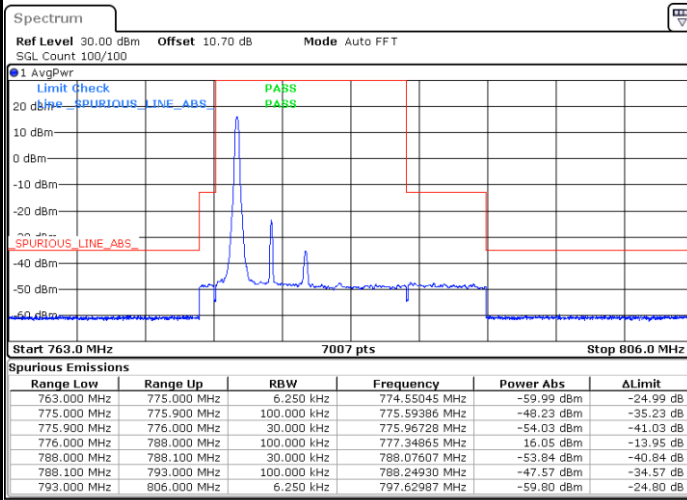


Date: 17.MAY.2022 14:33:40



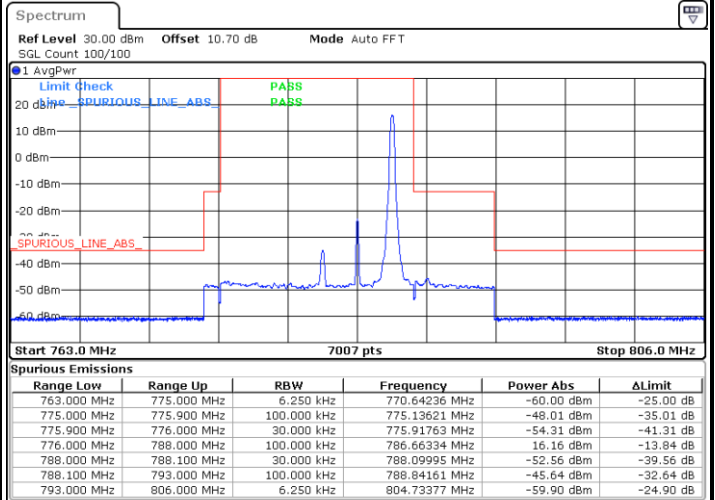
LTE Band 13 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



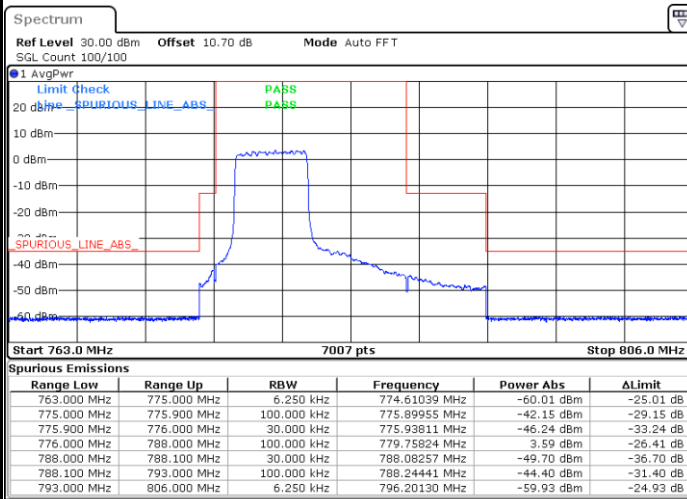
Date: 17.MAY.2022 14:48:00

Highest Band Edge / 1 RB



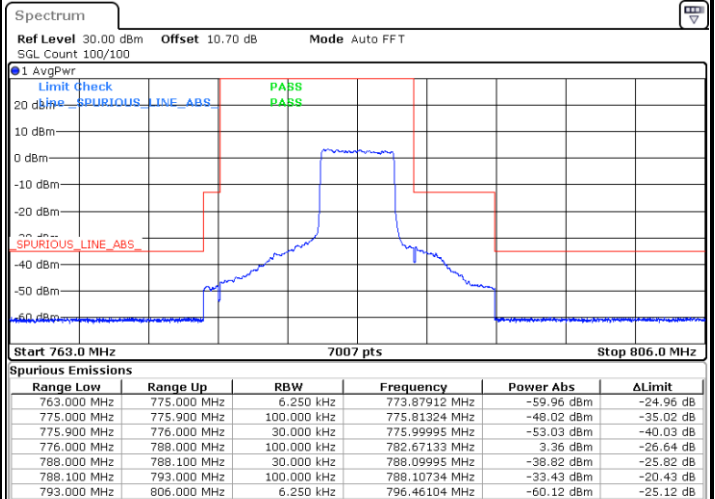
Date: 17.MAY.2022 14:51:33

Lowest Band Edge / Full RB



Date: 17.MAY.2022 14:47:08

Highest Band Edge / Full RB

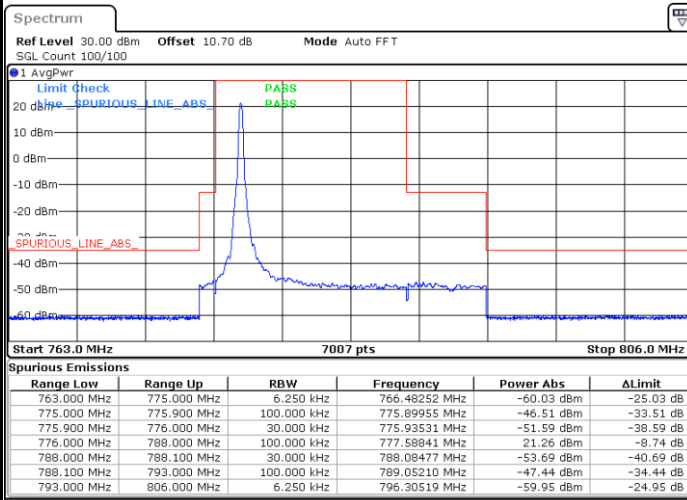


Date: 17.MAY.2022 14:50:41



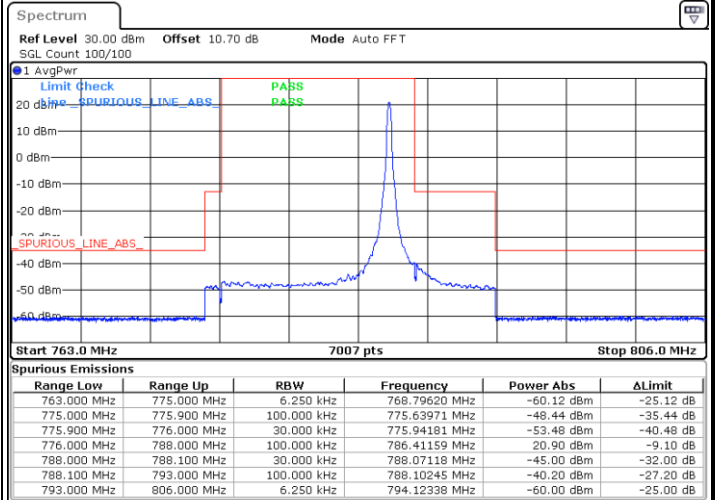
LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB



