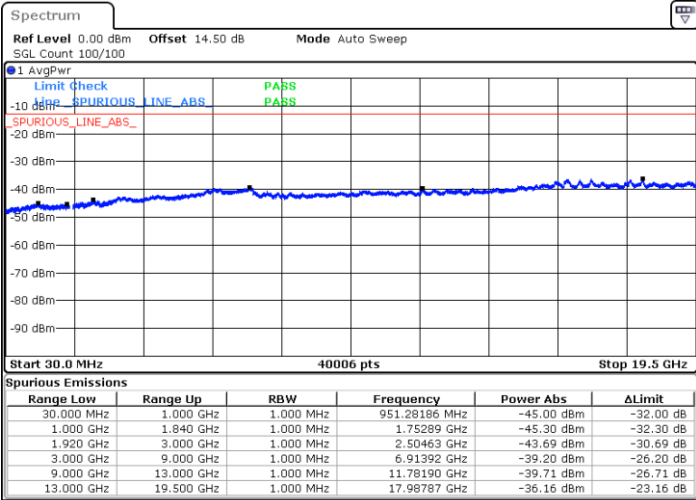




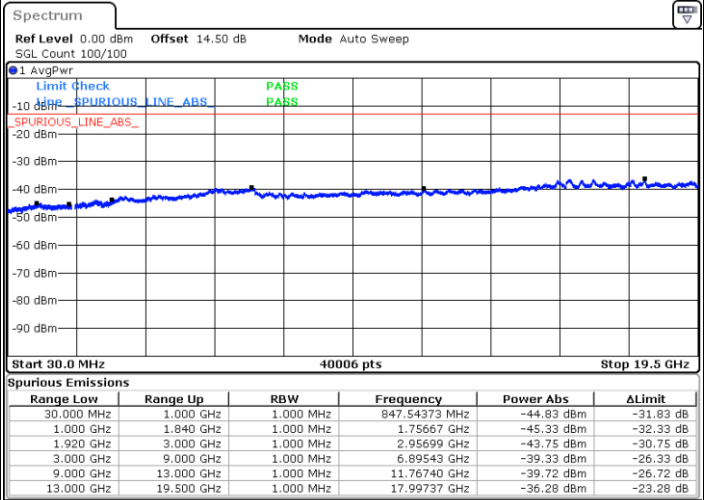
LTE Band 2 / 5MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



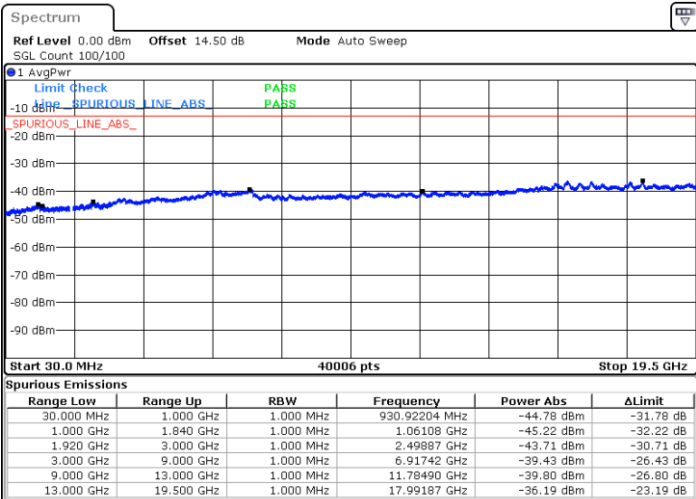
Date: 13.JAN.2023 21:06:37



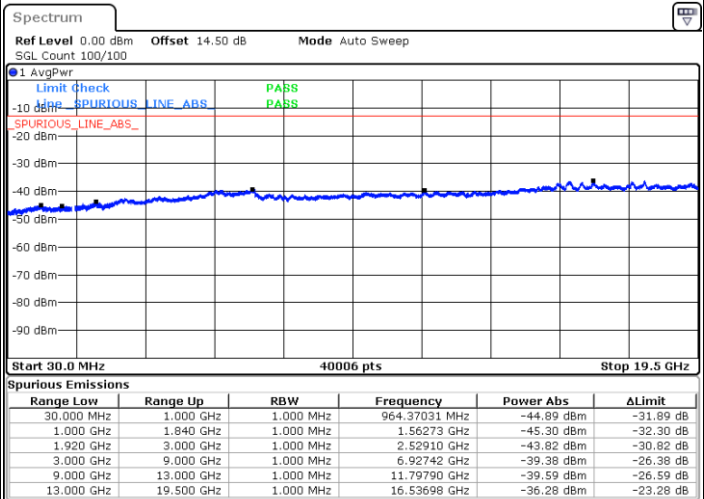
Date: 13.JAN.2023 21:07:30

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 13.JAN.2023 21:09:59

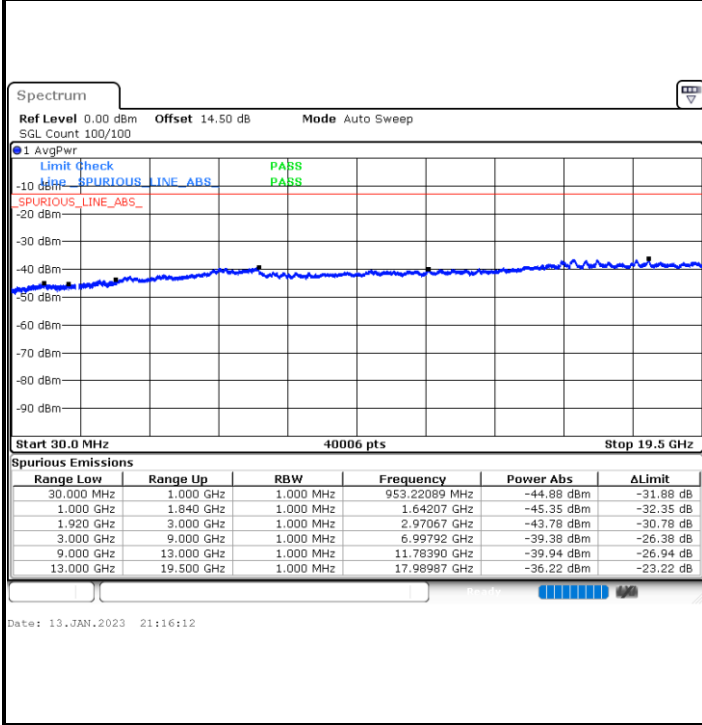


Date: 13.JAN.2023 21:10:52

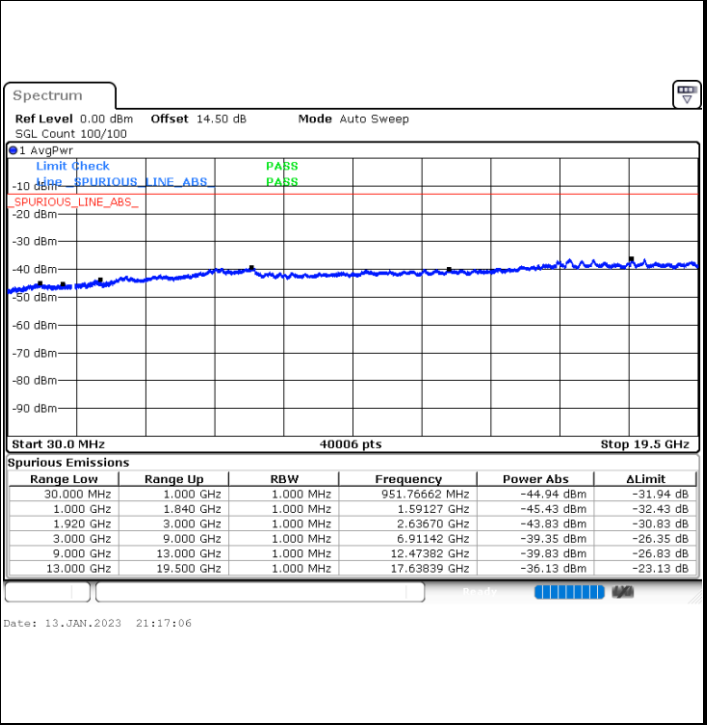


LTE Band 2 / 5MHz

Highest Channel / QPSK

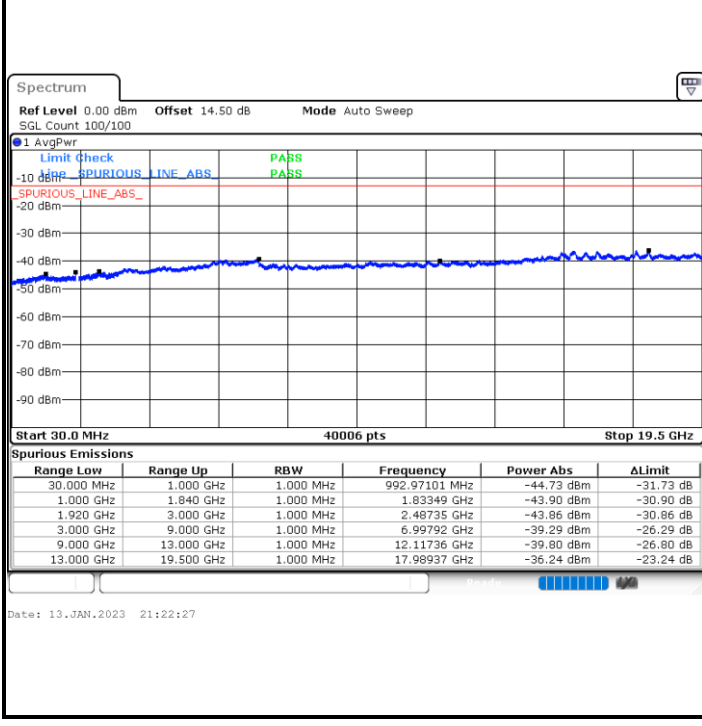


Highest Channel / 16QAM

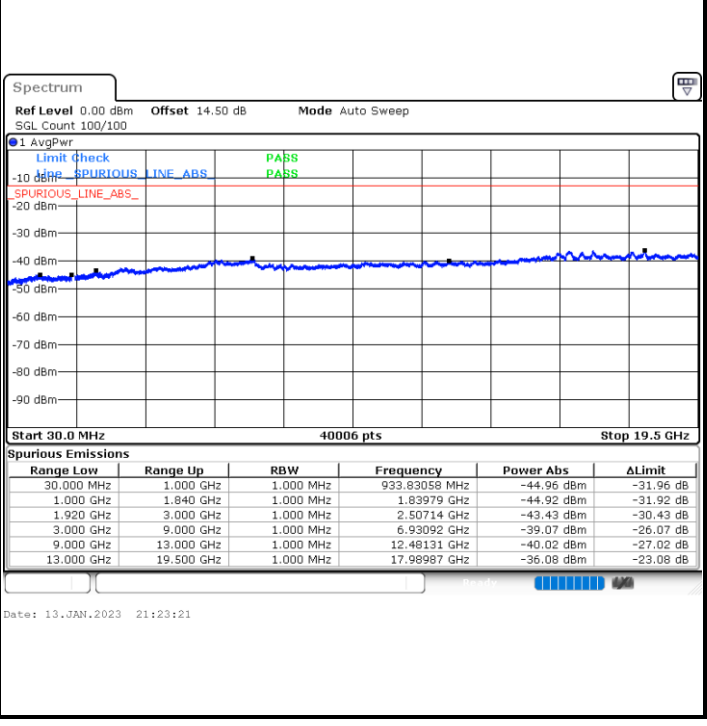


LTE Band 2 / 10MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

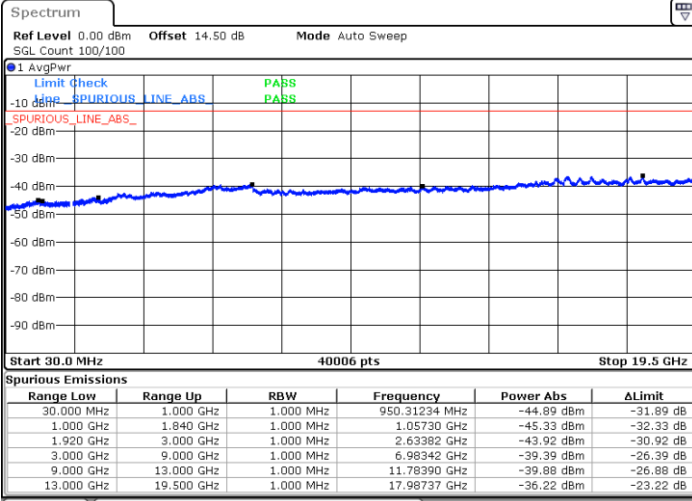




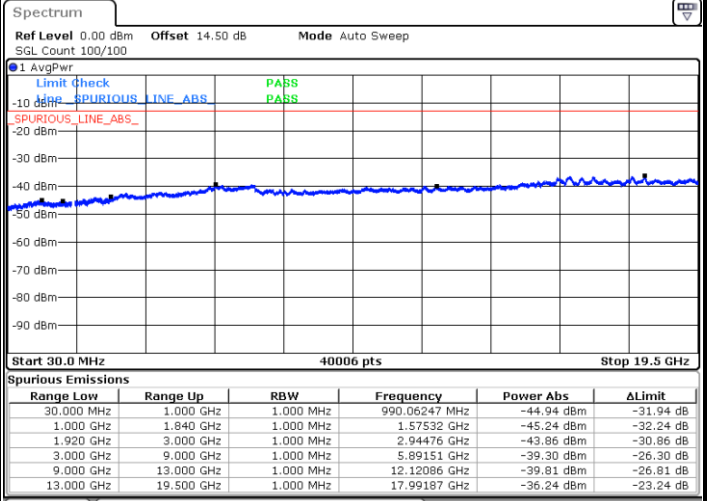
LTE Band 2 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM



