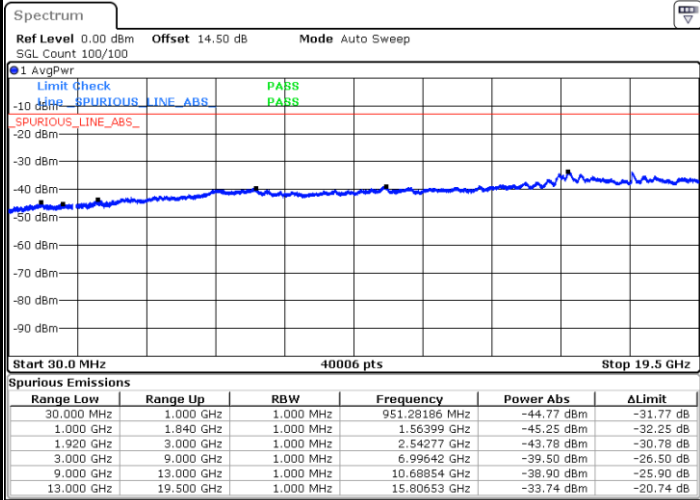




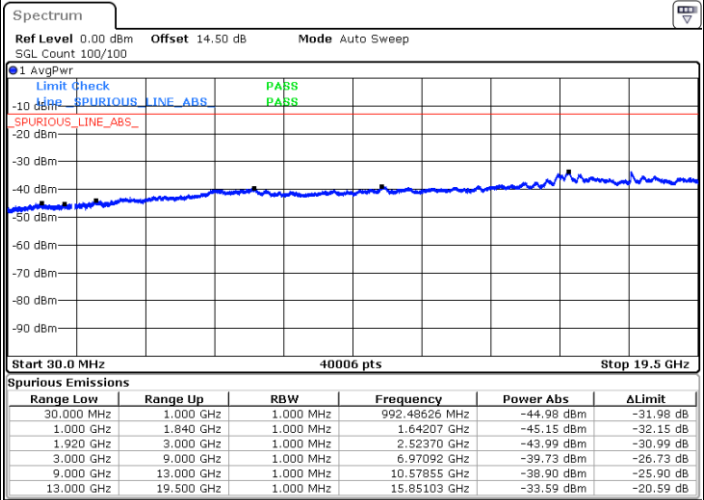
LTE Band 2 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