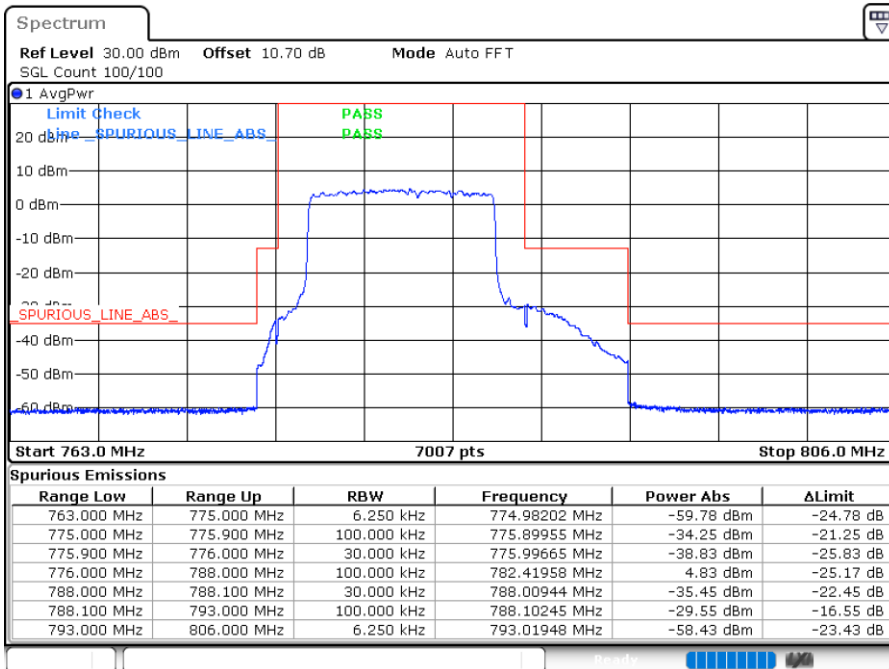
Date: 17.MAY.2022 14:39:16

Highest Band Edge / 1 RB



Date: 17.MAY.2022 14:40:04

Band Edge / Full RB

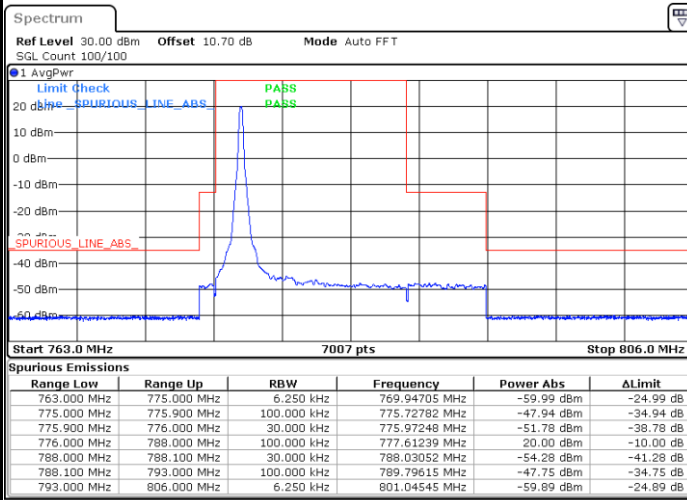


Date: 17.MAY.2022 14:36:51



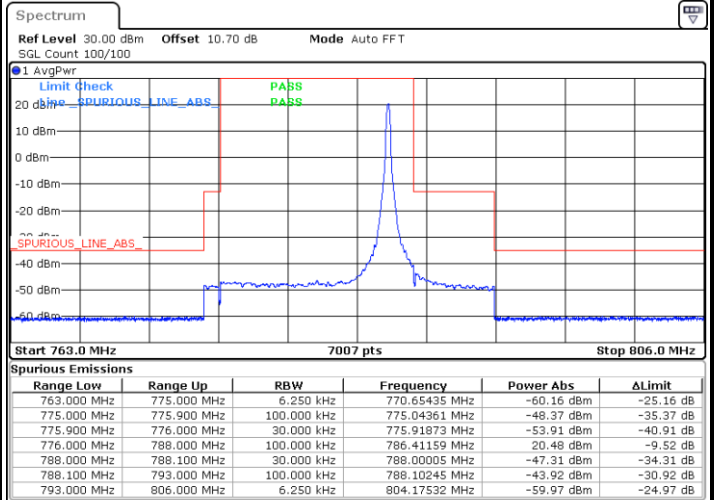
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



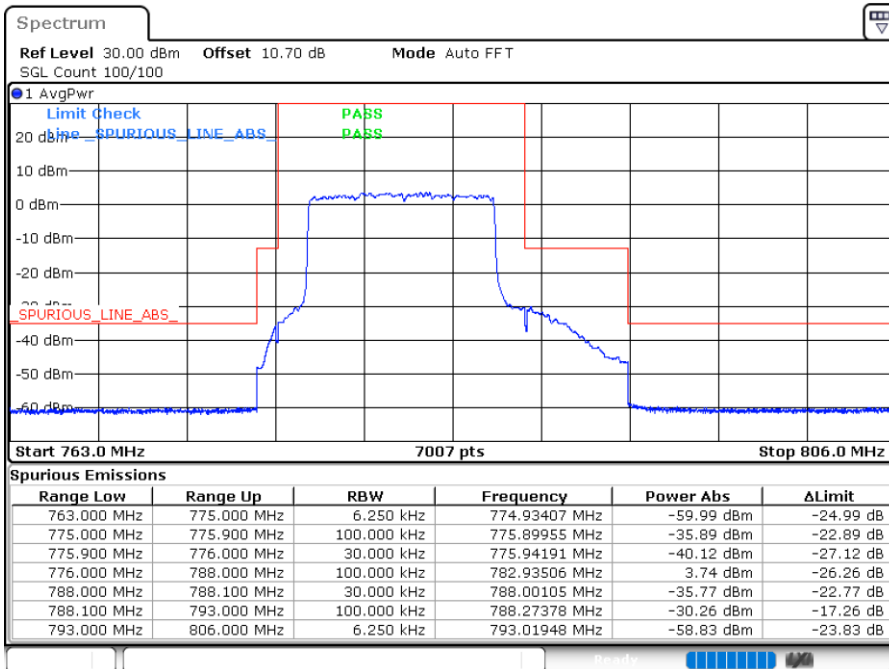
Date: 17.MAY.2022 14:38:28

Highest Band Edge / 1 RB



Date: 17.MAY.2022 14:40:52

Band Edge / Full RB

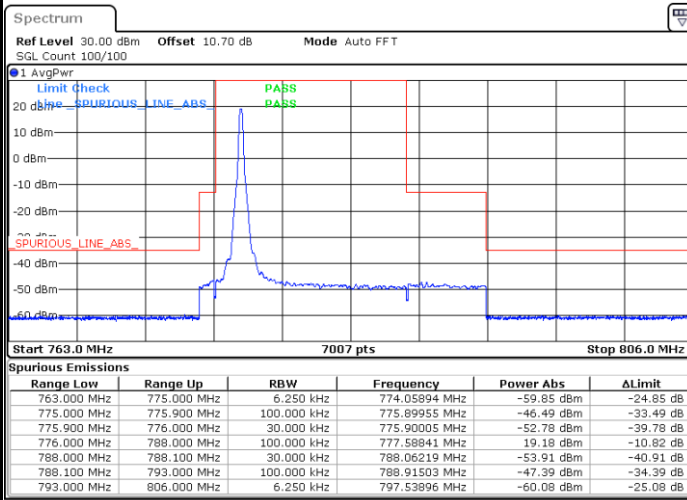


Date: 17.MAY.2022 14:37:40



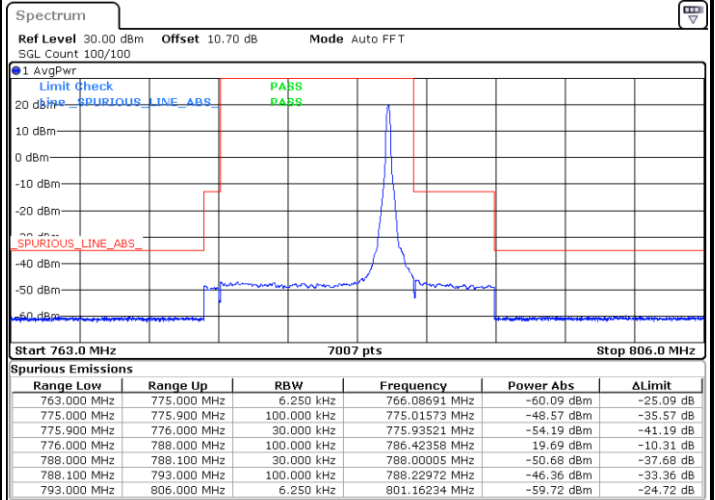
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