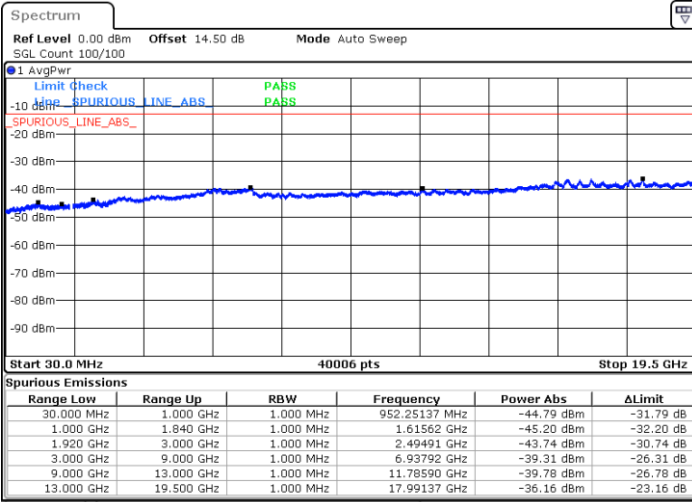
Date: 13.JAN.2023 21:25:50



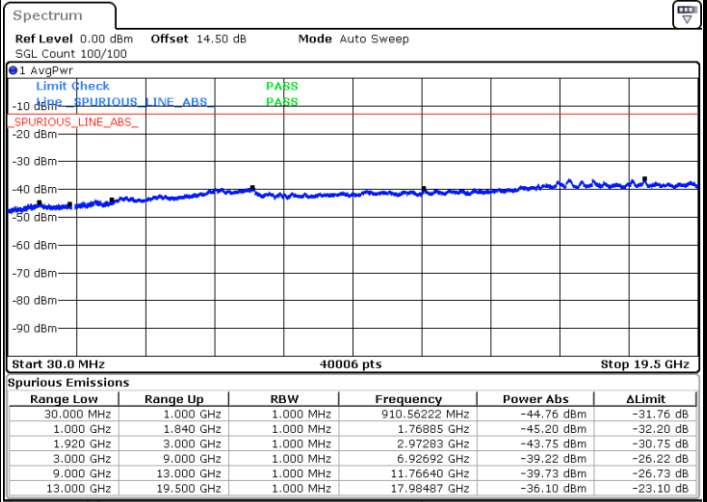
Date: 13.JAN.2023 21:26:43

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 13.JAN.2023 21:32:04

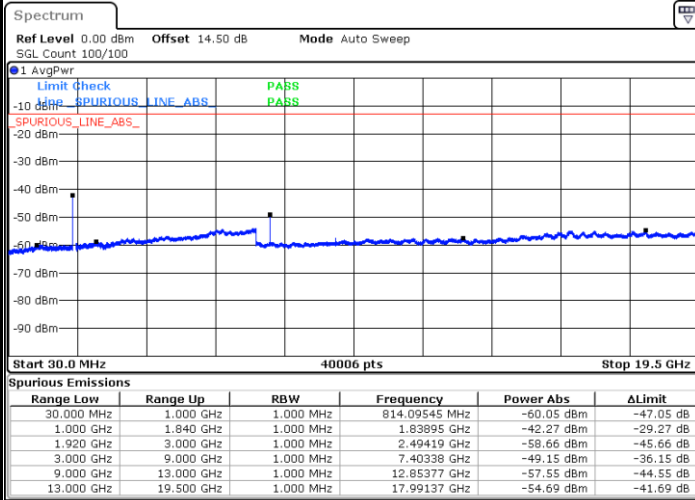


Date: 13.JAN.2023 21:32:58



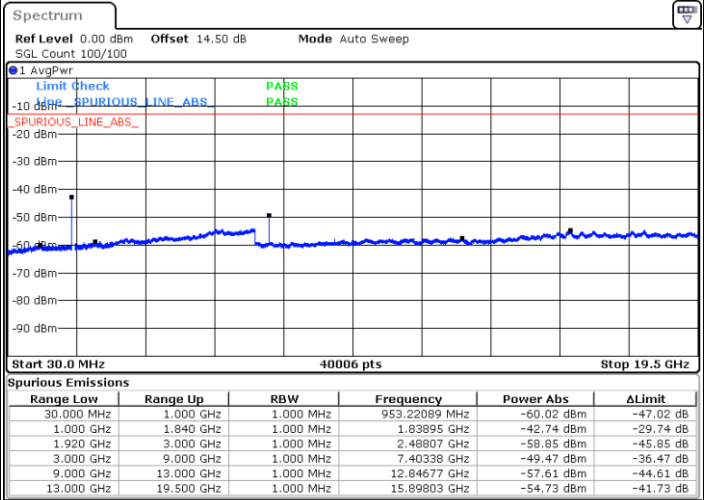
LTE Band 2 / 15MHz

Lowest Channel / QPSK



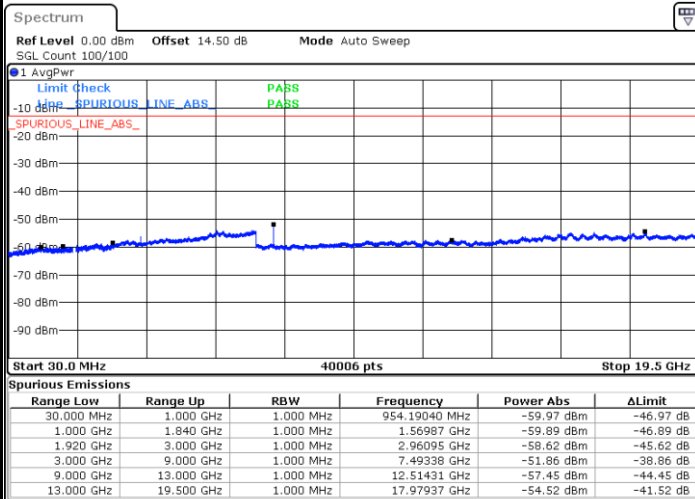
Date: 13.JAN.2023 21:38:20

Lowest Channel / 16QAM



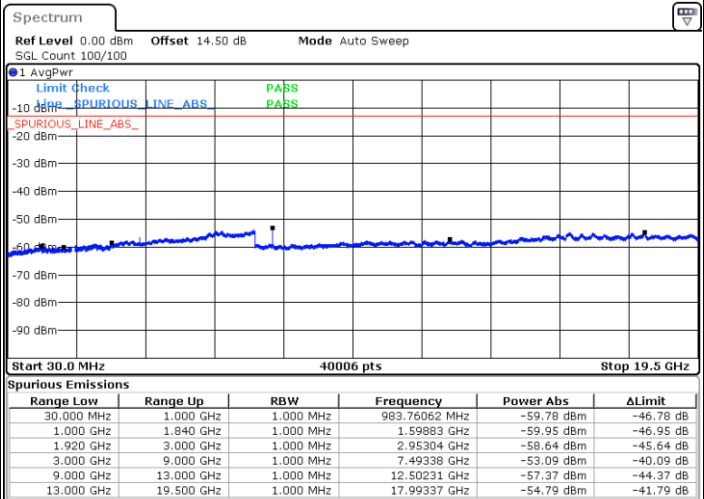
Date: 13.JAN.2023 21:39:13

Middle Channel / QPSK



Date: 13.JAN.2023 21:41:42

Middle Channel / 16QAM

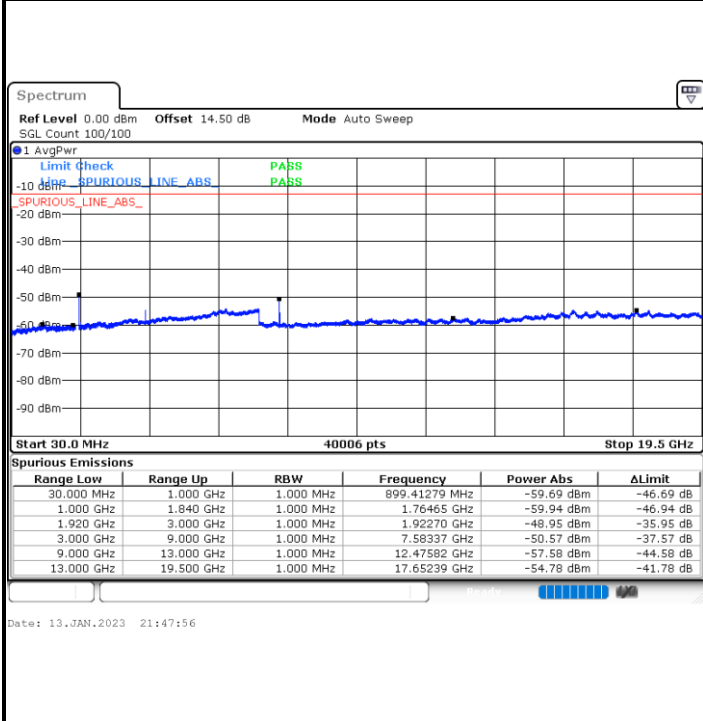


Date: 13.JAN.2023 21:42:36

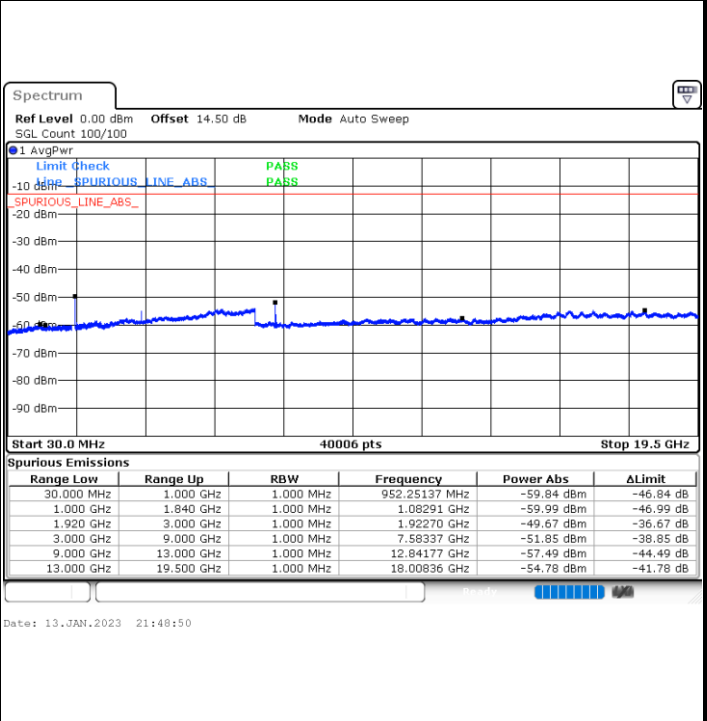


LTE Band 2 / 15MHz

Highest Channel / QPSK

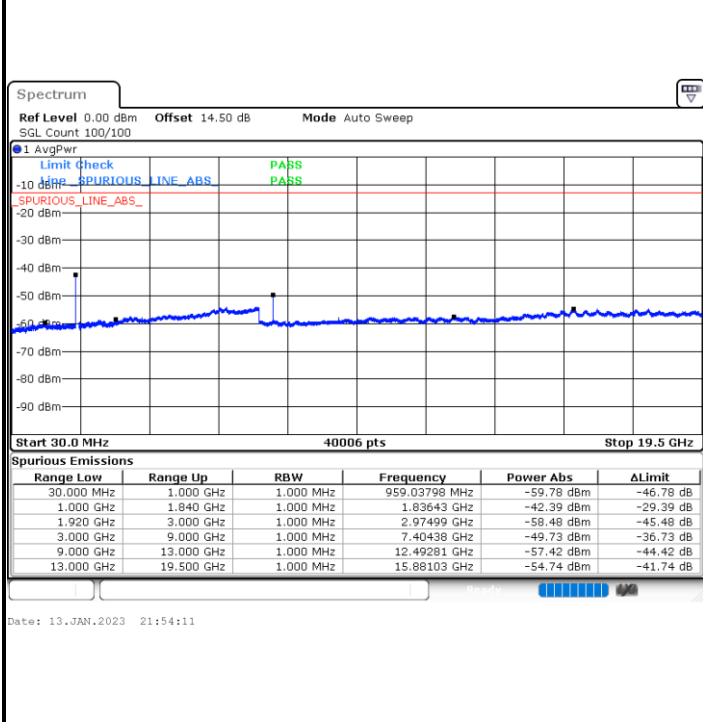


Highest Channel / 16QAM

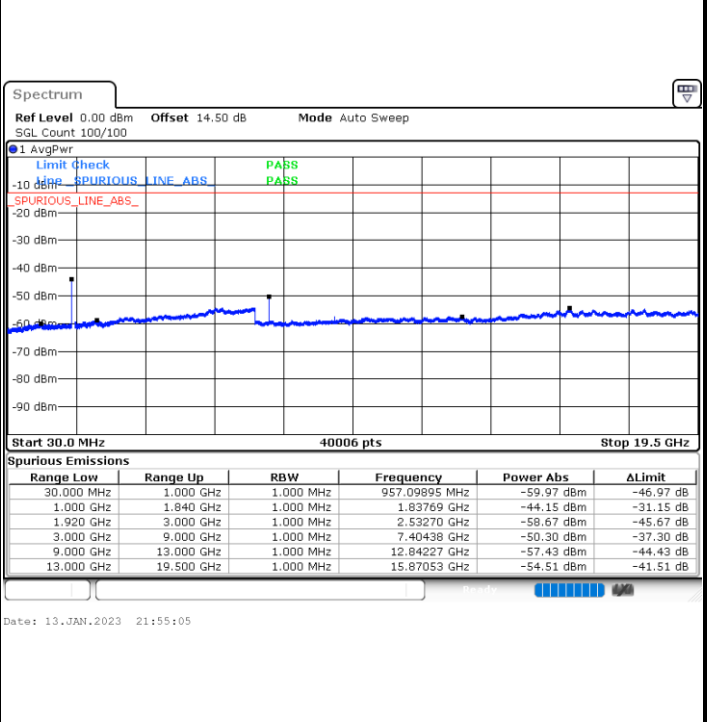


LTE Band 2 / 20MHz

Lowest Channel / QPSK



Lowest Channel / 16QAM

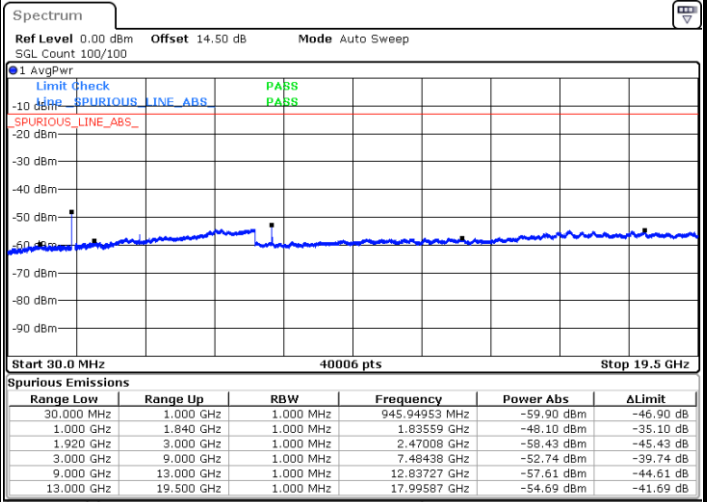
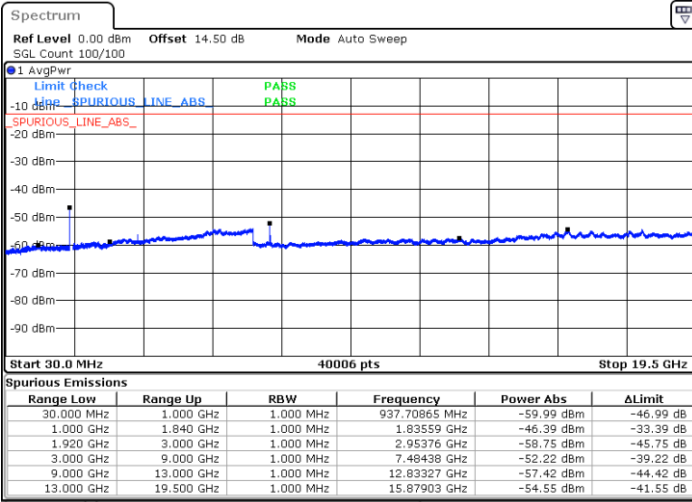




