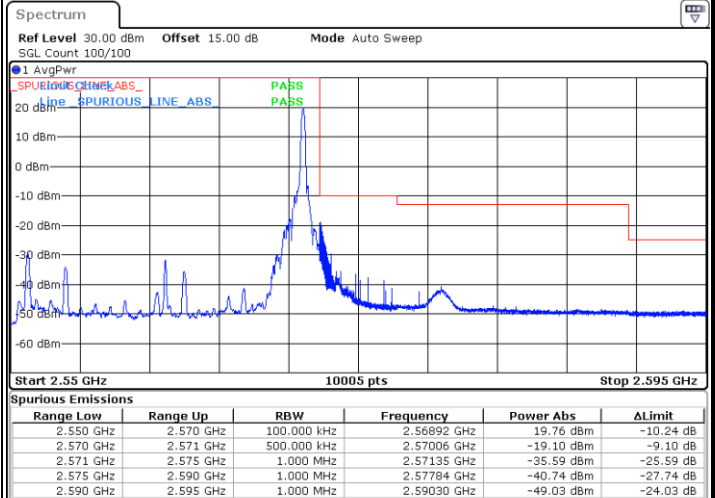
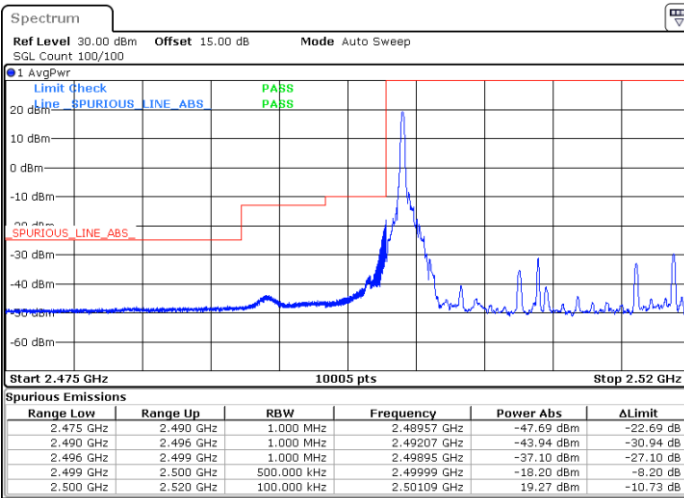




LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

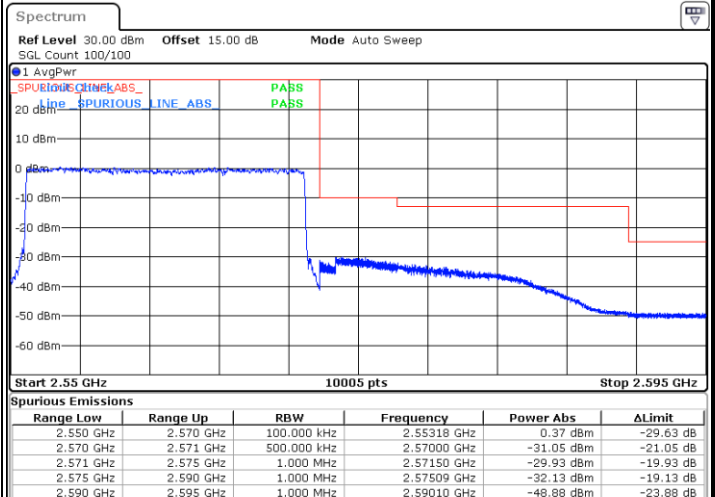
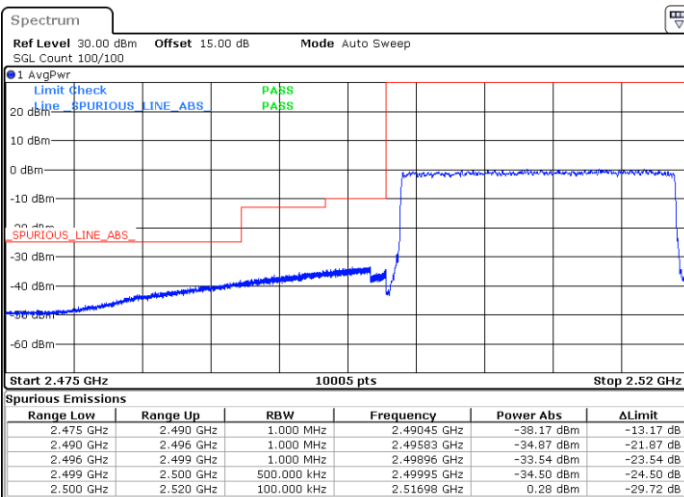


Date: 25.NOV.2022 19:18:09

Date: 25.NOV.2022 19:32:17

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



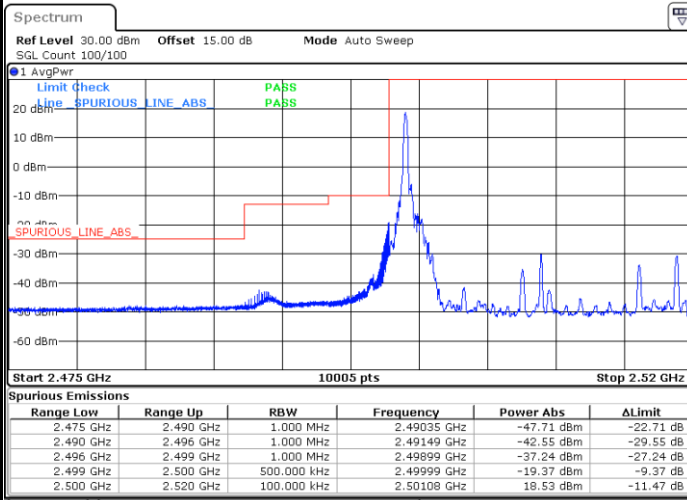
Date: 25.NOV.2022 19:20:56

Date: 25.NOV.2022 19:36:25



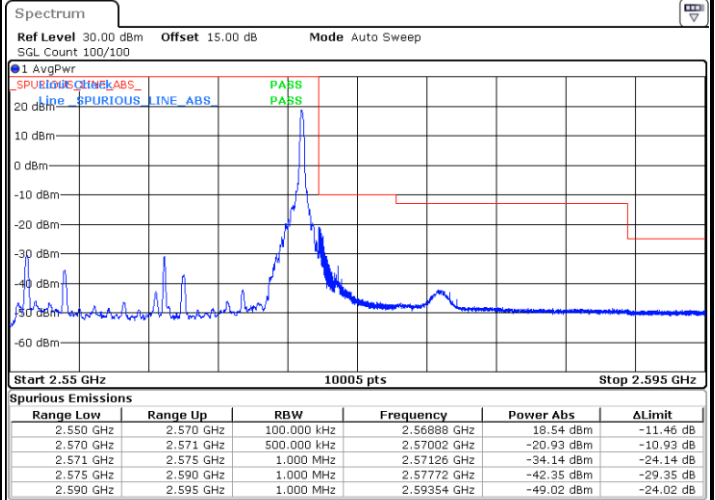
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



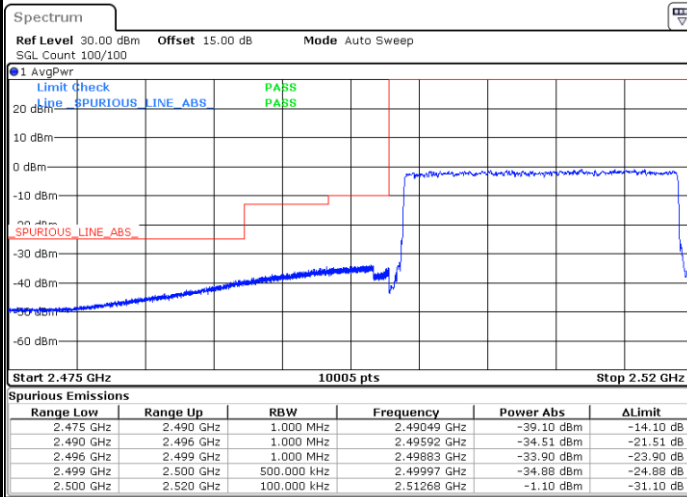
Date: 25.NOV.2022 19:19:32

Highest Band Edge / 1RB



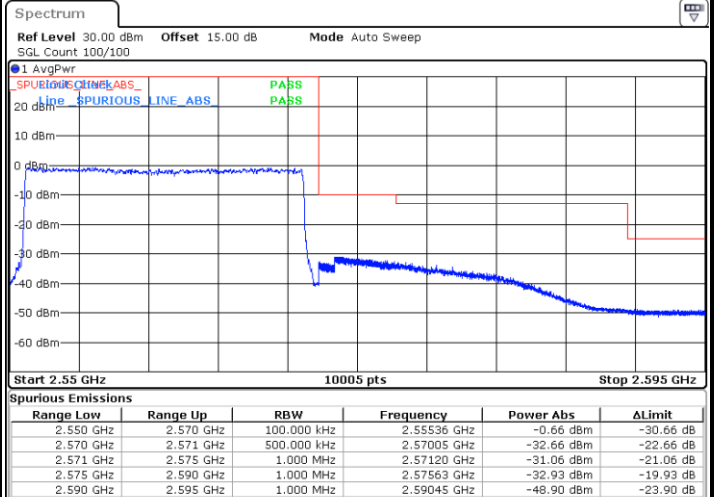
Date: 25.NOV.2022 19:33:40

Lowest Band Edge / Full RB



Date: 25.NOV.2022 19:22:19

Highest Band Edge / Full RB

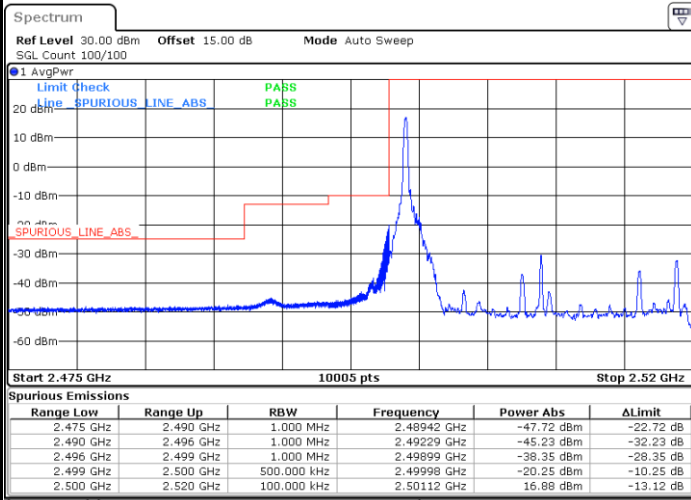


Date: 25.NOV.2022 19:35:03



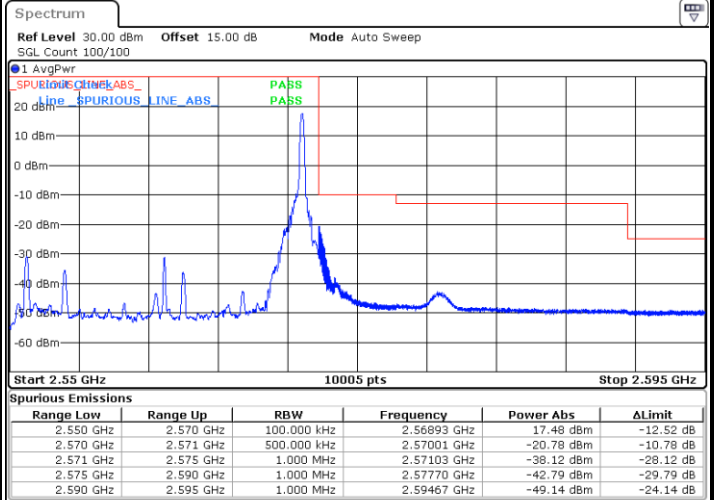
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1 RB