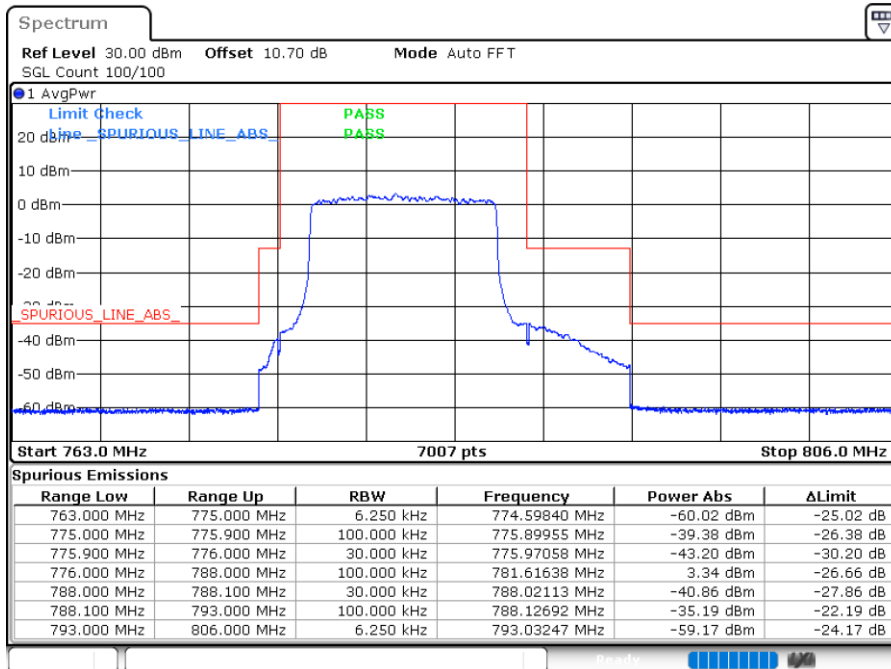
Date: 17.MAY.2022 14:44:28

Highest Band Edge / 1 RB



Date: 17.MAY.2022 14:45:16

Band Edge / Full RB

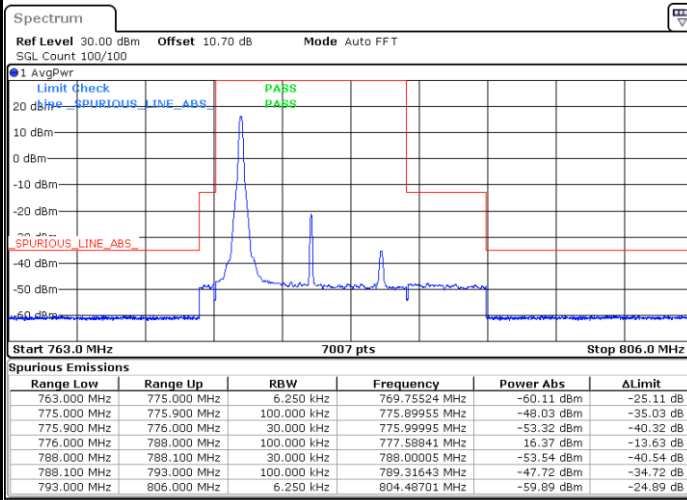


Date: 17.MAY.2022 14:43:40



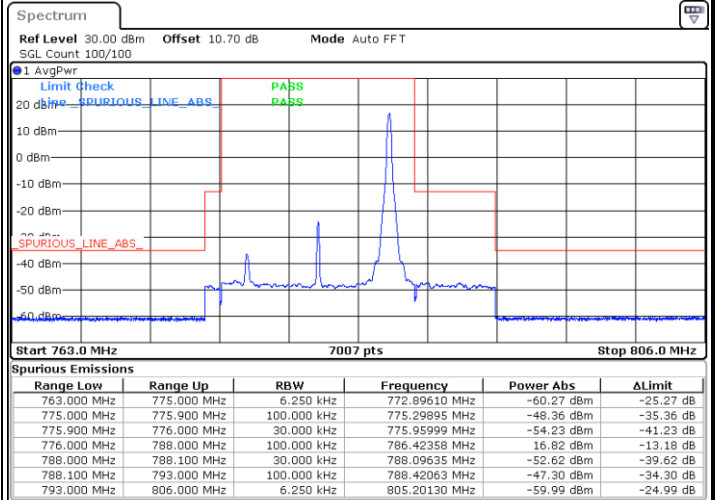
LTE Band 13 / 10MHz / 256QAM

Lowest Band Edge / 1 RB



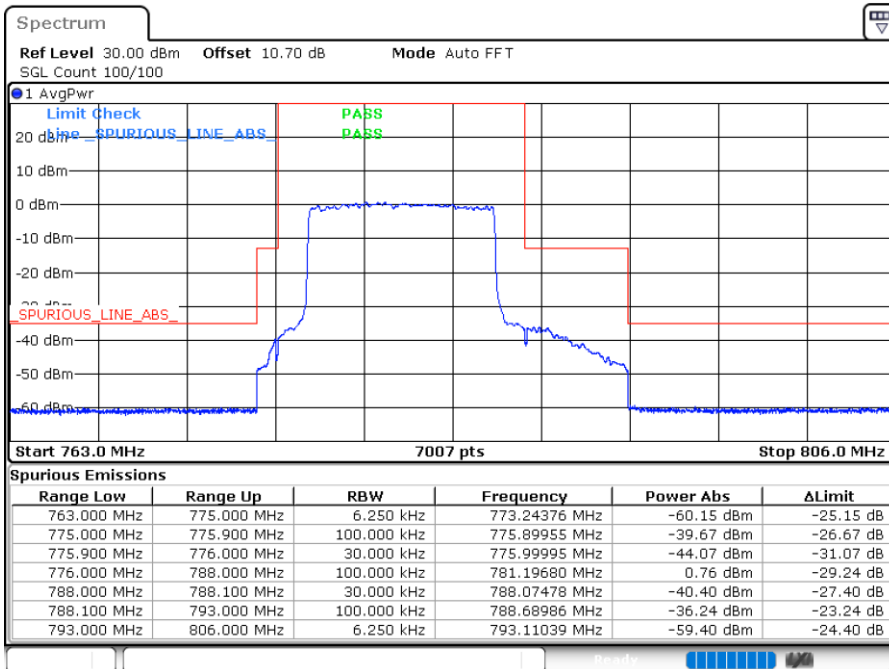
Date: 17.MAY.2022 14:54:37

Highest Band Edge / 1 RB



Date: 17.MAY.2022 14:55:25

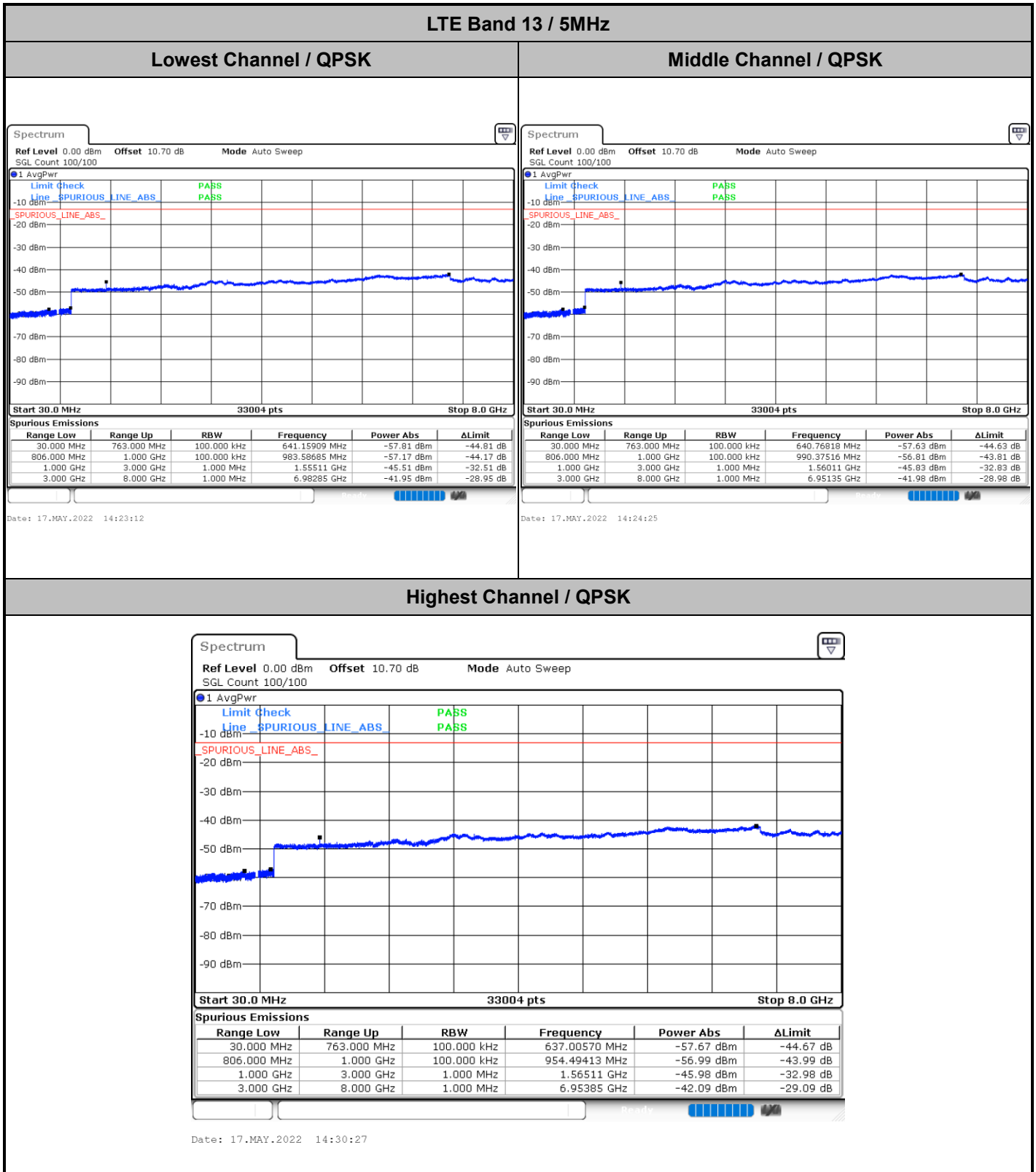
Band Edge / Full RB



Date: 17.MAY.2022 14:53:49



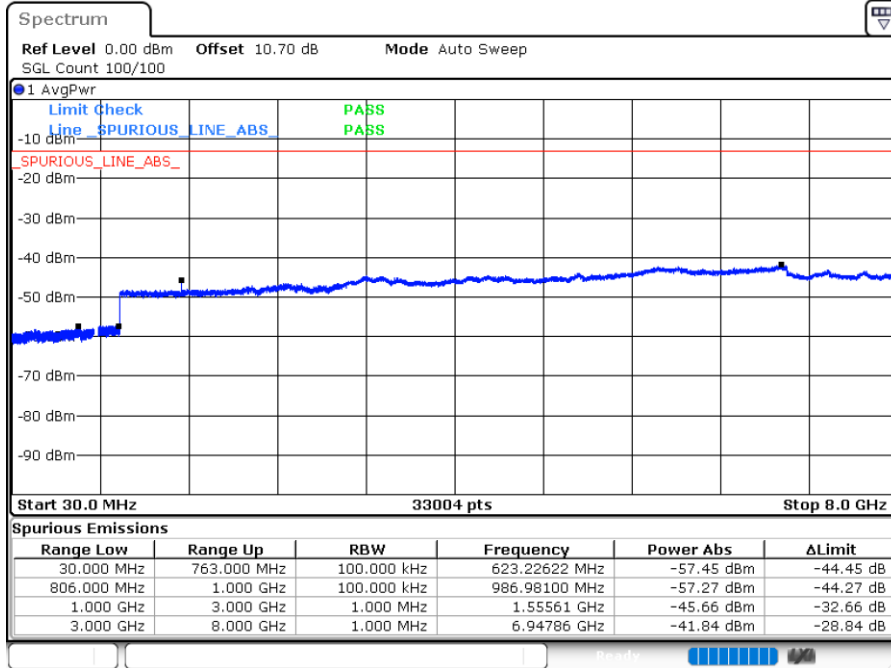