LTE Band 2 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

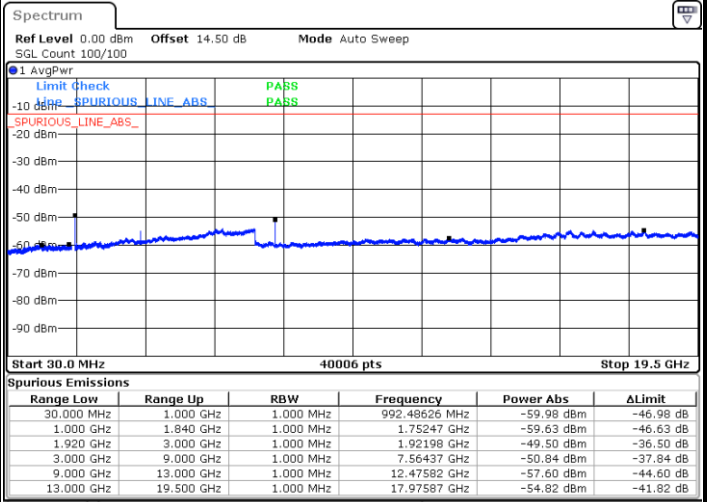
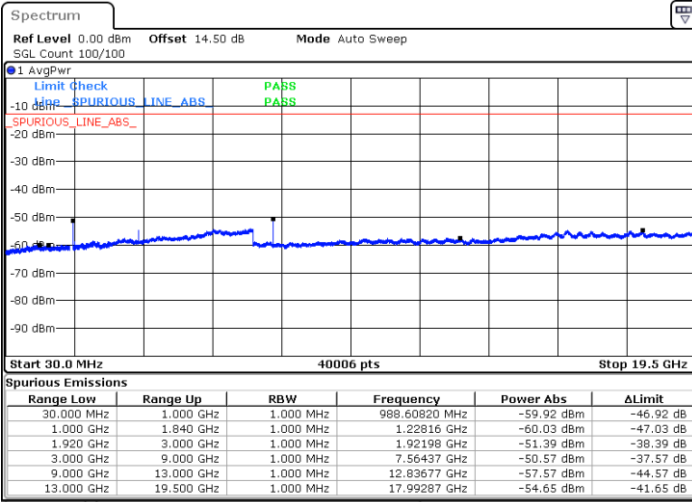


Date: 13.JAN.2023 21:57:33

Date: 13.JAN.2023 21:58:27

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 13.JAN.2023 22:03:48

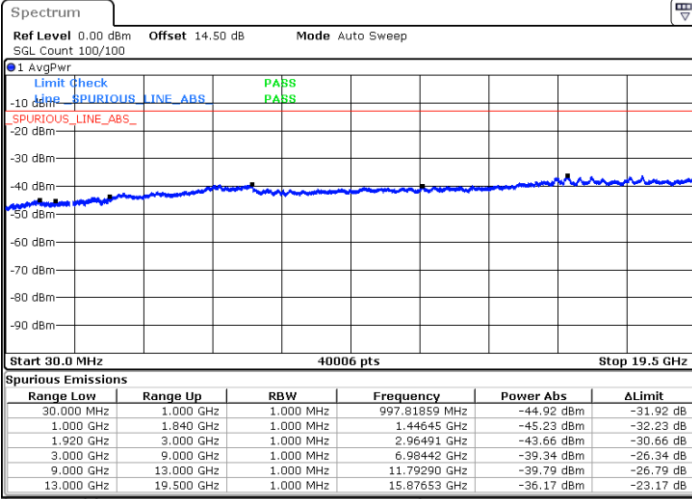
Date: 13.JAN.2023 22:04:42



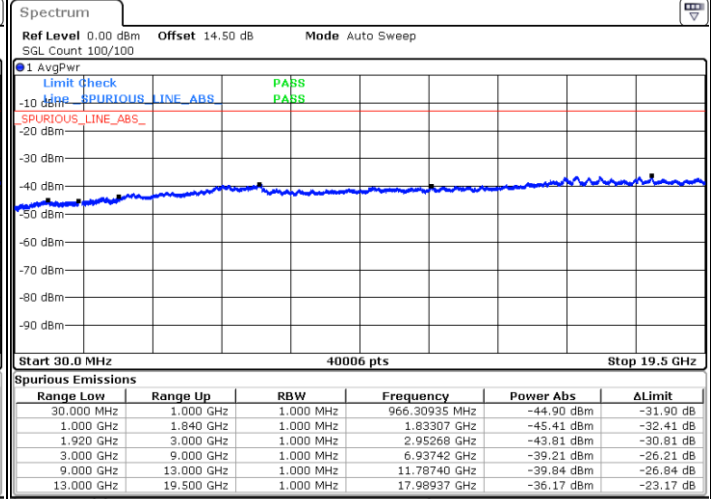
LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

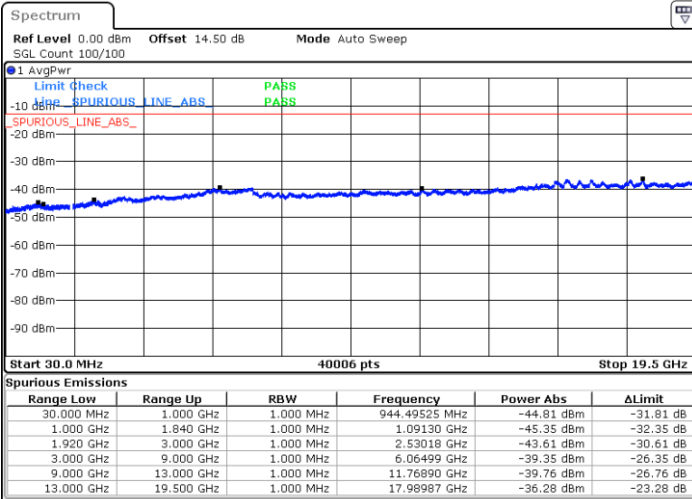


Date: 14.JAN.2023 00:36:20



Date: 14.JAN.2023 00:37:52

Highest Channel / 64QAM

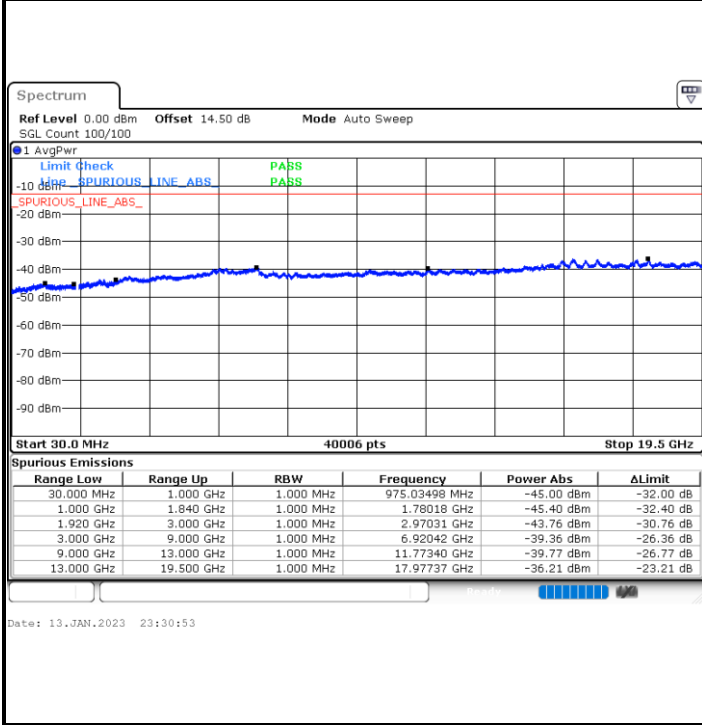


Date: 14.JAN.2023 00:41:59

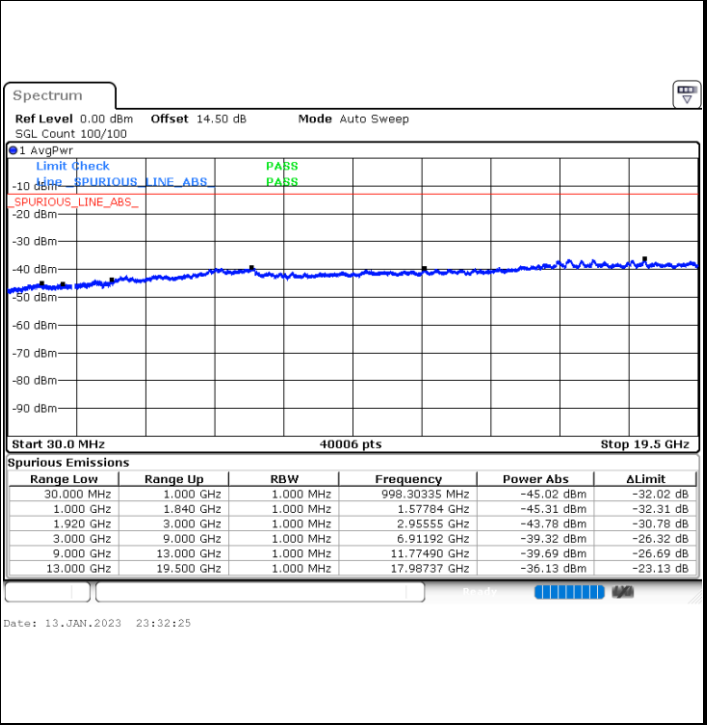


LTE Band 2 / 3MHz

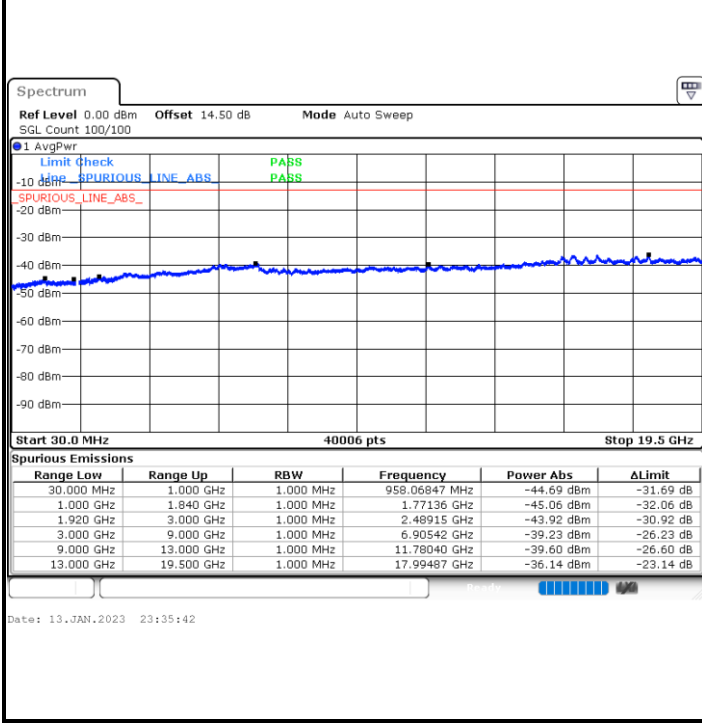
Lowest Channel / 64QAM



Middle Channel / 64QAM



Highest Channel / 64QAM

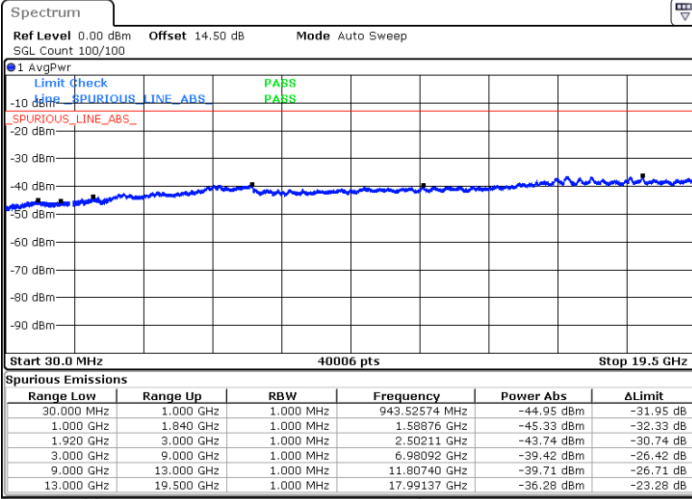




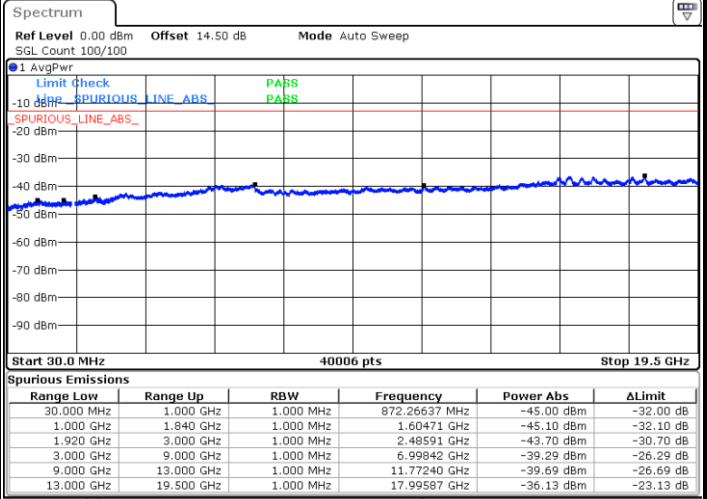
LTE Band 2 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

