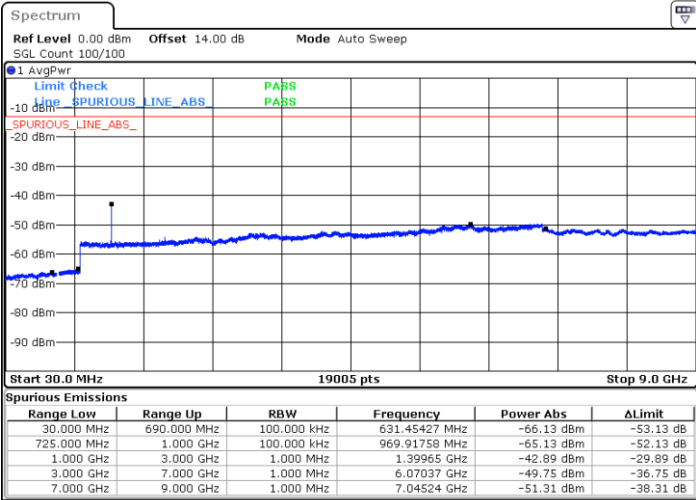




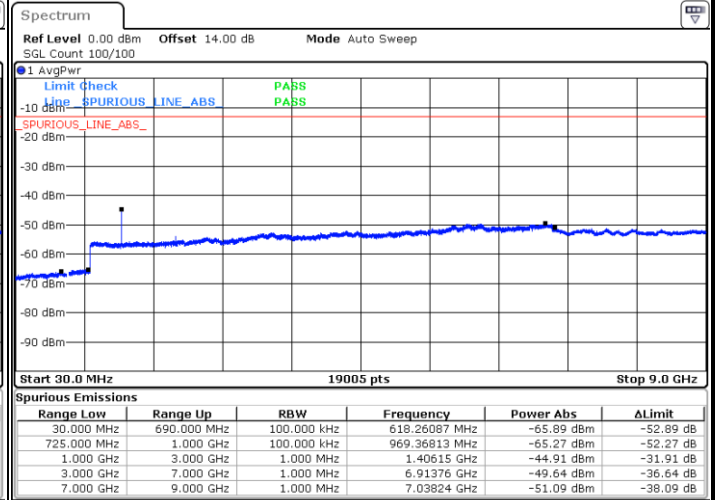
LTE Band 12 / 10MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

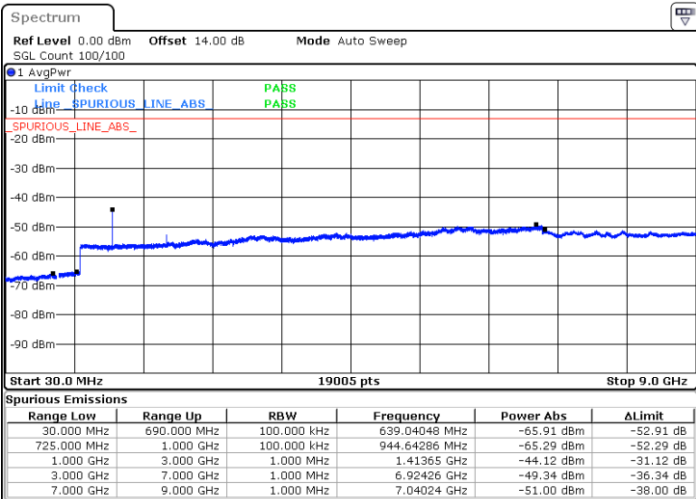


Date: 8.JUL.2022 18:09:47



Date: 8.JUL.2022 18:11:50

Highest Channel / 64QAM



Date: 8.JUL.2022 18:16:27



Frequency Stability

Test Conditions		LTE Band 12 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0038	PASS
40	Normal Voltage	0.0007	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0001	
0	Normal Voltage	0.0008	
-10	Normal Voltage	0.0021	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0011	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0008	

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 13

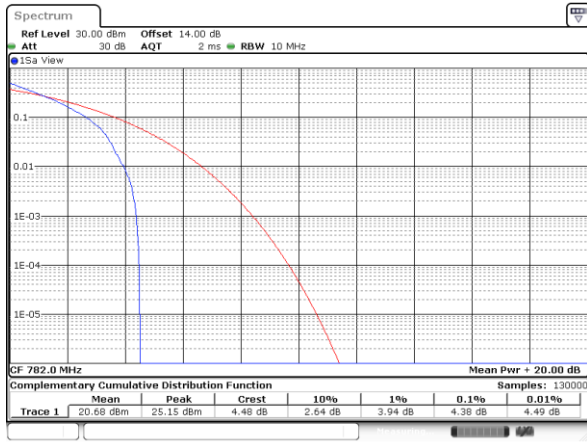
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.38	5.13	4.99	6.03	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.97	6.29	-	-	
Highest CH	-	-	-	-	