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 17.MAY.2022 14:42:05



Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0042	PASS
40	Normal Voltage	0.0096	
30	Normal Voltage	0.0150	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0107	
0	Normal Voltage	0.0012	
-10	Normal Voltage	0.0119	
-20	Normal Voltage	0.0059	
-30	Normal Voltage	0.0086	
20	Maximum Voltage	0.0160	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0037	

Note:

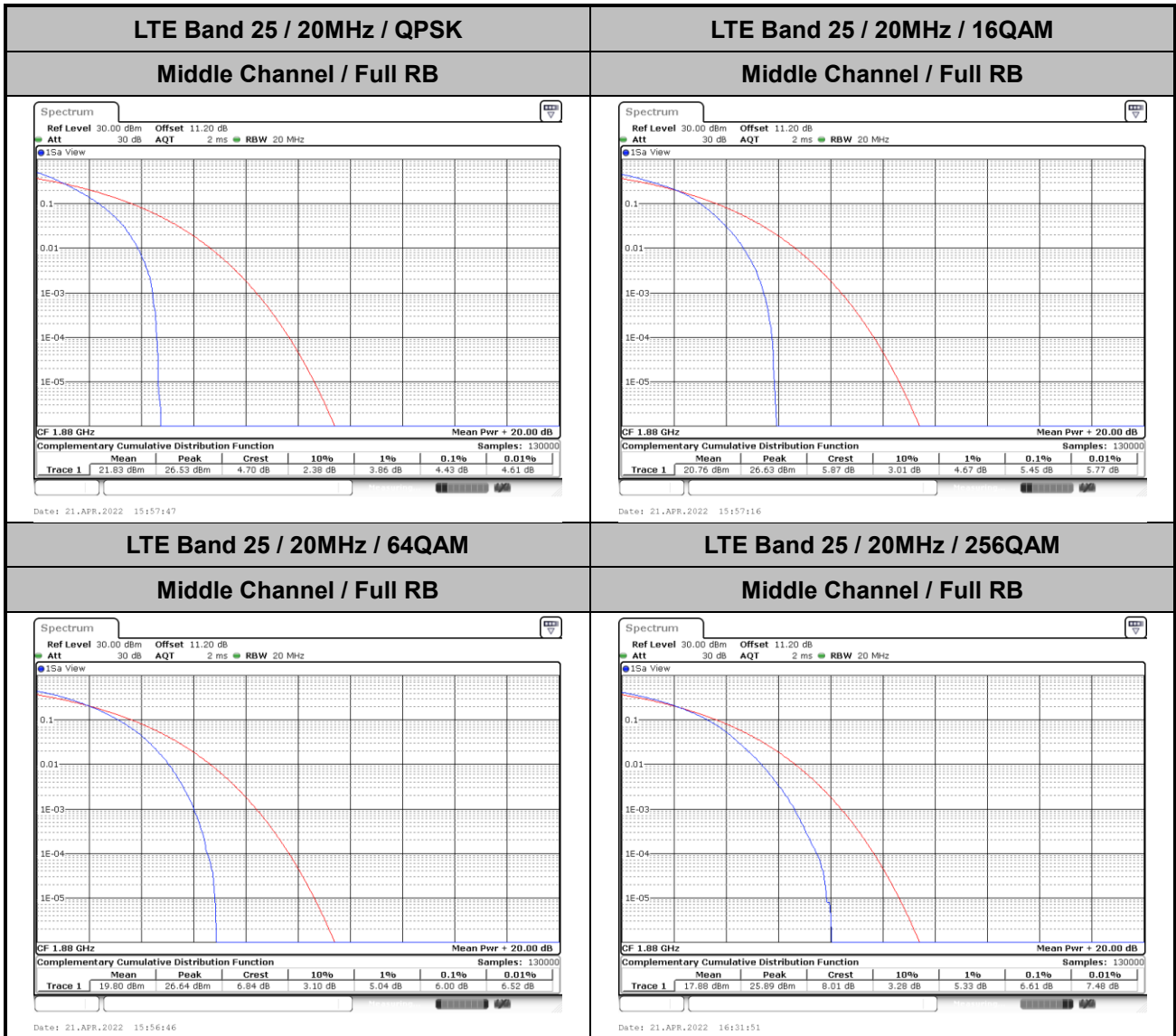
1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.30 V. ; Maximum Voltage =4.25 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 25