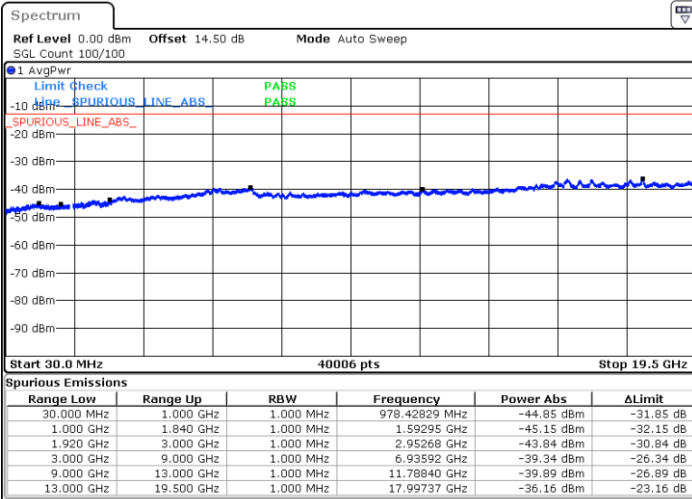


Date: 13.JAN.2023 23:39:01



Date: 13.JAN.2023 23:40:33

Highest Channel / 64QAM



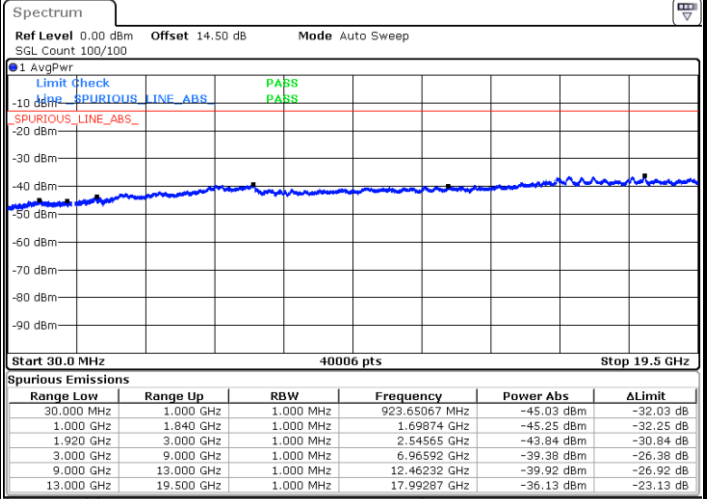
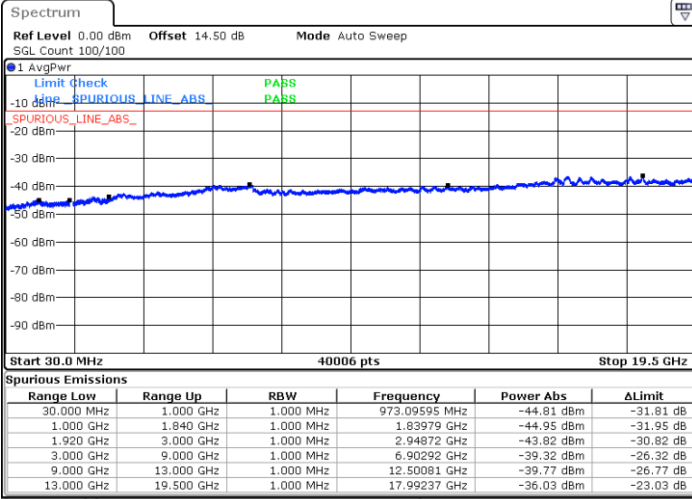
Date: 13.JAN.2023 23:43:50



LTE Band 2 / 10MHz

Lowest Channel / 64QAM

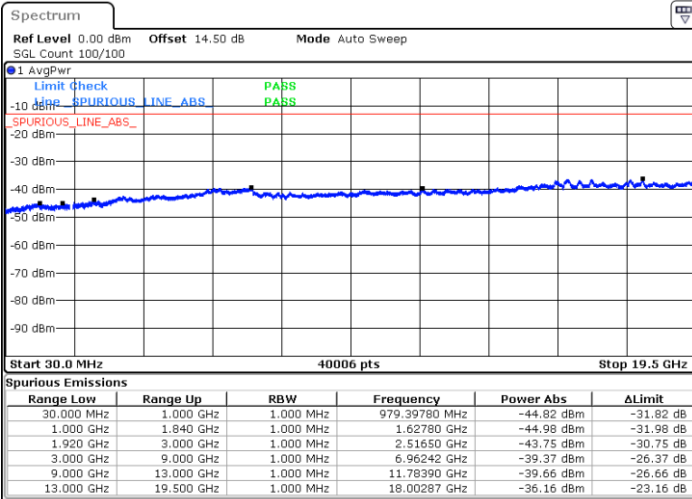
Middle Channel / 64QAM



Date: 13.JAN.2023 23:47:09

Date: 13.JAN.2023 23:48:41

Highest Channel / 64QAM



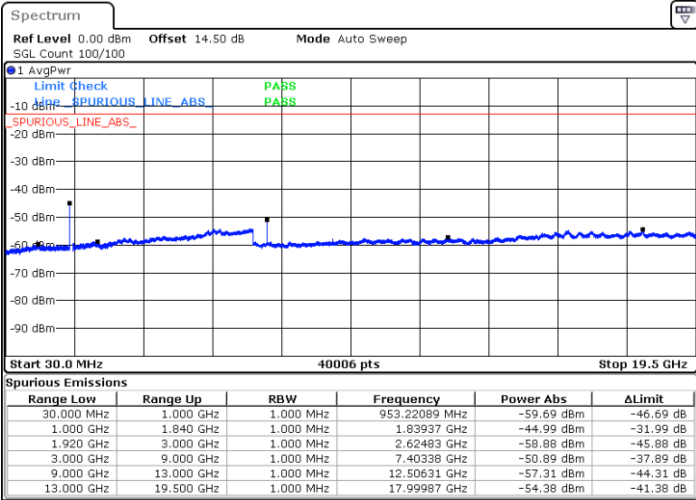
Date: 13.JAN.2023 23:51:59



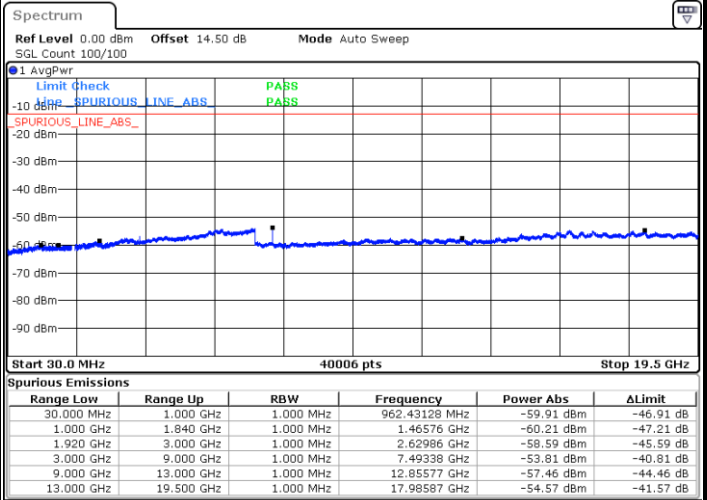
LTE Band 2 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

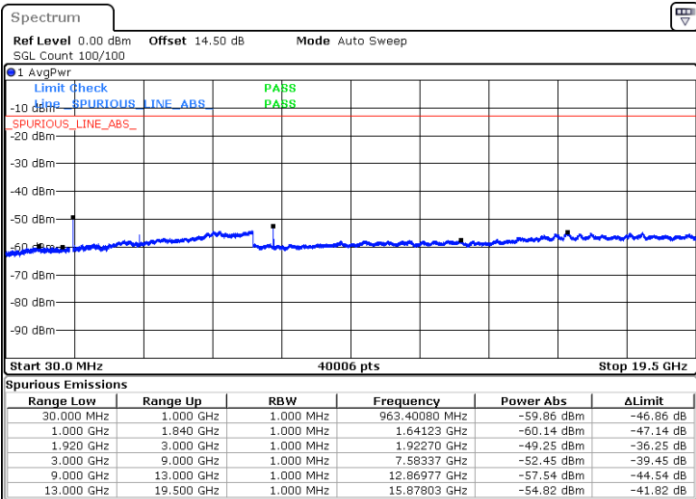


Date: 14.JAN.2023 00:08:55



Date: 14.JAN.2023 00:10:27

Highest Channel / 64QAM



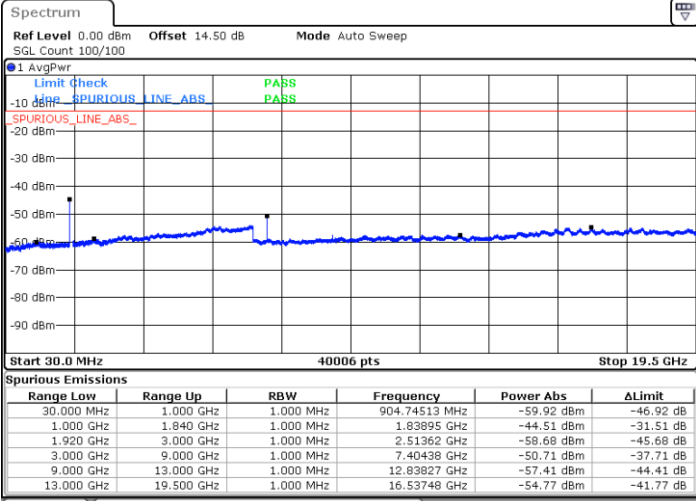
Date: 14.JAN.2023 00:13:45



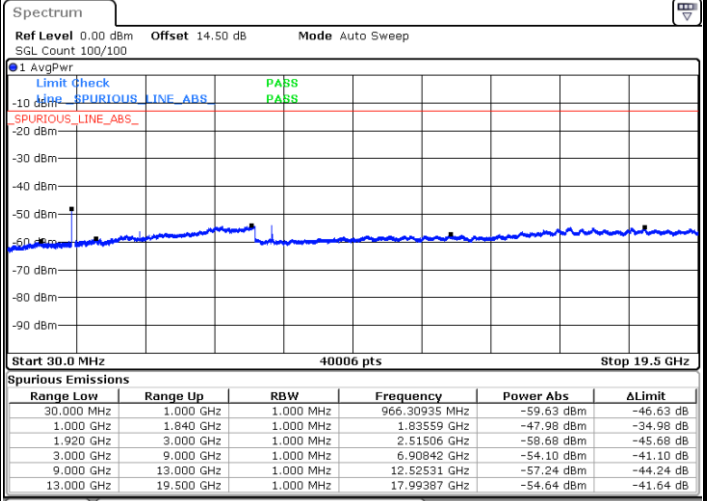
LTE Band 2 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

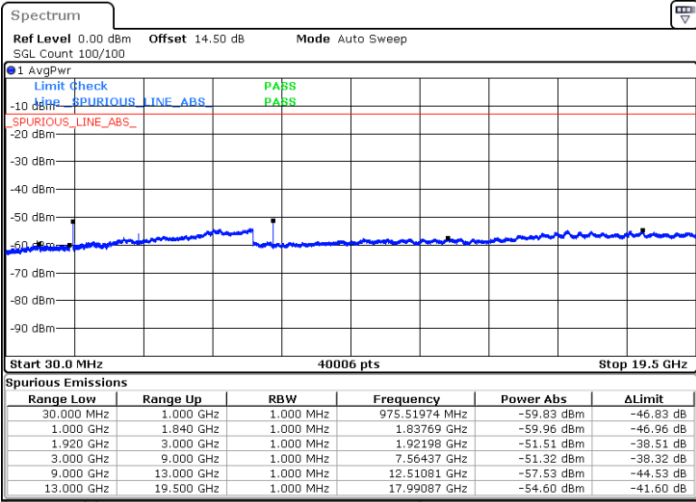


Date: 14.JAN.2023 00:17:03



Date: 14.JAN.2023 00:18:35

Highest Channel / 64QAM



Date: 14.JAN.2023 00:21:52



Frequency Stability

Test Conditions		LTE Band 2 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0011	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0013	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

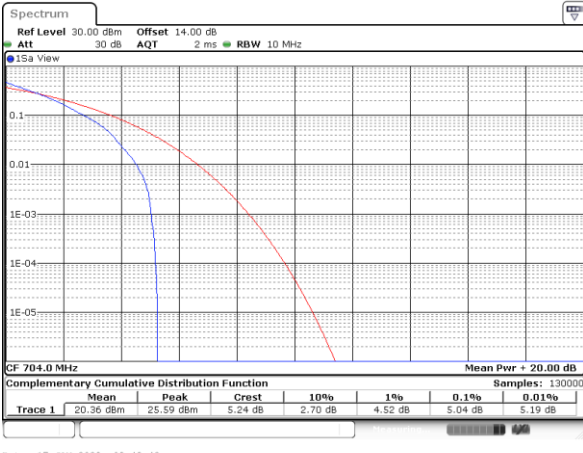
Peak-to-Average Ratio

Mode	LTE Band 12 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	5.04	5.36	6.20	6.38	PASS
Middle CH	4.99	5.51	6.00	6.43	
Highest CH	5.39	5.45	6.35	6.29	
Mode	LTE Band 12 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.93	6.72	-	-	PASS
Middle CH	6.78	6.70	-	-	
Highest CH	6.75	6.64	-	-	