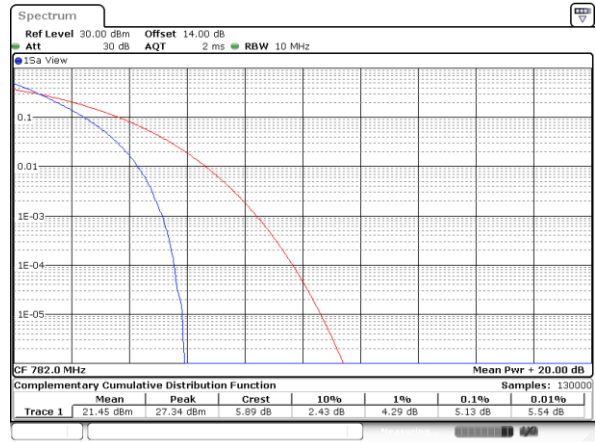
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 11.JUL.2022 11:18:04

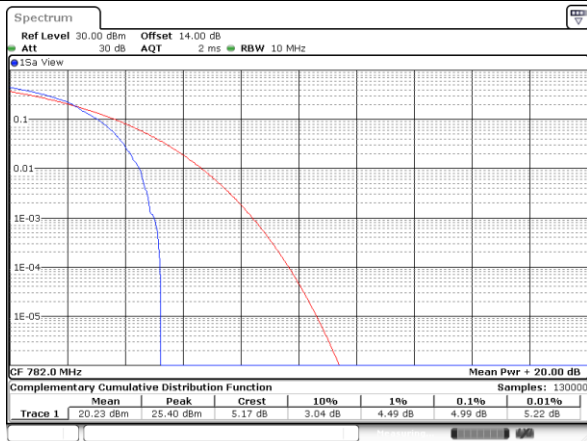
Middle Channel / Full RB



Date: 11.JUL.2022 11:18:29

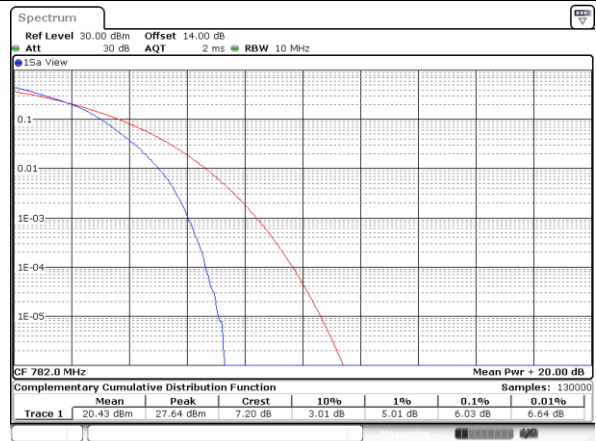
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 11.JUL.2022 11:17:14

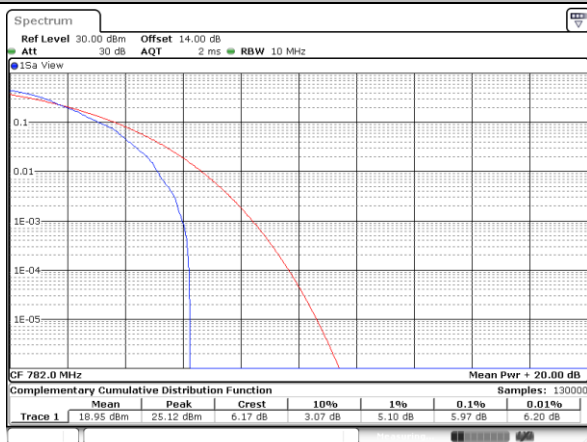
Middle Channel / Full RB



Date: 11.JUL.2022 11:17:39

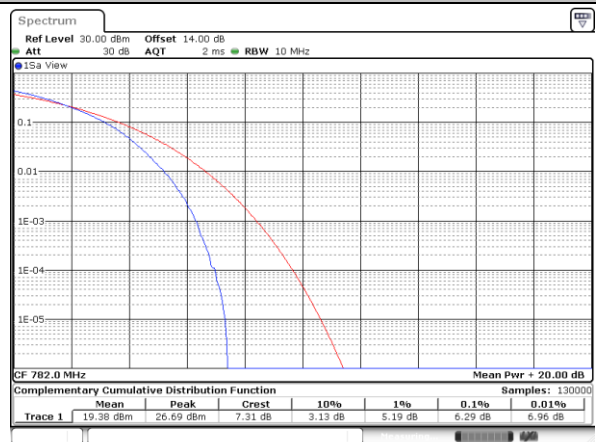
LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 11.JUL.2022 11:16:23

Middle Channel / Full RB



Date: 11.JUL.2022 11:16:48



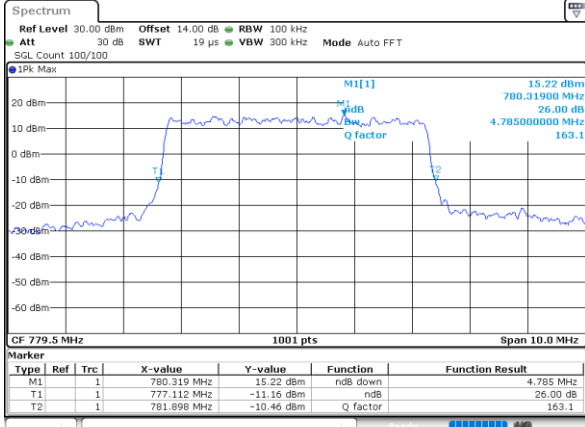
26dB Bandwidth

Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.79	4.93	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.94	9.79	9.65	-	-	-	-
Highest CH	-	-	-	-	4.95	4.80	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.86	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.89	-	9.73	-	-	-	-	-
Highest CH	-	-	-	-	4.95	-	-	-	-	-	-	-