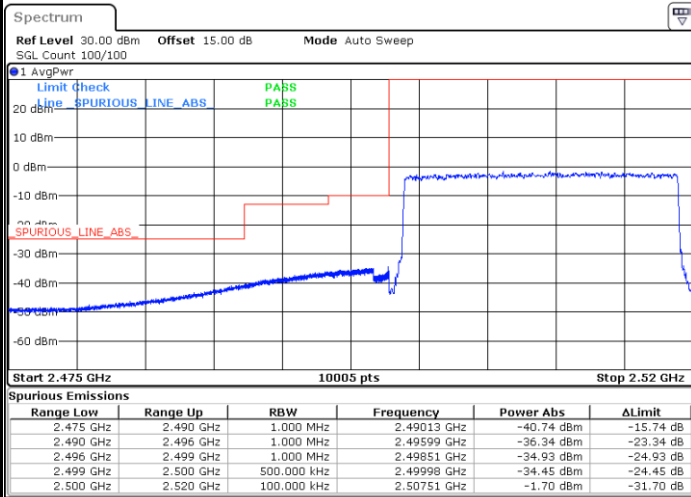
Date: 25.NOV.2022 19:41:10

Highest Band Edge / 1 RB



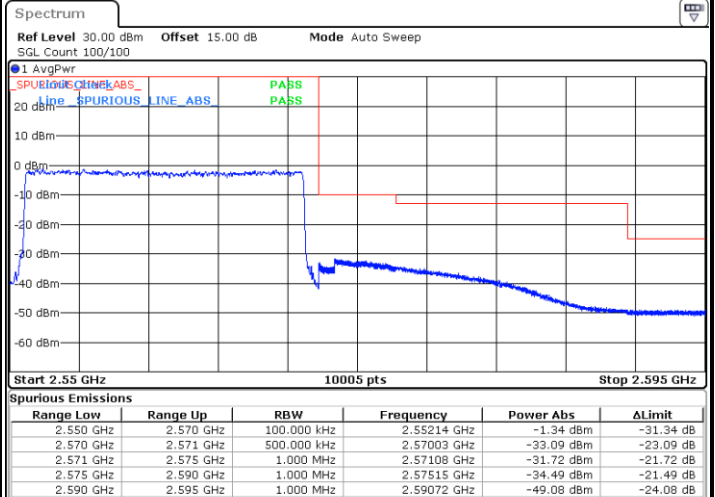
Date: 25.NOV.2022 19:47:56

Lowest Band Edge / Full RB



Date: 25.NOV.2022 19:42:33

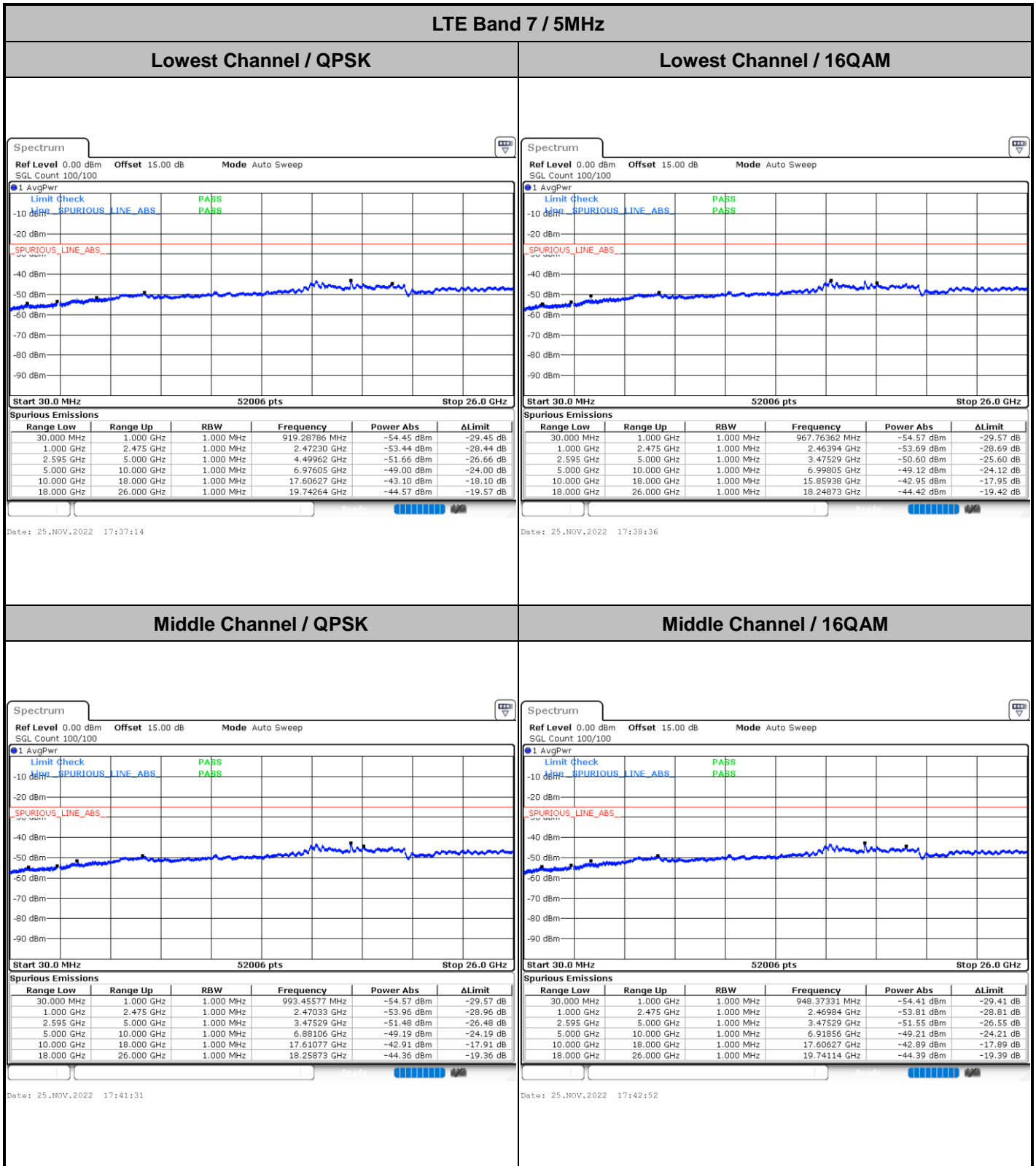
Highest Band Edge / Full RB



Date: 25.NOV.2022 19:49:18



# Conducted Spurious Emission

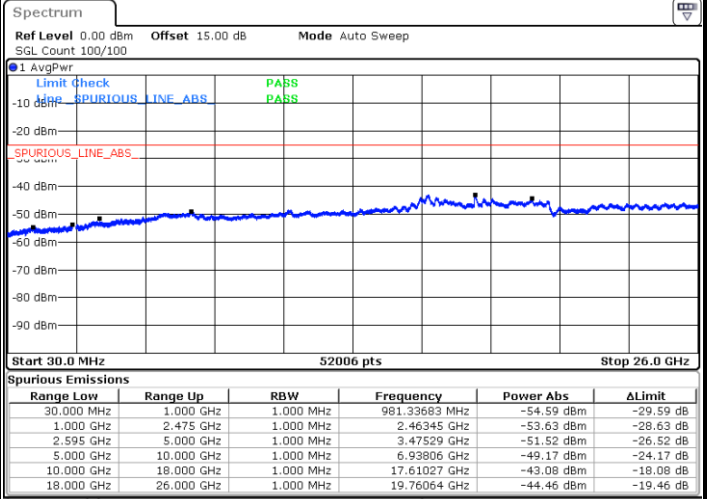
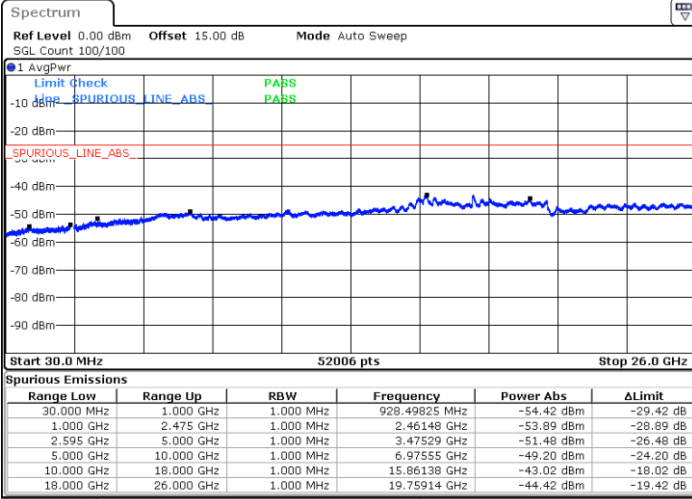




LTE Band 7 / 5MHz

Highest Channel / QPSK

Highest Channel / 16QAM



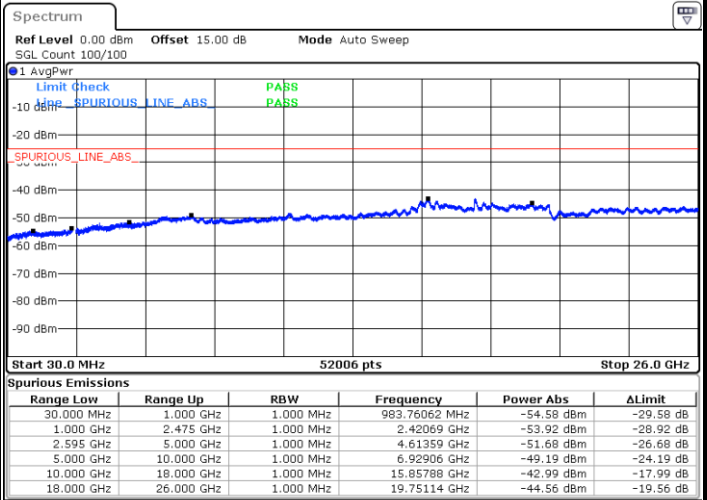
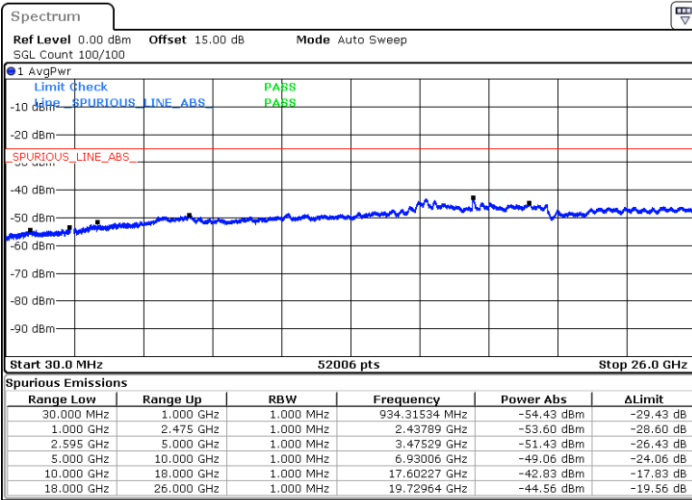
Date: 25.NOV.2022 17:51:20

Date: 25.NOV.2022 17:52:42

LTE Band 7 / 10MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 25.NOV.2022 18:12:41

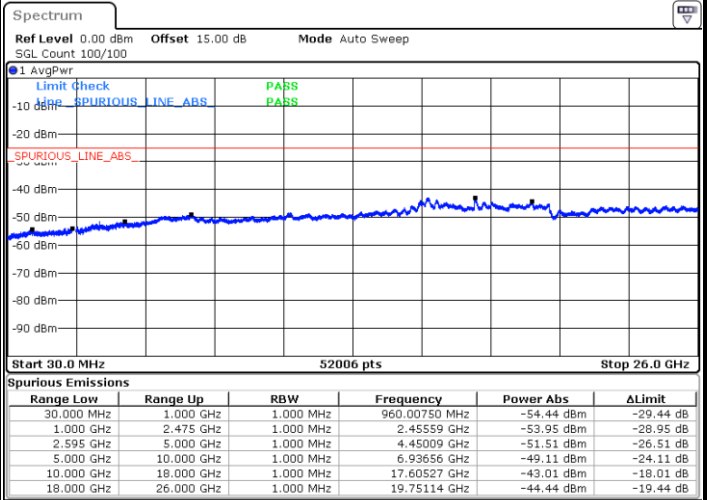
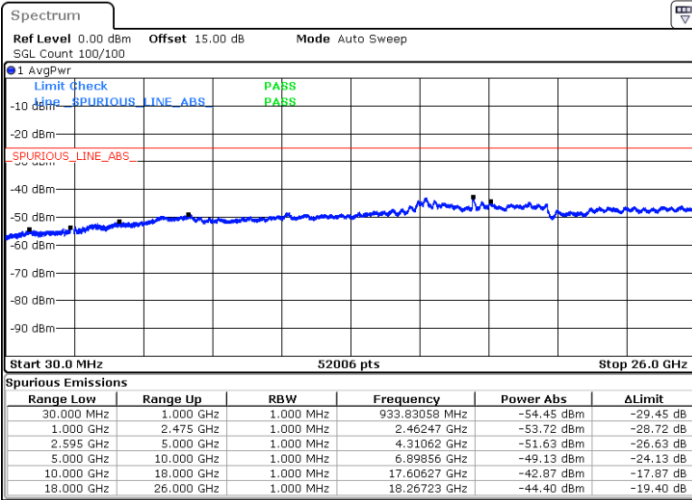
Date: 25.NOV.2022 18:14:03



LTE Band 7 / 10MHz

Middle Channel / QPSK

Middle Channel / 16QAM

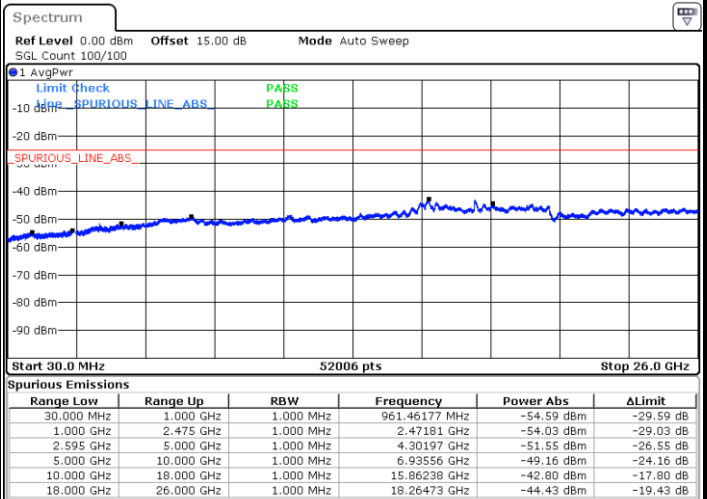
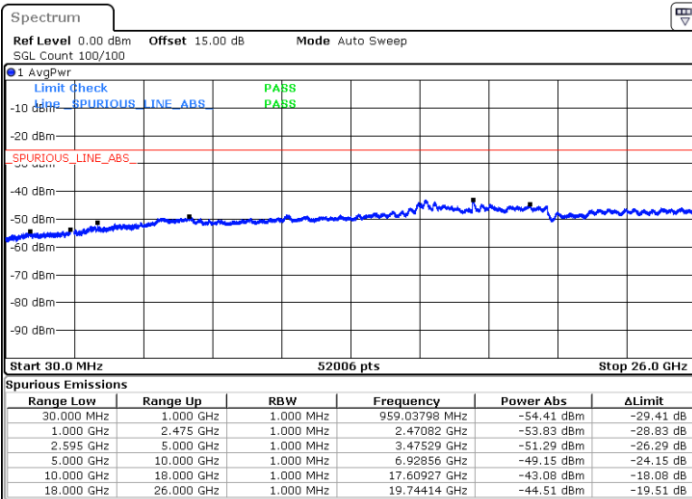


Date: 25.NOV.2022 18:16:58

Date: 25.NOV.2022 18:18:19

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 25.NOV.2022 18:26:47

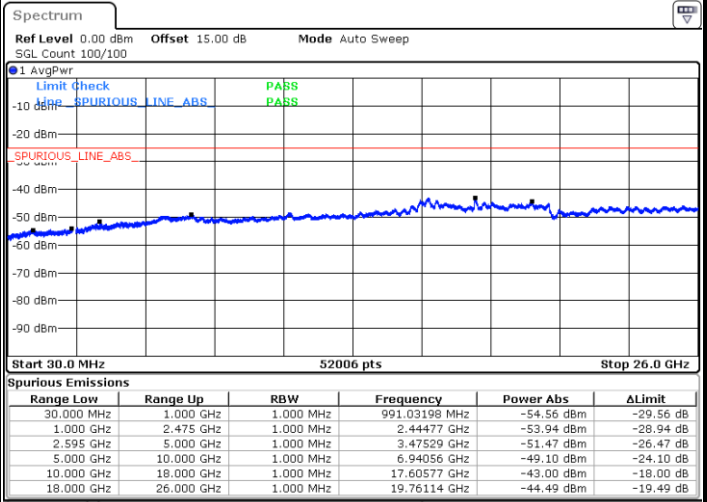
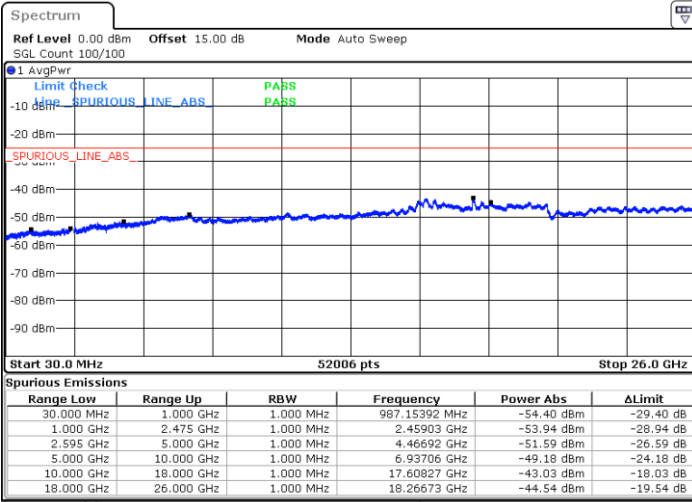
Date: 25.NOV.2022 18:28:09