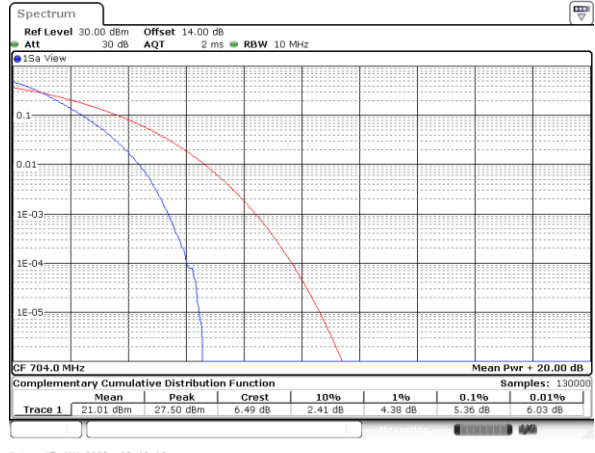
LTE Band 12 / 10MHz / QPSK

Lowest Channel / 1RB



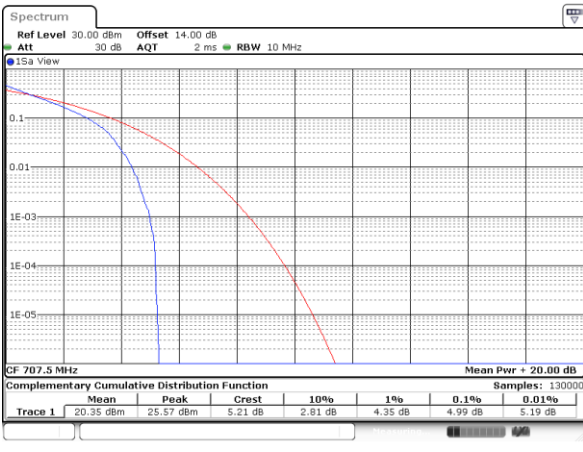
Date: 17_JAN.2023 09:49:42

Lowest Channel / Full RB



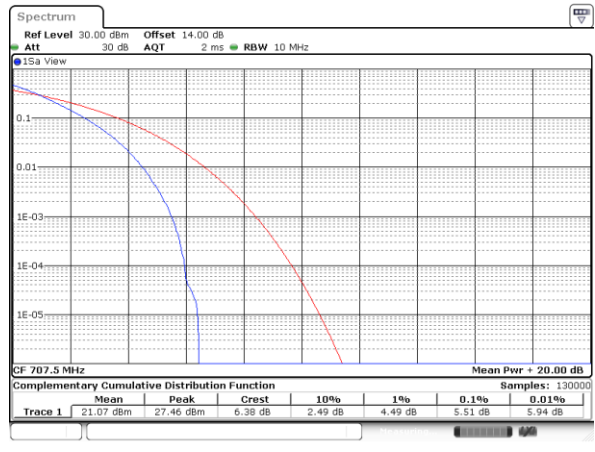
Date: 17_JAN.2023 09:49:19

Middle Channel / 1RB



Date: 17_JAN.2023 09:50:04

Middle Channel / Full RB



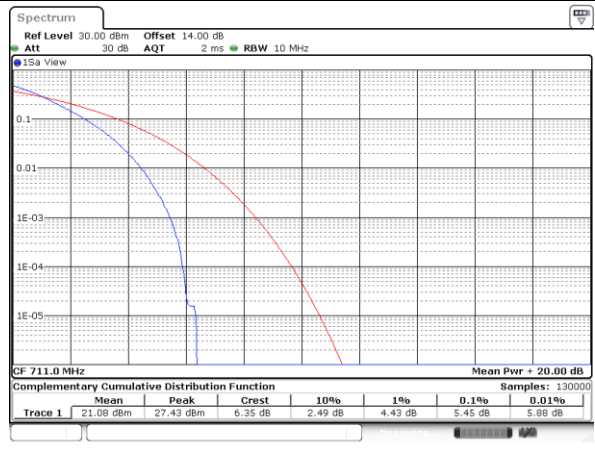
Date: 17_JAN.2023 09:50:27

Highest Channel / 1RB



Date: 17_JAN.2023 09:51:12

Highest Channel / Full RB

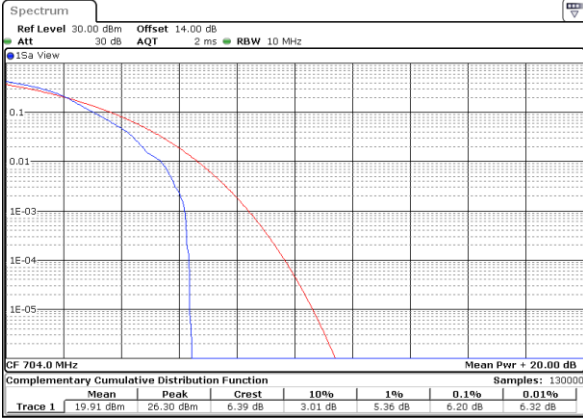


Date: 17_JAN.2023 09:50:49



LTE Band 12 / 10MHz / 16QAM

Lowest Channel / 1RB



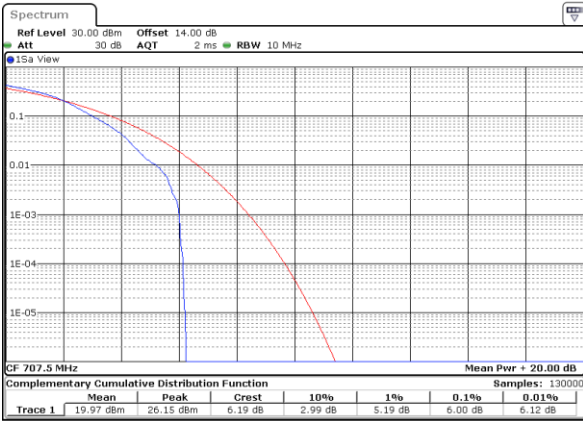
Date: 17_JAN.2023 09:47:25

Lowest Channel / Full RB



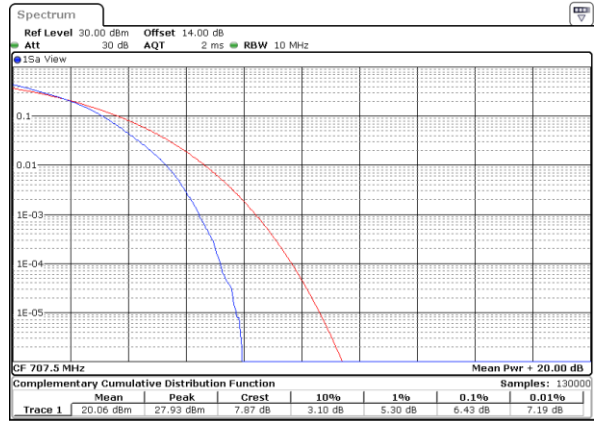
Date: 17_JAN.2023 09:47:02

Middle Channel / 1RB



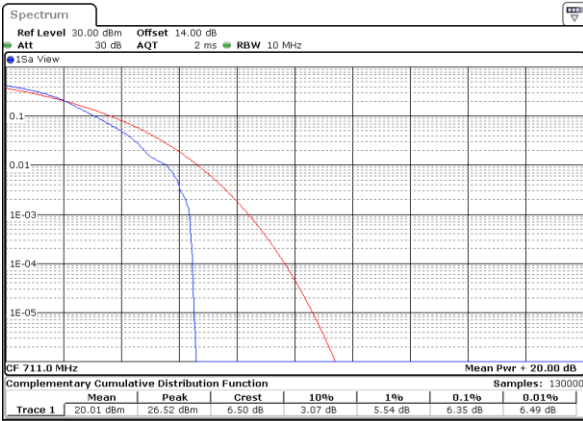
Date: 17_JAN.2023 09:47:48

Middle Channel / Full RB



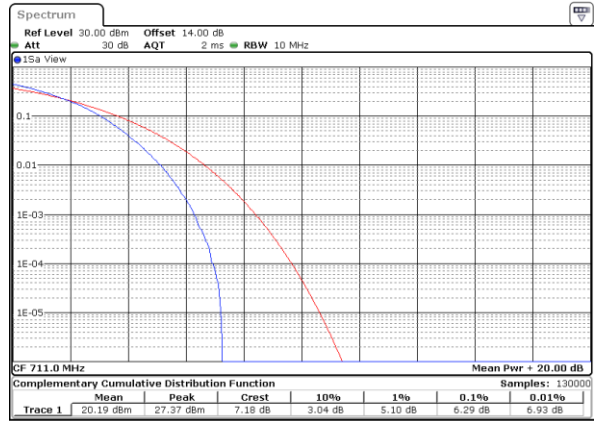
Date: 17_JAN.2023 09:48:10

Highest Channel / 1RB



Date: 17_JAN.2023 09:48:56

Highest Channel / Full RB



Date: 17_JAN.2023 09:48:33



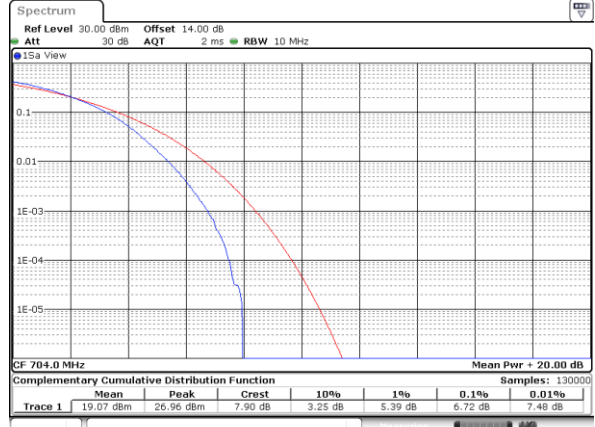
LTE Band 12 / 10MHz / 64QAM

Lowest Channel / 1RB



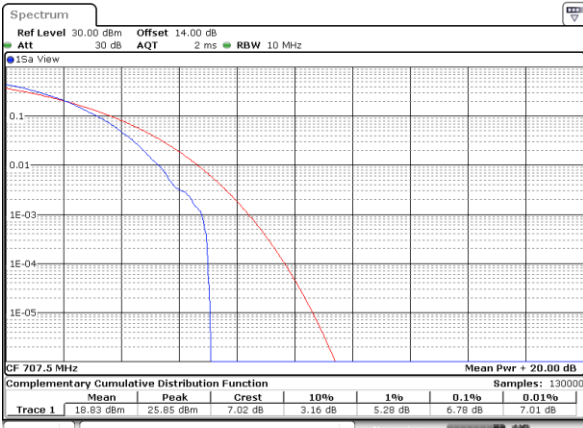
Date: 17_JAN.2023 09:45:08

Lowest Channel / Full RB



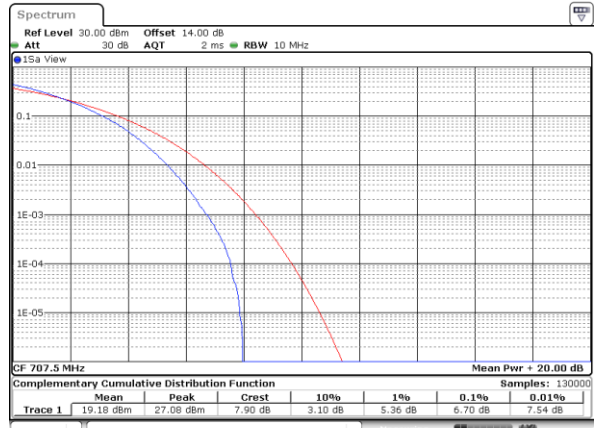
Date: 17_JAN.2023 09:44:45

Middle Channel / 1RB



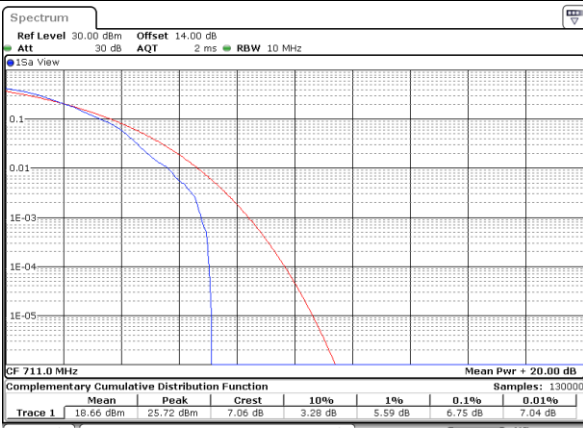
Date: 17_JAN.2023 09:45:31

Middle Channel / Full RB



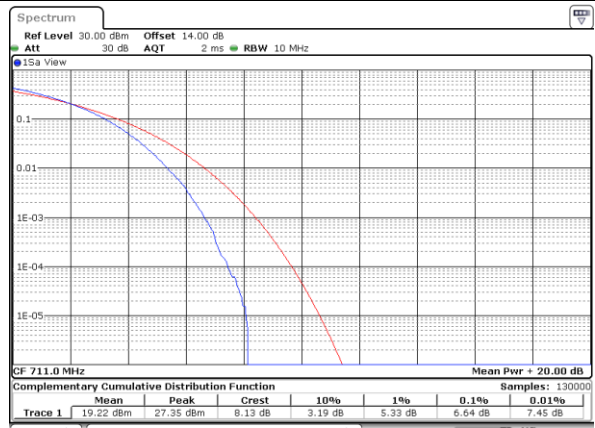
Date: 17_JAN.2023 09:45:54

Highest Channel / 1RB



Date: 17_JAN.2023 09:46:39

Highest Channel / Full RB



Date: 17_JAN.2023 09:46:16



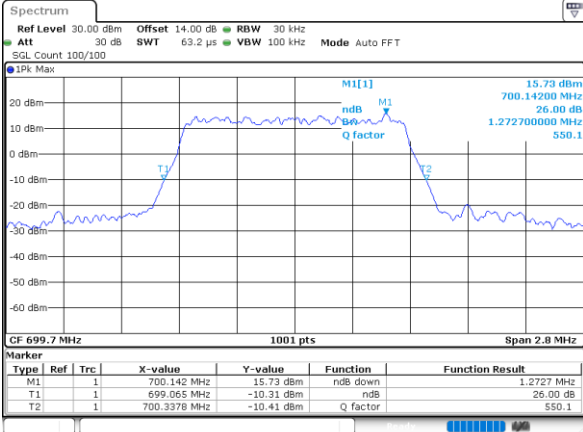
26dB Bandwidth

Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.27	1.26	2.96	3.00	4.84	4.95	9.75	9.87	-	-	-	-
Middle CH	1.27	1.26	2.99	3.00	4.88	4.86	9.65	9.79	-	-	-	-
Highest CH	1.28	1.26	3.00	2.99	4.83	4.89	9.67	9.73	-	-	-	-
Mode	LTE Band 12 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.27	-	3.02	-	4.88	-	9.81	-	-	-	-	-
Middle CH	1.26	-	2.97	-	4.83	-	9.71	-	-	-	-	-
Highest CH	1.26	-	3.00	-	4.83	-	9.67	-	-	-	-	-



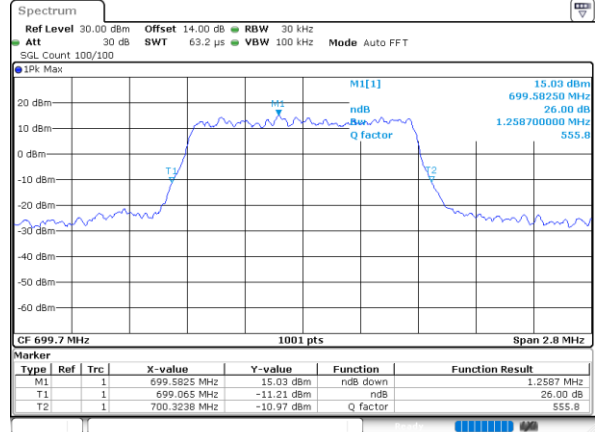
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