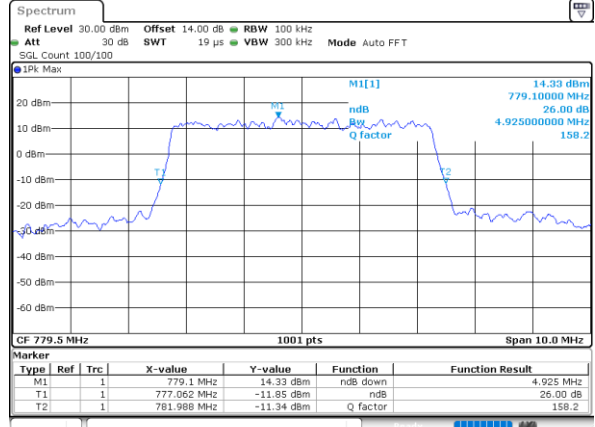
LTE Band 13

Lowest Channel / 5MHz / QPSK



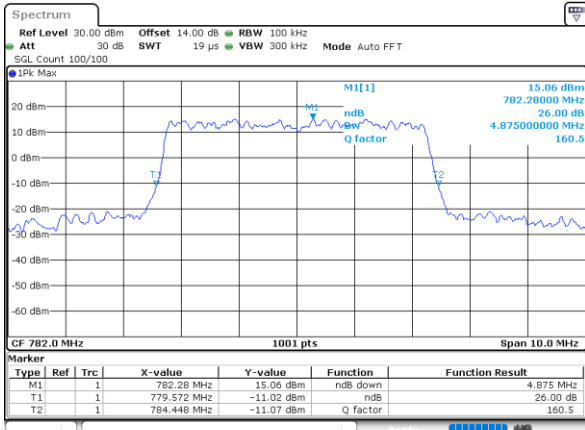
Date: 11.JUL.2022 10:14:37

Lowest Channel / 5MHz / 16QAM



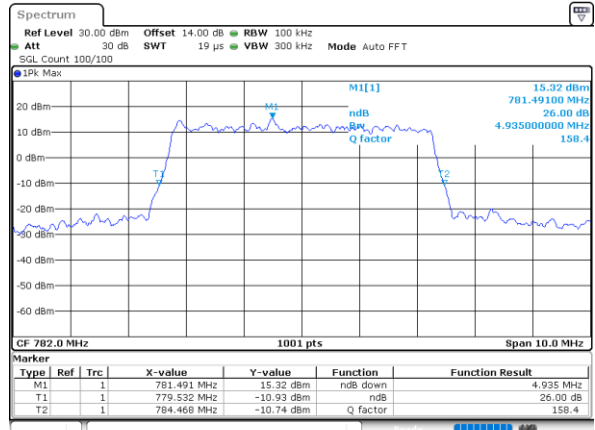
Date: 11.JUL.2022 10:14:13

Middle Channel / 5MHz / QPSK



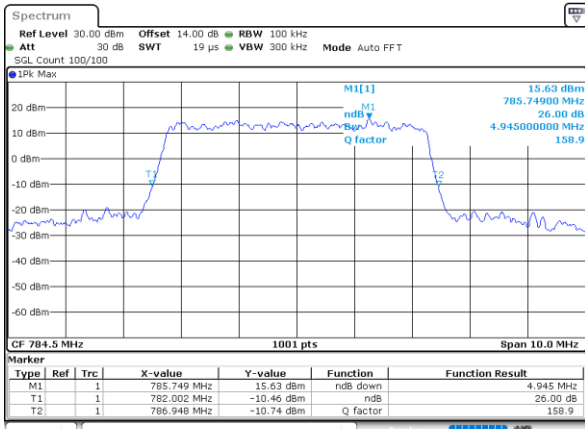
Date: 11.JUL.2022 10:27:42