LTE Band 7 / 15MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM

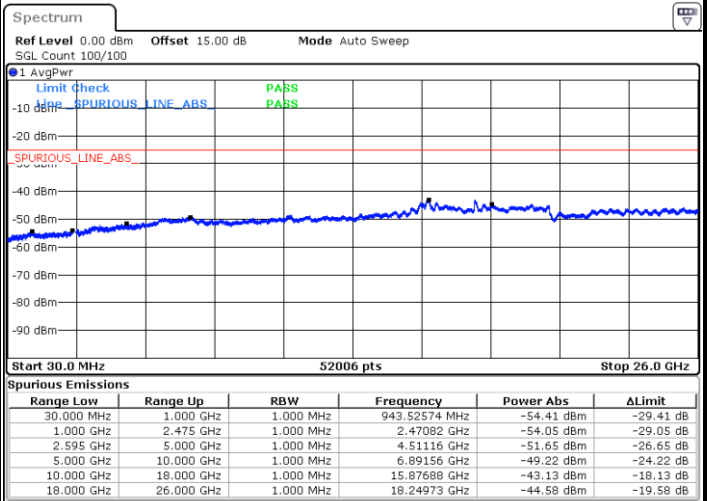
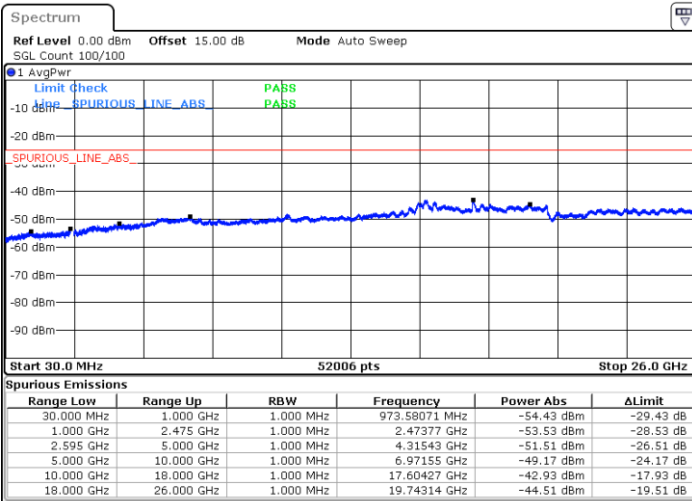


Date: 25.NOV.2022 18:48:10

Date: 25.NOV.2022 18:49:31

Middle Channel / QPSK

Middle Channel / 16QAM



Date: 25.NOV.2022 18:52:27

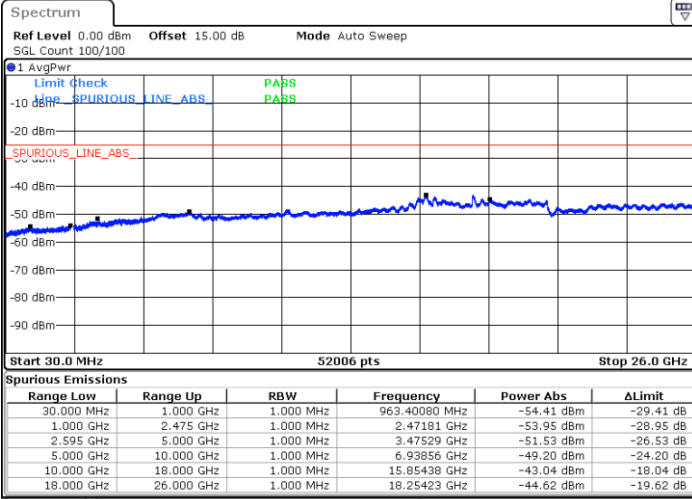
Date: 25.NOV.2022 18:53:48



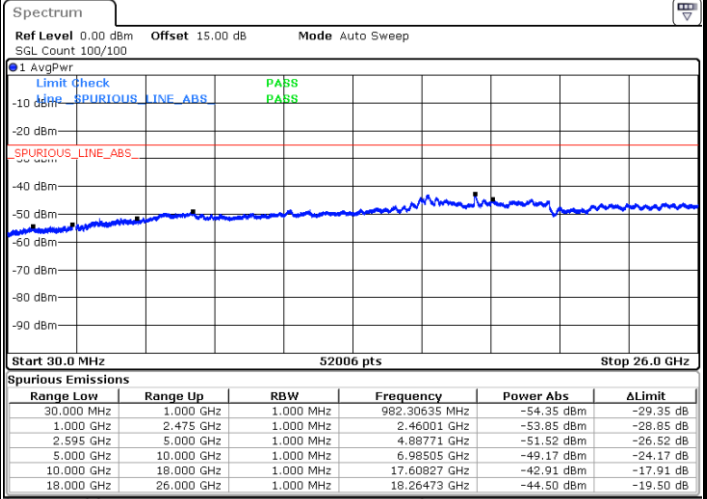
LTE Band 7 / 15MHz

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 25.NOV.2022 19:02:16

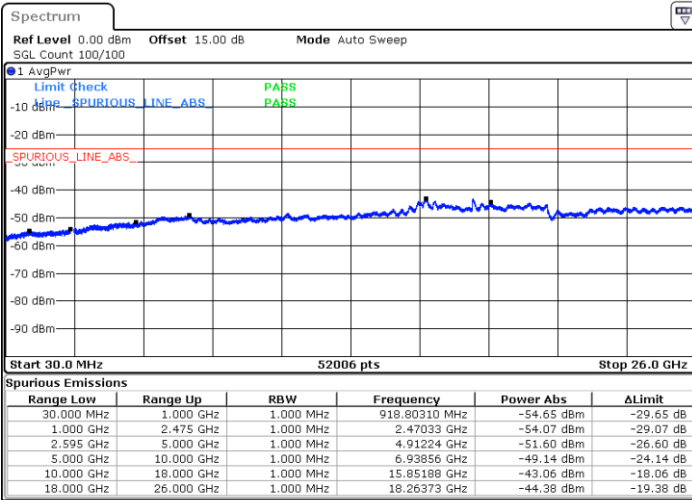


Date: 25.NOV.2022 19:03:38

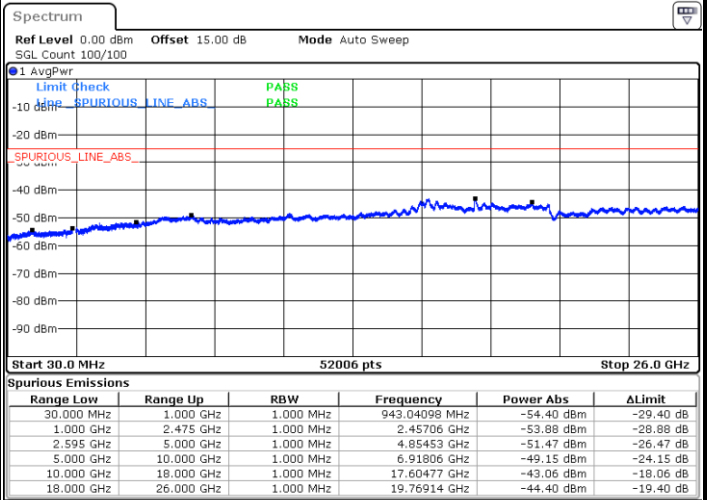
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Lowest Channel / 16QAM



Date: 25.NOV.2022 19:23:40



Date: 25.NOV.2022 19:25:02

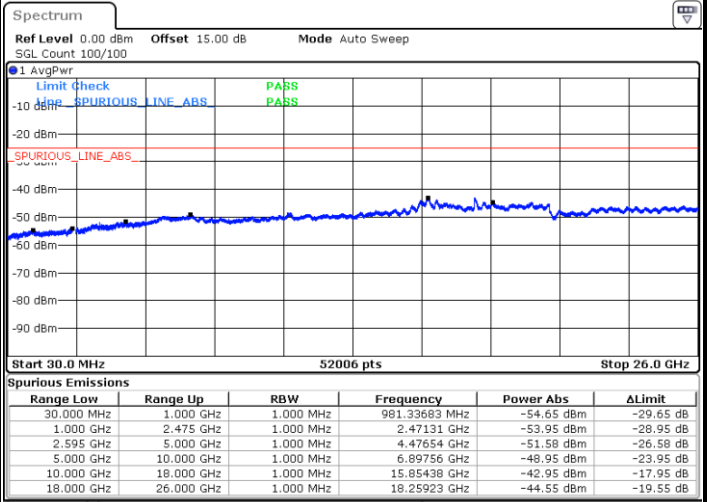
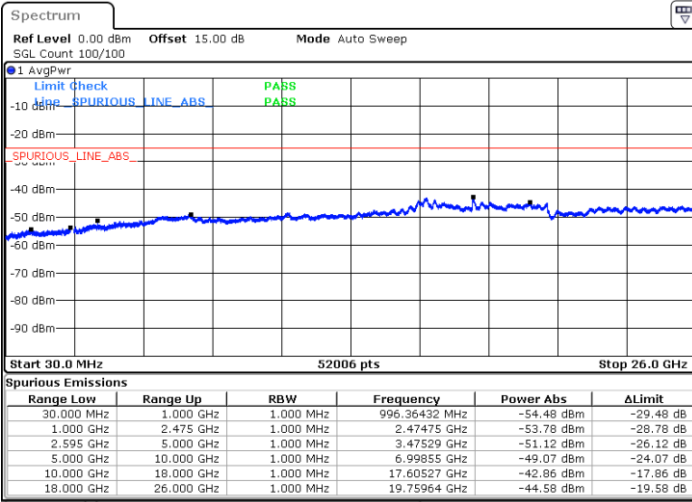




LTE Band 7 / 20MHz

Middle Channel / QPSK

Middle Channel / 16QAM

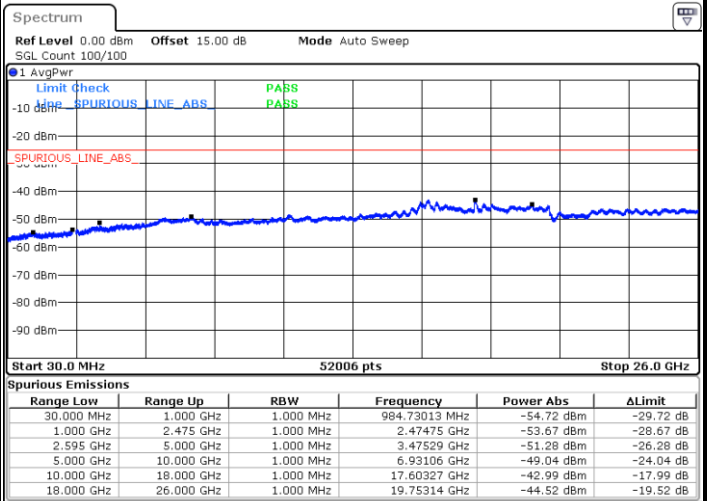
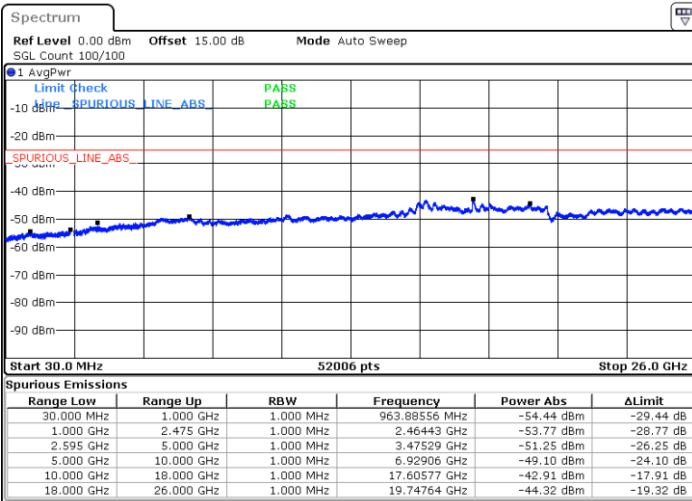


Date: 25.NOV.2022 19:27:57

Date: 25.NOV.2022 19:29:18

Highest Channel / QPSK

Highest Channel / 16QAM



Date: 25.NOV.2022 19:37:47

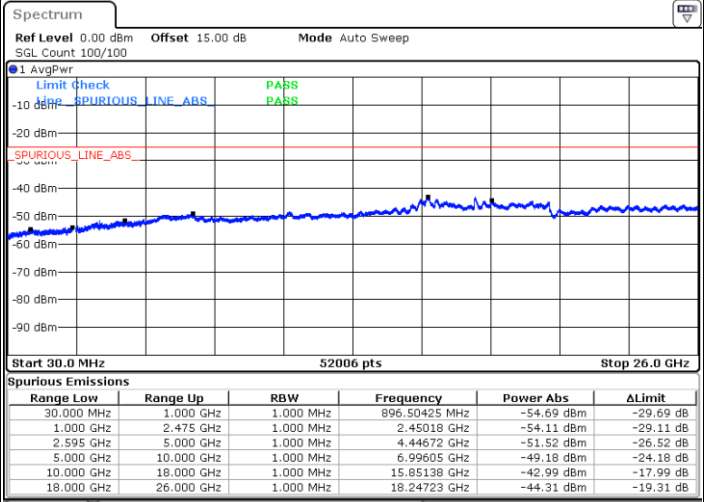
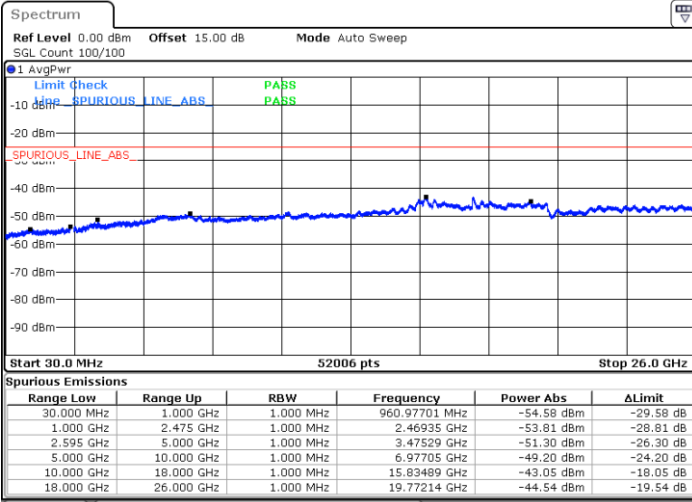
Date: 25.NOV.2022 19:39:09