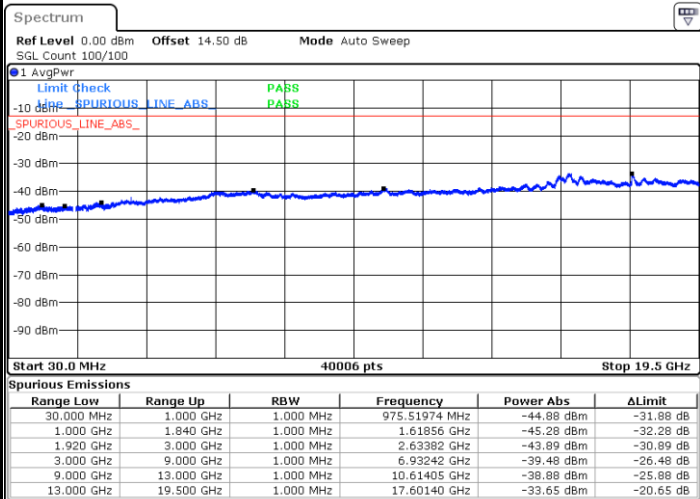
Date: 11.MAY.2023 21:54:50



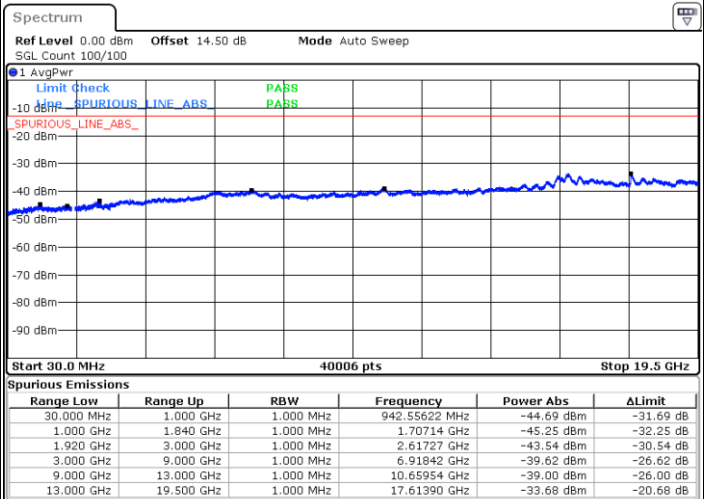
Date: 11.MAY.2023 21:56:33

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 11.MAY.2023 22:01:58

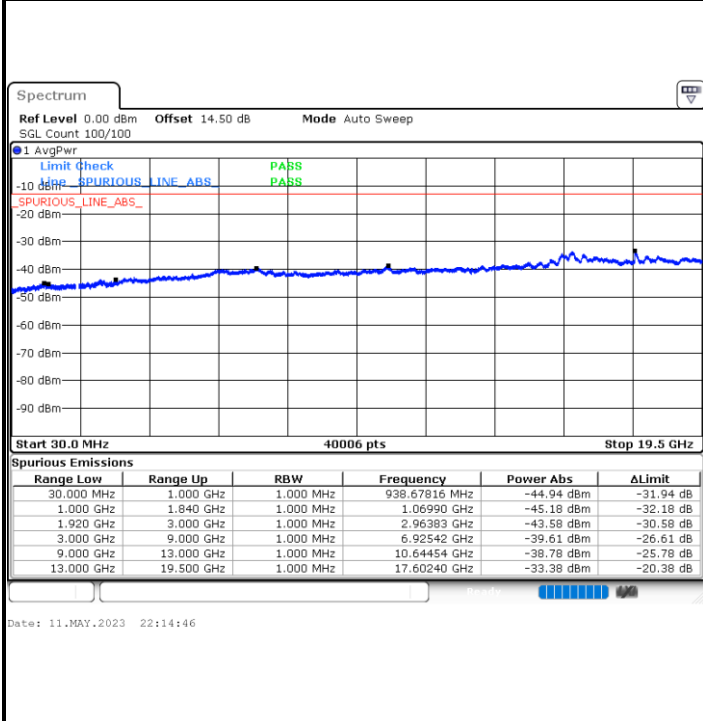


Date: 11.MAY.2023 22:03:40

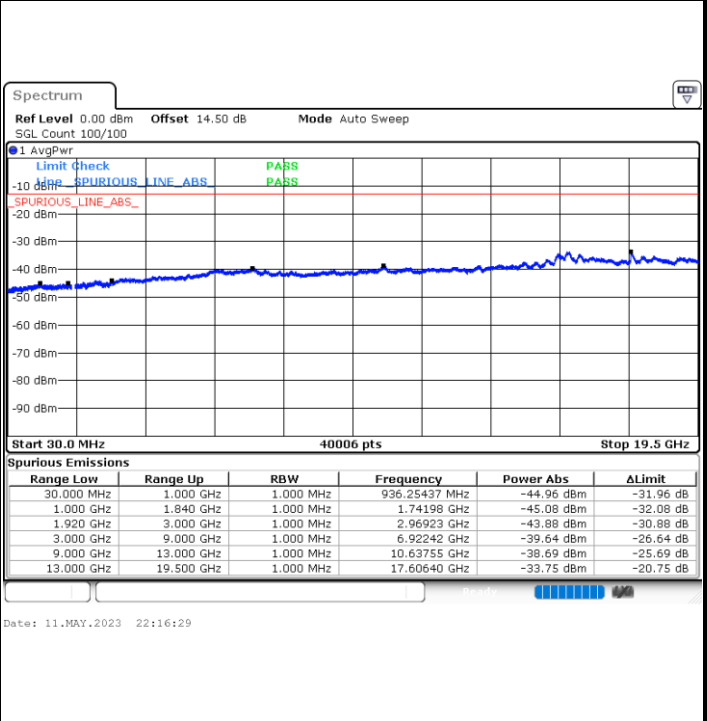


LTE Band 2 / 15MHz

Highest Channel / QPSK

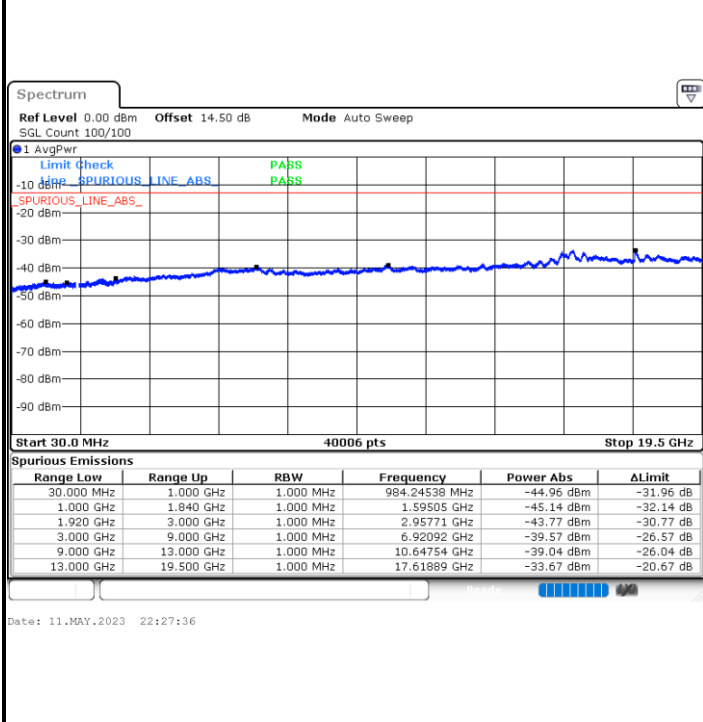


Highest Channel / 16QAM

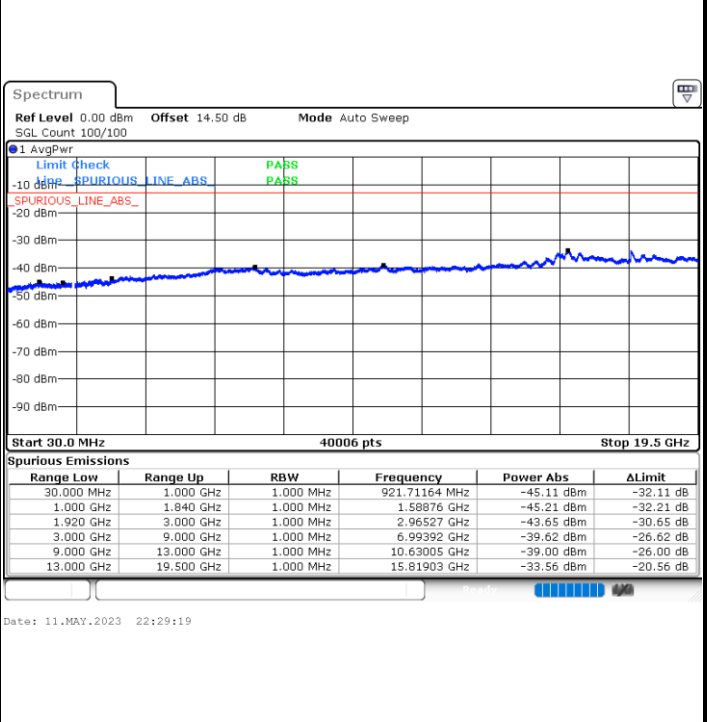


LTE Band 2 / 20MHz

Lowest Channel / QPSK



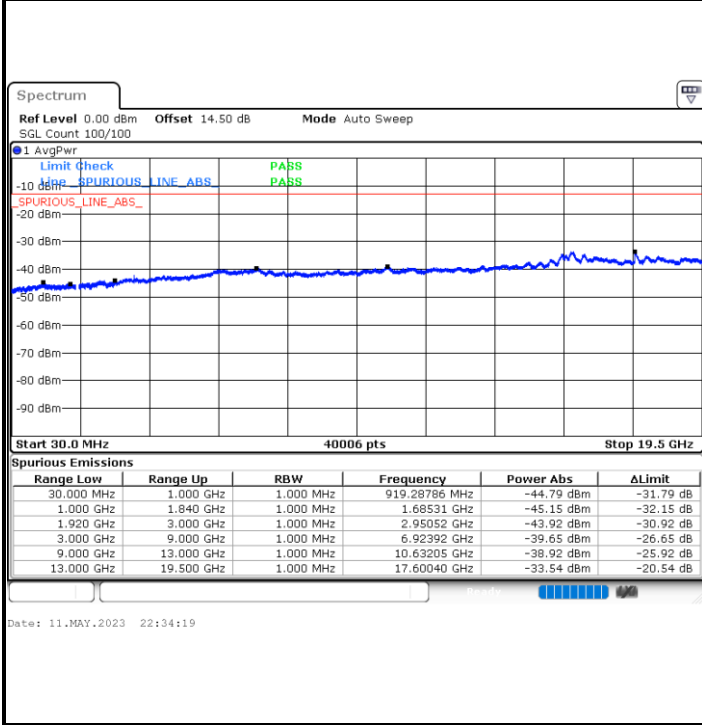
Lowest Channel / 16QAM



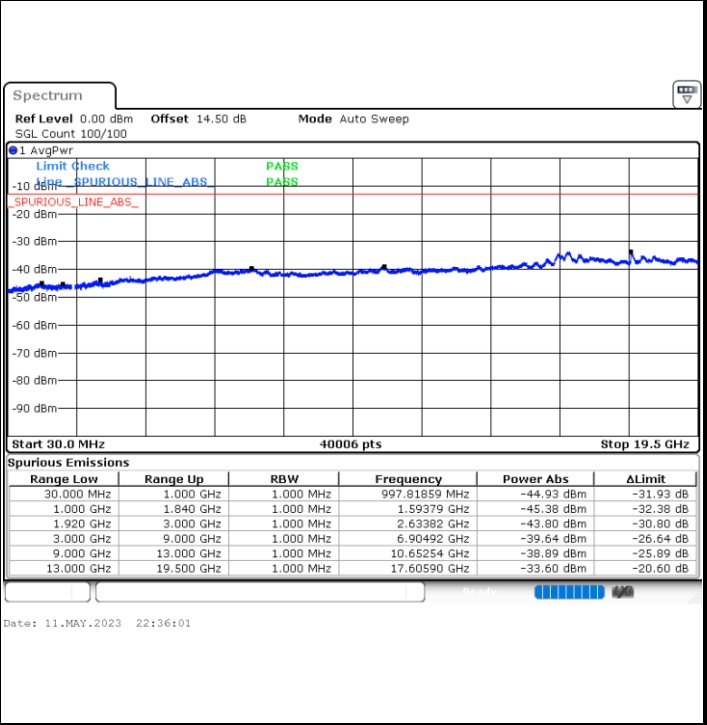


LTE Band 2 / 20MHz

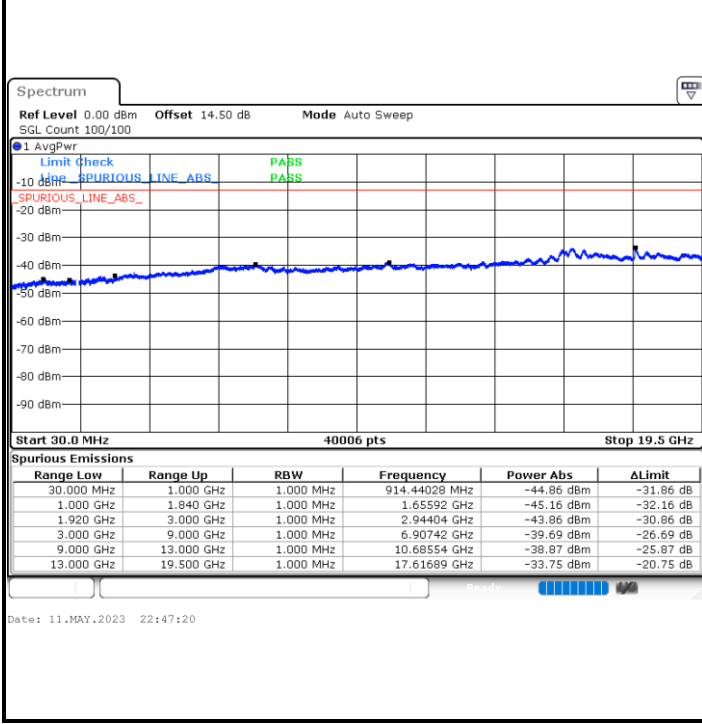
Middle Channel / QPSK



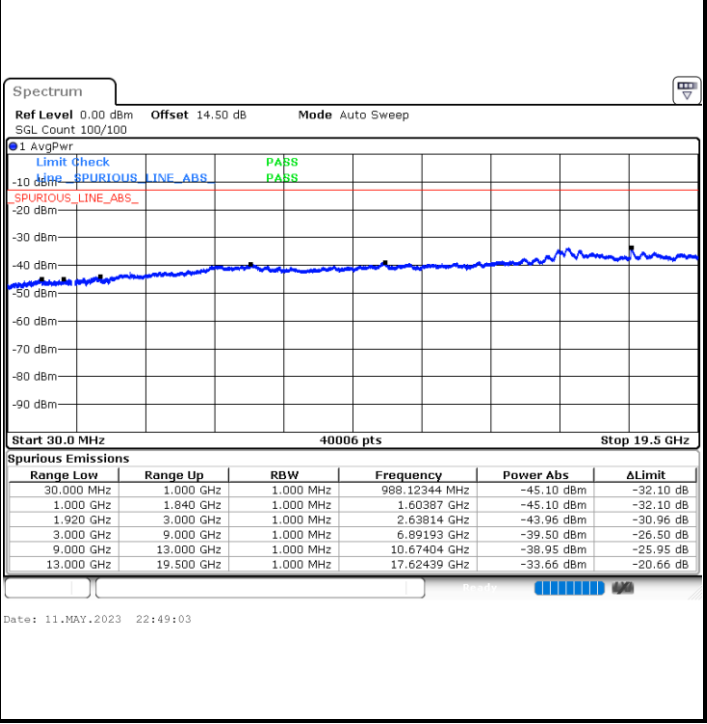
Middle Channel / 16QAM



Highest Channel / QPSK



Highest Channel / 16QAM

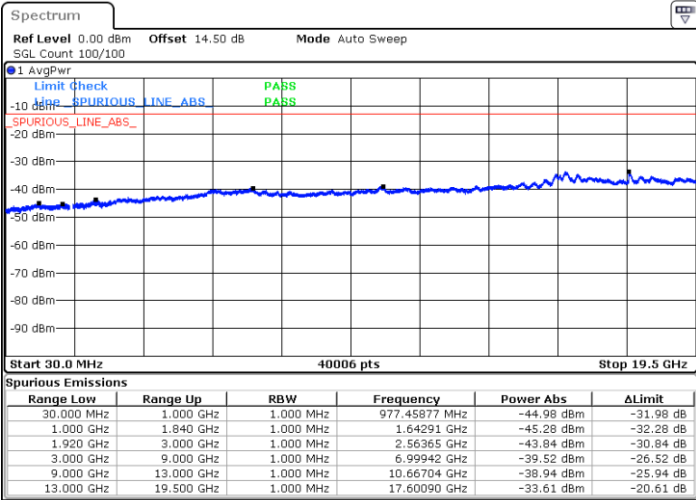




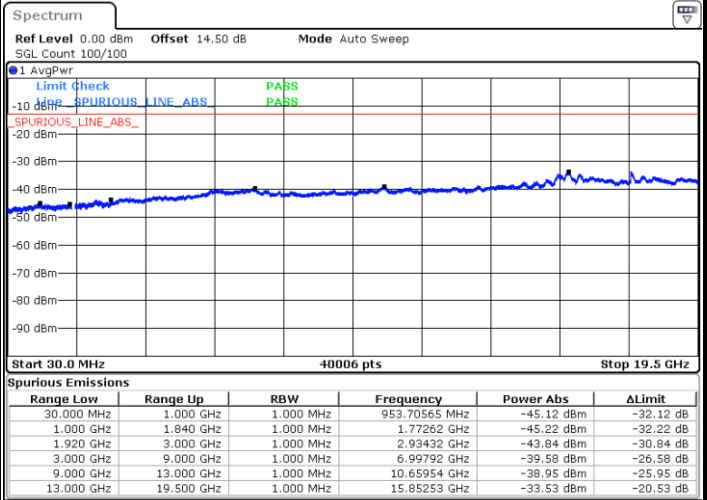
LTE Band 2 / 1.4MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

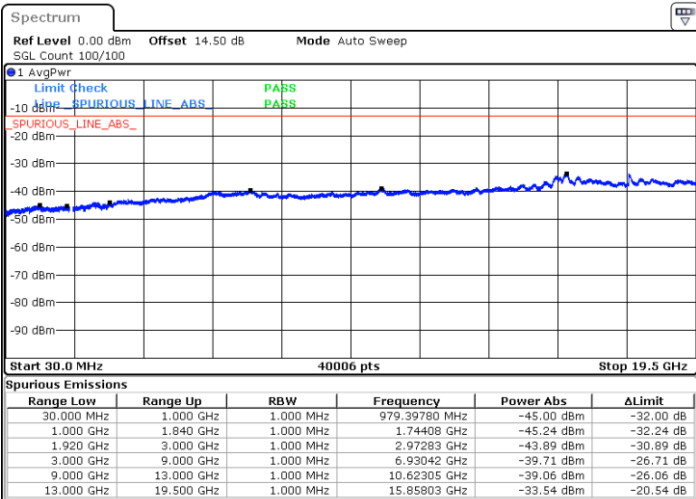


Date: 11.MAY.2023 19:25:10



Date: 11.MAY.2023 19:27:40

Highest Channel / 64QAM

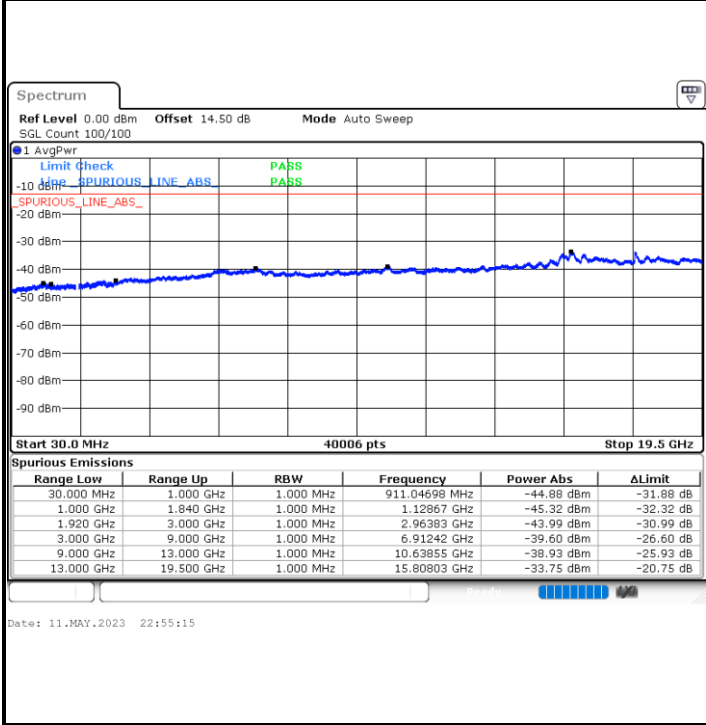


Date: 11.MAY.2023 19:33:42

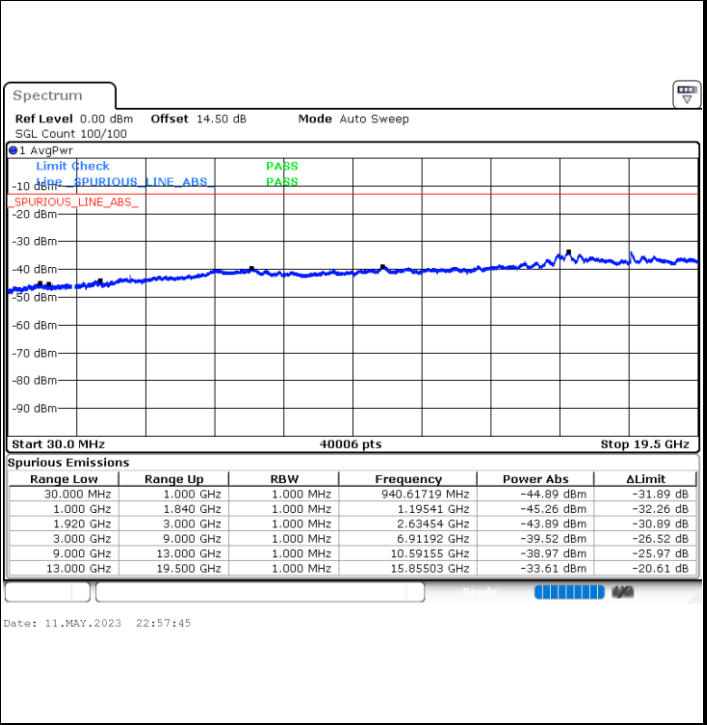


**LTE Band 2 / 3MHz**

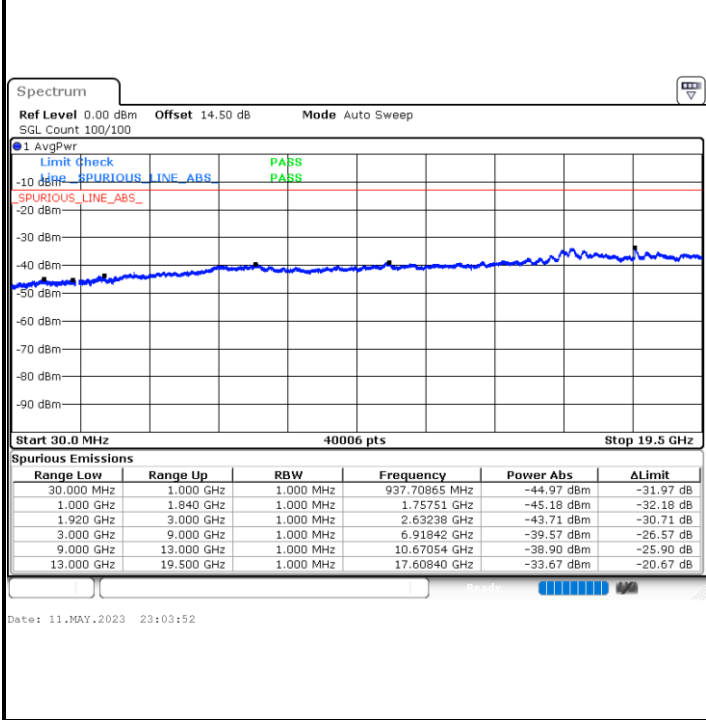
**Lowest Channel / 64QAM**



**Middle Channel / 64QAM**



**Highest Channel / 64QAM**



**Highest Channel / 64QAM**

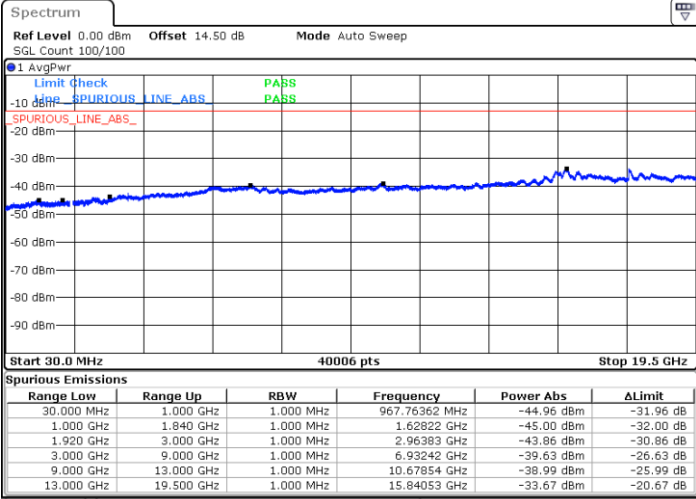




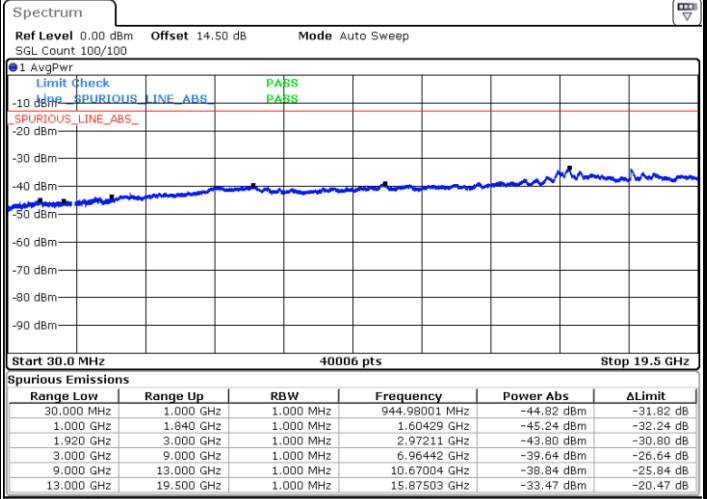
LTE Band 2 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