Middle Channel / 5MHz / 16QAM



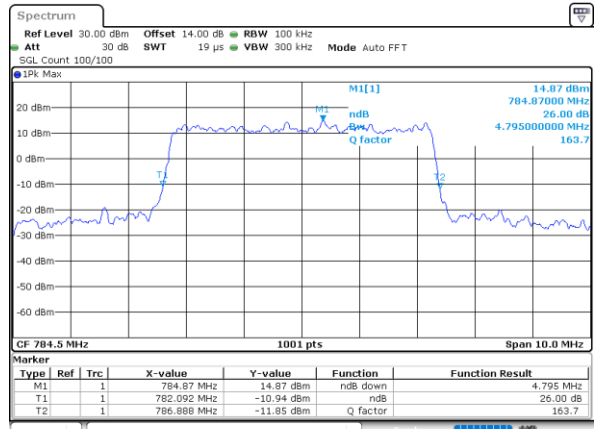
Date: 11.JUL.2022 10:28:06

Highest Channel / 5MHz / QPSK



Date: 11.JUL.2022 10:30:13

Highest Channel / 5MHz / 16QAM

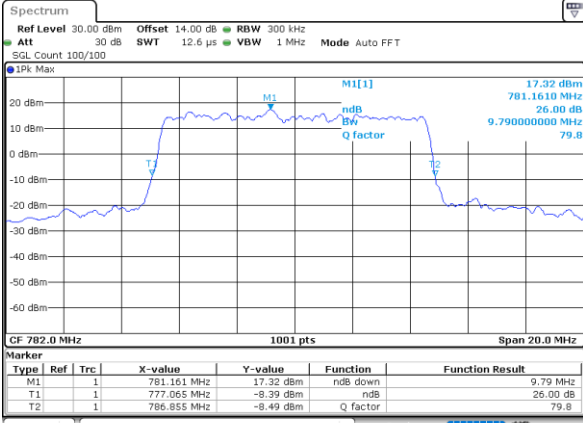


Date: 11.JUL.2022 10:29:49



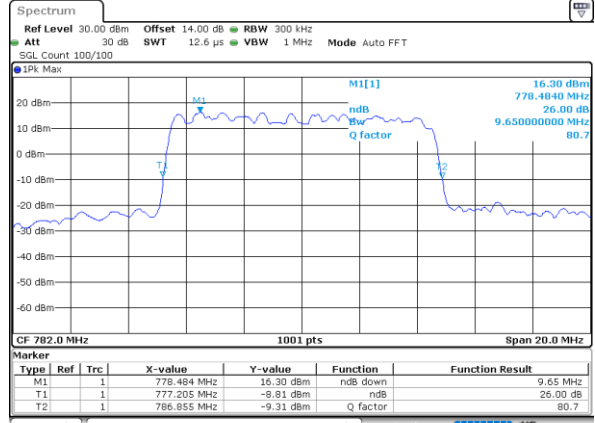
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 11.JUL.2022 10:54:52