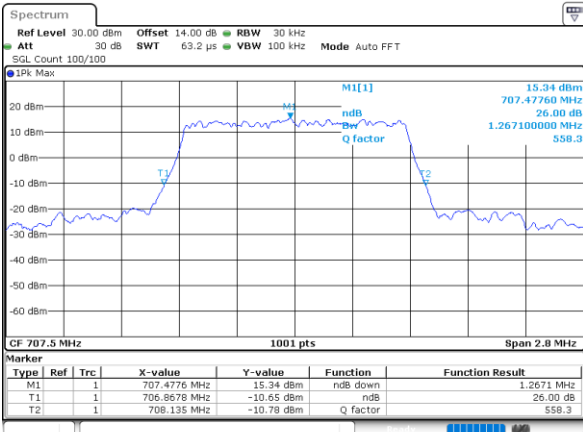
Date: 17_JAN_2023 09:15:01

Lowest Channel / 1.4MHz / 16QAM



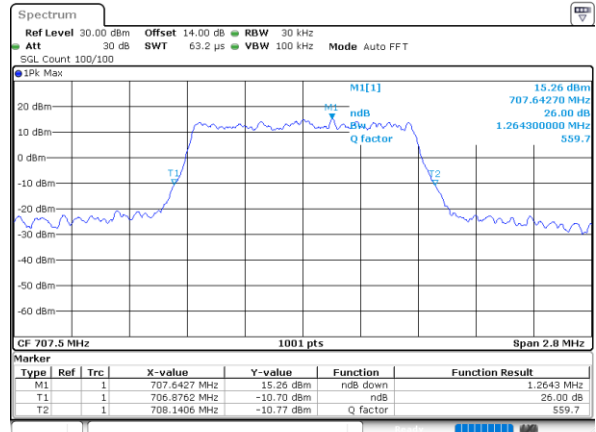
Date: 17_JAN_2023 09:11:40

Middle Channel / 1.4MHz / QPSK



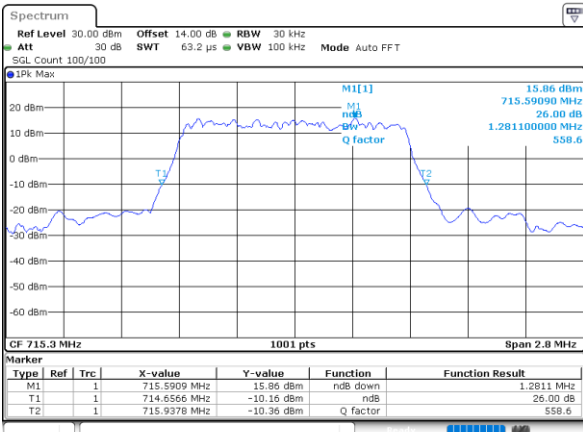
Date: 17_JAN_2023 09:23:02

Middle Channel / 1.4MHz / 16QAM



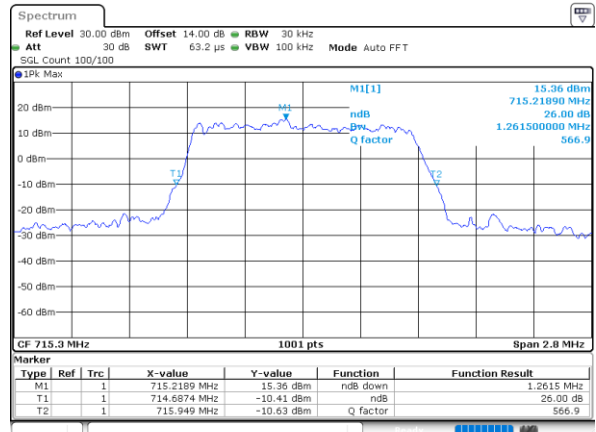
Date: 17_JAN_2023 09:23:123

Highest Channel / 1.4MHz / QPSK



Date: 17_JAN_2023 09:27:07

Highest Channel / 1.4MHz / 16QAM

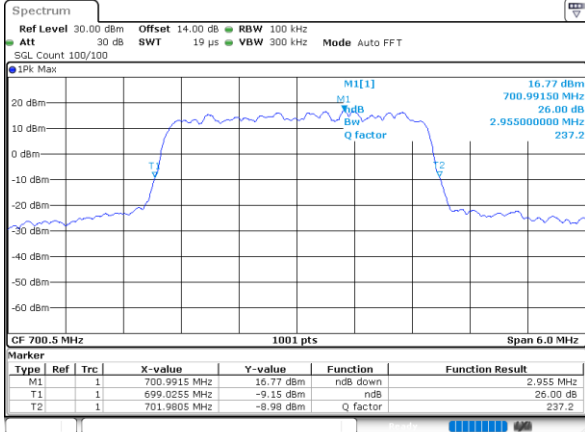


Date: 17_JAN_2023 09:26:46



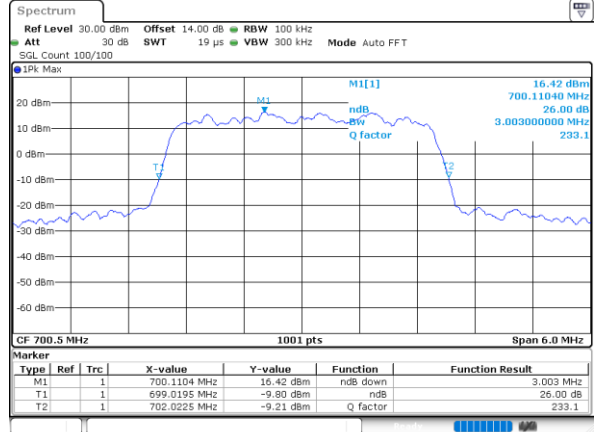
LTE Band 12

Lowest Channel / 3MHz / QPSK



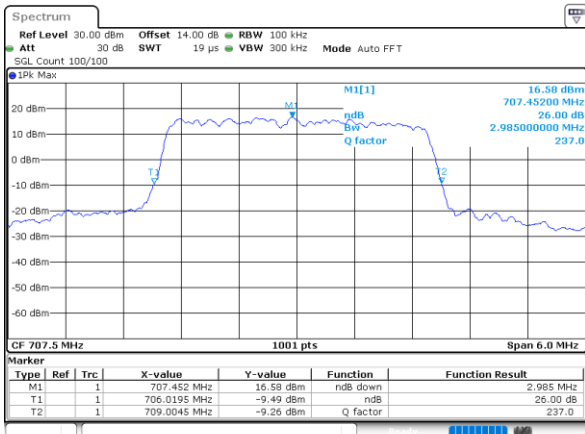
Date: 17_JAN_2023 07:38:55

Lowest Channel / 3MHz / 16QAM



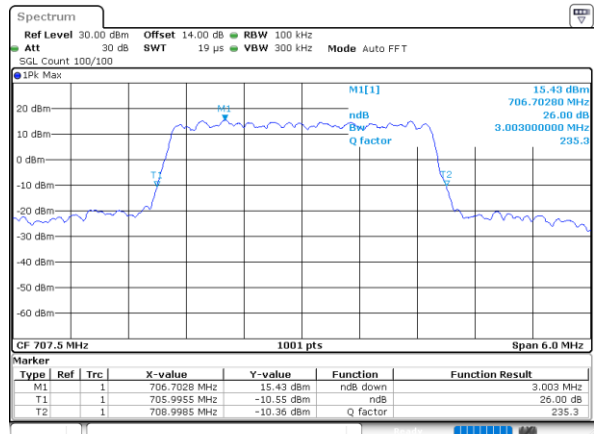
Date: 17_JAN_2023 07:38:34

Middle Channel / 3MHz / QPSK



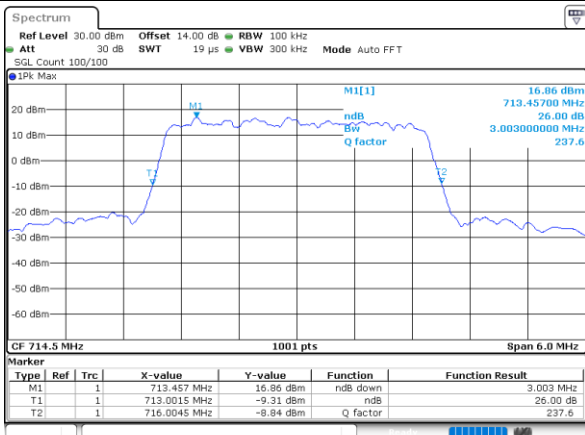
Date: 17_JAN_2023 07:46:57

Middle Channel / 3MHz / 16QAM



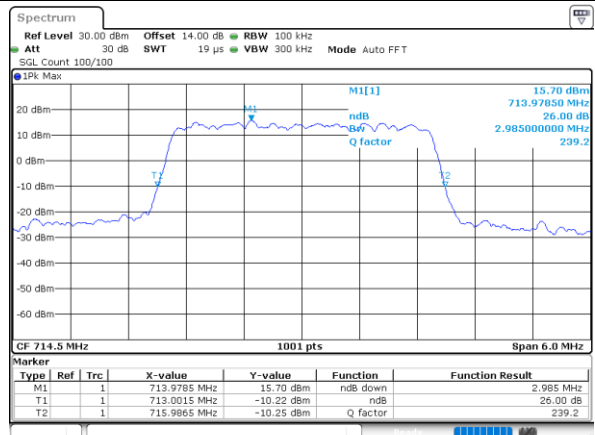
Date: 17_JAN_2023 07:47:18

Highest Channel / 3MHz / QPSK



Date: 17_JAN_2023 07:51:02

Highest Channel / 3MHz / 16QAM

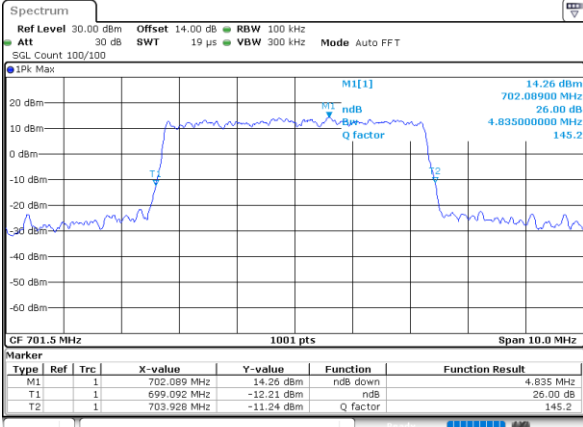


Date: 17_JAN_2023 07:50:41



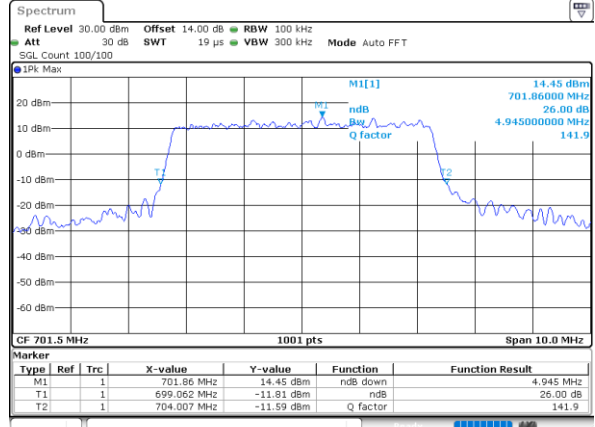
LTE Band 12

Lowest Channel / 5MHz / QPSK



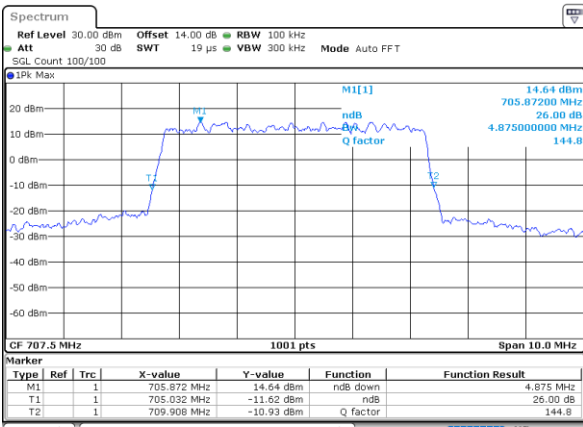
Date: 17_JAN_2023 08:20:00

Lowest Channel / 5MHz / 16QAM



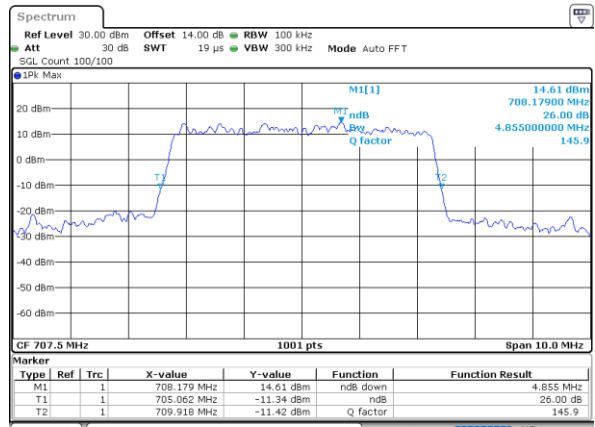
Date: 17_JAN_2023 08:19:39

Middle Channel / 5MHz / QPSK



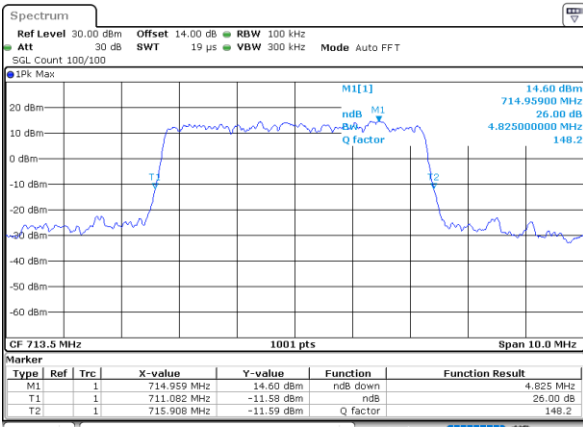
Date: 17_JAN_2023 08:28:01

Middle Channel / 5MHz / 16QAM



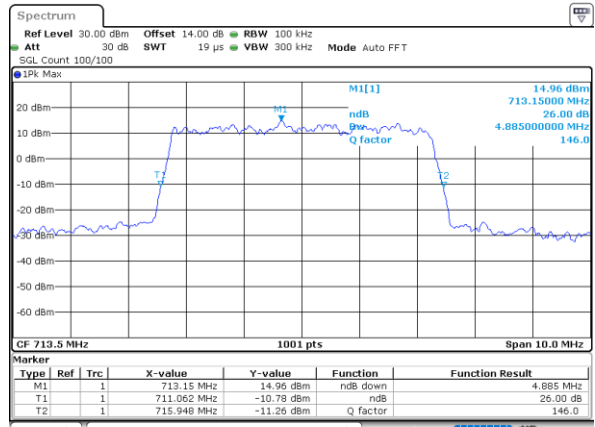
Date: 17_JAN_2023 08:28:22

Highest Channel / 5MHz / QPSK



Date: 17_JAN_2023 08:32:09

Highest Channel / 5MHz / 16QAM

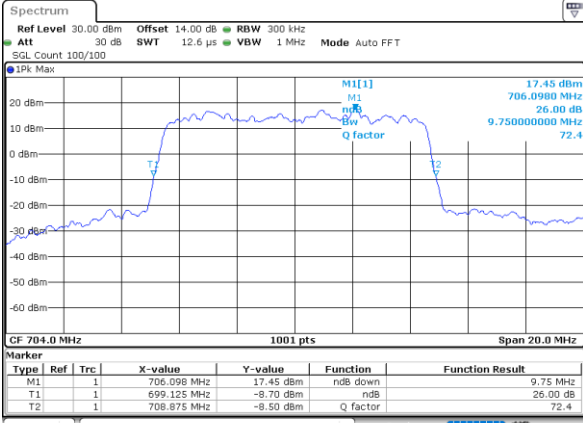


Date: 17_JAN_2023 08:31:46