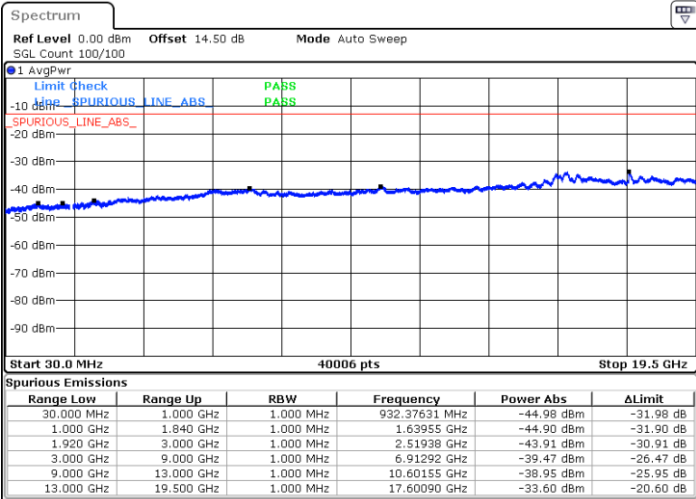


Date: 11.MAY.2023 23:09:59



Date: 11.MAY.2023 23:12:34

Highest Channel / 64QAM



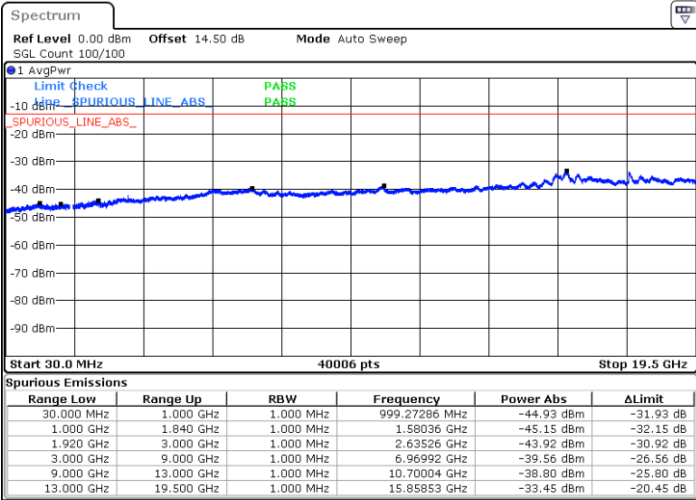
Date: 11.MAY.2023 23:10:41



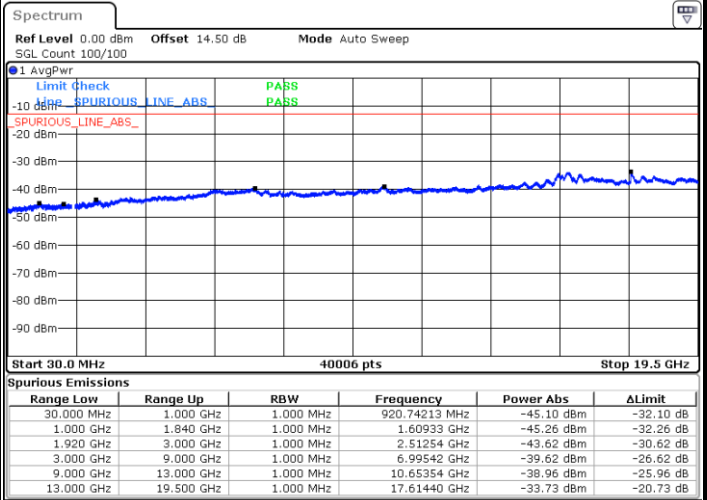
LTE Band 2 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

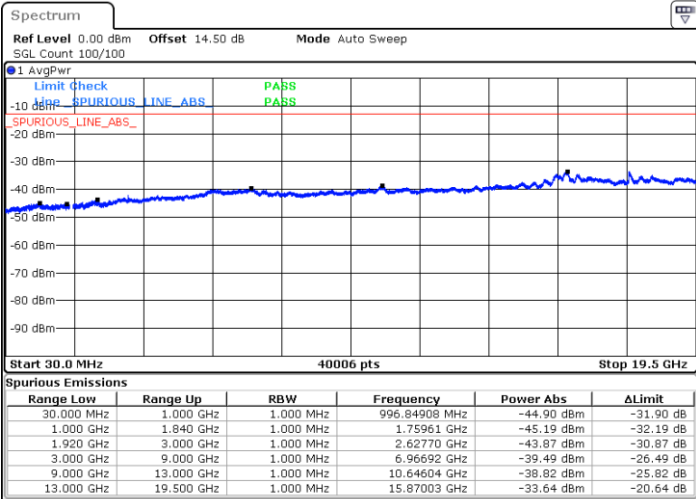


Date: 11.MAY.2023 23:24:48



Date: 11.MAY.2023 23:27:19

Highest Channel / 64QAM



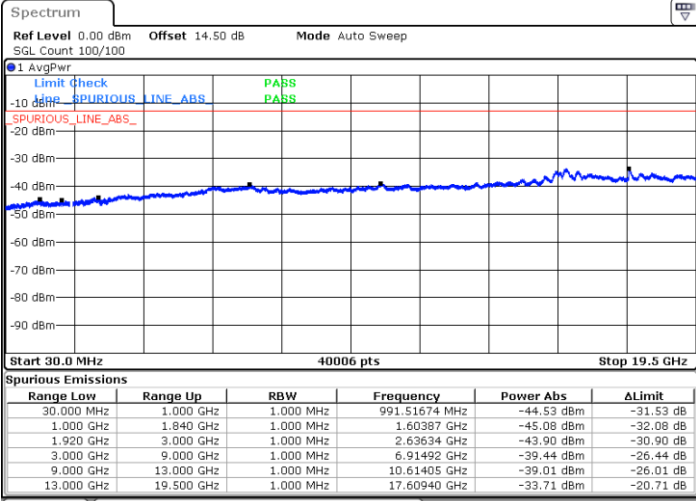
Date: 11.MAY.2023 23:33:25



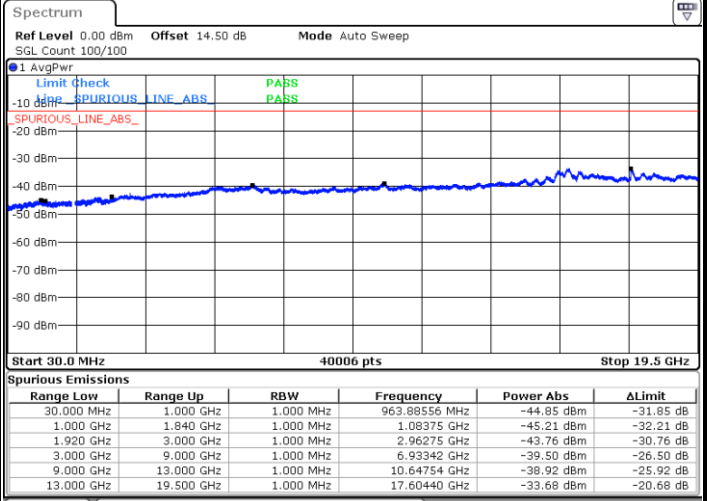
LTE Band 2 / 15MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

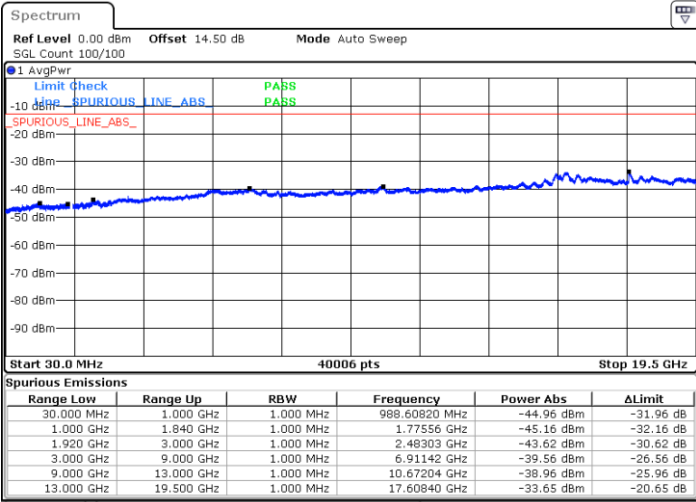


Date: 11.MAY.2023 23:39:32



Date: 11.MAY.2023 23:42:08

Highest Channel / 64QAM



Date: 11.MAY.2023 23:48:08

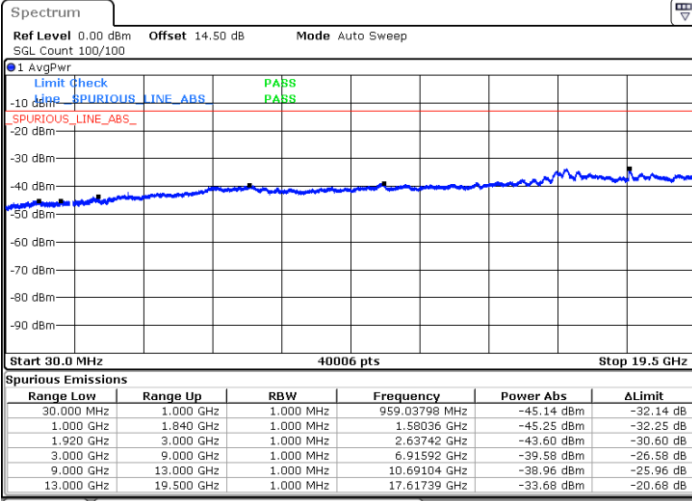




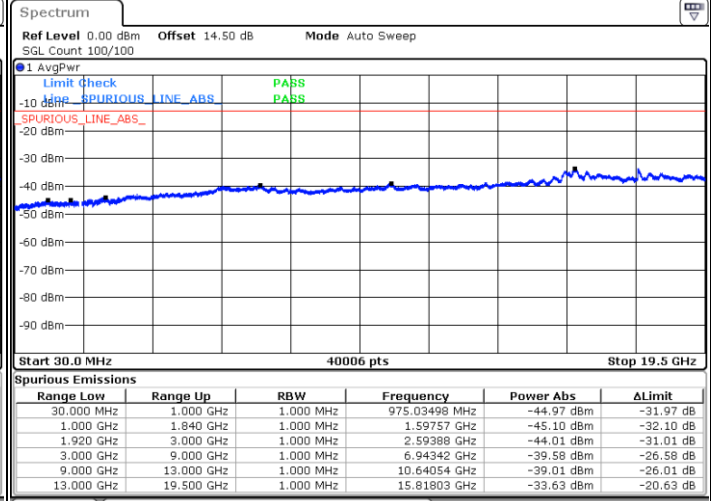
LTE Band 2 / 20MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

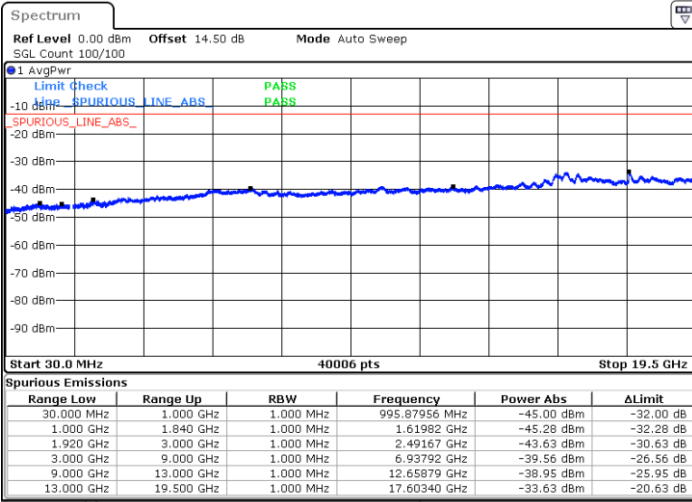


Date: 11.MAY.2023 23:54:15



Date: 11.MAY.2023 23:56:46

Highest Channel / 64QAM



Date: 12.MAY.2023 00:02:52



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	0.0007	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0076	
-10	Normal Voltage	0.0000	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0072	
20	Maximum Voltage	0.0002	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

1. Normal Voltage =3.89 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.48 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



# LTE Band 4

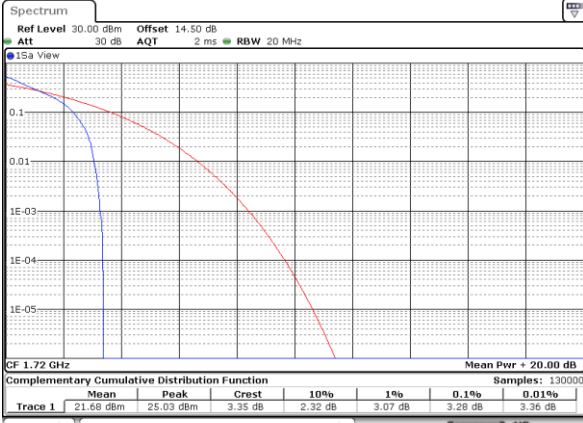
## Peak-to-Average Ratio

Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.28	4.87	4.55	5.71	PASS
Middle CH	3.45	4.87	4.35	5.97	
Highest CH	3.88	4.99	4.90	6.03	
Mode	LTE Band 4 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.25	6.14	-	-	PASS
Middle CH	5.13	6.23	-	-	
Highest CH	5.54	6.17	-	-	