Middle Channel / 10MHz / 16QAM

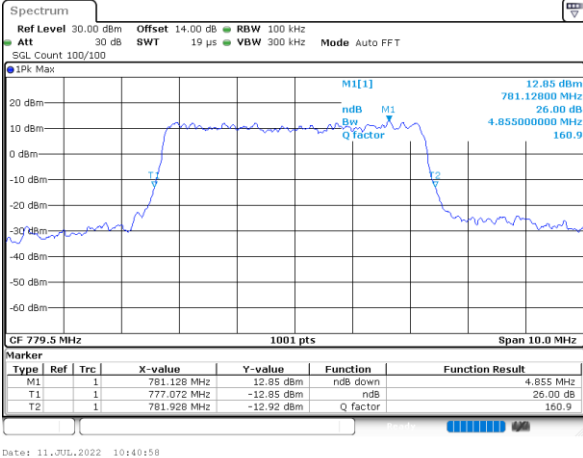


Date: 11.JUL.2022 10:54:28



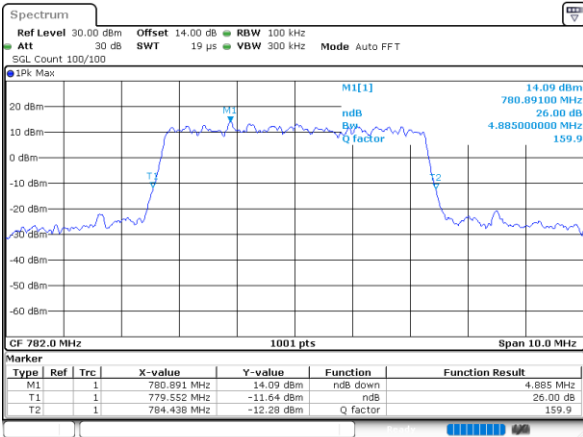
LTE Band 13

Lowest Channel / 5MHz / 64QAM



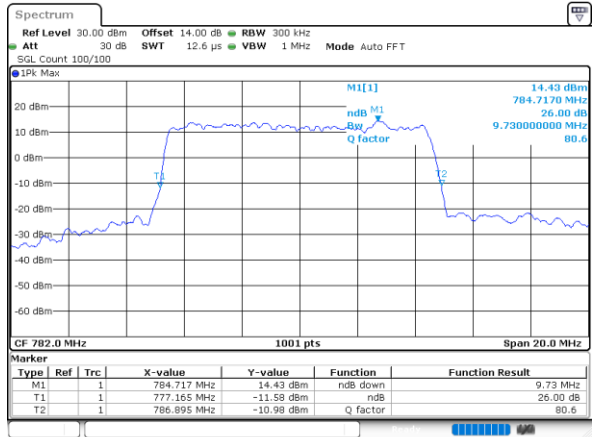
Date: 11.JUL.2022 10:40:58

Middle Channel / 5MHz / 64QAM



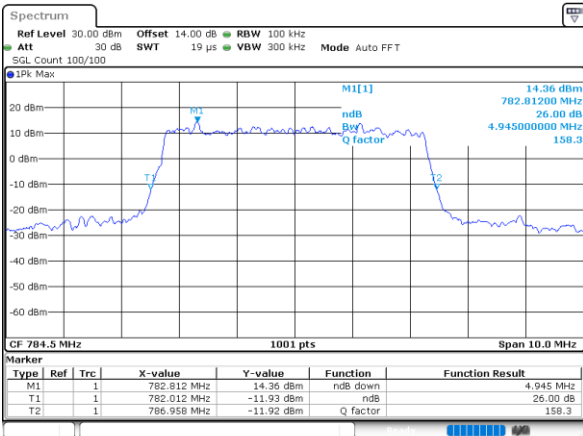
Date: 11.JUL.2022 10:47:33

Middle Channel / 10MHz / 64QAM



Date: 11.JUL.2022 11:09:18

Highest Channel / 5MHz / 64QAM



Date: 11.JUL.2022 10:48:27



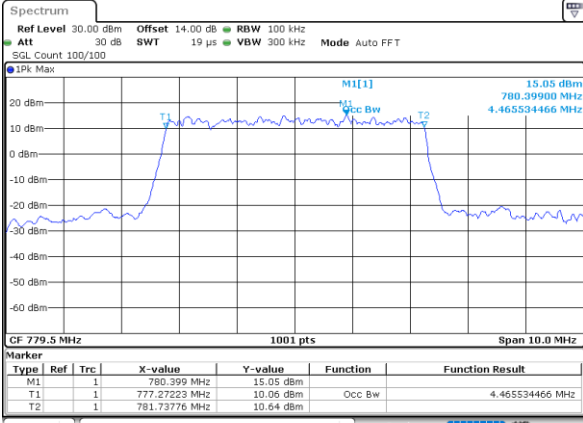
Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.47	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.49	4.50	9.05	9.01	-	-	-	-
Highest CH	-	-	-	-	4.50	4.49	-	-	-	-	-	-
Mode	LTE Band 13 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.49	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	-	9.03	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-