LTE Band 7 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

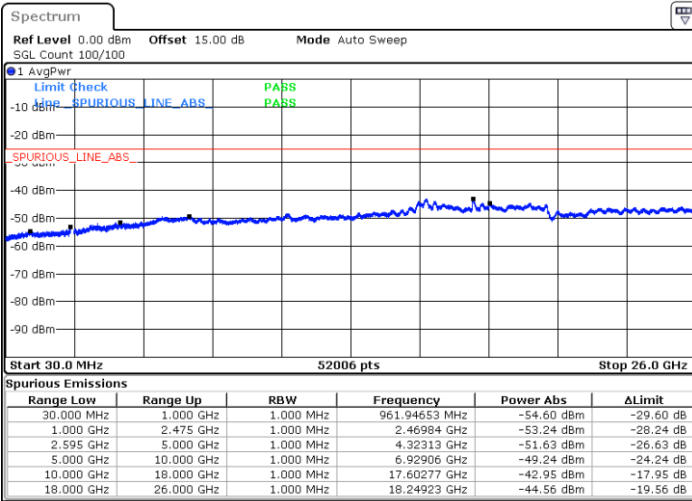


Date: 25.NOV.2022 17:57:28

Date: 25.NOV.2022 17:59:28

Highest Channel / 64QAM

N/A



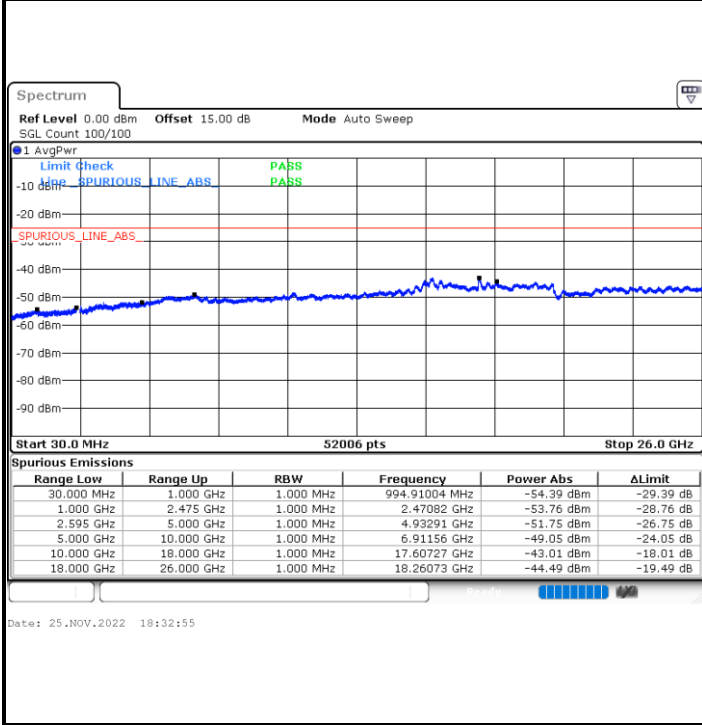
Date: 25.NOV.2022 18:04:13

N/A

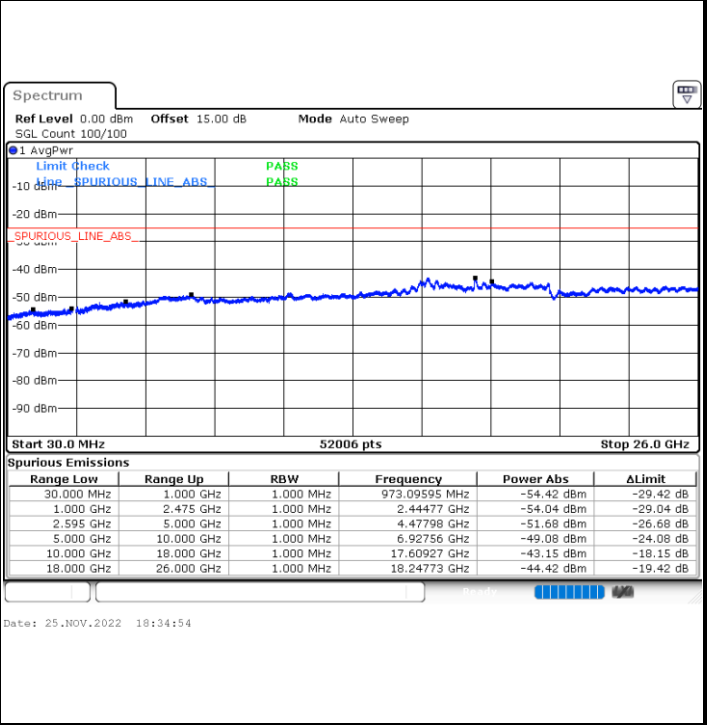


**LTE Band 7 / 10MHz**

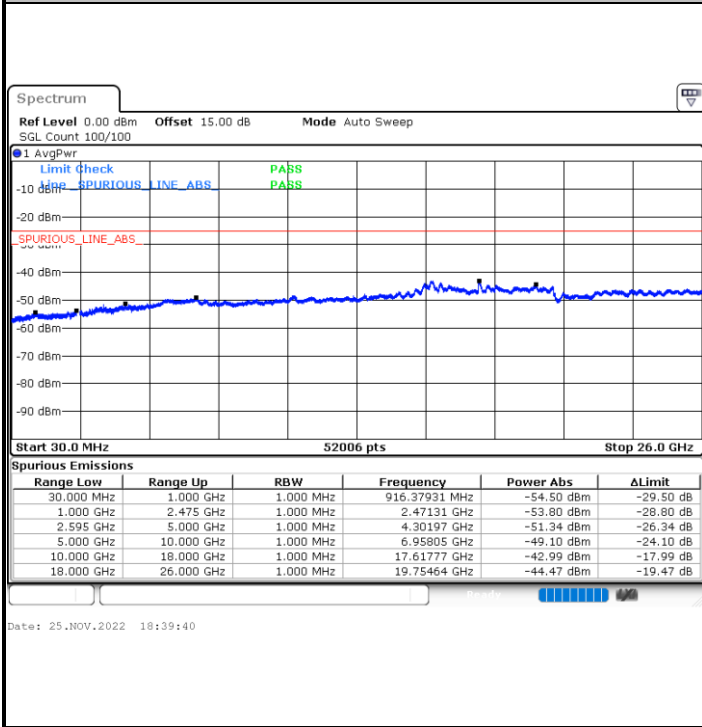
**Lowest Channel / 64QAM**



**Middle Channel / 64QAM**



**Highest Channel / 64QAM**



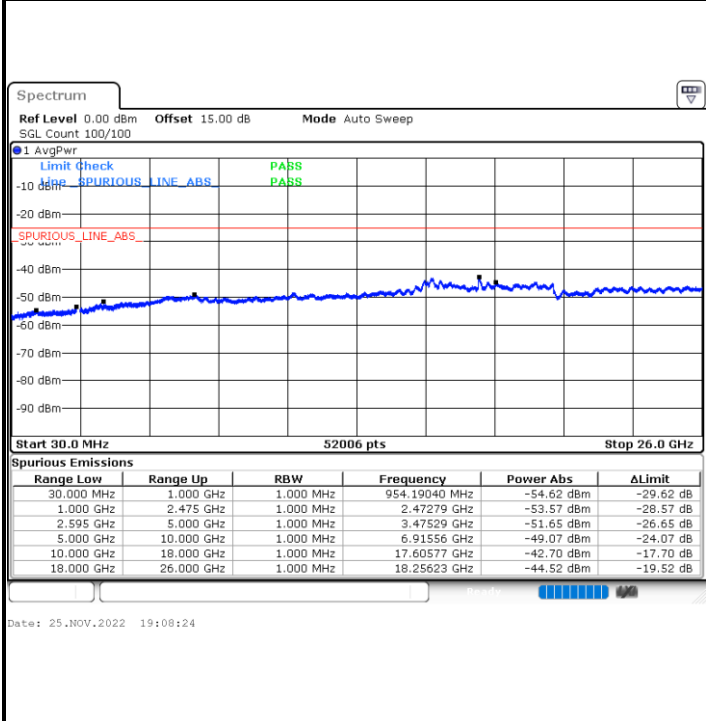
**N/A**

N/A



**LTE Band 7 / 15MHz**

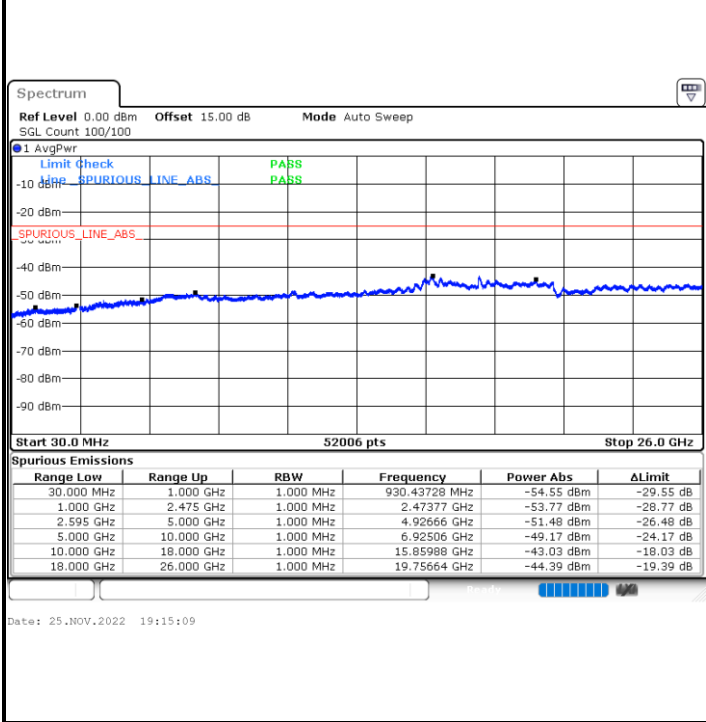
**Lowest Channel / 64QAM**



**Middle Channel / 64QAM**



**Highest Channel / 64QAM**



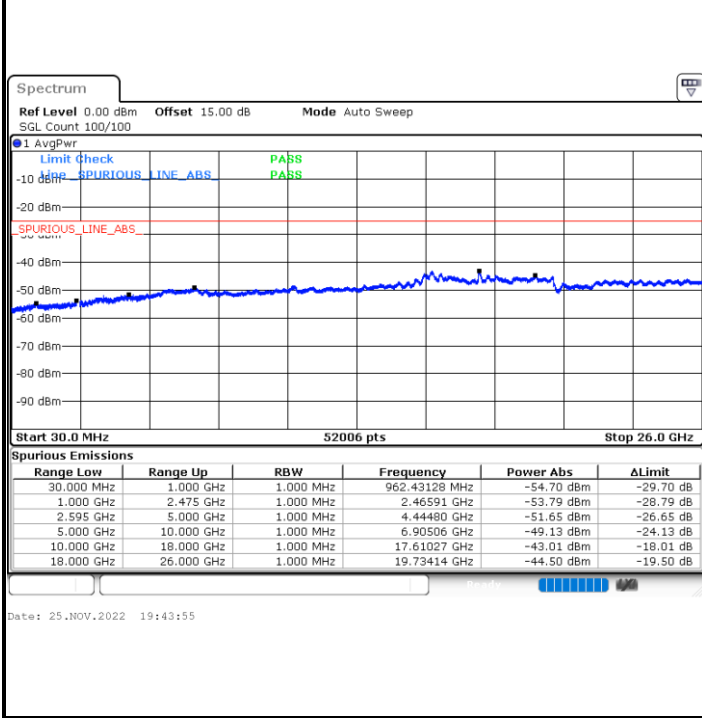
**N/A**

N/A

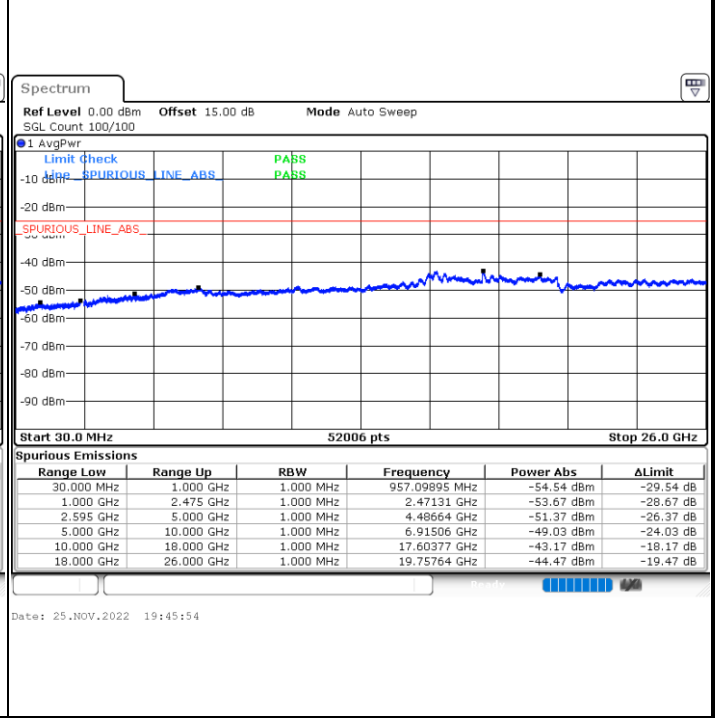


**LTE Band 7 / 20MHz**

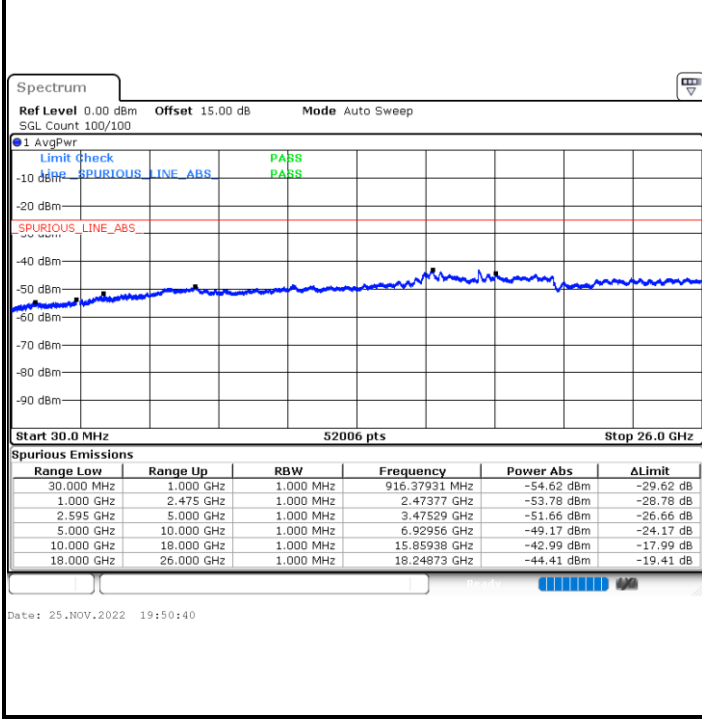
**Lowest Channel / 64QAM**



**Middle Channel / 64QAM**



**Highest Channel / 64QAM**



**N/A**

N/A



### Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0003	PASS
40	Normal Voltage	0.0004	
30	Normal Voltage	0.0008	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0006	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0006	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0004	

**Note:**

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



### LTE Band 7 (Second PA, DC\_7A\_n5A)

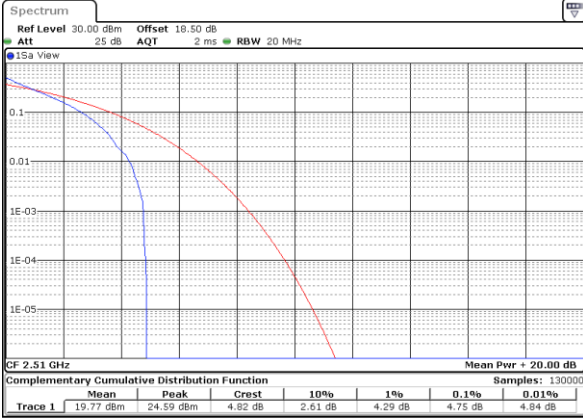
#### Peak-to-Average Ratio

Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.75	5.28	5.86	6.23	<b>PASS</b>
Middle CH	4.49	4.87	5.94	5.74	
Highest CH	4.72	5.10	5.83	6.12	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.38	6.49	-	-	<b>PASS</b>
Middle CH	6.61	6.23	-	-	
Highest CH	6.41	6.43	-	-	



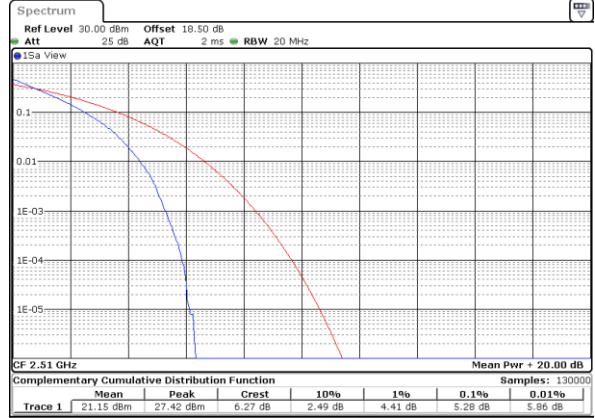
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