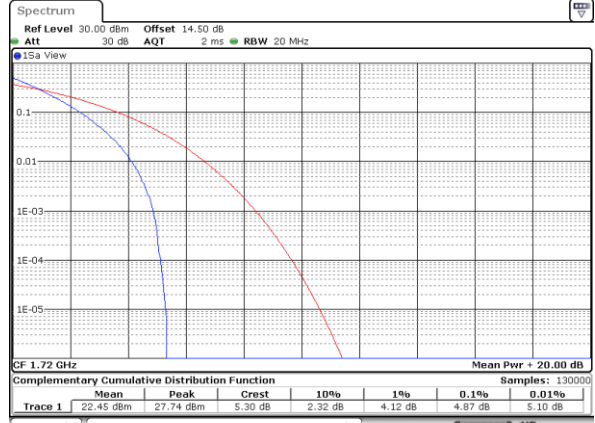
LTE Band 4 / 20MHz / QPSK

Lowest Channel / 1RB



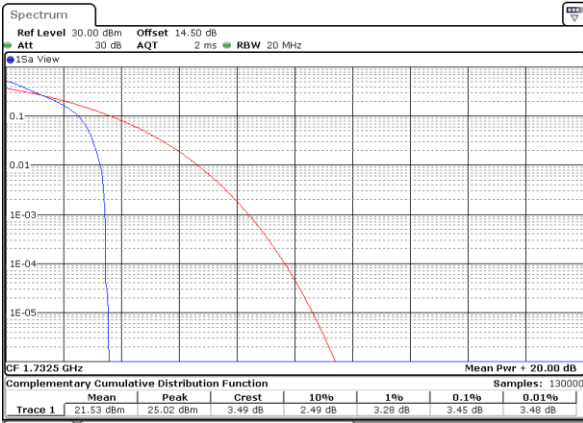
Date: 8 JUN 2023 22:11:33

Lowest Channel / Full RB



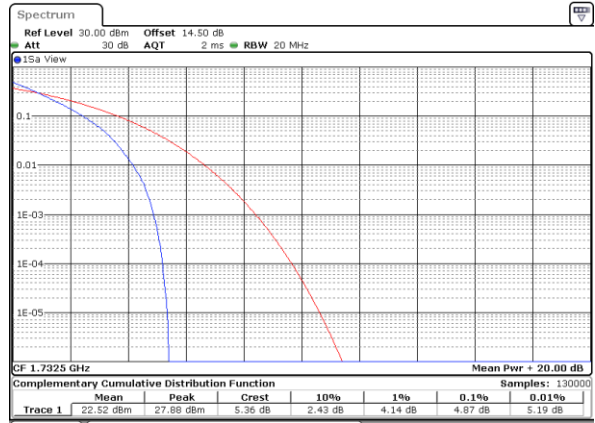
Date: 8 JUN 2023 22:11:59

Middle Channel / 1RB



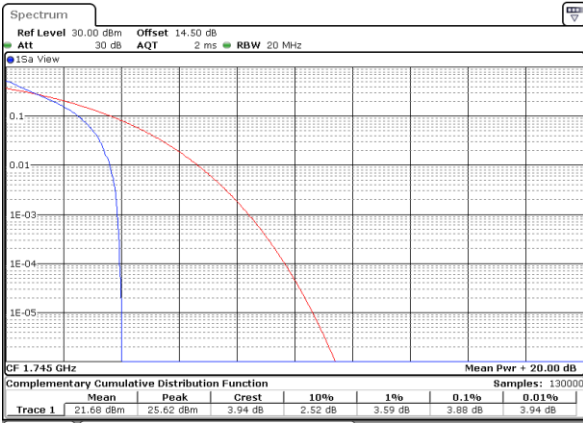
Date: 8 JUN 2023 22:12:05

Middle Channel / Full RB



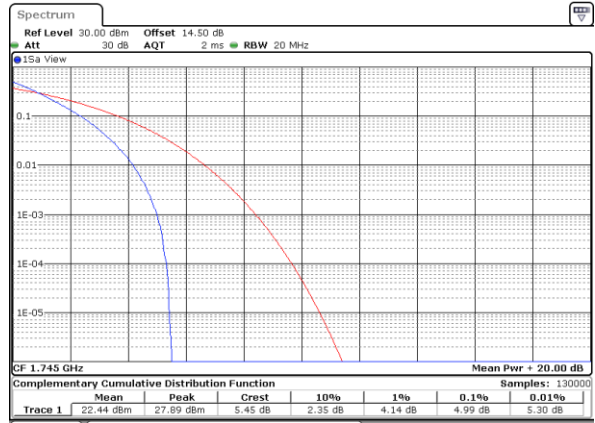
Date: 8 JUN 2023 22:12:50

Highest Channel / 1RB



Date: 8 JUN 2023 22:13:16

Highest Channel / Full RB

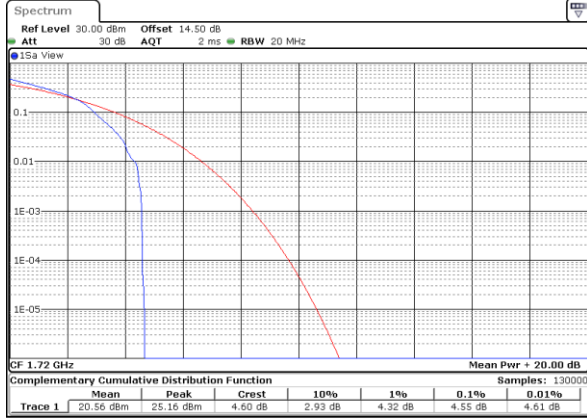


Date: 8 JUN 2023 22:13:42



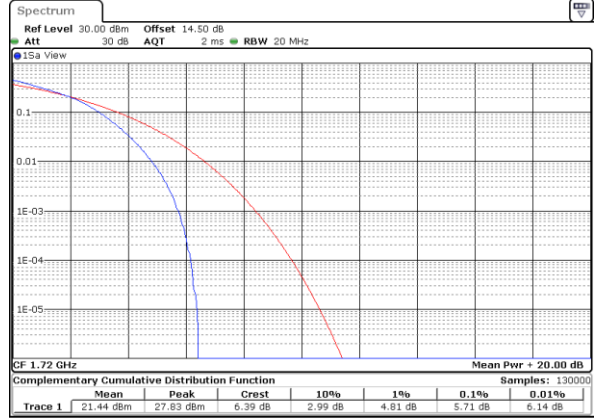
LTE Band 4 / 20MHz / 16QAM

Lowest Channel / 1RB



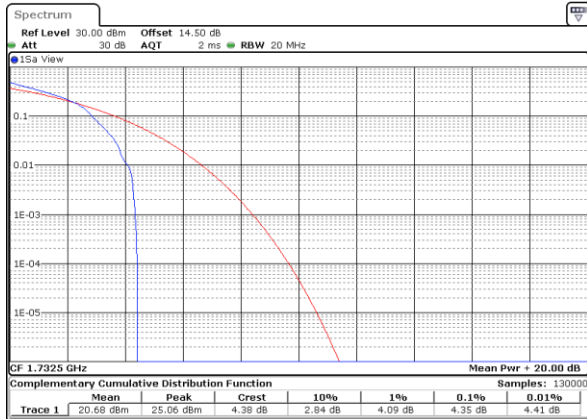
Date: 8 JUN 2023 22:08:59

Lowest Channel / Full RB



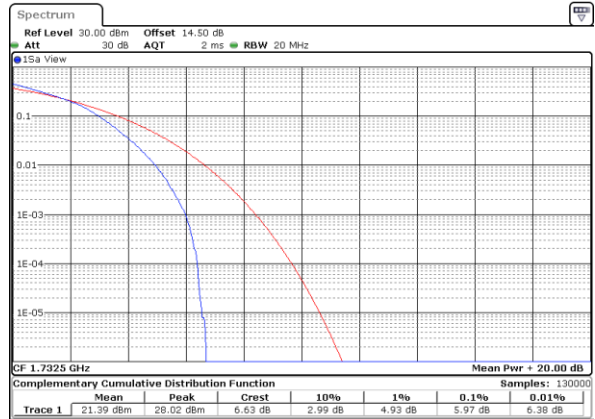
Date: 8 JUN 2023 22:09:24

Middle Channel / 1RB



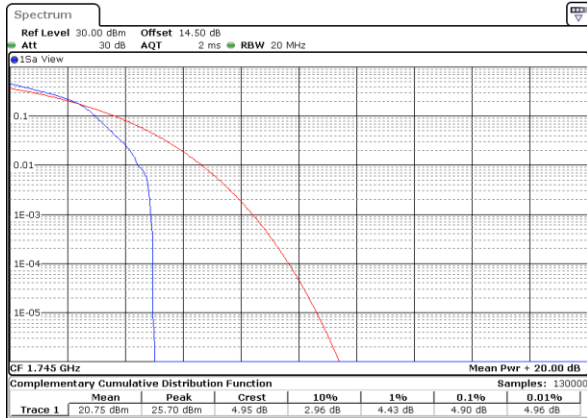
Date: 8 JUN 2023 22:09:50

Middle Channel / Full RB



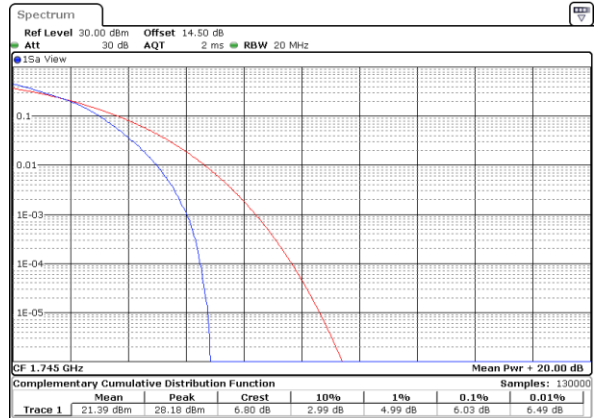
Date: 8 JUN 2023 22:10:16

Highest Channel / 1RB



Date: 8 JUN 2023 22:10:42

Highest Channel / Full RB

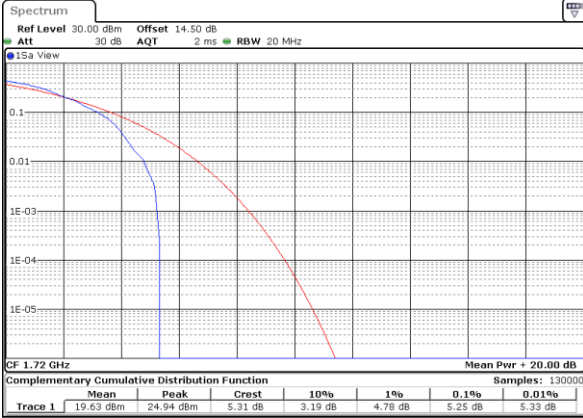


Date: 8 JUN 2023 22:11:07



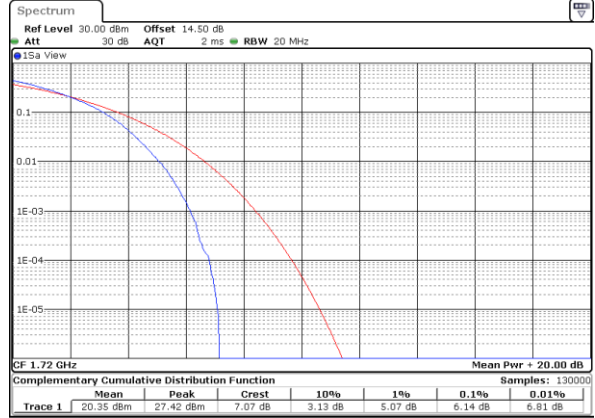
LTE Band 4 / 20MHz / 64QAM

Lowest Channel / 1RB



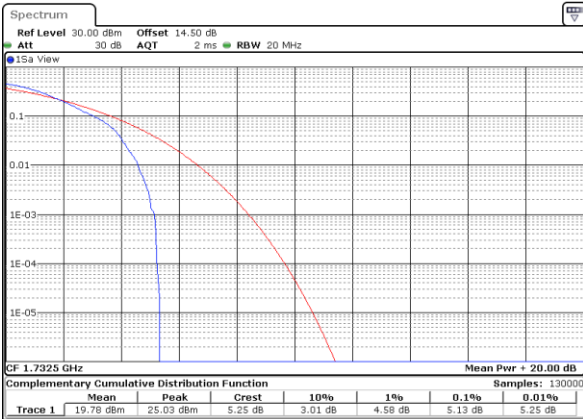
Date: 8 JUN 2023 22:14:08

Lowest Channel / Full RB



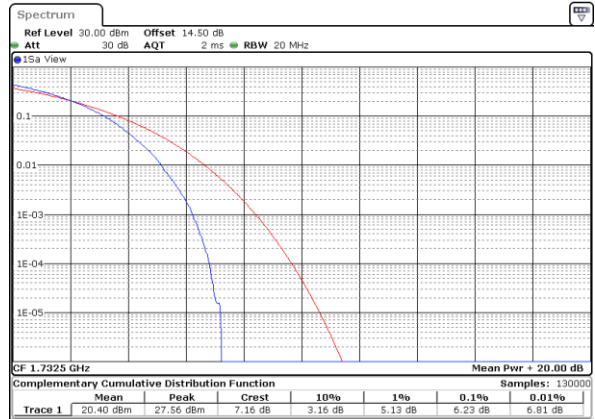
Date: 8 JUN 2023 22:14:34

Middle Channel / 1RB



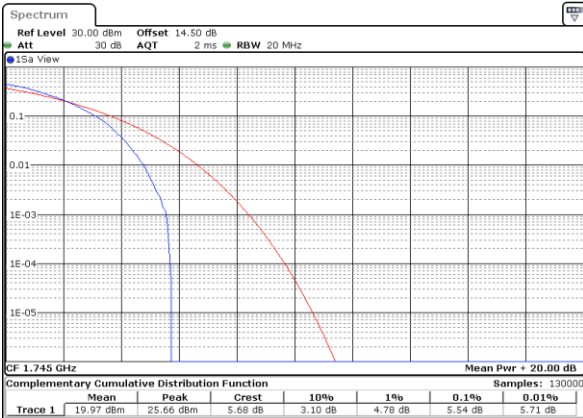
Date: 8 JUN 2023 22:15:00

Middle Channel / Full RB



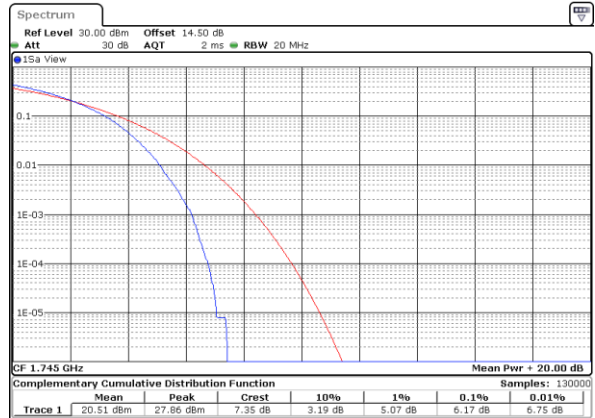
Date: 8 JUN 2023 22:15:25

Highest Channel / 1RB



Date: 8 JUN 2023 22:15:51

Highest Channel / Full RB



Date: 8 JUN 2023 22:16:17



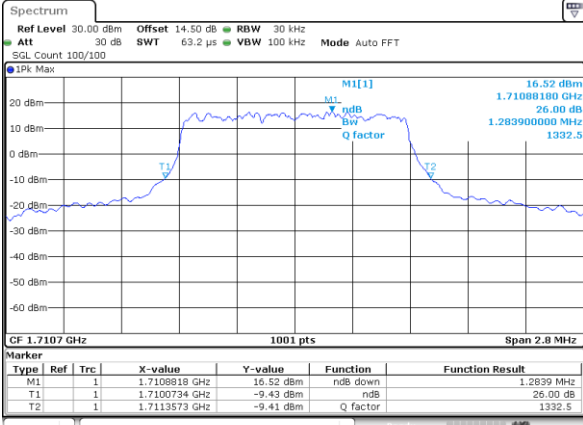
26dB Bandwidth

Mode	LTE Band 4 : 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	1.28	1.28	3.00	2.96	4.88	4.85	9.79	9.75	14.27	14.42	18.82	18.90
Middle CH	1.28	1.28	2.99	2.96	4.87	4.90	9.89	9.69	14.42	14.27	18.66	19.02
Highest CH	1.27	1.27	2.98	2.94	4.95	4.83	9.81	9.89	14.57	14.54	18.86	19.02
Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.31	-	2.95	-	4.97	-	9.81	-	14.30	-	18.86	-
Middle CH	1.28	-	2.94	-	4.97	-	10.01	-	14.45	-	19.02	-
Highest CH	1.30	-	2.96	-	4.89	-	9.75	-	14.48	-	18.86	-



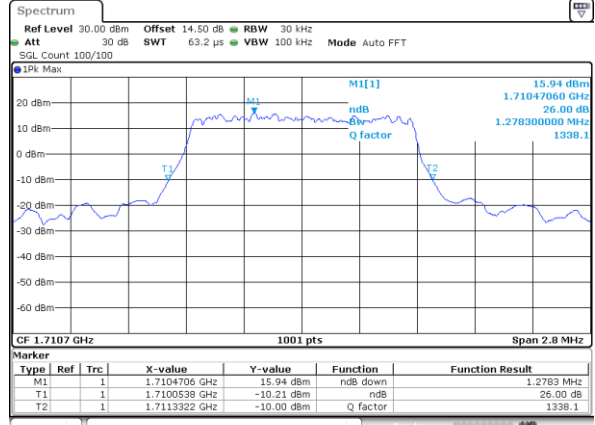
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