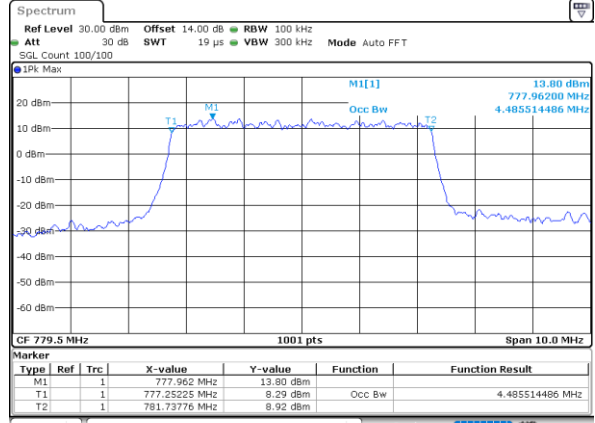
LTE Band 13

Lowest Channel / 5MHz / QPSK



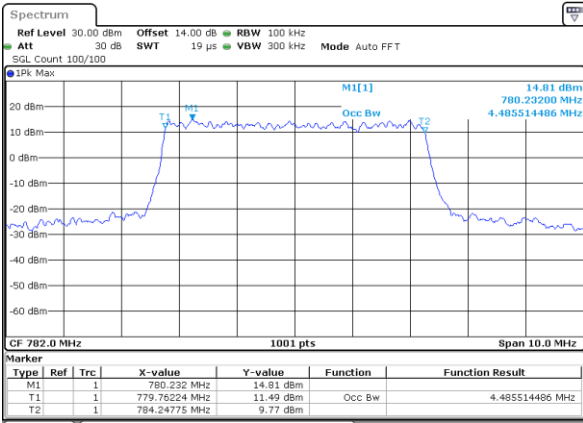
Date: 11.JUL.2022 10:13:33

Lowest Channel / 5MHz / 16QAM



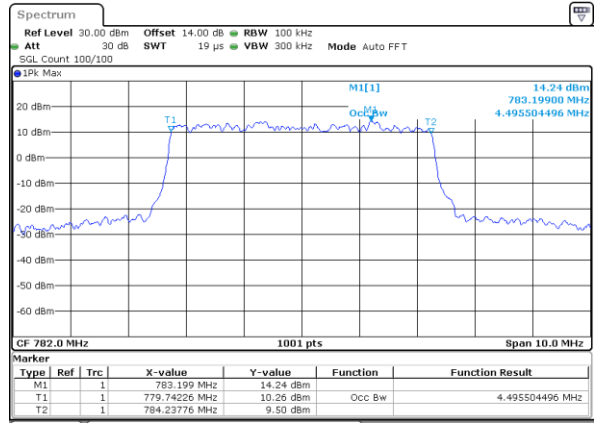
Date: 11.JUL.2022 10:13:58

Middle Channel / 5MHz / QPSK



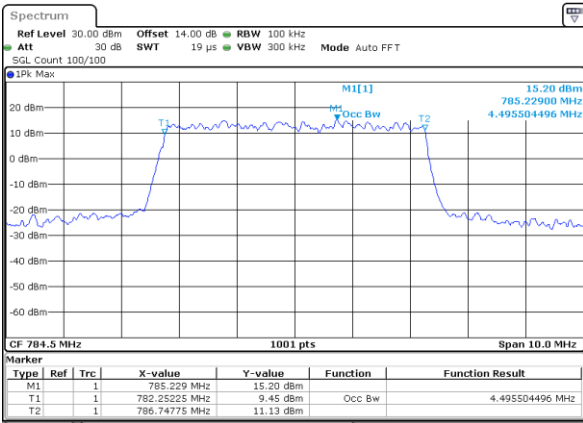
Date: 11.JUL.2022 10:28:45

Middle Channel / 5MHz / 16QAM



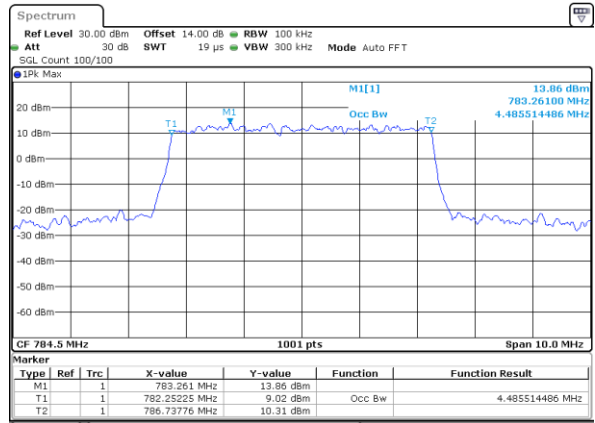
Date: 11.JUL.2022 10:28:21

Highest Channel / 5MHz / QPSK



Date: 11.JUL.2022 10:29:09

Highest Channel / 5MHz / 16QAM

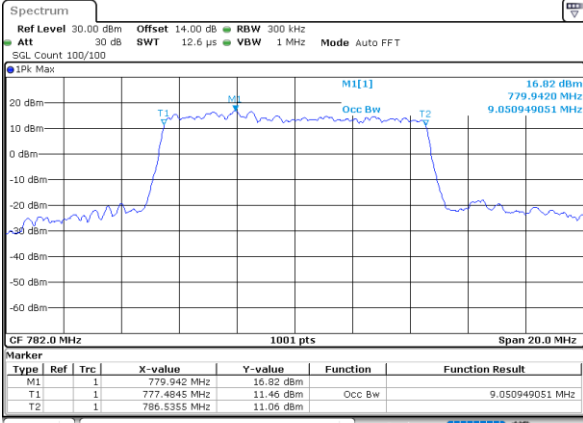


Date: 11.JUL.2022 10:29:34



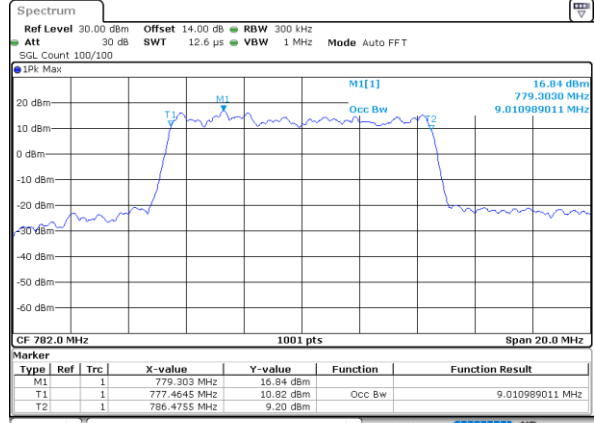
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 11.JUL.2022 10:53:49