Peak-to-Average Ratio

Mode	LTE Band 25 / 20MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.43	5.45	6.00	6.61	PASS





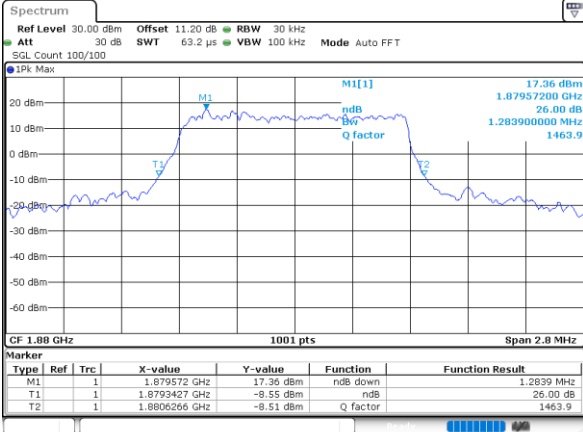
26dB Bandwidth

Mode	LTE Band 25 : 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	1.28	1.29	3.12	3.03	4.74	5.00	10.03	10.31	14.24	14.42	19.14	19.30
Mode	LTE Band 25 : 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	1.37	1.34	3.07	3.09	5.14	5.11	9.89	10.13	14.60	14.33	19.02	18.94