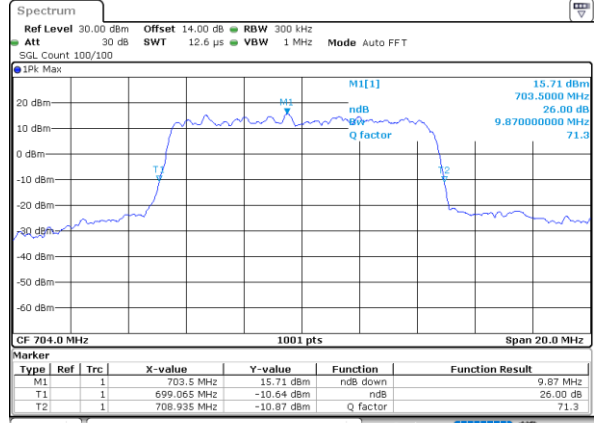
LTE Band 12

Lowest Channel / 10MHz / QPSK



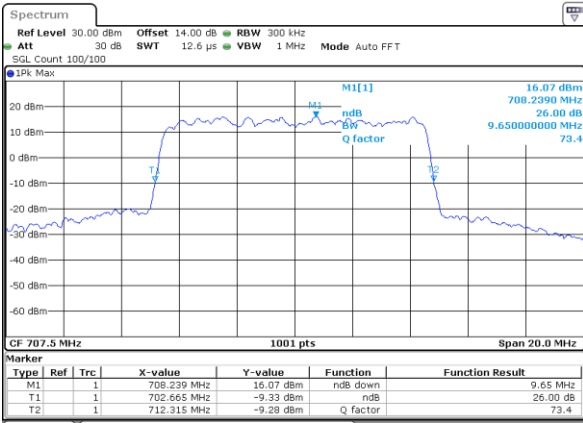
Date: 17_JAN.2023 09:40:34

Lowest Channel / 10MHz / 16QAM



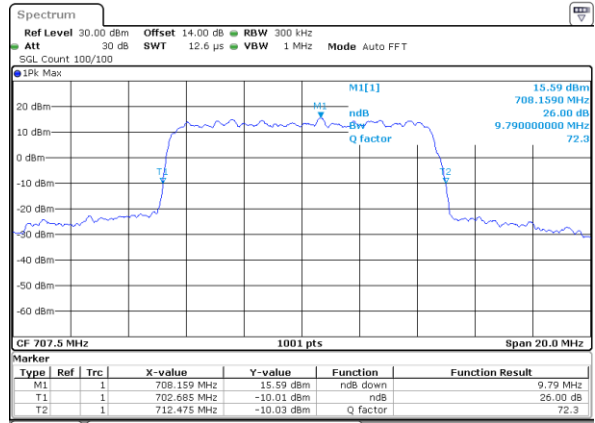
Date: 17_JAN.2023 09:40:13

Middle Channel / 10MHz / QPSK



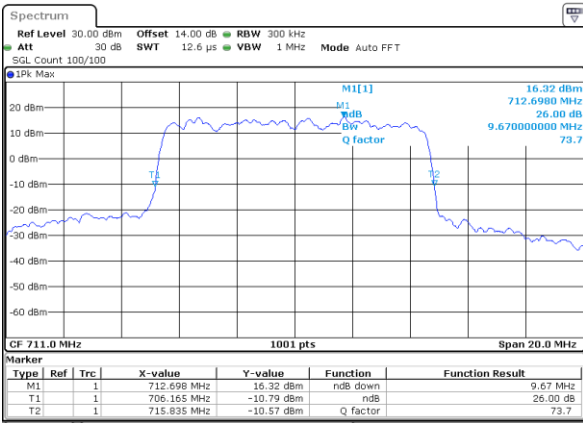
Date: 17_JAN.2023 09:48:06

Middle Channel / 10MHz / 16QAM



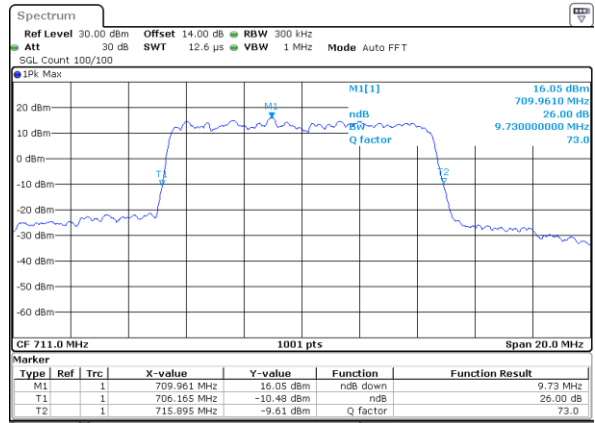
Date: 17_JAN.2023 09:48:57

Highest Channel / 10MHz / QPSK



Date: 17_JAN.2023 09:52:42

Highest Channel / 10MHz / 16QAM

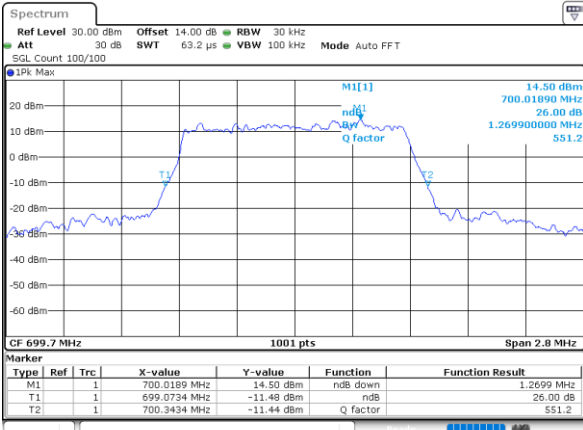


Date: 17_JAN.2023 09:52:20



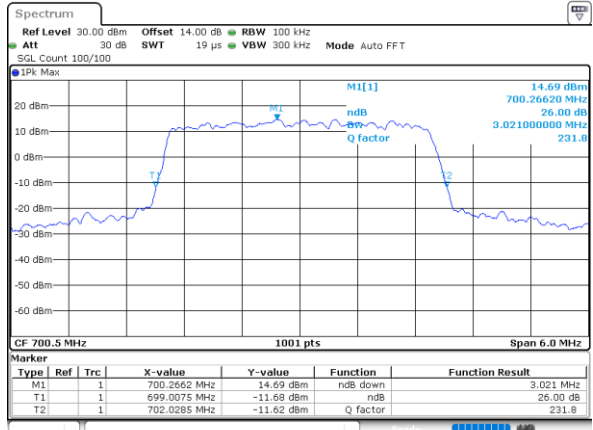
LTE Band 12

Lowest Channel / 1.4MHz / 64QAM



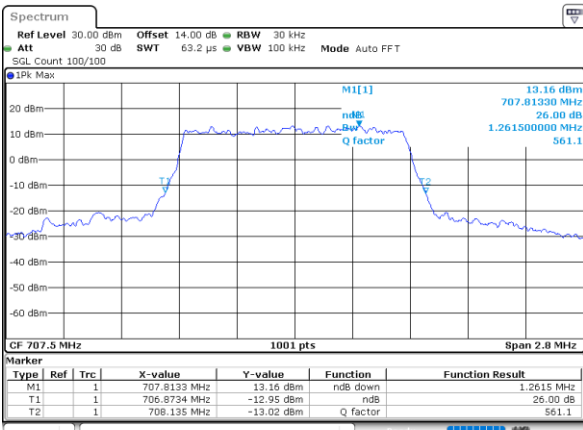
Date: 17_JAN_2023 09:34:49

Lowest Channel / 3MHz / 64QAM



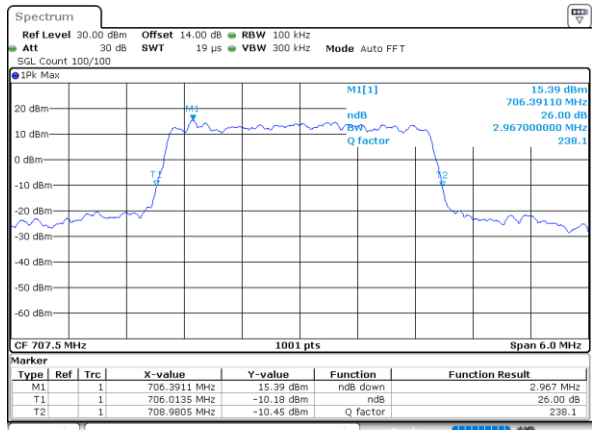
Date: 17_JAN_2023 07:58:44

Middle Channel / 1.4MHz / 64QAM



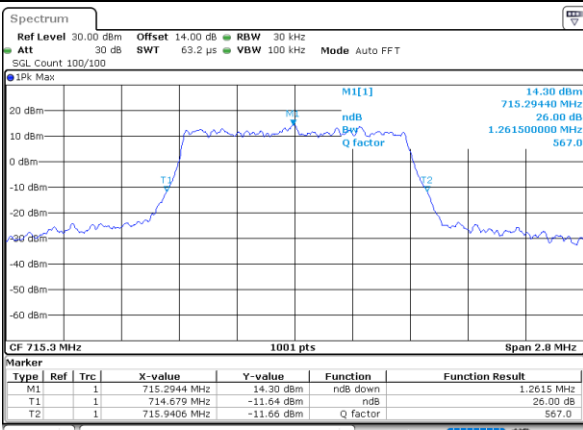
Date: 17_JAN_2023 09:39:01

Middle Channel / 3MHz / 64QAM



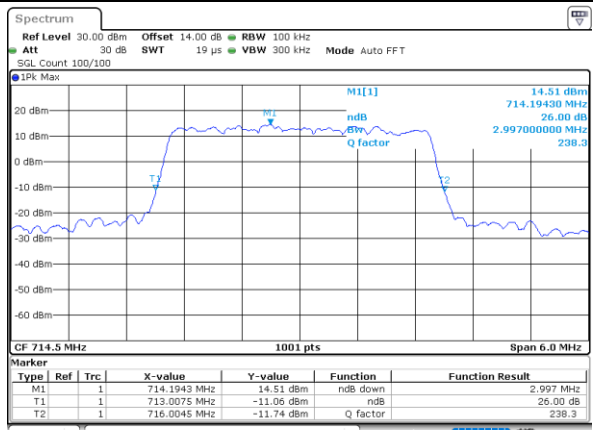
Date: 17_JAN_2023 08:02:56

Highest Channel / 1.4MHz / 64QAM



Date: 17_JAN_2023 09:40:53

Highest Channel / 3MHz / 64QAM

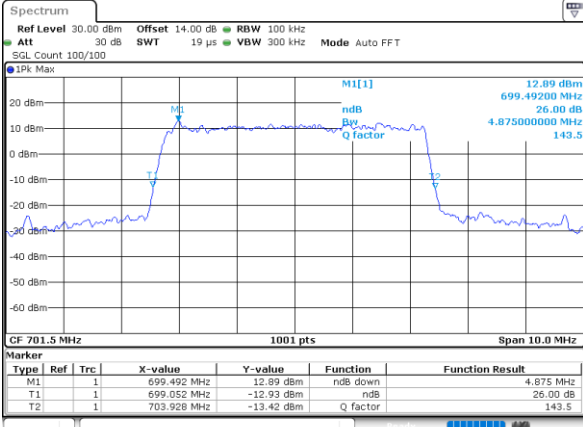


Date: 17_JAN_2023 08:04:48



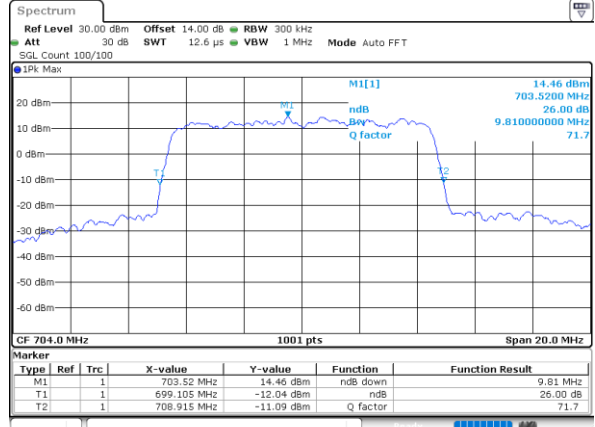
LTE Band 12

Lowest Channel / 5MHz / 64QAM



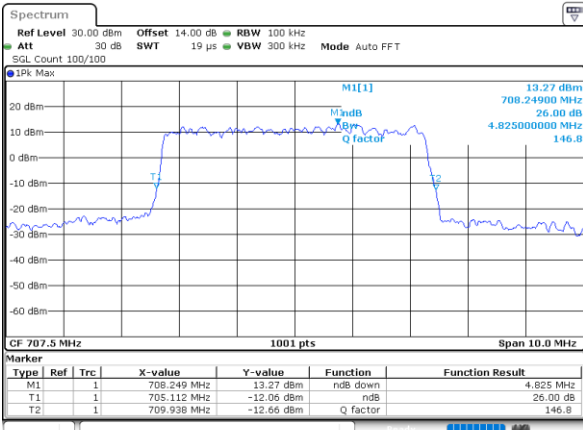
Date: 17_JAN_2023 09:09:01

Lowest Channel / 10MHz / 64QAM



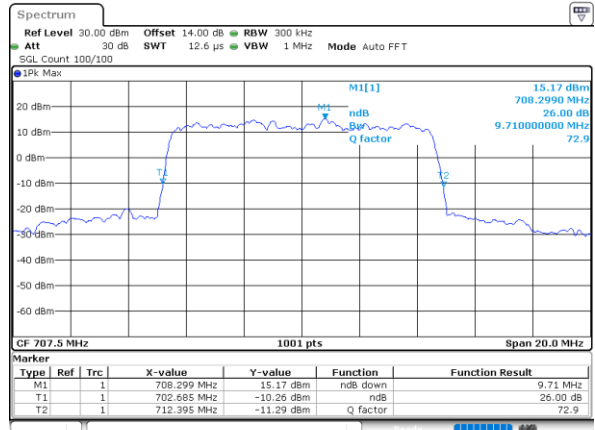
Date: 17_JAN_2023 09:04:03

Middle Channel / 5MHz / 64QAM



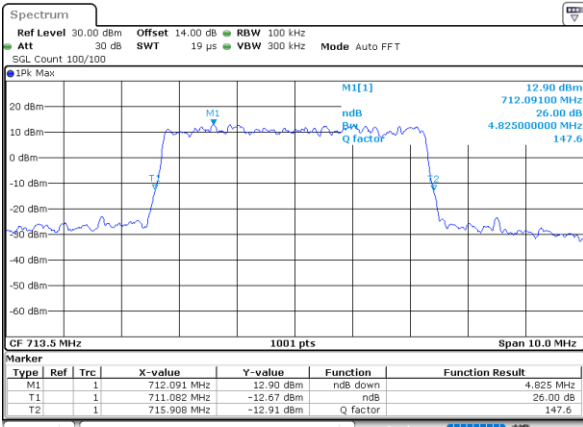
Date: 17_JAN_2023 09:13:12

Middle Channel / 10MHz / 64QAM



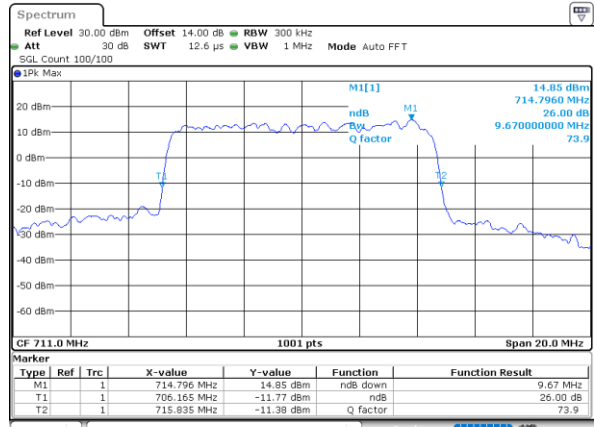
Date: 17_JAN_2023 09:08:14

Highest Channel / 5MHz / 64QAM