Middle Channel / 10MHz / 16QAM

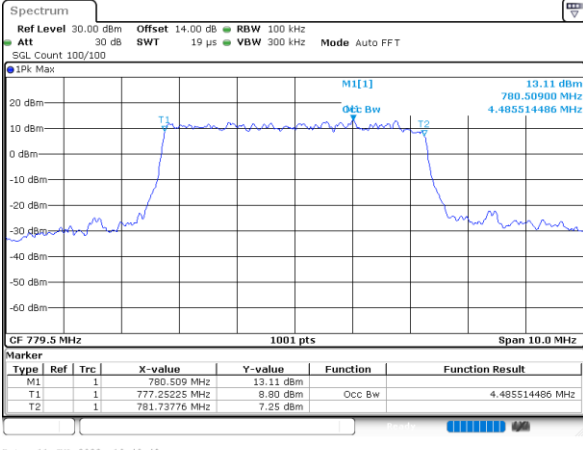


Date: 11.JUL.2022 10:54:13



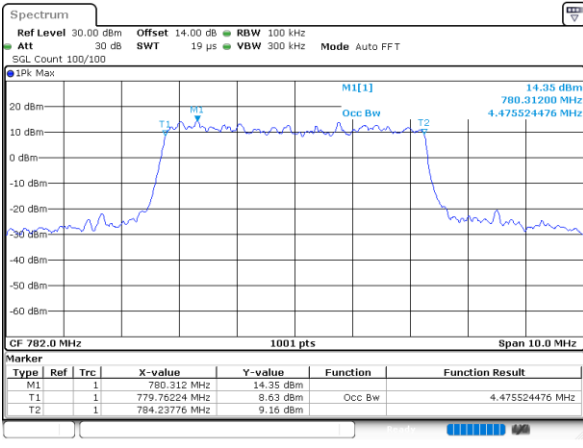
LTE Band 13

Lowest Channel / 5MHz / 64QAM



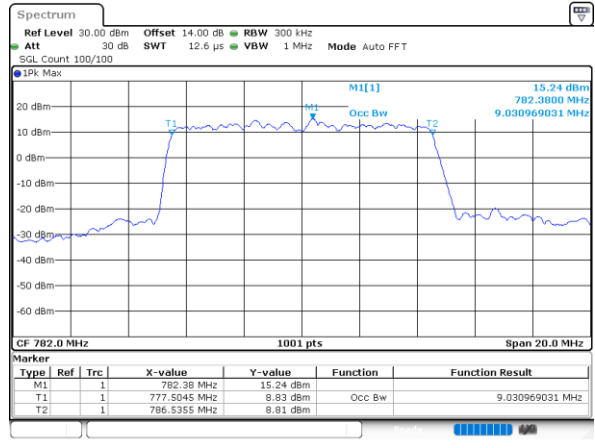
Date: 11.JUL.2022 10:40:43

Middle Channel / 5MHz / 64QAM



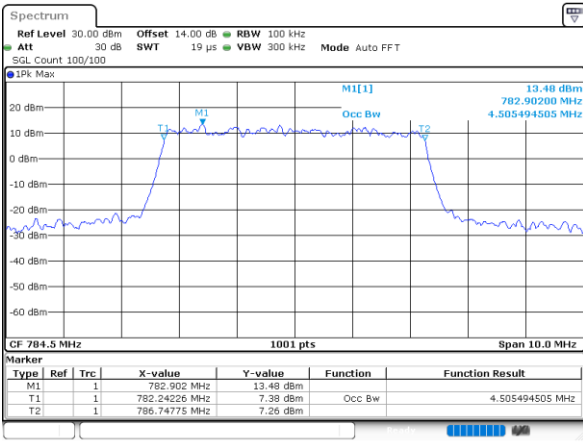
Date: 11.JUL.2022 10:47:48

Middle Channel / 10MHz / 64QAM



Date: 11.JUL.2022 11:09:03

Highest Channel / 5MHz / 64QAM



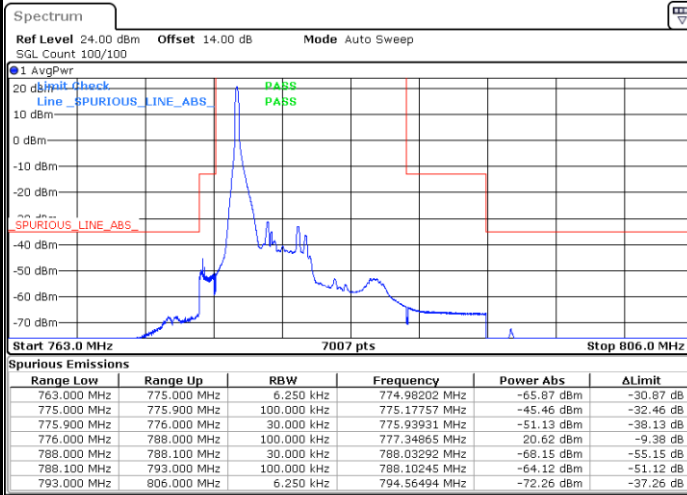
Date: 11.JUL.2022 10:48:12



Conducted Band Edge

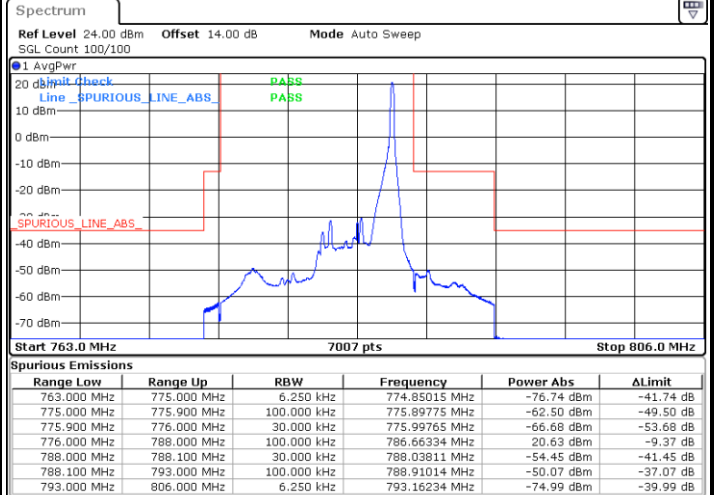
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