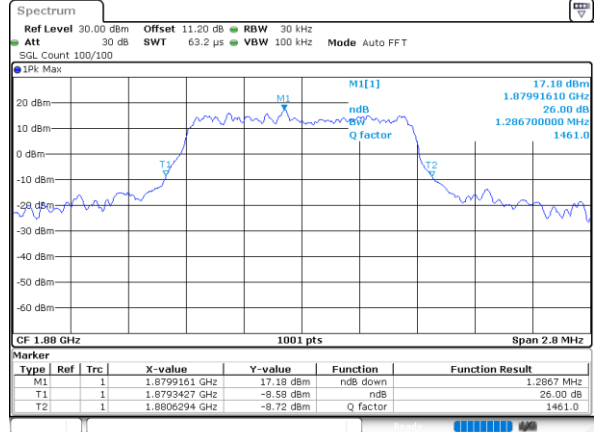
LTE Band 25

Middle Channel / 1.4MHz / QPSK



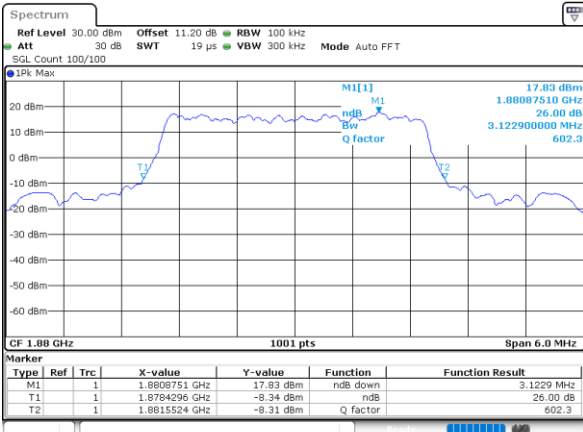
Date: 21.APR.2022 14:01:05

Middle Channel / 1.4MHz / 16QAM



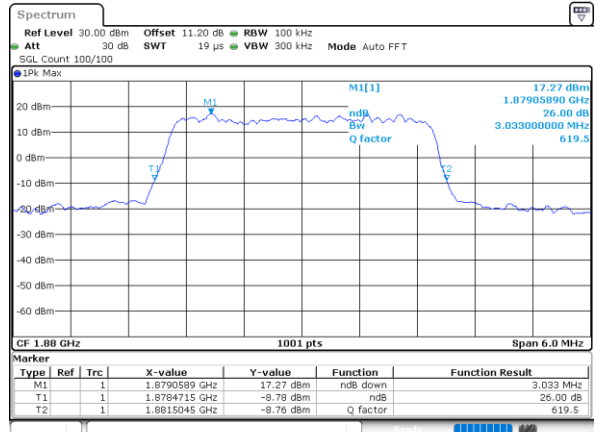
Date: 21.APR.2022 14:01:34

Middle Channel / 3MHz / QPSK



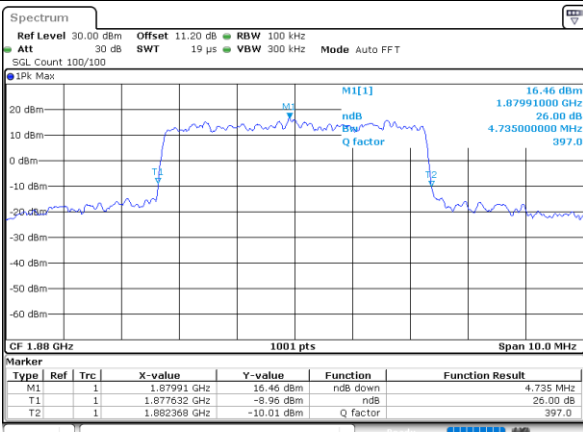
Date: 21.APR.2022 14:26:47

Middle Channel / 3MHz / 16QAM



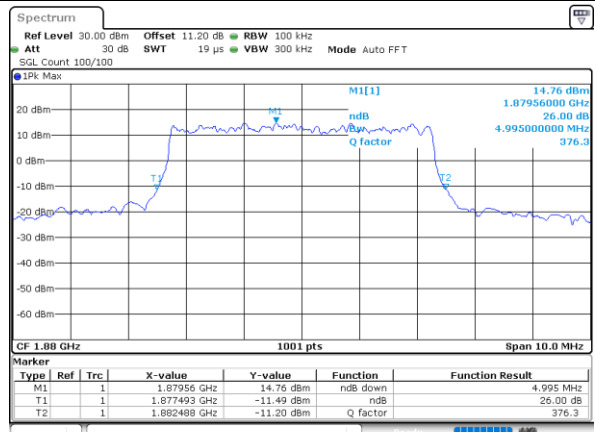
Date: 21.APR.2022 14:27:17

Middle Channel / 5MHz / QPSK



Date: 21.APR.2022 14:41:54

Middle Channel / 5MHz / 16QAM

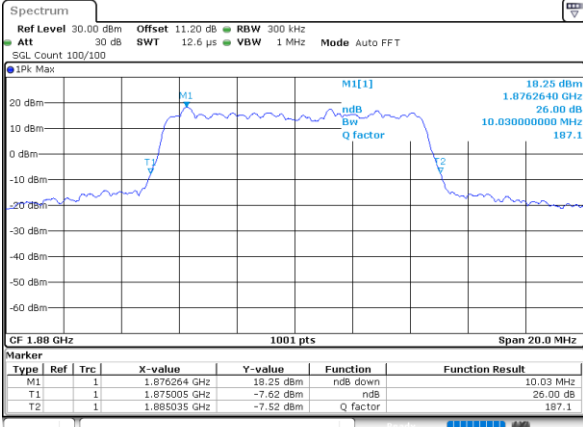


Date: 21.APR.2022 14:42:24



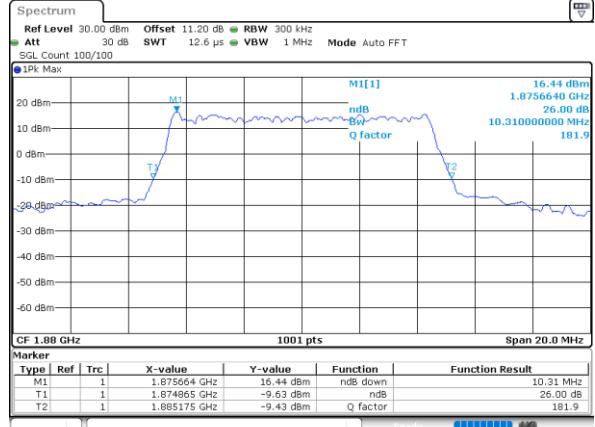
LTE Band 25

Middle Channel / 10MHz / QPSK



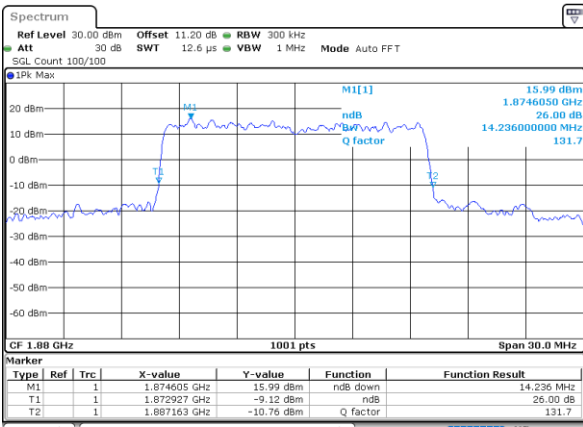
Date: 21.APR.2022 15:02:22

Middle Channel / 10MHz / 16QAM



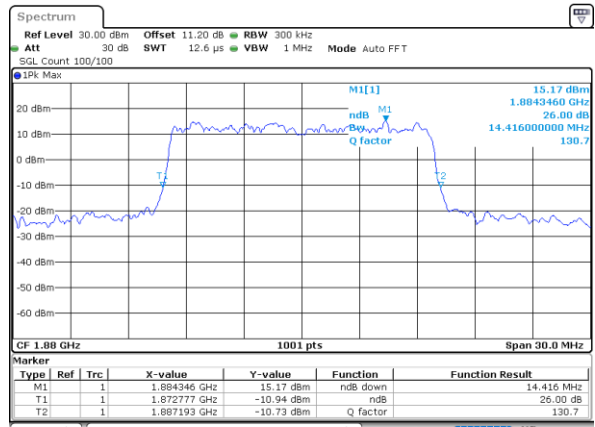
Date: 21.APR.2022 15:02:52

Middle Channel / 15MHz / QPSK



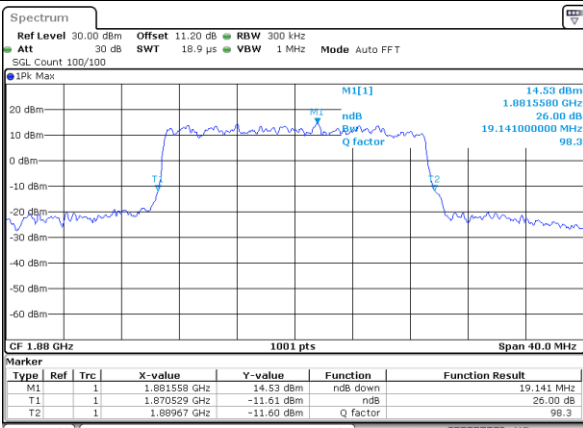
Date: 21.APR.2022 15:28:09

Middle Channel / 15MHz / 16QAM



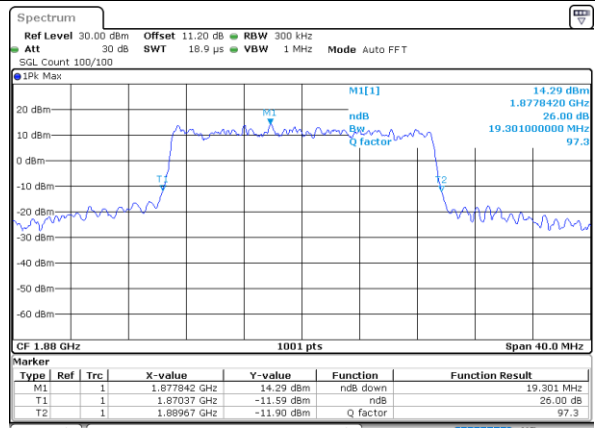
Date: 21.APR.2022 15:28:38

Middle Channel / 20MHz / QPSK