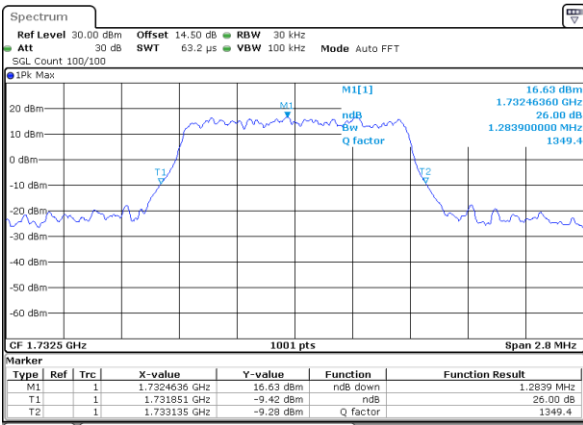
Date: 8 JUN 2023 20:19:21

Lowest Channel / 1.4MHz / 16QAM



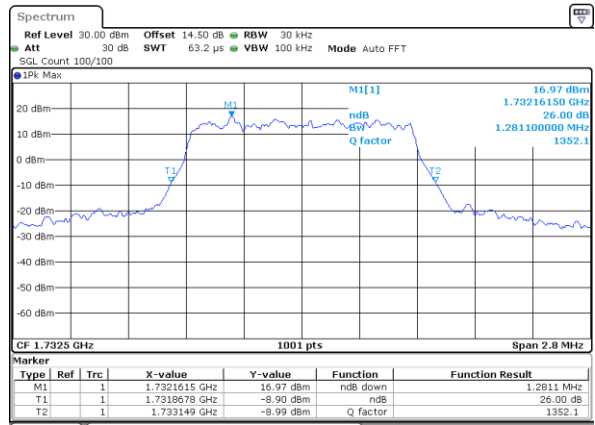
Date: 8 JUN 2023 20:19:45

Middle Channel / 1.4MHz / QPSK



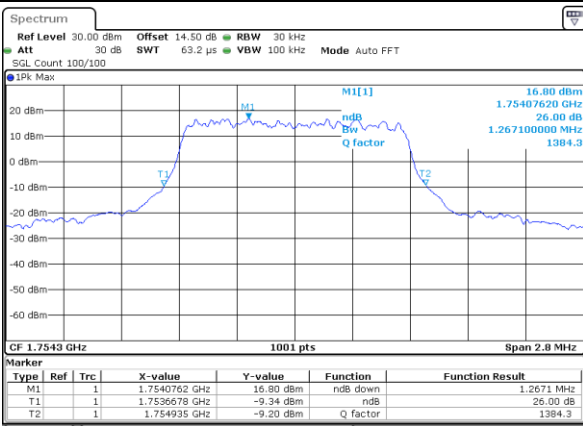
Date: 8 JUN 2023 20:34:44

Middle Channel / 1.4MHz / 16QAM



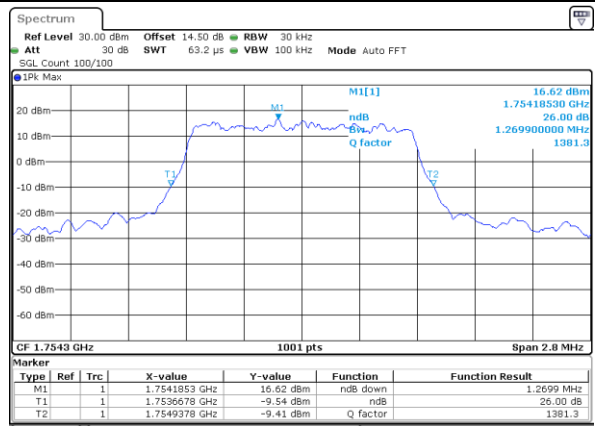
Date: 8 JUN 2023 20:35:08

Highest Channel / 1.4MHz / QPSK



Date: 8 JUN 2023 20:38:31

Highest Channel / 1.4MHz / 16QAM



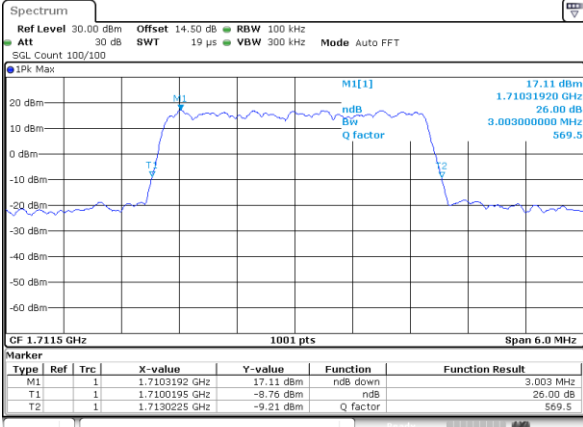
Date: 8 JUN 2023 20:38:56





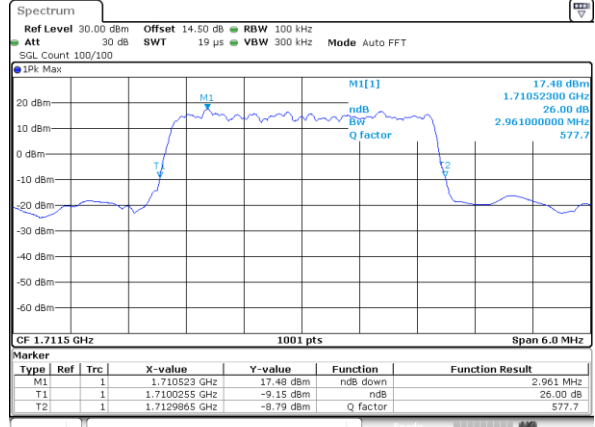
LTE Band 4

Lowest Channel / 3MHz / QPSK



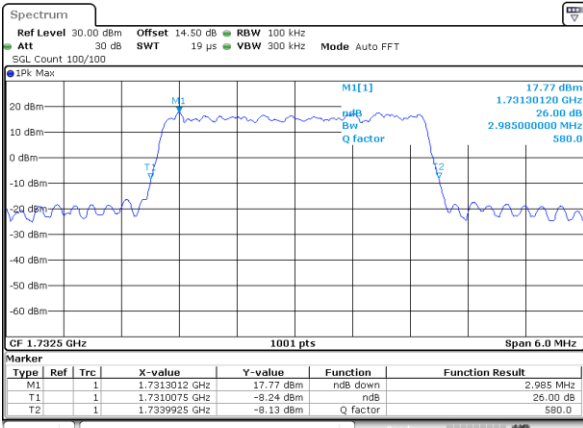
Date: 8 JUN 2023 16:35:16

Lowest Channel / 3MHz / 16QAM



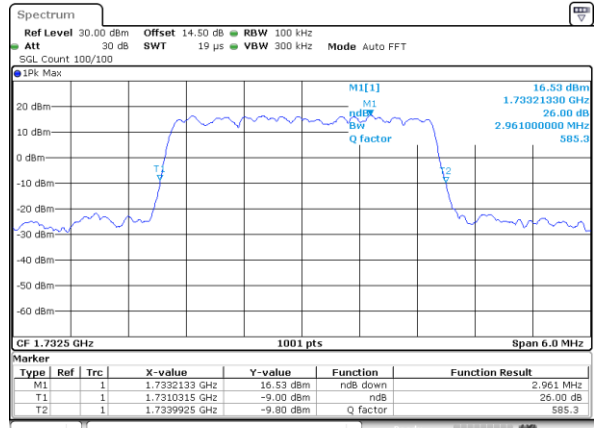
Date: 8 JUN 2023 16:35:41

Middle Channel / 3MHz / QPSK



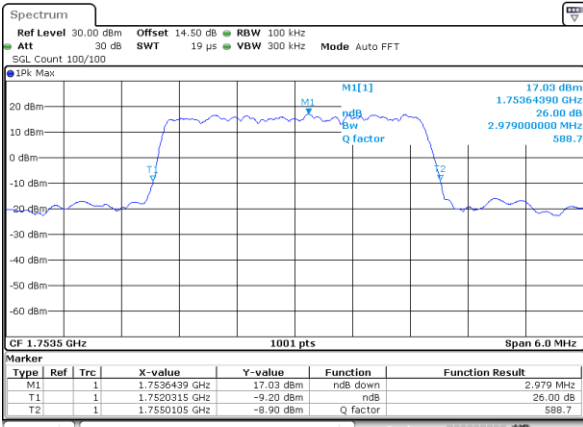
Date: 8 JUN 2023 16:45:20

Middle Channel / 3MHz / 16QAM



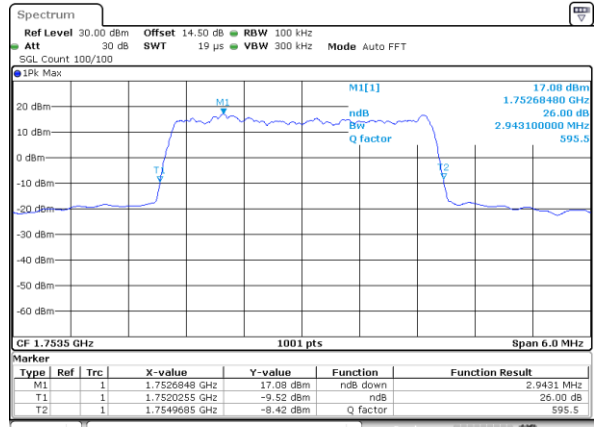
Date: 8 JUN 2023 16:45:44

Highest Channel / 3MHz / QPSK



Date: 8 JUN 2023 16:49:47

Highest Channel / 3MHz / 16QAM

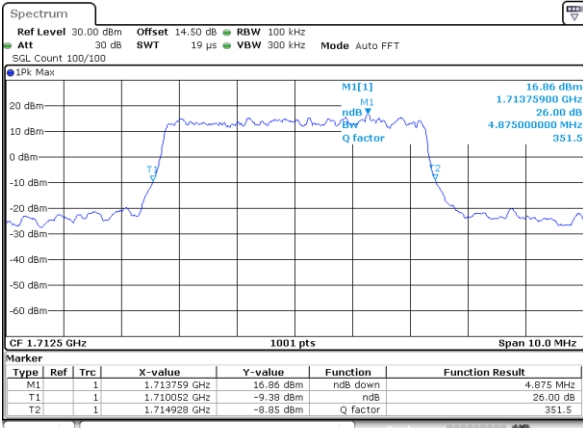


Date: 8 JUN 2023 16:50:12



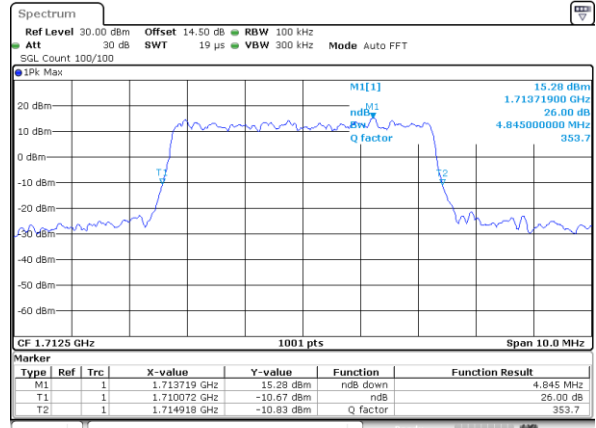
LTE Band 4

Lowest Channel / 5MHz / QPSK



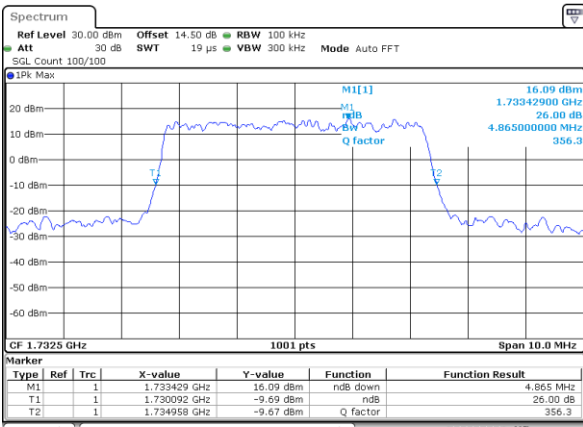
Date: 8 JUN 2023 16:59:53

Lowest Channel / 5MHz / 16QAM



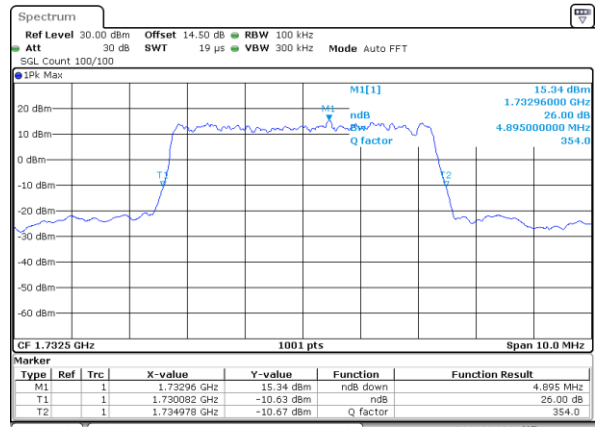
Date: 8 JUN 2023 17:00:18

Middle Channel / 5MHz / QPSK



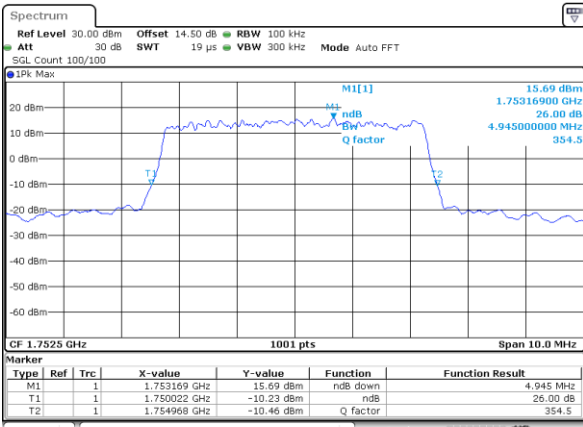
Date: 8 JUN 2023 17:09:57

Middle Channel / 5MHz / 16QAM



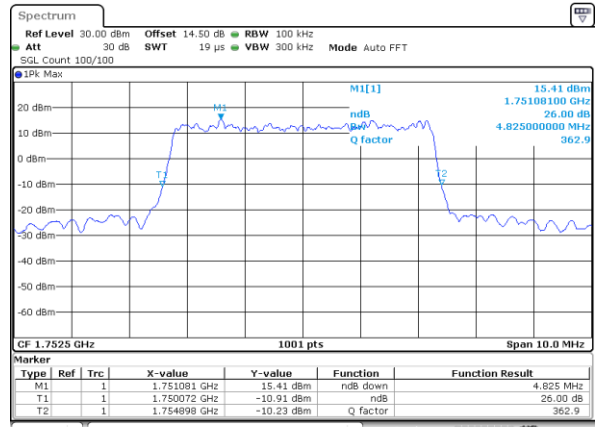
Date: 8 JUN 2023 17:10:20

Highest Channel / 5MHz / QPSK



Date: 8 JUN 2023 17:11:23

Highest Channel / 5MHz / 16QAM

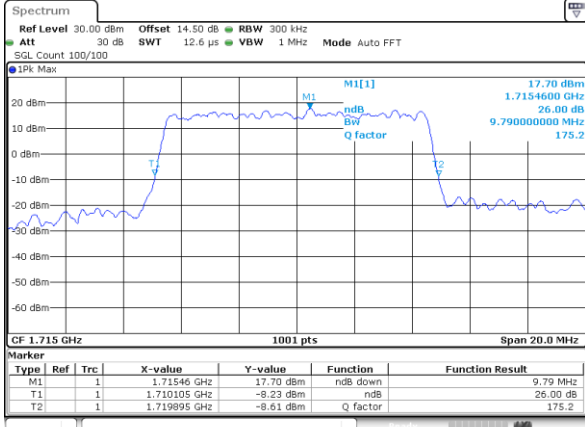


Date: 8 JUN 2023 17:11:48



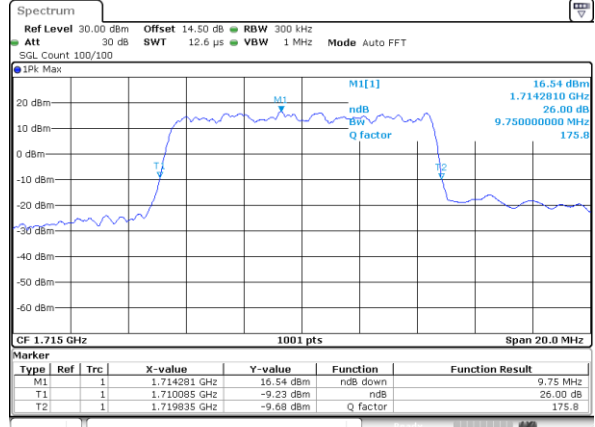