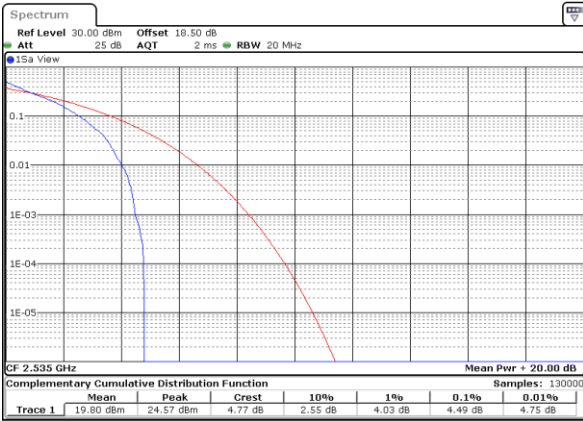
Date: 4\_JAN\_2023 01:05:08

Lowest Channel / Full RB



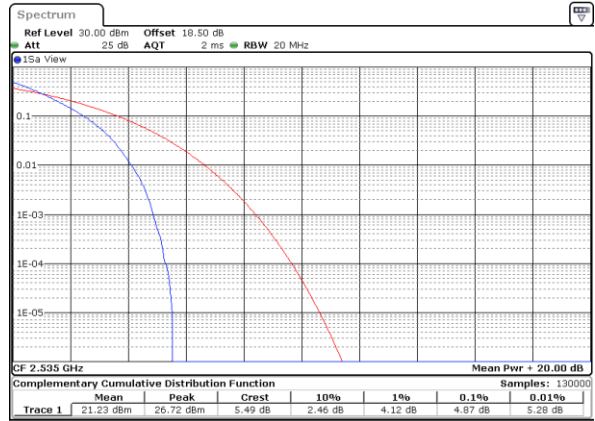
Date: 4\_JAN\_2023 01:05:16

Middle Channel / 1RB



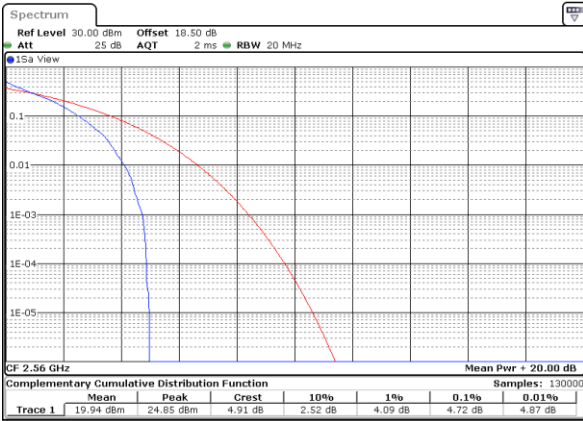
Date: 4\_JAN\_2023 01:04:13

Middle Channel / Full RB



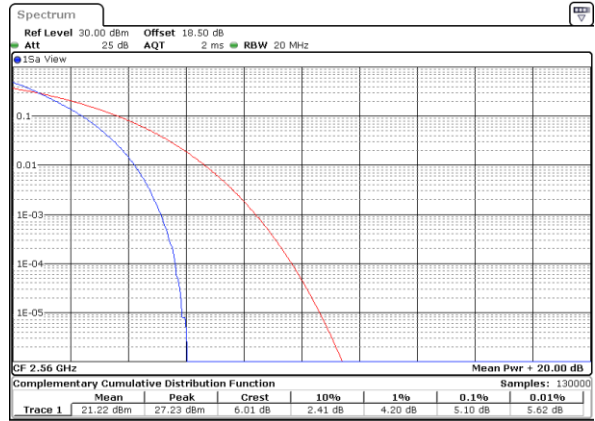
Date: 4\_JAN\_2023 01:04:03

Highest Channel / 1RB



Date: 4\_JAN\_2023 01:02:15

Highest Channel / Full RB



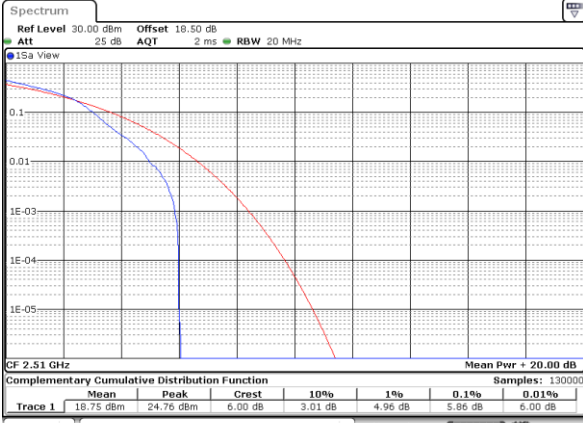
Date: 4\_JAN\_2023 01:02:28





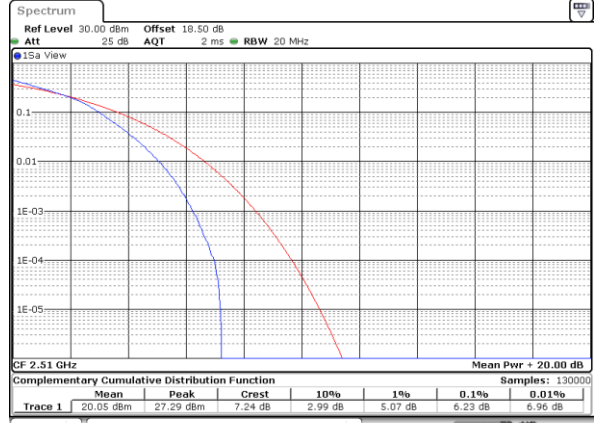
LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



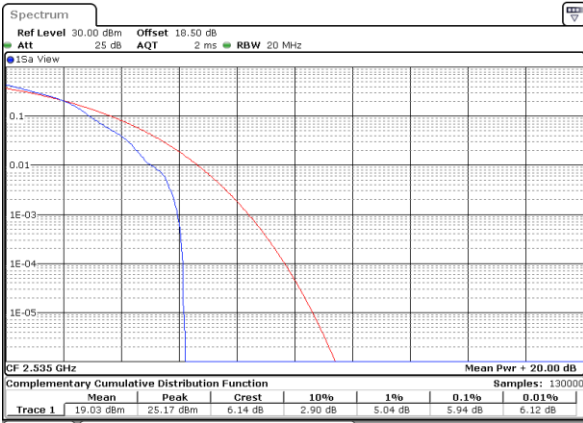
Date: 4.JAN.2023 01:04:59

Lowest Channel / Full RB



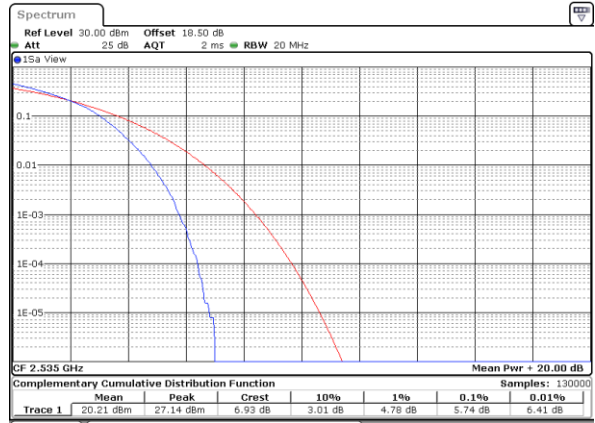
Date: 4.JAN.2023 01:05:27

Middle Channel / 1RB



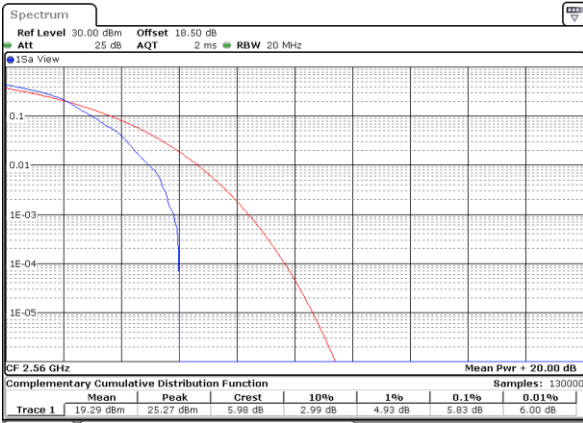
Date: 4.JAN.2023 01:04:21

Middle Channel / Full RB



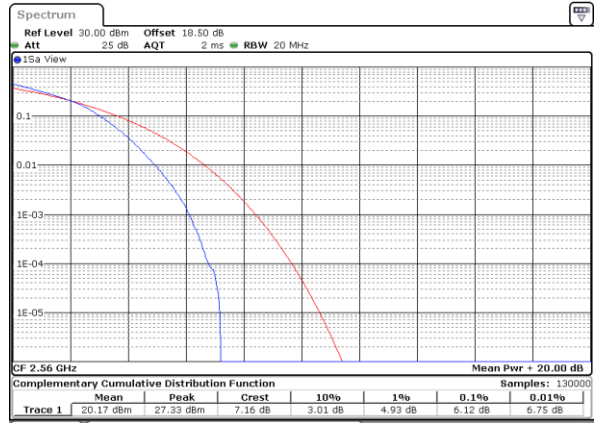
Date: 4.JAN.2023 01:05:55

Highest Channel / 1RB



Date: 4.JAN.2023 01:02:07

Highest Channel / Full RB

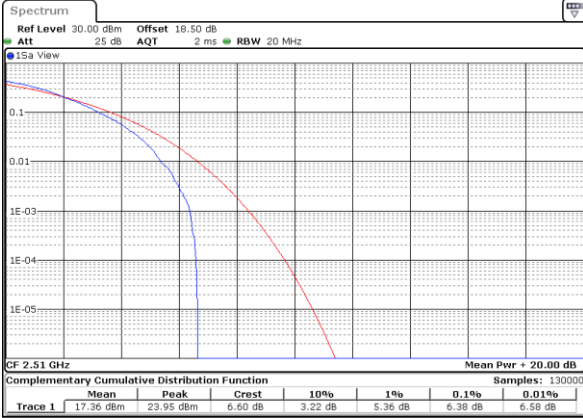


Date: 4.JAN.2023 01:02:39



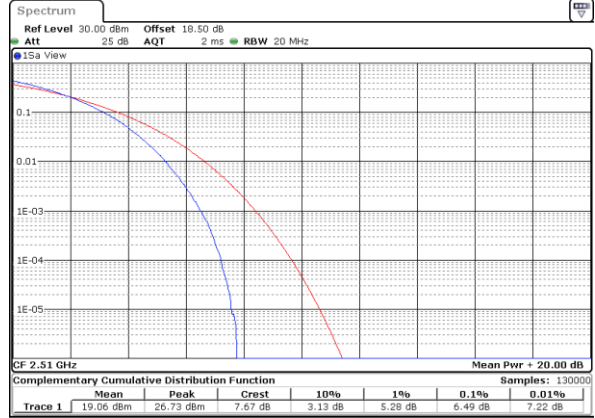
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



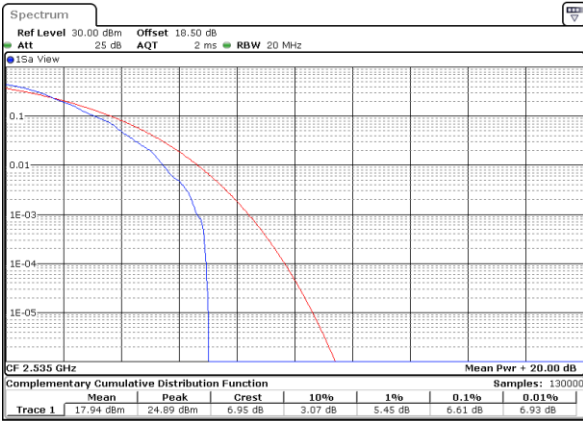
Date: 4\_JAN.2023 01:04:51

Lowest Channel / Full RB



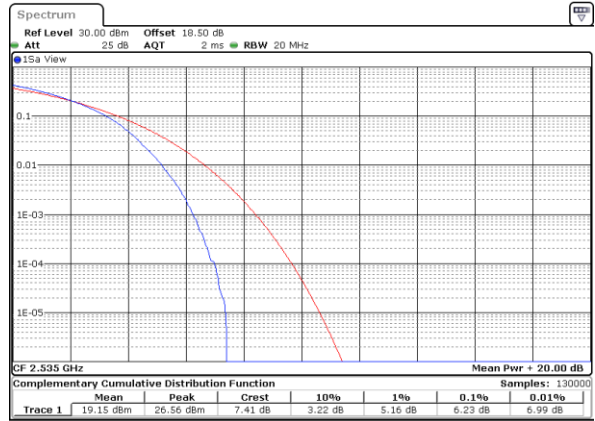
Date: 4\_JAN.2023 01:05:36

Middle Channel / 1RB



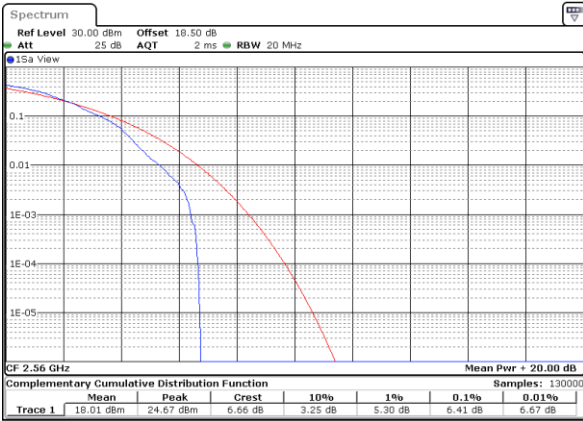
Date: 4\_JAN.2023 01:04:29

Middle Channel / Full RB



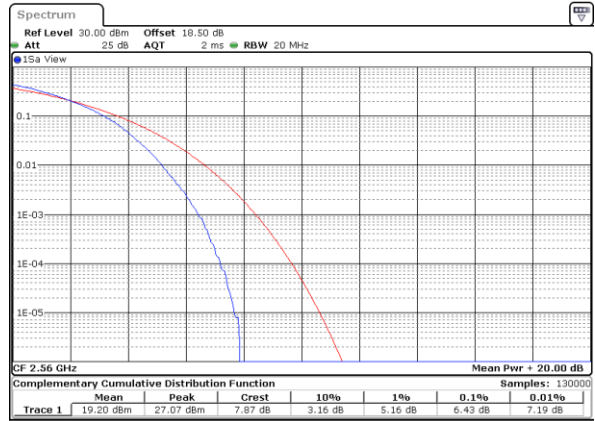
Date: 4\_JAN.2023 01:05:44

Highest Channel / 1RB



Date: 4\_JAN.2023 01:01:52

Highest Channel / Full RB



Date: 4\_JAN.2023 01:02:50



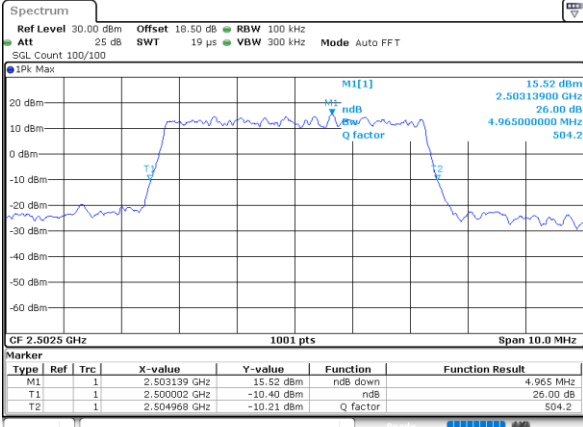
**26dB Bandwidth**

Mode	LTE Band 7 : 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	-	-	-	-	4.97	4.88	9.73	9.67	14.39	14.57	19.30	19.18
Middle CH	-	-	-	-	4.82	4.84	9.73	9.75	14.15	14.39	18.78	18.82
Highest CH	-	-	-	-	4.87	4.88	9.65	9.65	14.18	14.51	18.90	18.70
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.99	-	9.81	-	14.27	-	18.98	-
Middle CH	-	-	-	-	4.89	-	9.63	-	14.48	-	19.06	-
Highest CH	-	-	-	-	4.88	-	9.83	-	14.36	-	18.90	-