Date: 21.APR.2022 15:43:17

Middle Channel / 20MHz / 16QAM

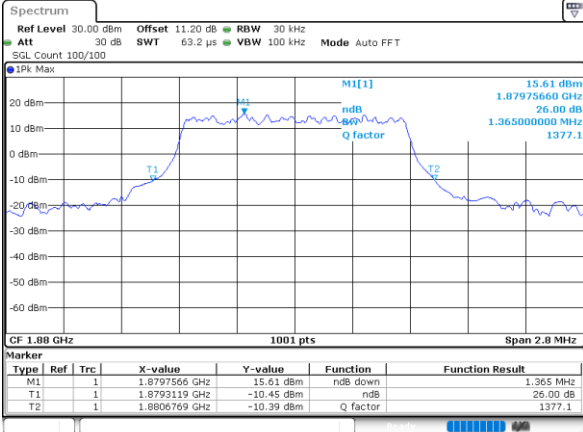


Date: 21.APR.2022 15:43:46



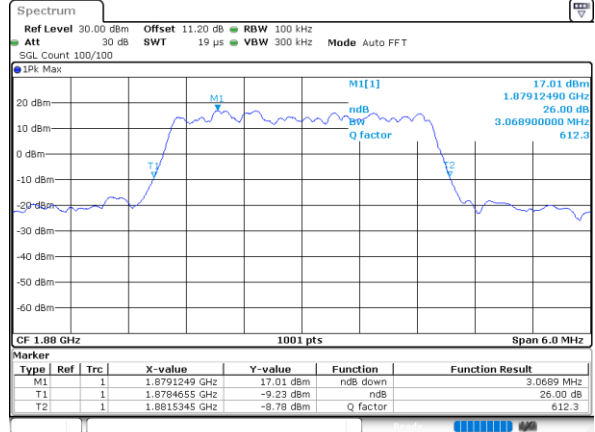
LTE Band 25

Middle Channel / 1.4MHz / 64QAM



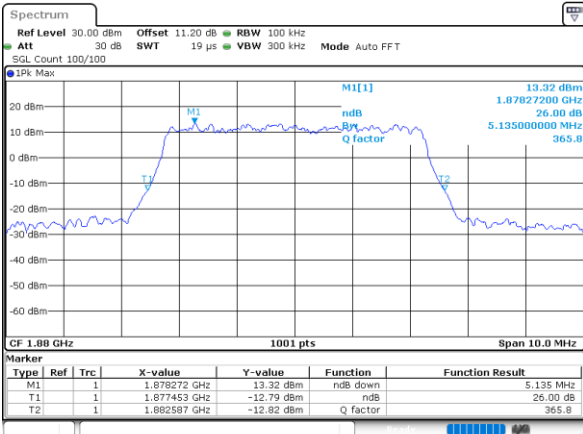
Date: 21.APR.2022 14:11:46

Middle Channel / 3MHz / 64QAM



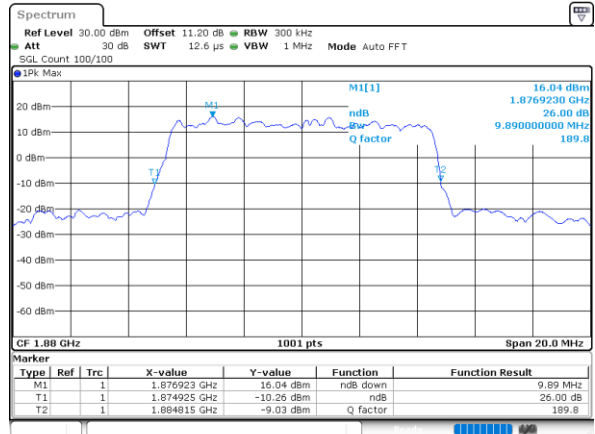
Date: 21.APR.2022 14:17:09

Middle Channel / 5MHz / 64QAM



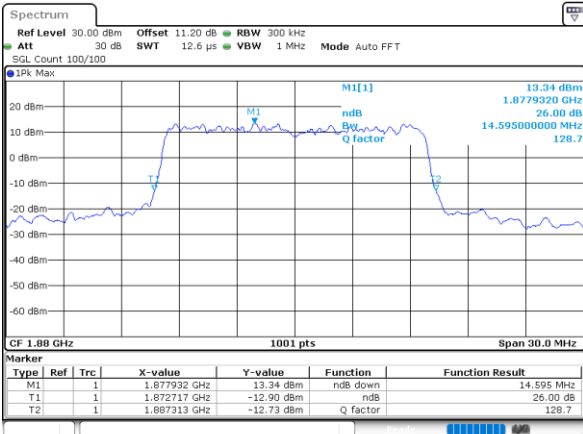
Date: 21.APR.2022 14:52:39

Middle Channel / 10MHz / 64QAM



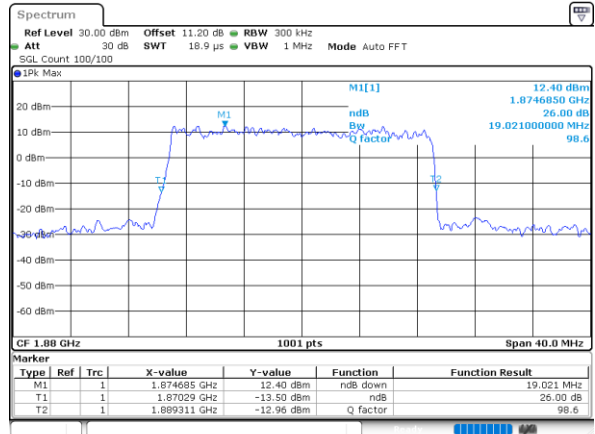
Date: 21.APR.2022 15:13:07

Middle Channel / 15MHz / 64QAM



Date: 21.APR.2022 15:18:30

Middle Channel / 20MHz / 64QAM

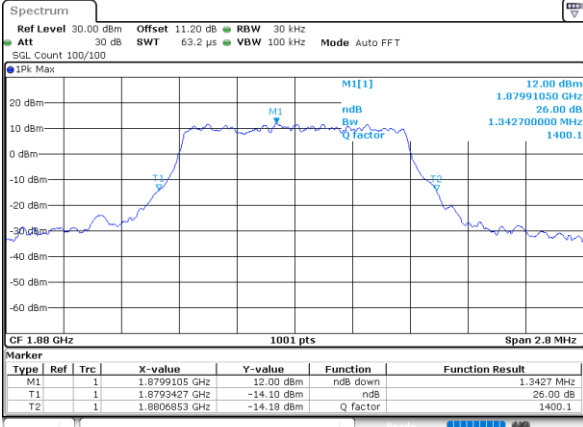


Date: 21.APR.2022 15:53:58



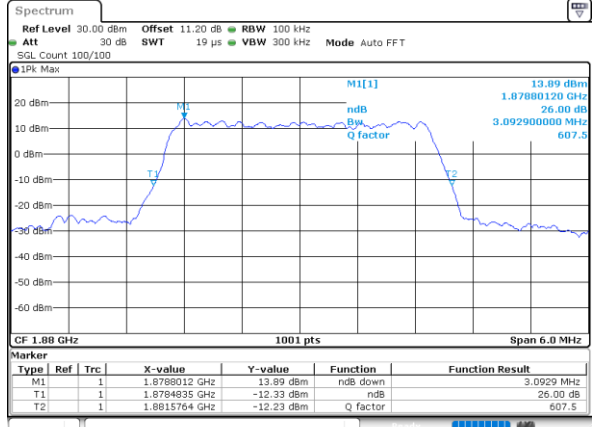
LTE Band 25

Middle Channel / 1.4MHz / 256QAM



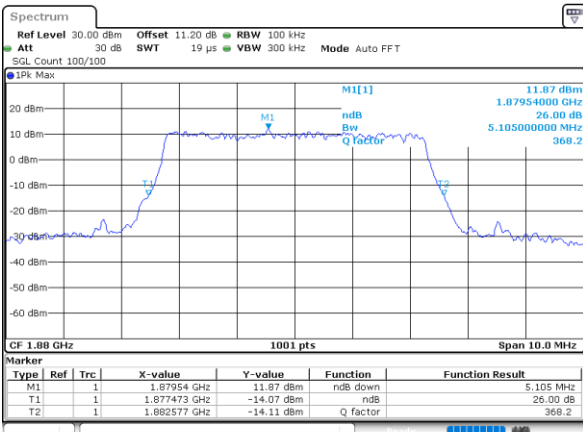
Date: 21.APR.2022 16:01:02

Middle Channel / 3MHz / 256QAM



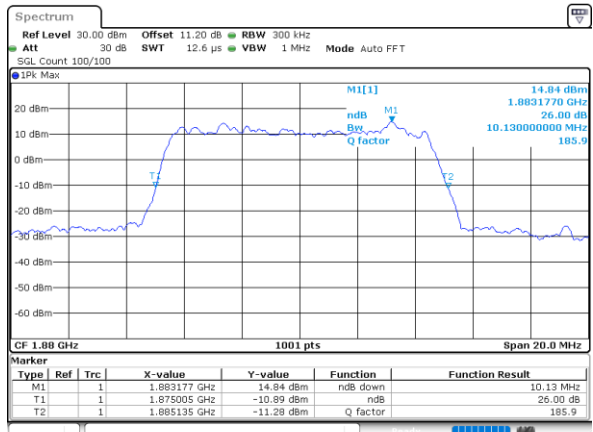
Date: 21.APR.2022 16:06:36

Middle Channel / 5MHz / 256QAM



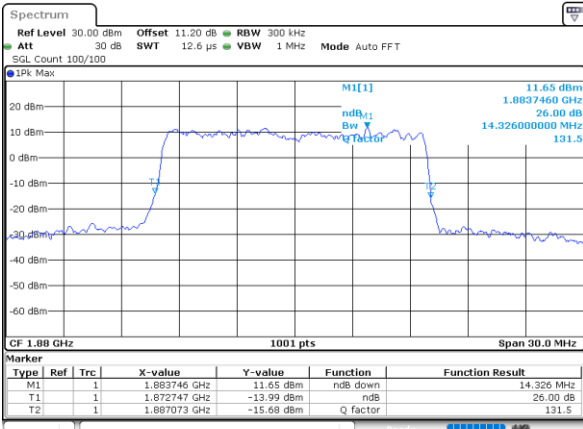
Date: 21.APR.2022 16:12:11