Date: 17_JAN_2023 09:15:05

Highest Channel / 10MHz / 64QAM



Date: 17_JAN_2023 09:10:06



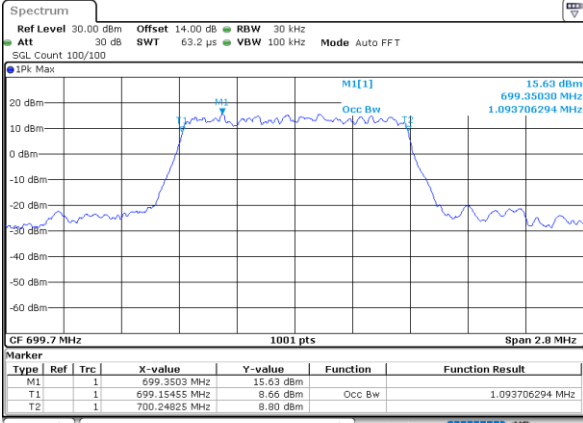
Occupied Bandwidth

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
Lowest CH	1.09	1.09	2.70	2.72	4.48	4.50	8.97	8.99	-	-	-	-
Middle CH	1.09	1.09	2.71	2.71	4.50	4.49	9.05	9.03	-	-	-	-
Highest CH	1.09	1.09	2.70	2.71	4.49	4.46	9.09	8.99	-	-	-	-
Mode	LTE Band 12 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.10	-	2.71	-	4.50	-	9.03	-	-	-	-	-
Middle CH	1.09	-	2.71	-	4.49	-	9.07	-	-	-	-	-
Highest CH	1.10	-	2.70	-	4.50	-	9.03	-	-	-	-	-



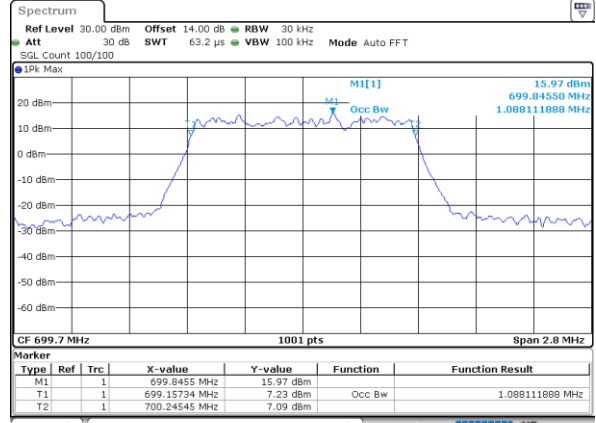
LTE Band 12

Lowest Channel / 1.4MHz / QPSK



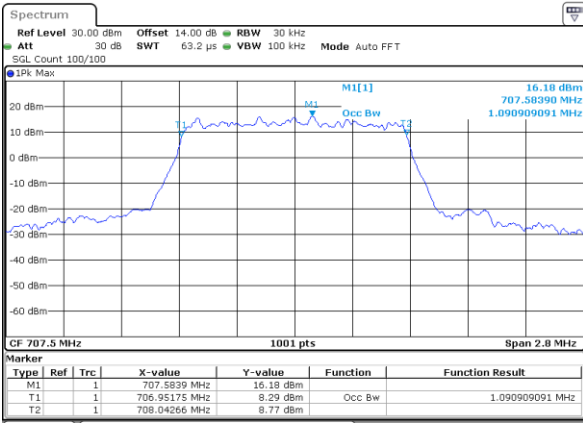
Date: 17_JAN_2023 09:13:57

Lowest Channel / 1.4MHz / 16QAM



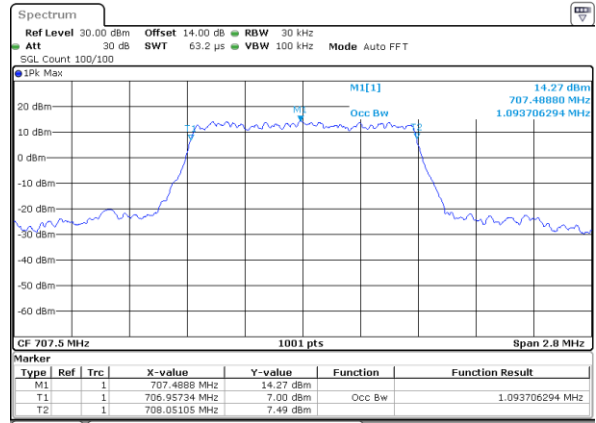
Date: 17_JAN_2023 09:14:19

Middle Channel / 1.4MHz / QPSK



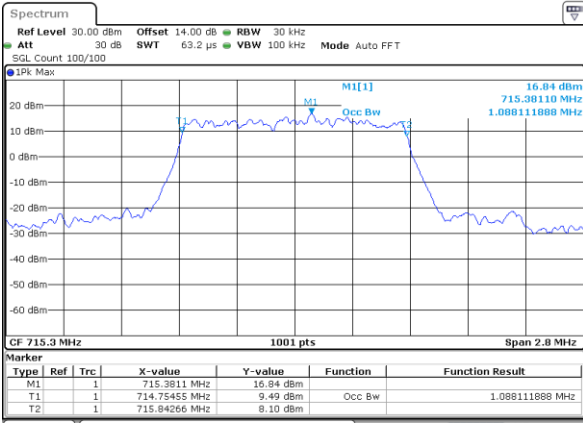
Date: 17_JAN_2023 09:22:42

Middle Channel / 1.4MHz / 16QAM



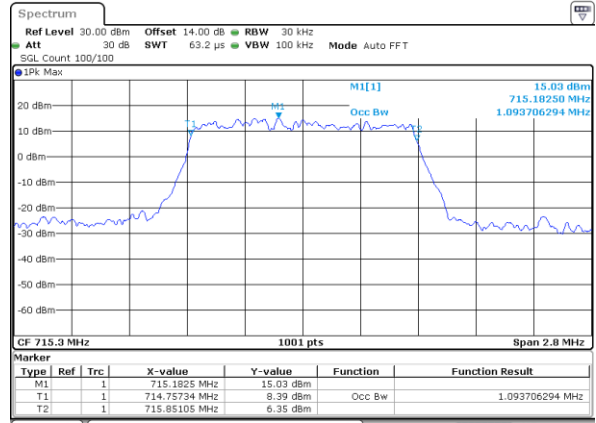
Date: 17_JAN_2023 09:22:11

Highest Channel / 1.4MHz / QPSK



Date: 17_JAN_2023 09:26:03

Highest Channel / 1.4MHz / 16QAM

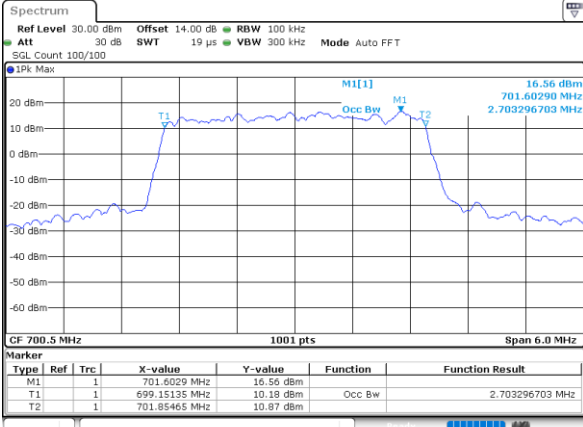


Date: 17_JAN_2023 09:26:25



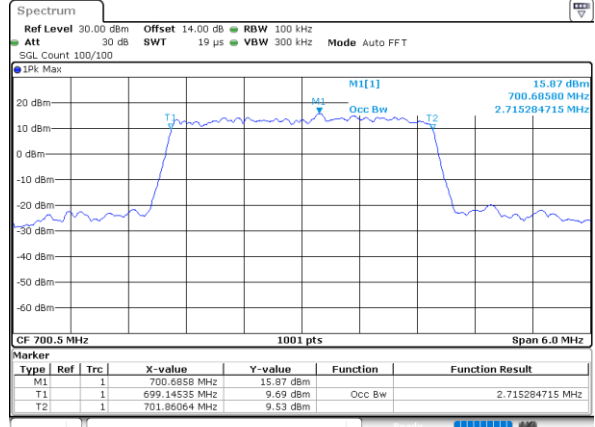
LTE Band 12

Lowest Channel / 3MHz / QPSK



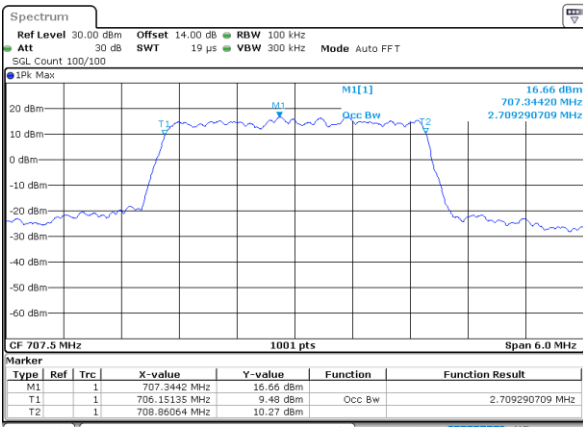
Date: 17_JAN_2023 07:37:51

Lowest Channel / 3MHz / 16QAM



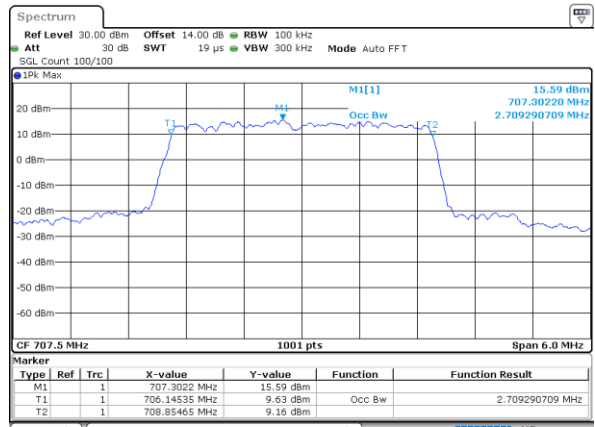
Date: 17_JAN_2023 07:38:12

Middle Channel / 3MHz / QPSK



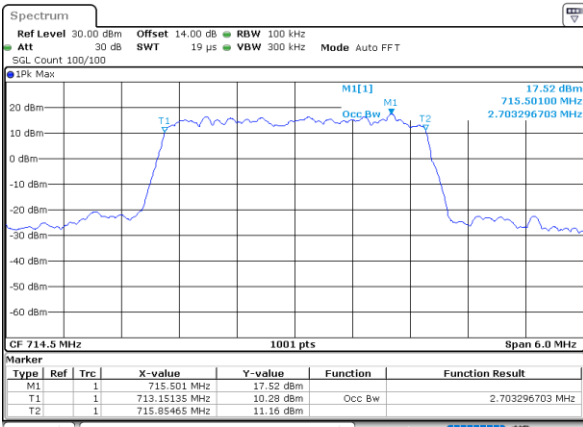
Date: 17_JAN_2023 07:46:36

Middle Channel / 3MHz / 16QAM



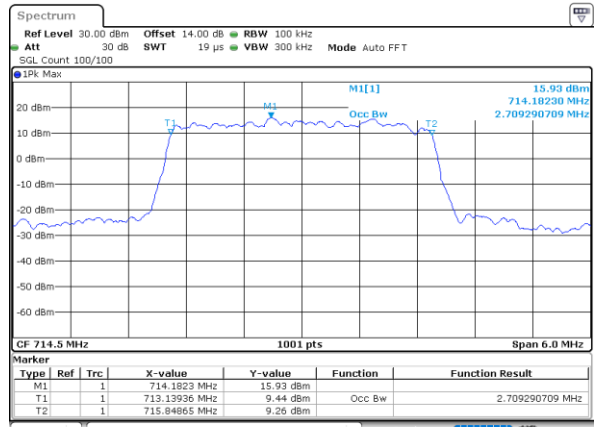
Date: 17_JAN_2023 07:46:15

Highest Channel / 3MHz / QPSK



Date: 17_JAN_2023 07:49:58

Highest Channel / 3MHz / 16QAM



Date: 17_JAN_2023 07:50:19