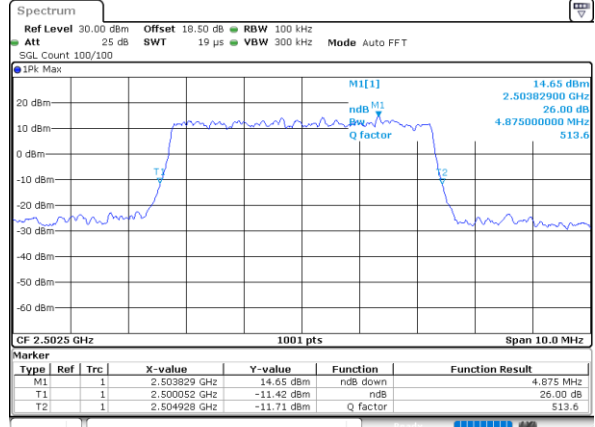
LTE Band 7

Lowest Channel / 5MHz / QPSK



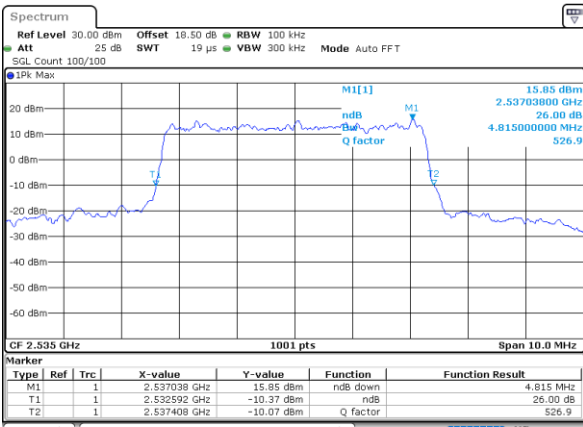
Date: 3, JAN, 2023 23:13:51

Lowest Channel / 5MHz / 16QAM



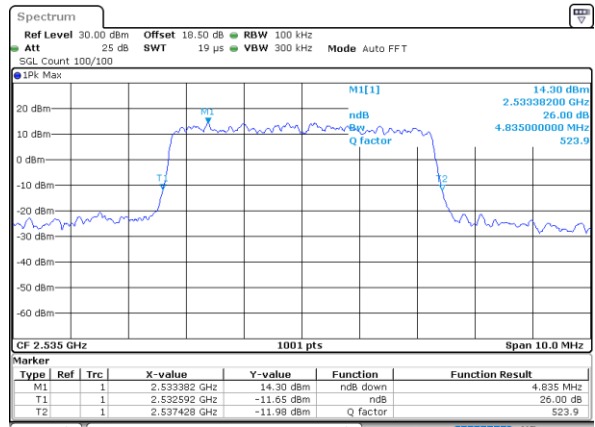
Date: 3, JAN, 2023 23:41:29

Middle Channel / 5MHz / QPSK



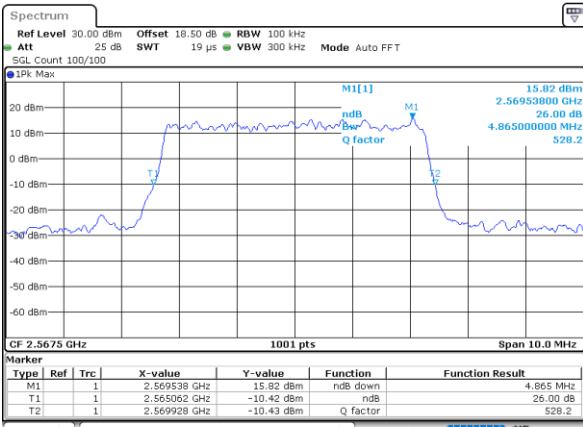
Date: 3, JAN, 2023 23:51:44

Middle Channel / 5MHz / 16QAM



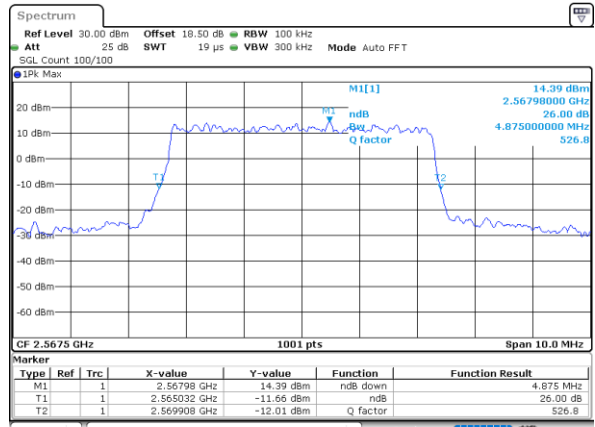
Date: 3, JAN, 2023 23:51:32

Highest Channel / 5MHz / QPSK



Date: 3, JAN, 2023 23:52:35

Highest Channel / 5MHz / 16QAM

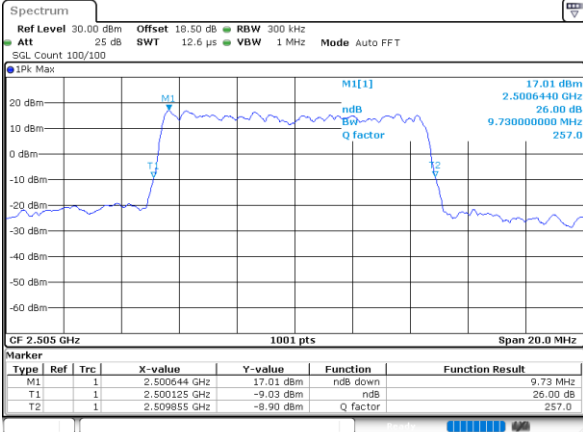


Date: 3, JAN, 2023 23:53:00



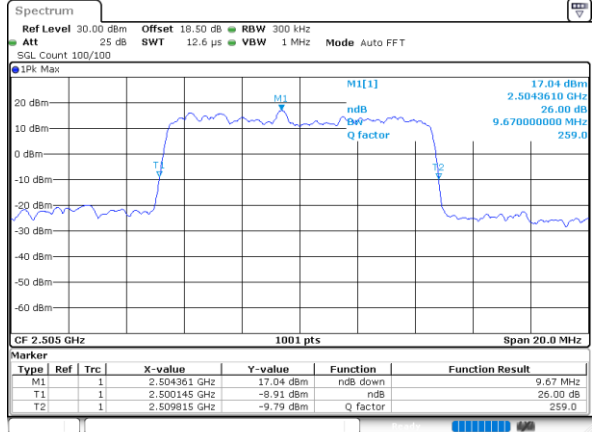
LTE Band 7

Lowest Channel / 10MHz / QPSK



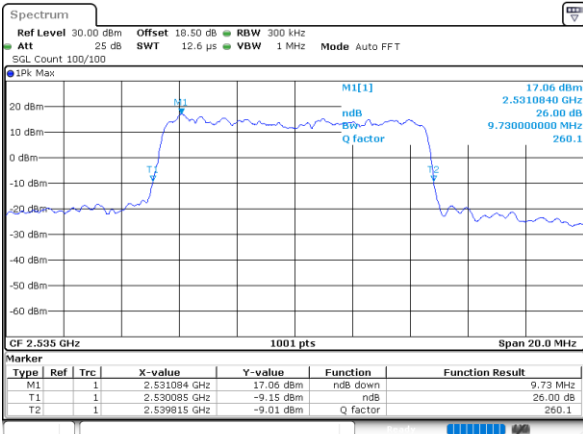
Date: 4, JAN, 2023 00:00:04

Lowest Channel / 10MHz / 16QAM



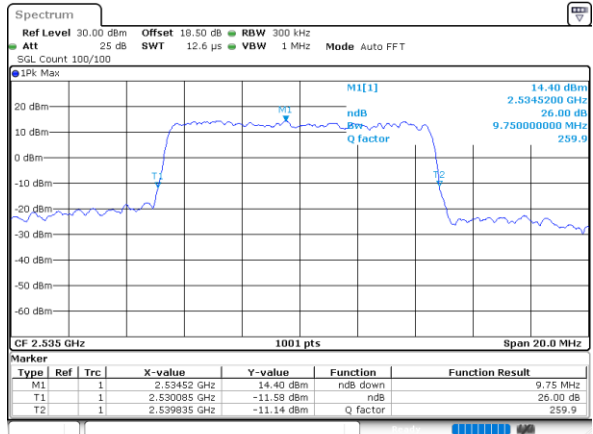
Date: 3, JAN, 2023 23:59:44

Middle Channel / 10MHz / QPSK



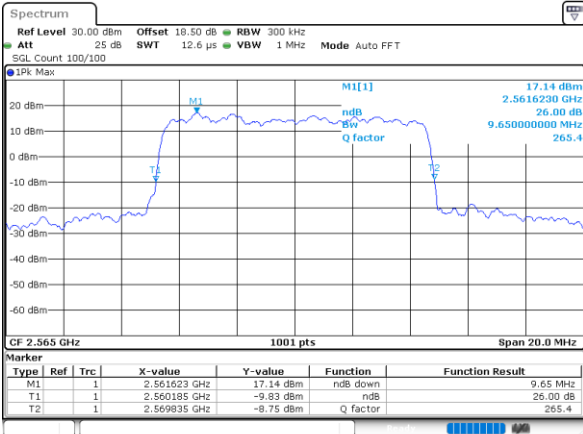
Date: 4, JAN, 2023 00:06:21

Middle Channel / 10MHz / 16QAM



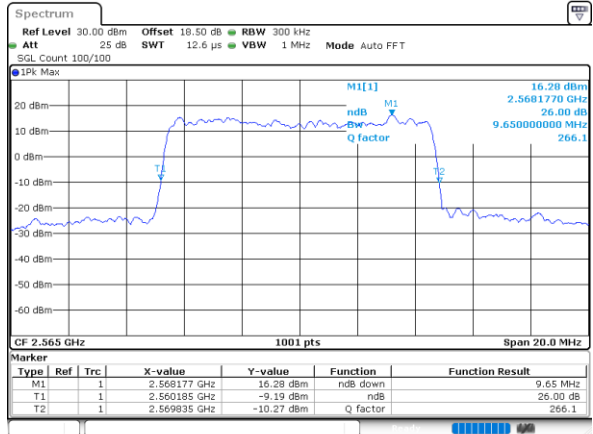
Date: 4, JAN, 2023 00:06:35

Highest Channel / 10MHz / QPSK



Date: 4, JAN, 2023 00:11:23

Highest Channel / 10MHz / 16QAM

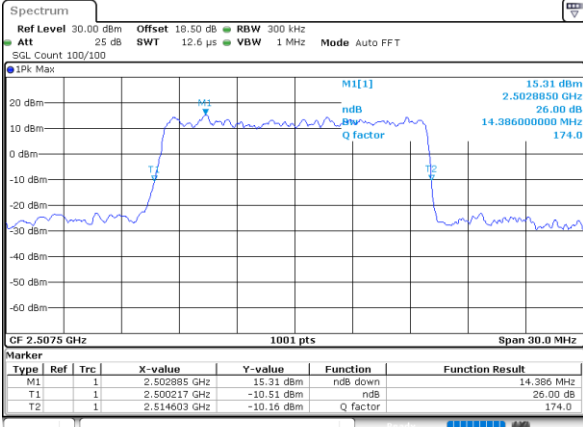


Date: 4, JAN, 2023 00:11:53



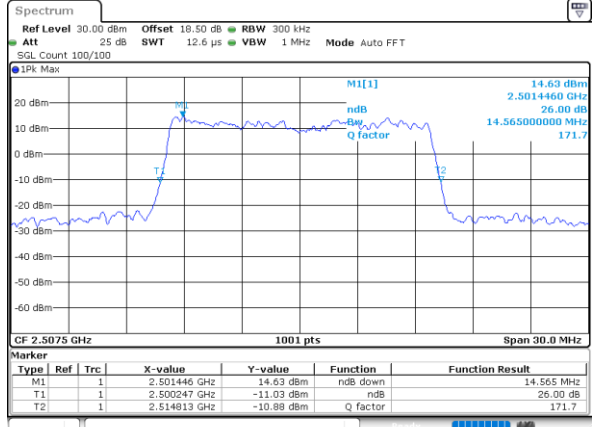
LTE Band 7

Lowest Channel / 15MHz / QPSK



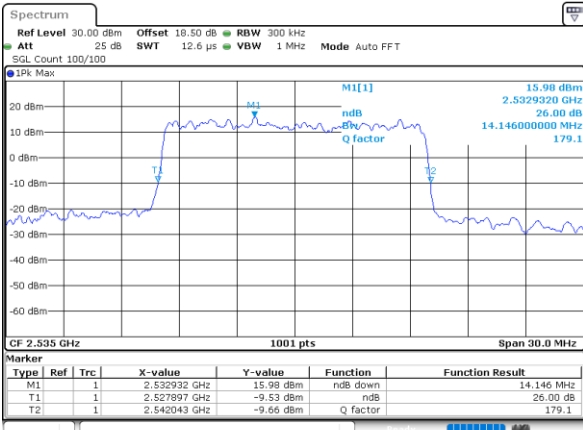
Date: 4, JAN, 2023 00:13:50

Lowest Channel / 15MHz / 16QAM



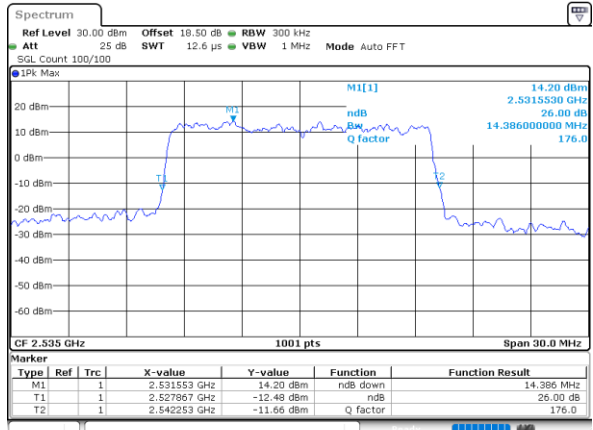
Date: 4, JAN, 2023 00:14:22

Middle Channel / 15MHz / QPSK



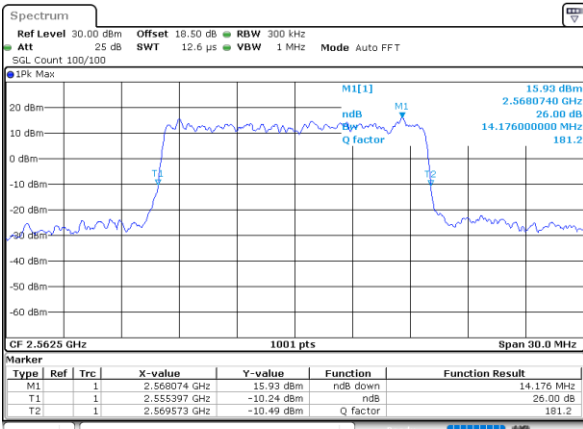
Date: 4, JAN, 2023 00:21:31

Middle Channel / 15MHz / 16QAM



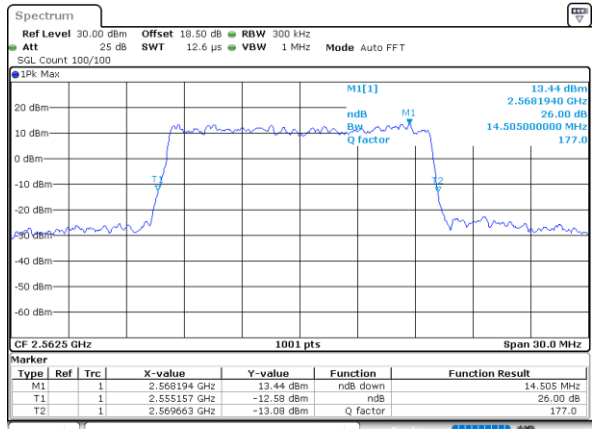
Date: 4, JAN, 2023 00:21:43

Highest Channel / 15MHz / QPSK



Date: 4, JAN, 2023 00:23:59

Highest Channel / 15MHz / 16QAM