LTE Band 4

Lowest Channel / 10MHz / QPSK



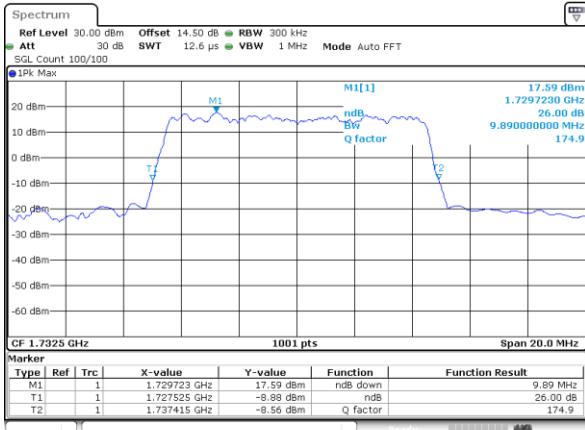
Date: 8 JUN 2023 17:24:30

Lowest Channel / 10MHz / 16QAM



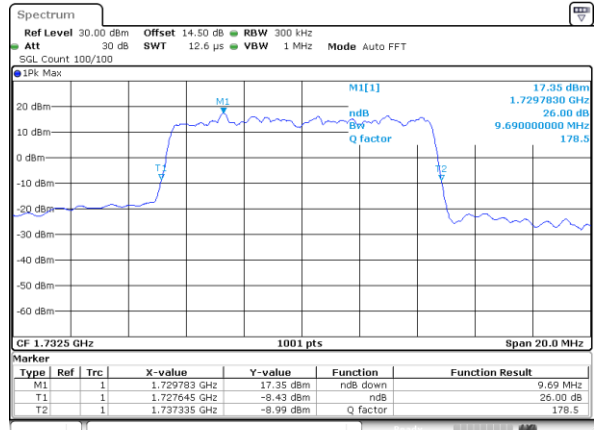
Date: 8 JUN 2023 17:24:54

Middle Channel / 10MHz / QPSK



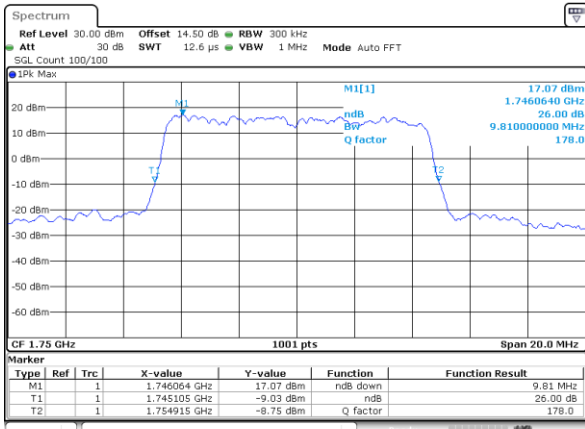
Date: 8 JUN 2023 17:34:08

Middle Channel / 10MHz / 16QAM



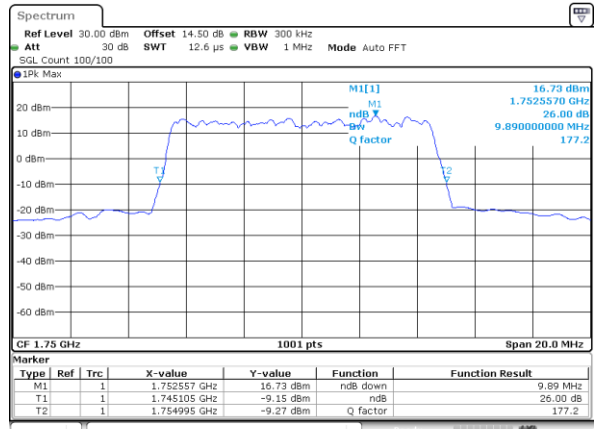
Date: 8 JUN 2023 17:34:32

Highest Channel / 10MHz / QPSK



Date: 8 JUN 2023 17:37:56

Highest Channel / 10MHz / 16QAM

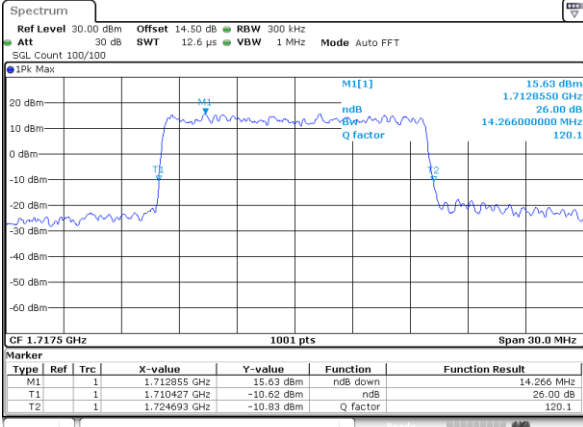


Date: 8 JUN 2023 17:38:20



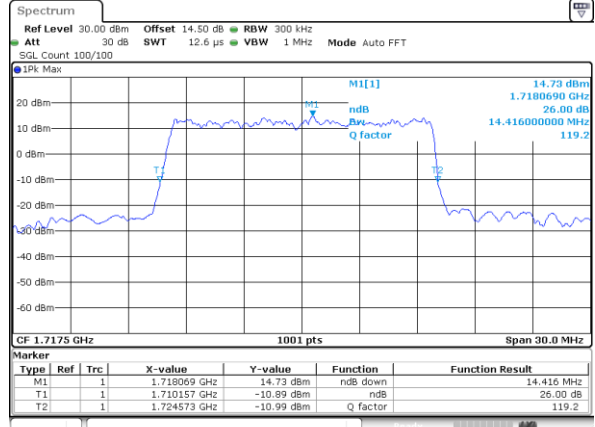
LTE Band 4

Lowest Channel / 15MHz / QPSK



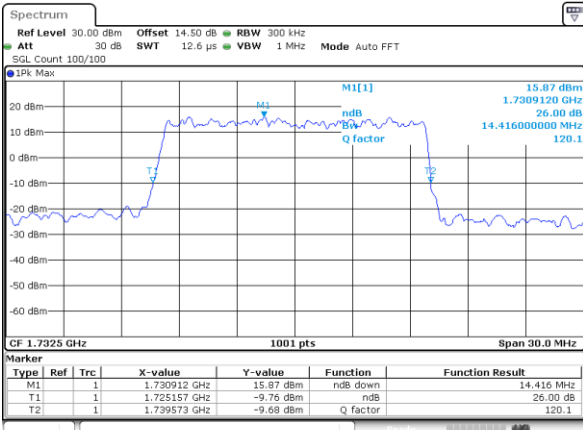
Date: 8 JUN 2023 17:46:02

Lowest Channel / 15MHz / 16QAM



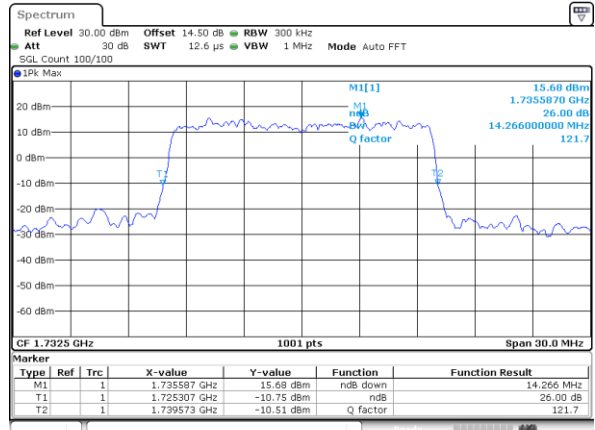
Date: 8 JUN 2023 17:46:26

Middle Channel / 15MHz / QPSK



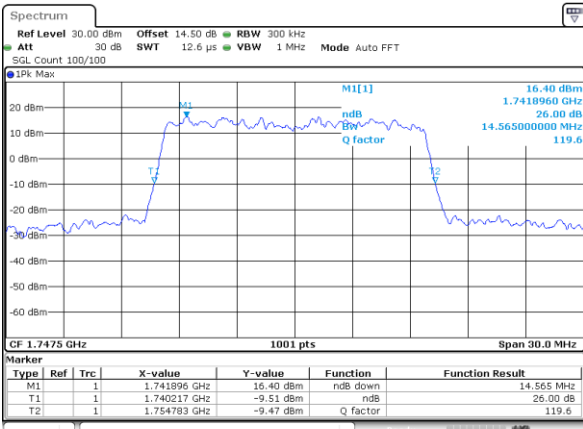
Date: 8 JUN 2023 17:53:26

Middle Channel / 15MHz / 16QAM



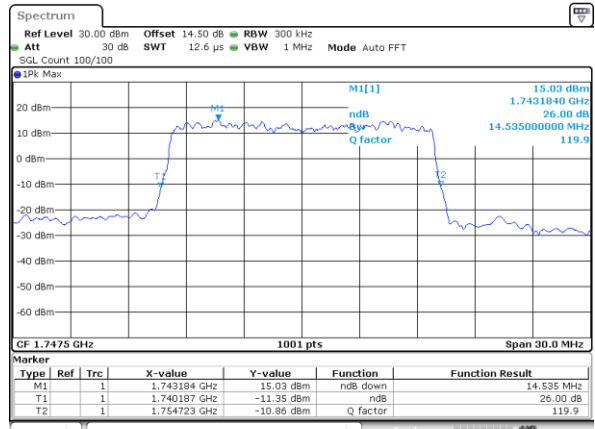
Date: 8 JUN 2023 17:53:50

Highest Channel / 15MHz / QPSK



Date: 8 JUN 2023 17:57:13

Highest Channel / 15MHz / 16QAM

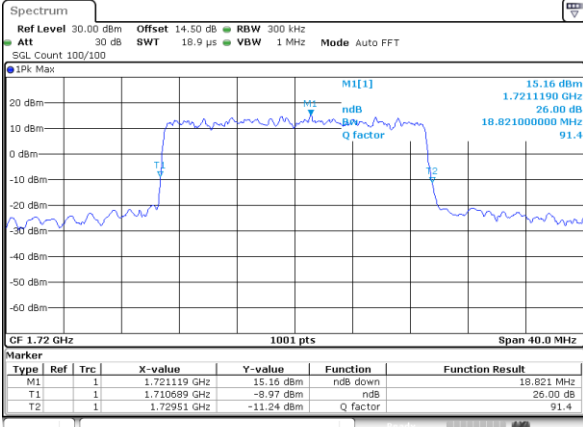


Date: 8 JUN 2023 17:57:37



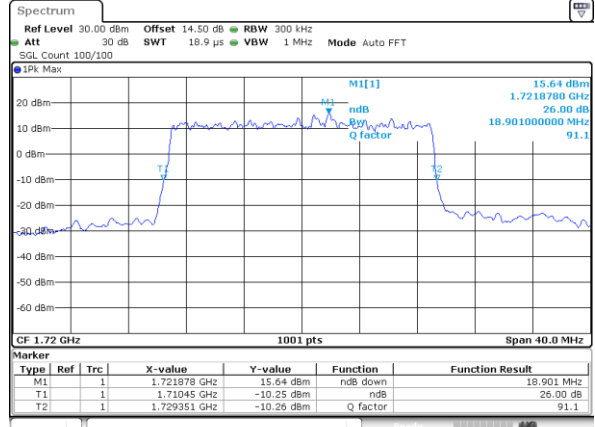
LTE Band 4

Lowest Channel / 20MHz / QPSK



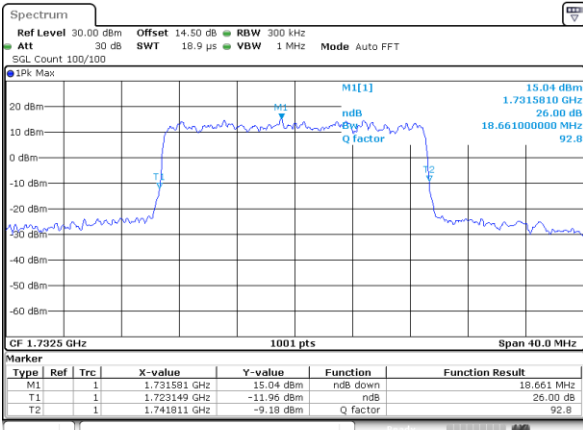
Date: 8 JUN 2023 18:04:37

Lowest Channel / 20MHz / 16QAM



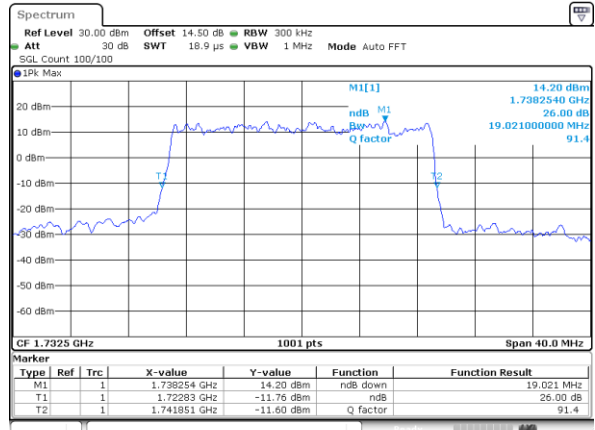
Date: 8 JUN 2023 18:05:02

Middle Channel / 20MHz / QPSK



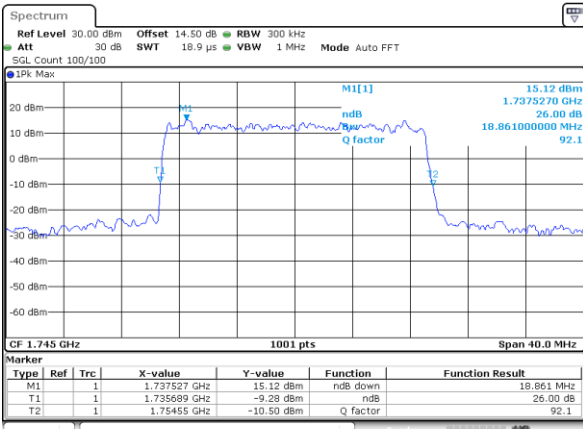
Date: 8 JUN 2023 18:12:01

Middle Channel / 20MHz / 16QAM



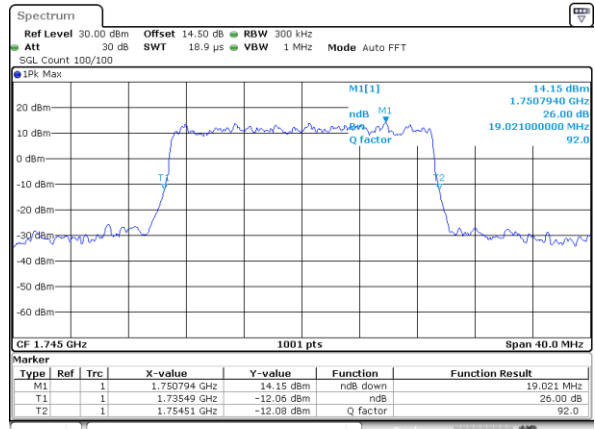
Date: 8 JUN 2023 18:12:25

Highest Channel / 20MHz / QPSK



Date: 8 JUN 2023 18:15:49

Highest Channel / 20MHz / 16QAM

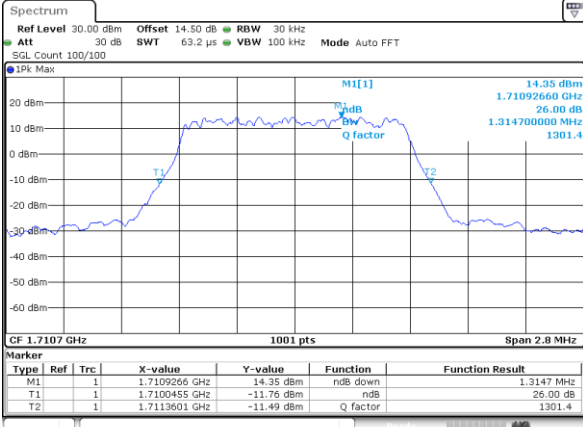