Middle Channel / 10MHz / 256QAM



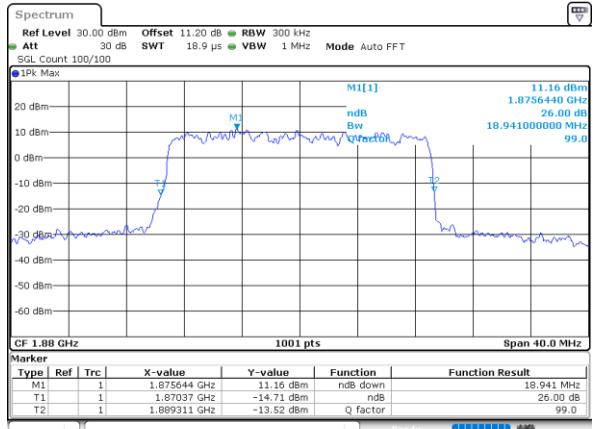
Date: 21.APR.2022 16:17:46

Middle Channel / 15MHz / 256QAM



Date: 21.APR.2022 16:23:20

Middle Channel / 20MHz / 256QAM



Date: 21.APR.2022 16:28:55



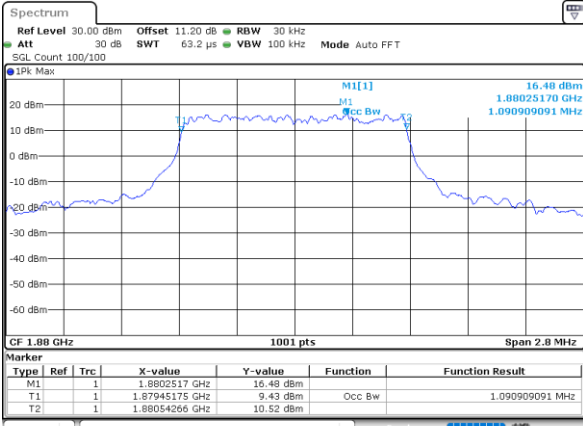
Occupied Bandwidth

Mode	LTE Band 25 : 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	1.10	2.73	2.74	4.52	4.55	9.07	9.05	13.37	13.52	17.90	17.82
Mode	LTE Band 25 : 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	1.10	1.09	2.73	2.73	4.50	4.49	9.07	9.09	13.46	13.46	17.86	17.90



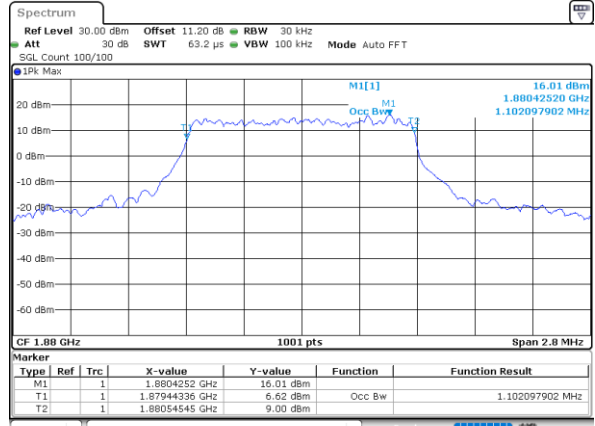
LTE Band 25

Middle Channel / 1.4MHz / QPSK



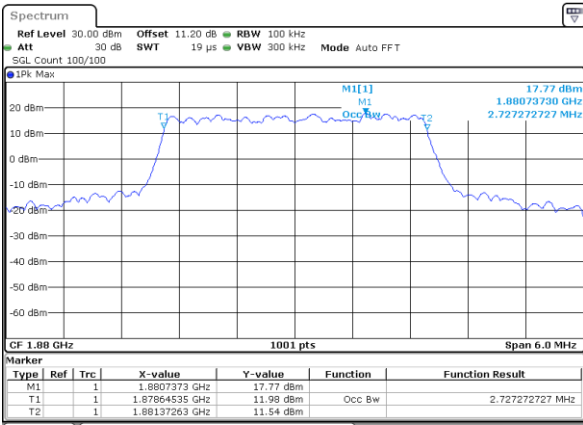
Date: 21.APR.2022 14:00:06

Middle Channel / 1.4MHz / 16QAM



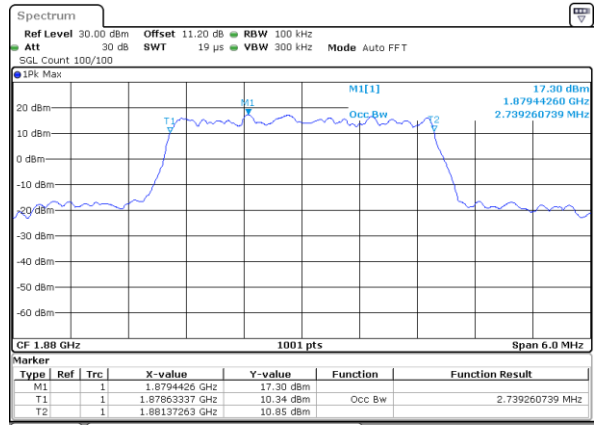
Date: 21.APR.2022 14:00:35

Middle Channel / 3MHz / QPSK



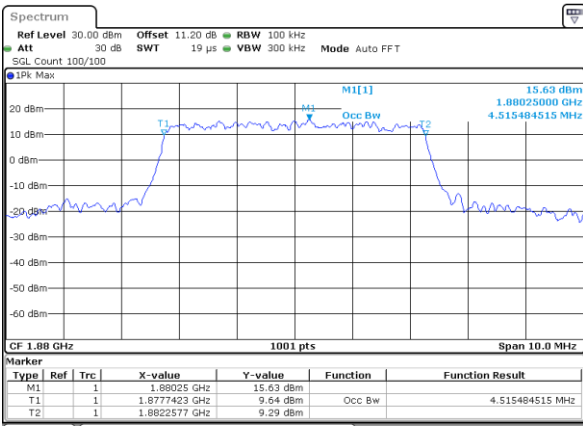
Date: 21.APR.2022 14:25:49

Middle Channel / 3MHz / 16QAM



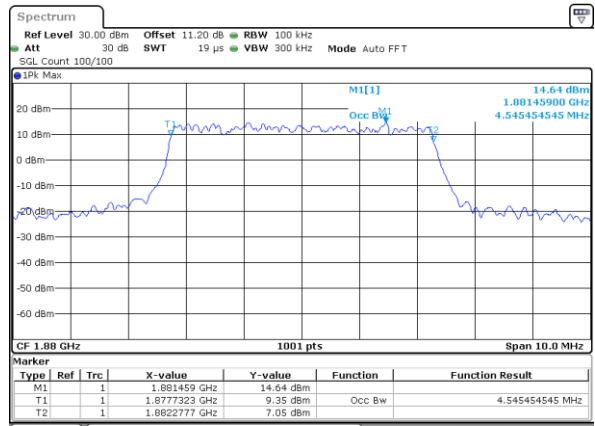
Date: 21.APR.2022 14:26:18

Middle Channel / 5MHz / QPSK



Date: 21.APR.2022 14:40:55

Middle Channel / 5MHz / 16QAM



Date: 21.APR.2022 14:41:25