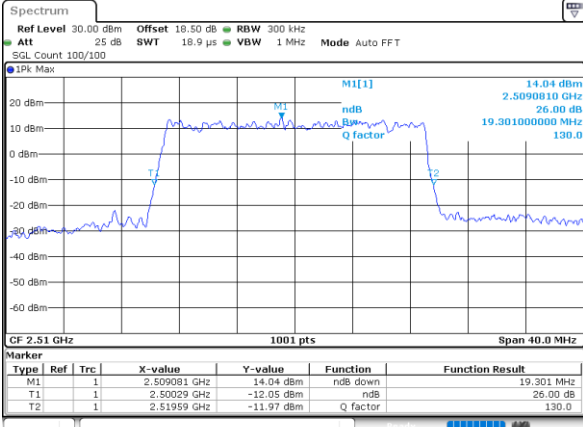


Date: 4, JAN, 2023 00:23:45



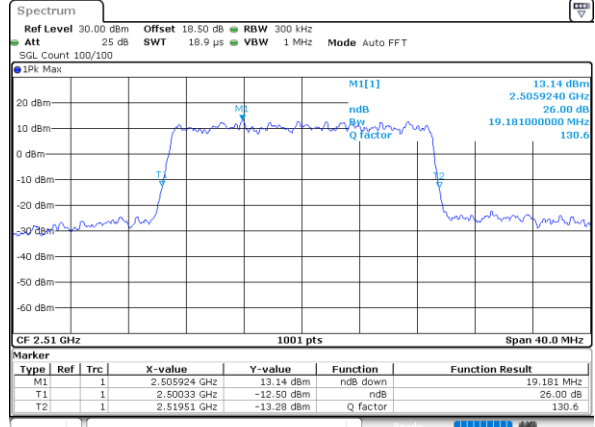
LTE Band 7

Lowest Channel / 20MHz / QPSK



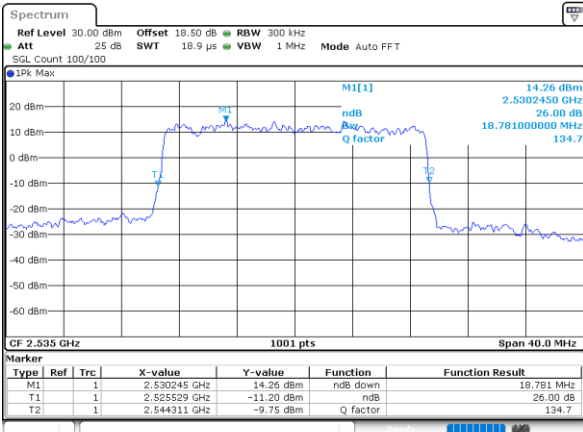
Date: 4.JAN.2023 00:29:24

Lowest Channel / 20MHz / 16QAM



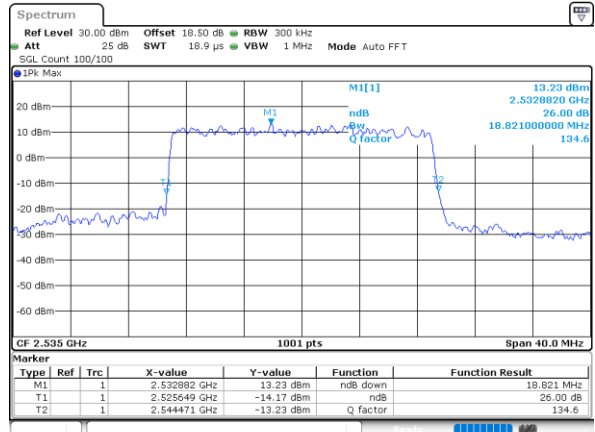
Date: 4.JAN.2023 00:28:59

Middle Channel / 20MHz / QPSK



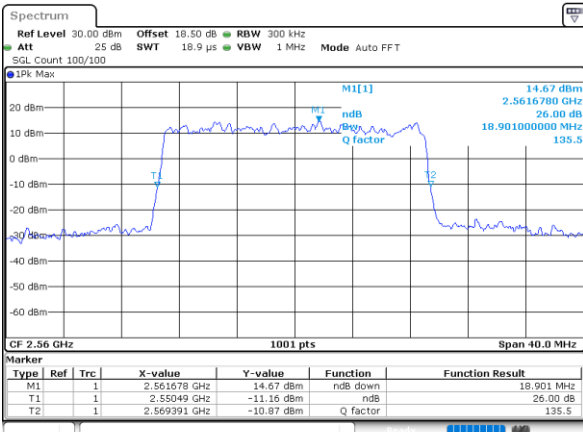
Date: 4.JAN.2023 00:36:21

Middle Channel / 20MHz / 16QAM



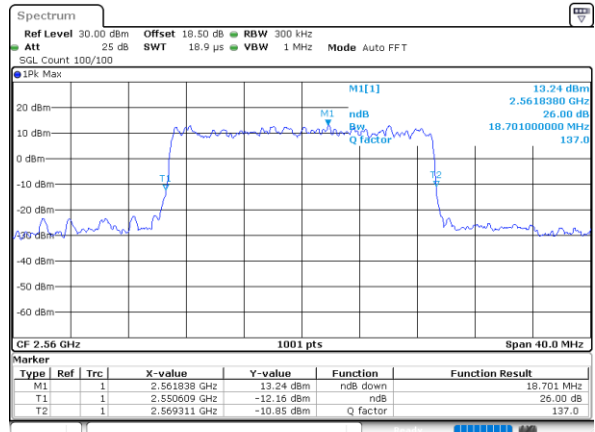
Date: 4.JAN.2023 00:36:07

Highest Channel / 20MHz / QPSK



Date: 4.JAN.2023 00:36:53

Highest Channel / 20MHz / 16QAM

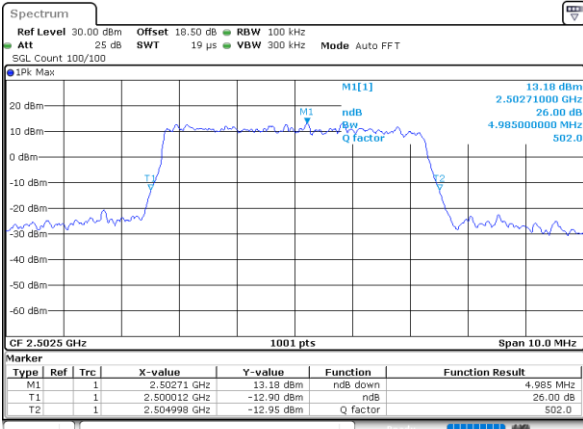


Date: 4.JAN.2023 00:37:17



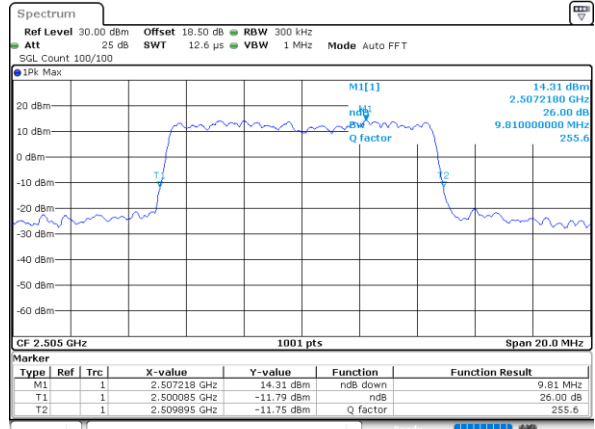
LTE Band 7

Lowest Channel / 5MHz / 64QAM



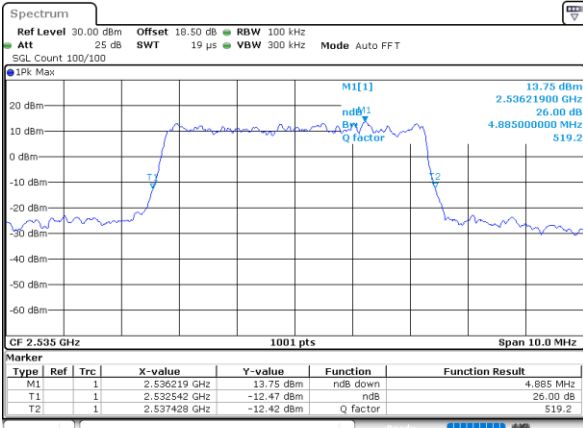
Date: 3, JAN, 2023 23:41:53

Lowest Channel / 10MHz / 64QAM



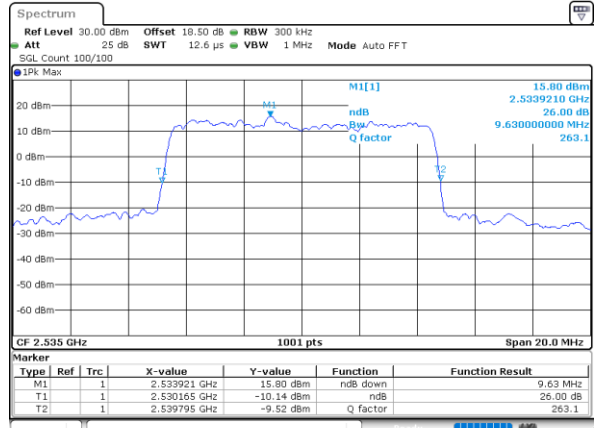
Date: 3, JAN, 2023 23:59:05

Middle Channel / 5MHz / 64QAM



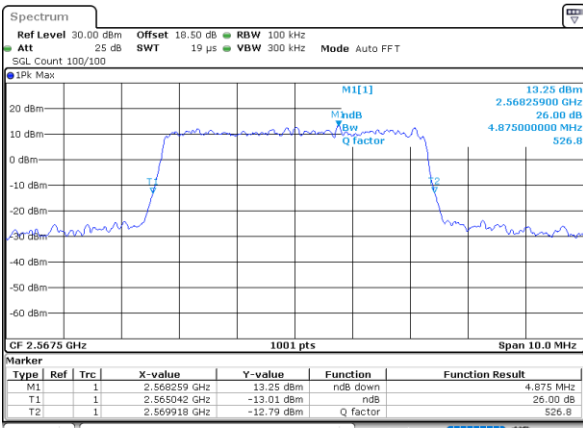
Date: 3, JAN, 2023 23:51:17

Middle Channel / 10MHz / 64QAM



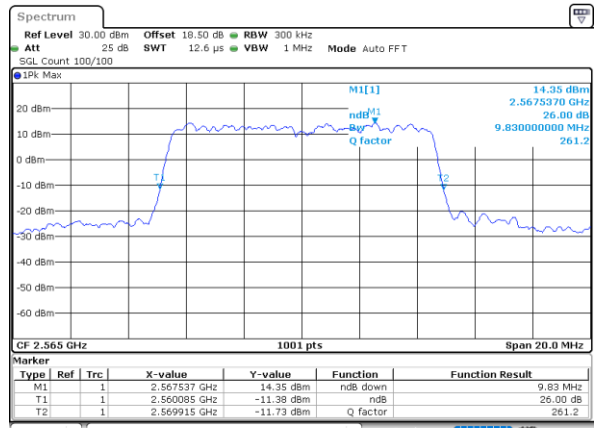
Date: 4, JAN, 2023 00:06:52

Highest Channel / 5MHz / 64QAM



Date: 3, JAN, 2023 23:53:30

Highest Channel / 10MHz / 64QAM



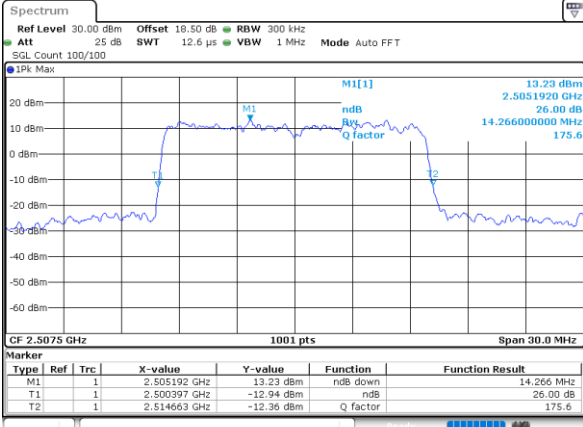
Date: 4, JAN, 2023 00:12:17





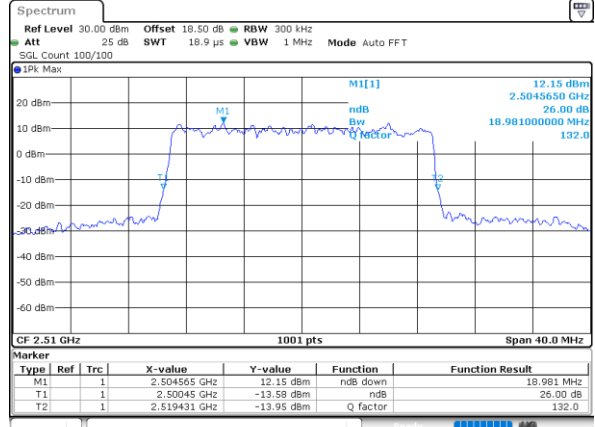
LTE Band 7

Lowest Channel / 15MHz / 64QAM



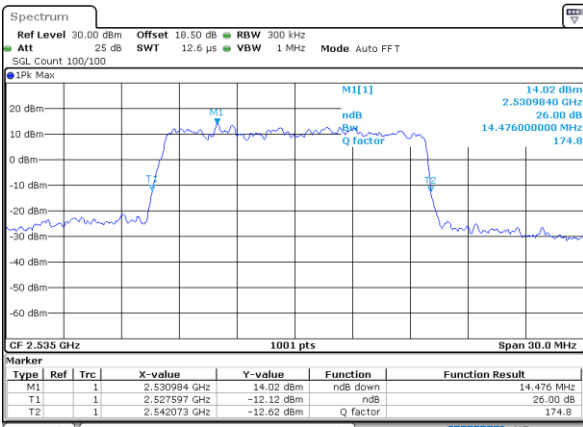
Date: 4\_JAN\_2023 00:14:42

Lowest Channel / 20MHz / 64QAM



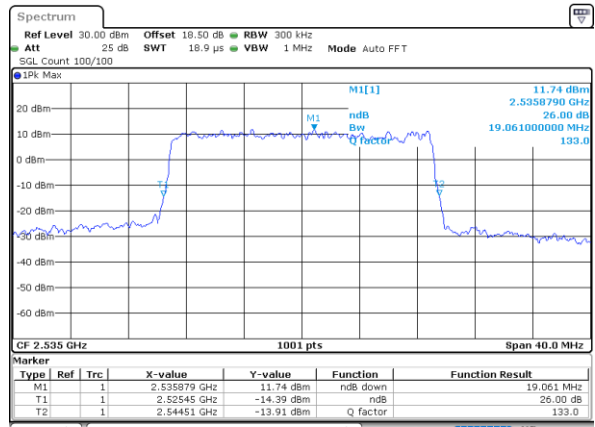
Date: 4\_JAN\_2023 00:28:29

Middle Channel / 15MHz / 64QAM



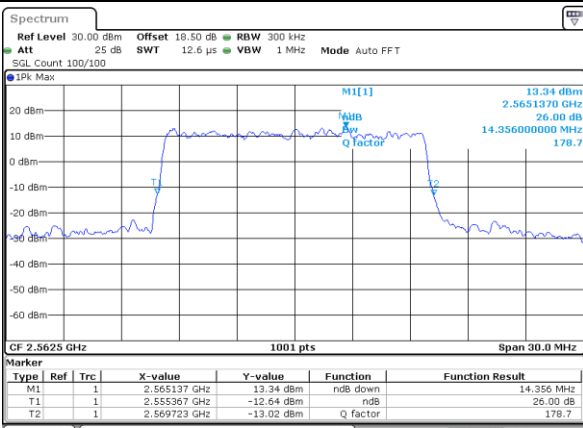
Date: 4\_JAN\_2023 00:21:55

Middle Channel / 20MHz / 64QAM



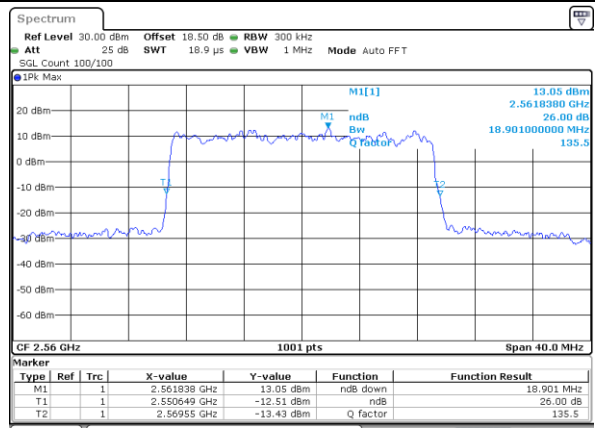
Date: 4\_JAN\_2023 00:35:53