Date: 8 JUN 2023 18:16:14



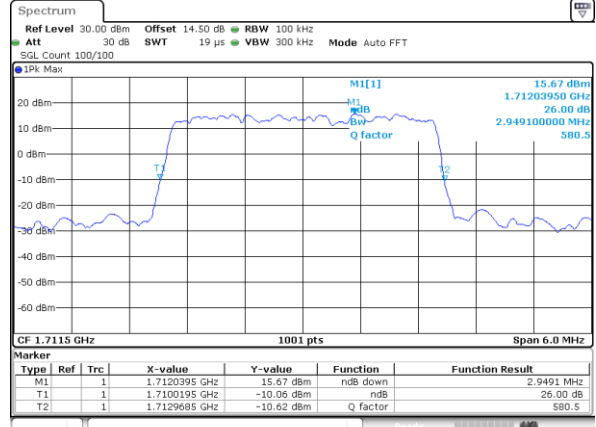
LTE Band 4

Lowest Channel / 1.4MHz / 64QAM



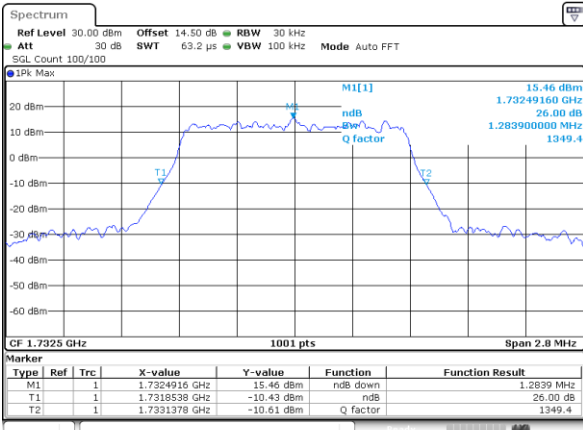
Date: 8 JUN 2023 19:06:37

Lowest Channel / 3MHz / 64QAM



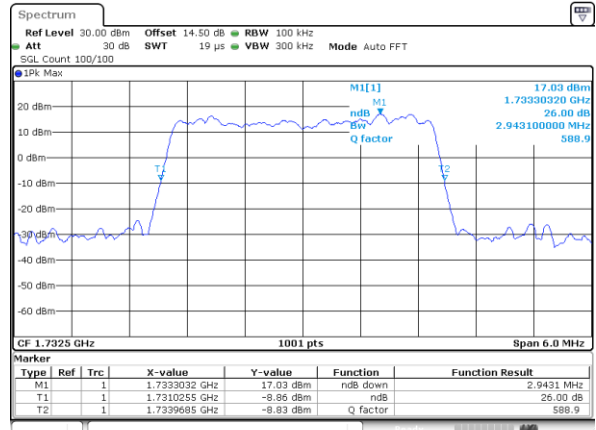
Date: 8 JUN 2023 18:22:41

Middle Channel / 1.4MHz / 64QAM



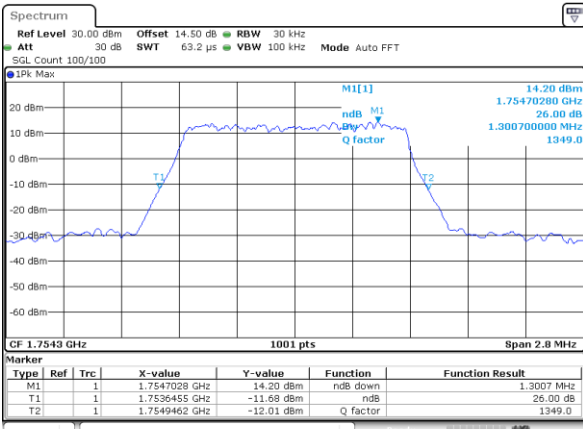
Date: 8 JUN 2023 19:35:49

Middle Channel / 3MHz / 64QAM



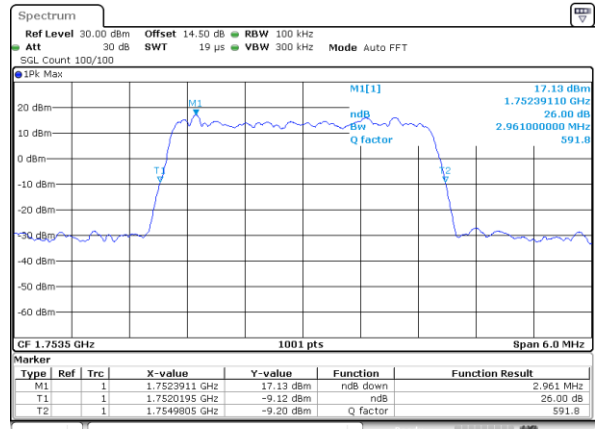
Date: 8 JUN 2023 18:26:12

Highest Channel / 1.4MHz / 64QAM



Date: 8 JUN 2023 19:37:32

Highest Channel / 3MHz / 64QAM

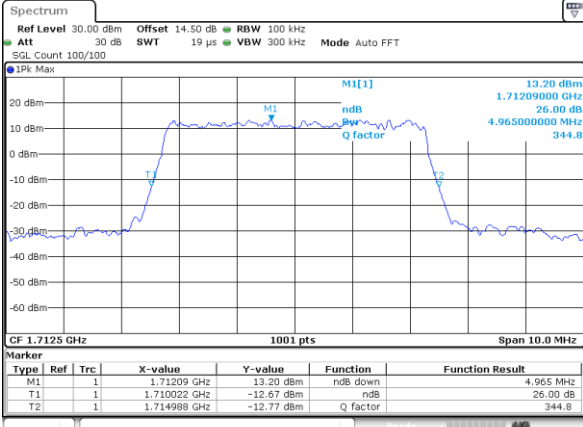


Date: 8 JUN 2023 18:27:56



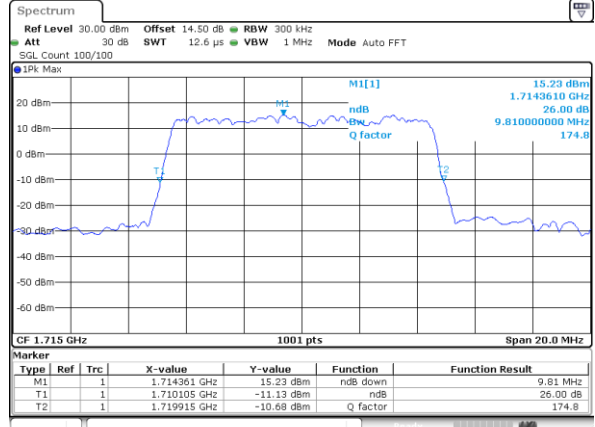
LTE Band 4

Lowest Channel / 5MHz / 64QAM



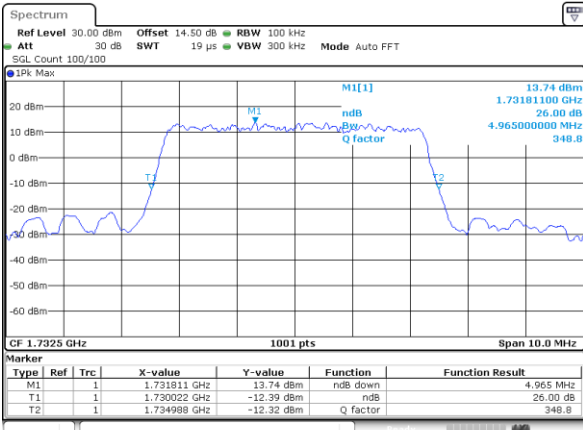
Date: 8 JUN 2023 18:31:28

Lowest Channel / 10MHz / 64QAM



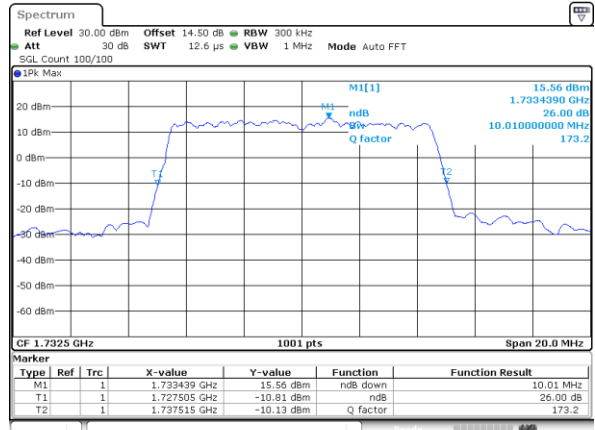
Date: 8 JUN 2023 18:40:17

Middle Channel / 5MHz / 64QAM



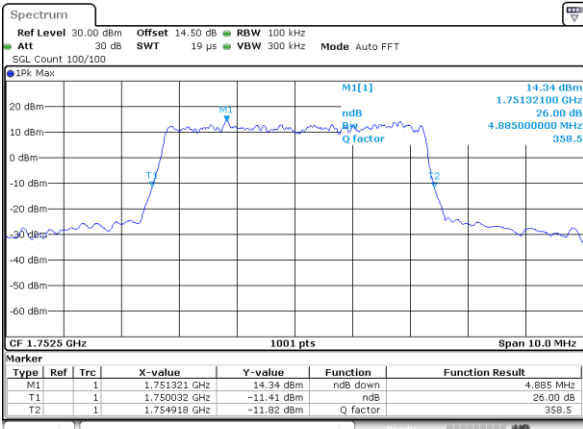
Date: 8 JUN 2023 18:35:00

Middle Channel / 10MHz / 64QAM



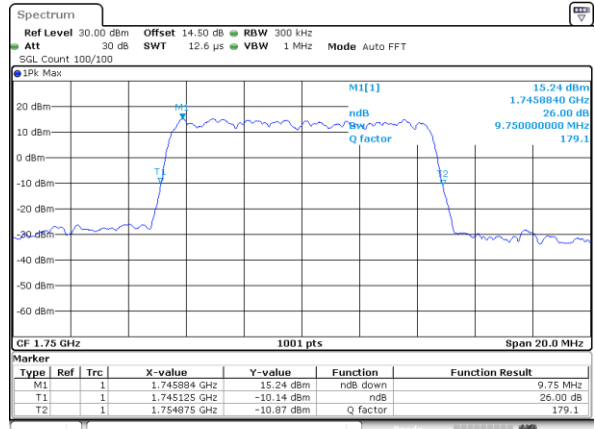
Date: 8 JUN 2023 18:43:48

Highest Channel / 5MHz / 64QAM



Date: 8 JUN 2023 18:36:45

Highest Channel / 10MHz / 64QAM

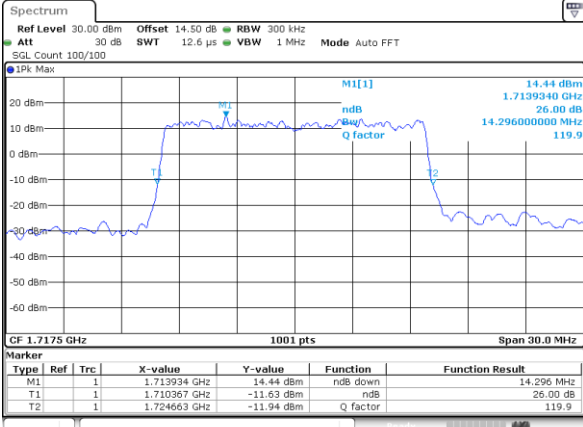


Date: 8 JUN 2023 18:45:32



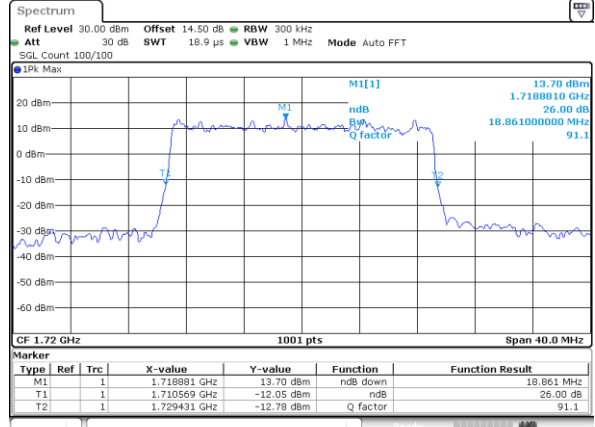
LTE Band 4

Lowest Channel / 15MHz / 64QAM



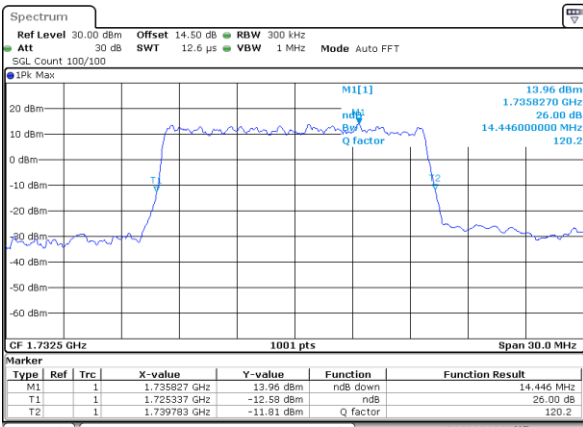
Date: 8 JUN 2023 18:49:04

Lowest Channel / 20MHz / 64QAM



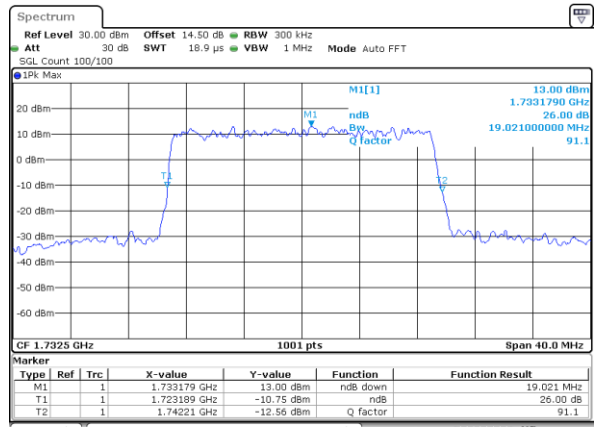
Date: 8 JUN 2023 18:57:50

Middle Channel / 15MHz / 64QAM



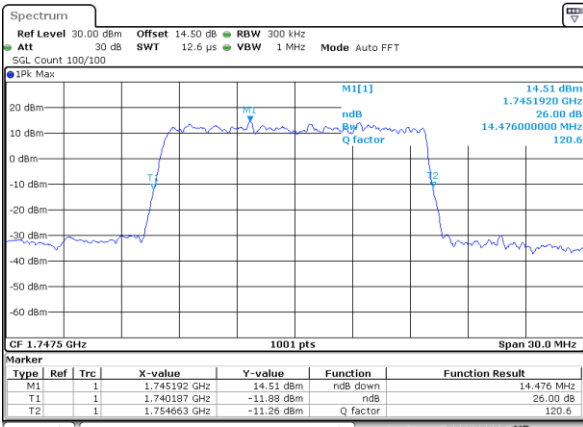
Date: 8 JUN 2023 18:52:34

Middle Channel / 20MHz / 64QAM



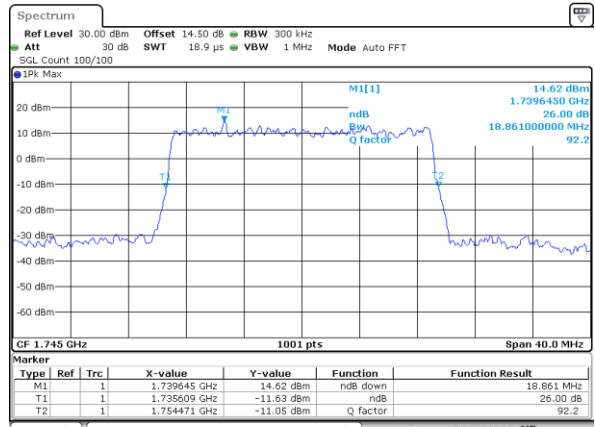
Date: 8 JUN 2023 19:01:21

Highest Channel / 15MHz / 64QAM



Date: 8 JUN 2023 18:54:18

Highest Channel / 20MHz / 64QAM



Date: 8 JUN 2023 19:03:05





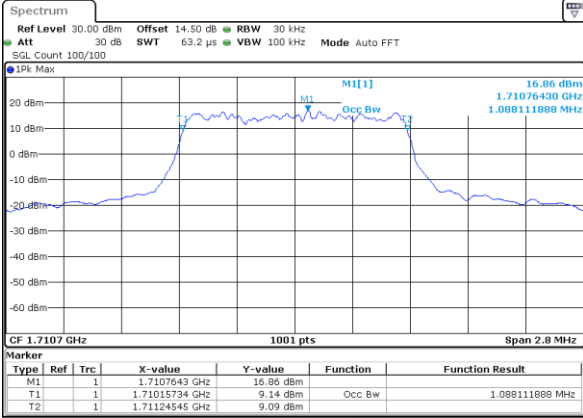
### Occupied Bandwidth

Mode	LTE Band 4 : 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	2.72	2.72	4.48	4.49	9.03	8.99	13.40	13.43	17.98	17.90
Middle CH	1.09	1.10	2.72	2.73	4.48	4.49	9.05	9.03	13.40	13.37	17.86	17.90
Highest CH	1.09	1.10	2.72	2.73	4.49	4.51	9.05	8.99	13.43	13.40	17.90	17.90
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.10	-	2.72	-	4.49	-	9.01	-	13.46	-	17.94	-
Middle CH	1.09	-	2.73	-	4.48	-	9.03	-	13.40	-	17.86	-
Highest CH	1.10	-	2.73	-	4.48	-	9.03	-	13.40	-	17.86	-



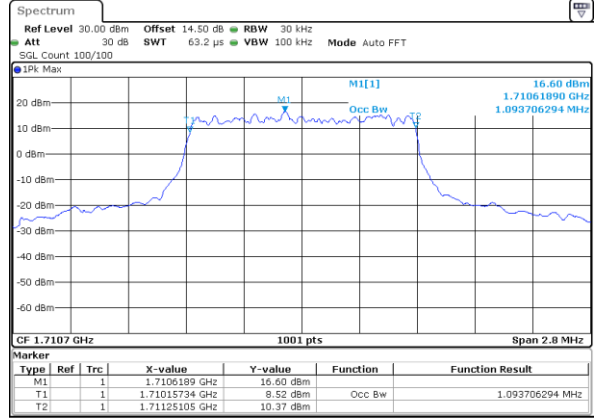
LTE Band 4

Lowest Channel / 1.4MHz / QPSK



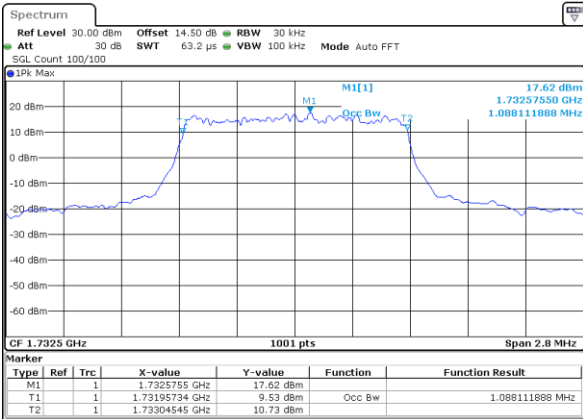
Date: 8 JUN 2023 20:18:33

Lowest Channel / 1.4MHz / 16QAM



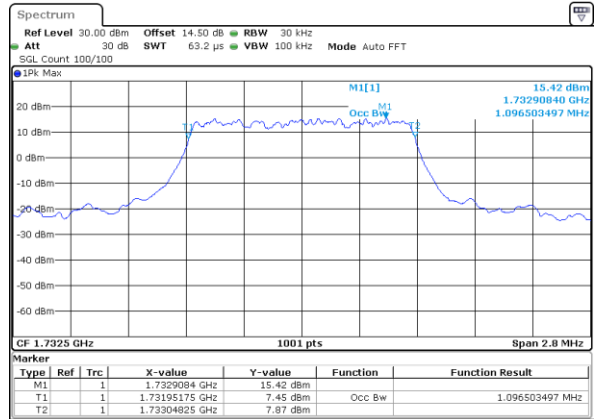
Date: 8 JUN 2023 20:18:57

Middle Channel / 1.4MHz / QPSK



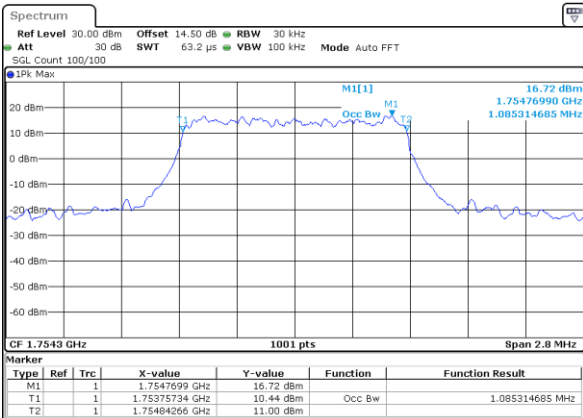
Date: 8 JUN 2023 20:33:56

Middle Channel / 1.4MHz / 16QAM



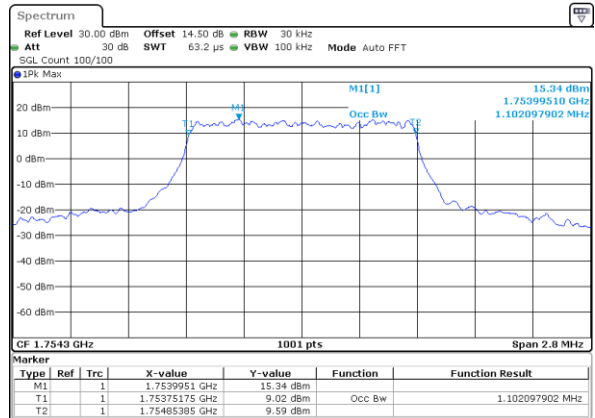
Date: 8 JUN 2023 20:34:20

Highest Channel / 1.4MHz / QPSK



Date: 8 JUN 2023 20:37:42

Highest Channel / 1.4MHz / 16QAM

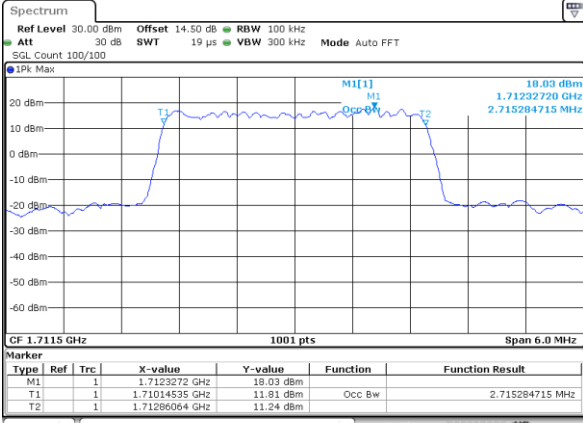


Date: 8 JUN 2023 20:38:07



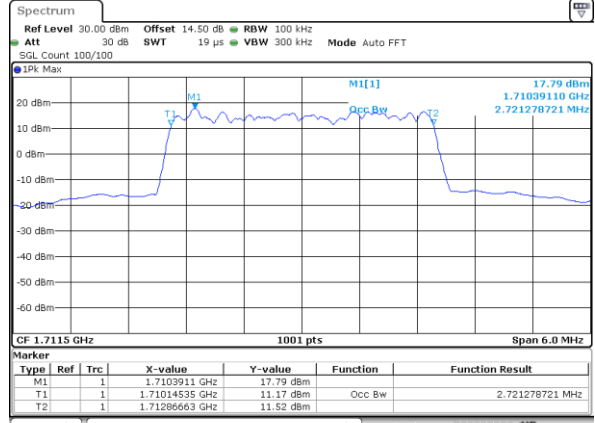
LTE Band 4

Lowest Channel / 3MHz / QPSK



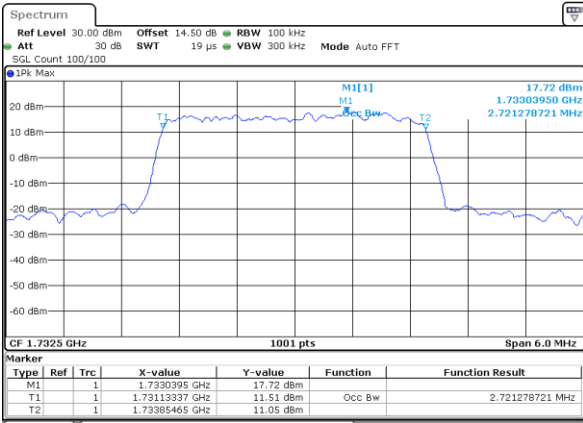
Date: 8 JUN 2023 16:34:28

Lowest Channel / 3MHz / 16QAM



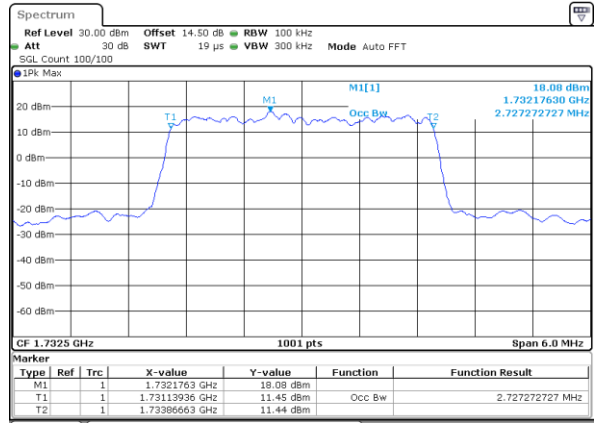
Date: 8 JUN 2023 16:34:52

Middle Channel / 3MHz / QPSK



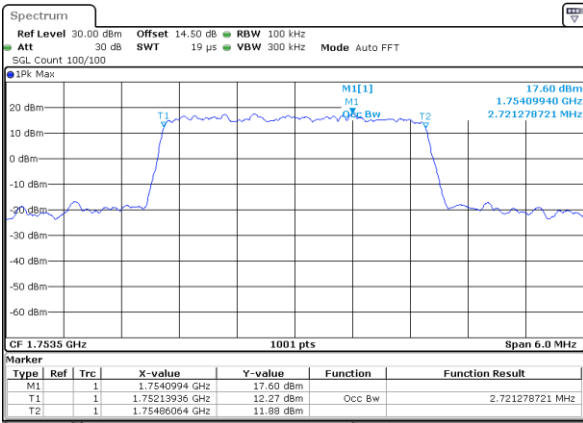
Date: 8 JUN 2023 16:44:32

Middle Channel / 3MHz / 16QAM



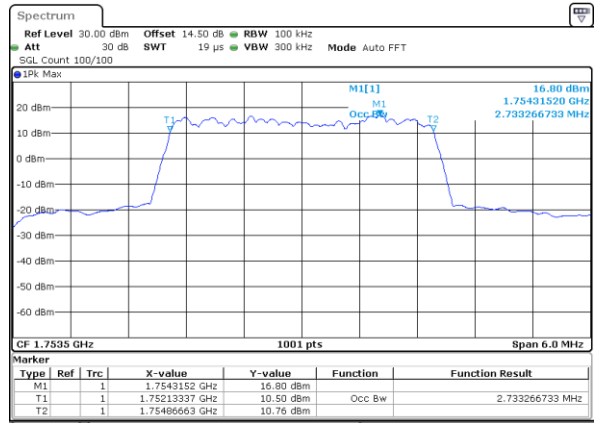
Date: 8 JUN 2023 16:44:56

Highest Channel / 3MHz / QPSK



Date: 8 JUN 2023 16:48:58

Highest Channel / 3MHz / 16QAM



Date: 8 JUN 2023 16:49:23