Highest Channel / 15MHz / 64QAM



Date: 4\_JAN\_2023 00:22:51

Highest Channel / 20MHz / 64QAM



Date: 4\_JAN\_2023 00:37:40



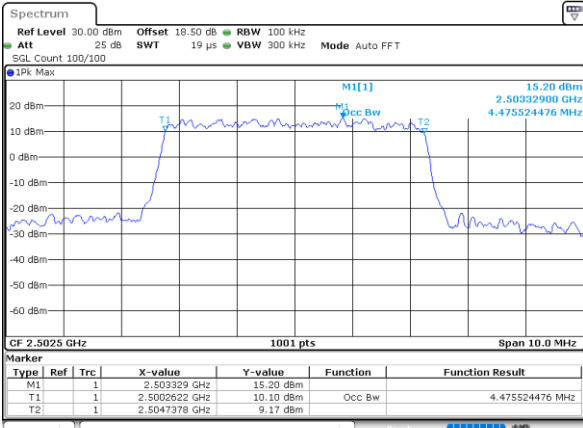
Occupied Bandwidth

Mode	LTE Band 7 : 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	-	-	-	-	4.48	4.49	9.05	8.99	13.46	13.49	17.90	17.86
Middle CH	-	-	-	-	4.49	4.49	9.01	9.03	13.43	13.43	17.86	17.82
Highest CH	-	-	-	-	4.48	4.51	9.03	9.03	13.52	13.40	17.86	17.86
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.50	-	9.07	-	13.46	-	17.90	-
Middle CH	-	-	-	-	4.50	-	9.01	-	13.46	-	17.82	-
Highest CH	-	-	-	-	4.50	-	9.03	-	13.43	-	17.90	-



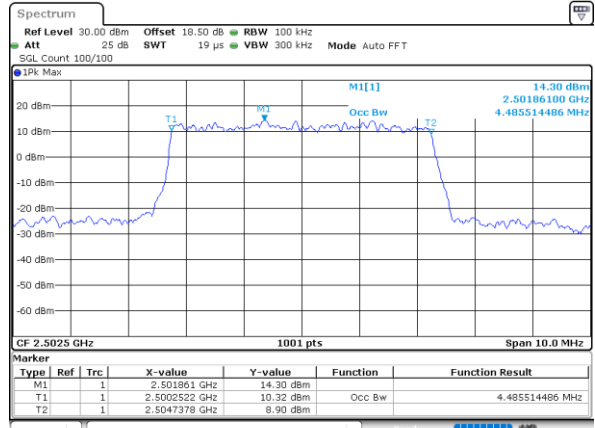
LTE Band 7

Lowest Channel / 5MHz / QPSK



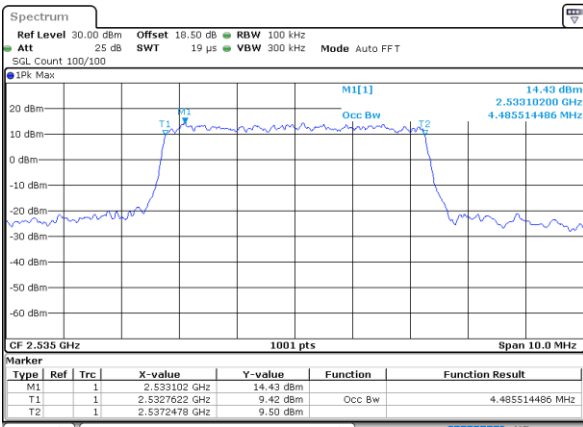
Date: 3, JAN, 2023 23:39:46

Lowest Channel / 5MHz / 16QAM



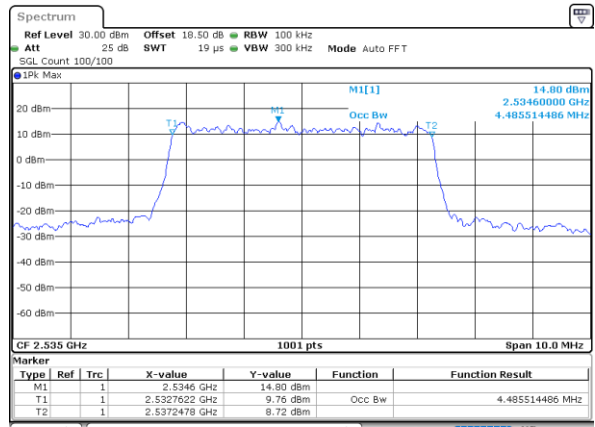
Date: 3, JAN, 2023 23:41:23

Middle Channel / 5MHz / QPSK



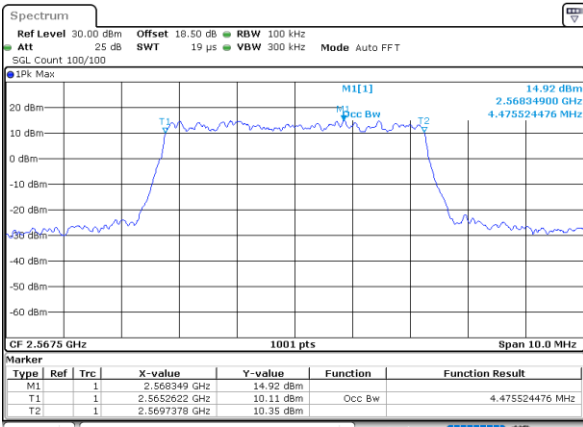
Date: 3, JAN, 2023 23:51:39

Middle Channel / 5MHz / 16QAM



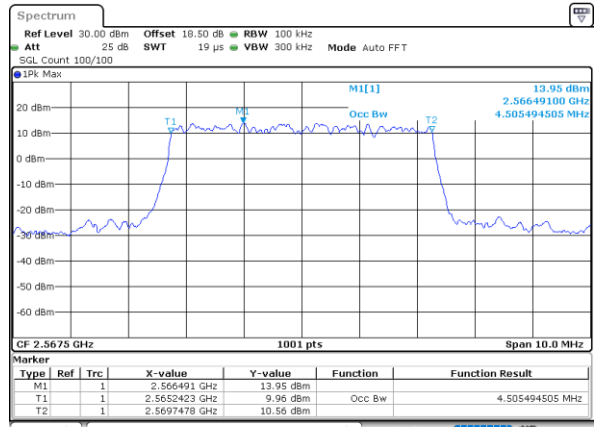
Date: 3, JAN, 2023 23:51:25

Highest Channel / 5MHz / QPSK



Date: 3, JAN, 2023 23:52:30

Highest Channel / 5MHz / 16QAM

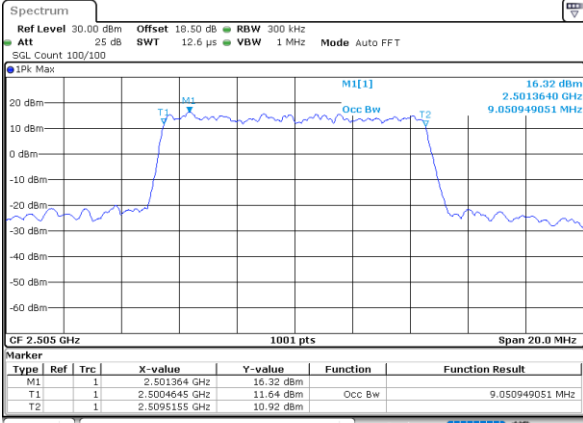


Date: 3, JAN, 2023 23:52:55



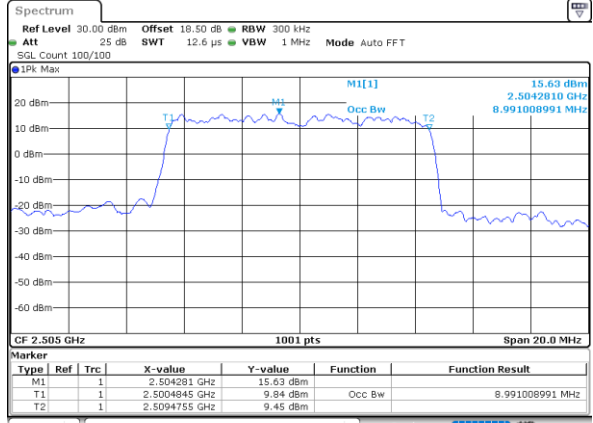
LTE Band 7

Lowest Channel / 10MHz / QPSK



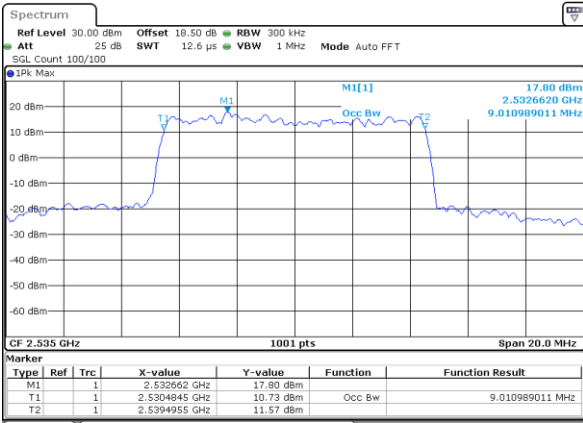
Date: 3, JAN, 2023 23:59:59

Lowest Channel / 10MHz / 16QAM



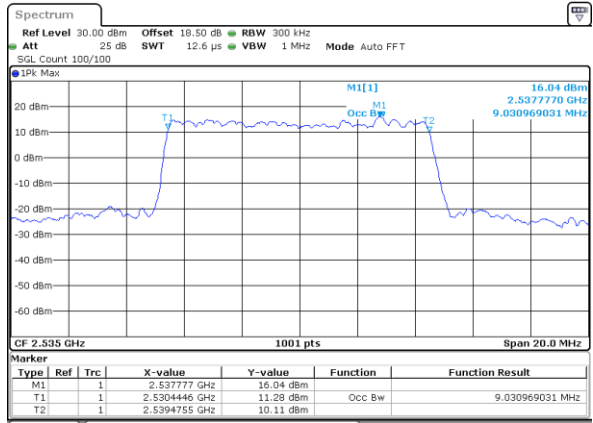
Date: 3, JAN, 2023 23:59:37

Middle Channel / 10MHz / QPSK



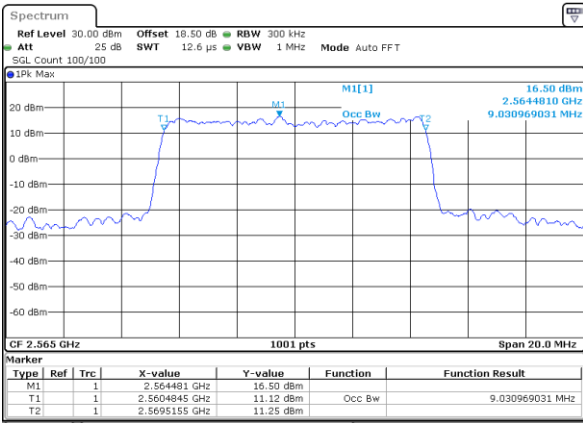
Date: 4, JAN, 2023 00:06:12

Middle Channel / 10MHz / 16QAM



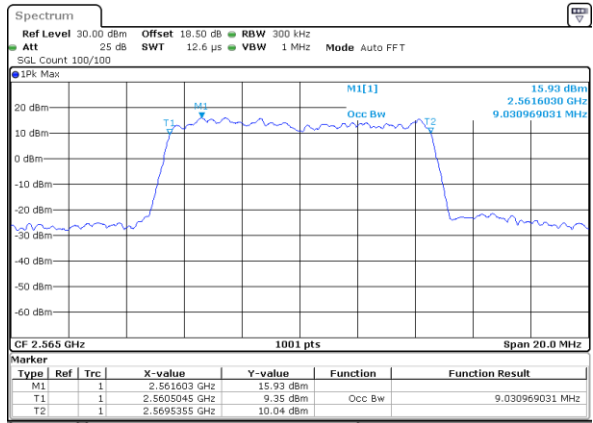
Date: 4, JAN, 2023 00:06:29

Highest Channel / 10MHz / QPSK



Date: 4, JAN, 2023 00:11:18

Highest Channel / 10MHz / 16QAM



Date: 4, JAN, 2023 00:11:39