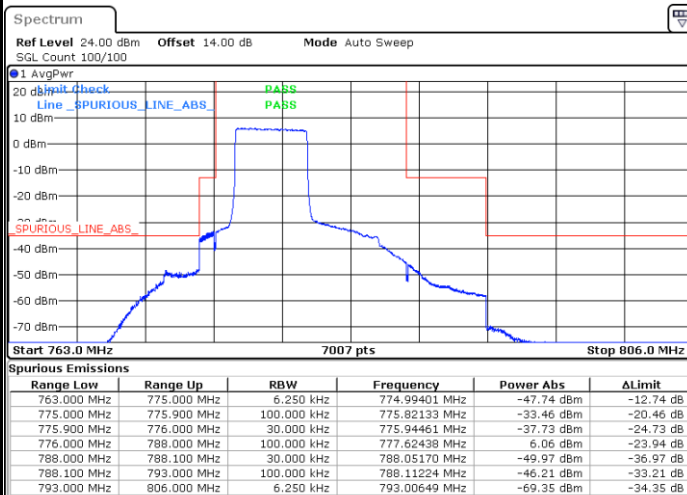
Date: 11.JUL.2022 10:21:59

Highest Band Edge / 1 RB



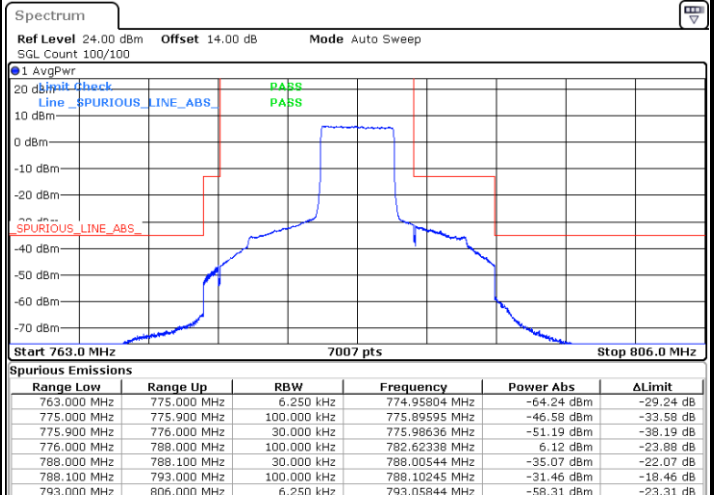
Date: 11.JUL.2022 10:37:34

Lowest Band Edge / Full RB



Date: 11.JUL.2022 10:16:21

Highest Band Edge / Full RB



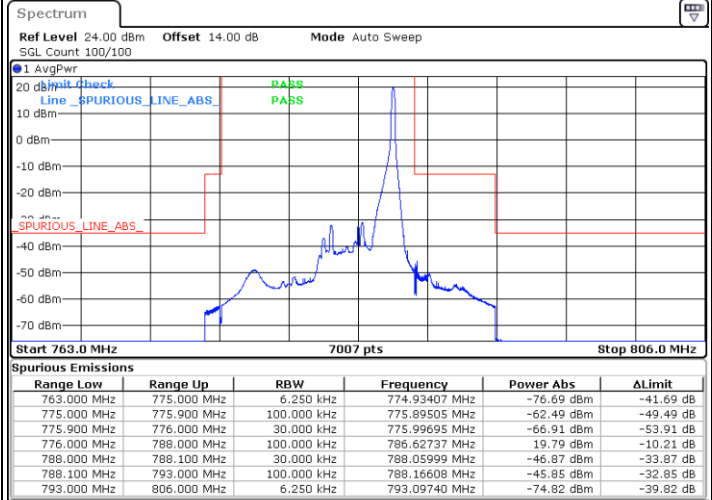
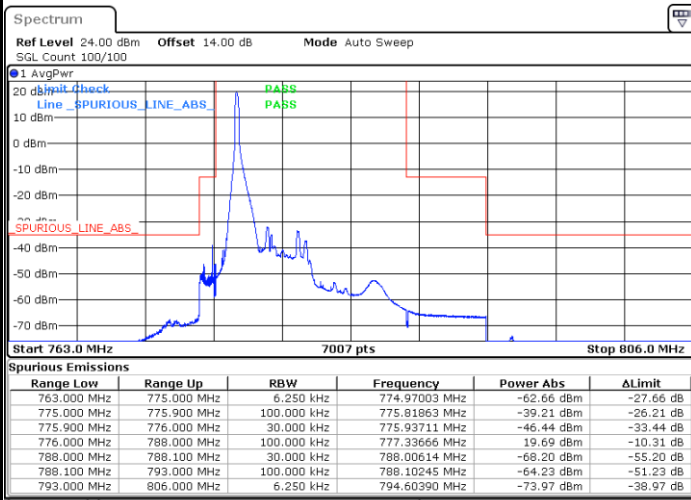
Date: 11.JUL.2022 10:31:57



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

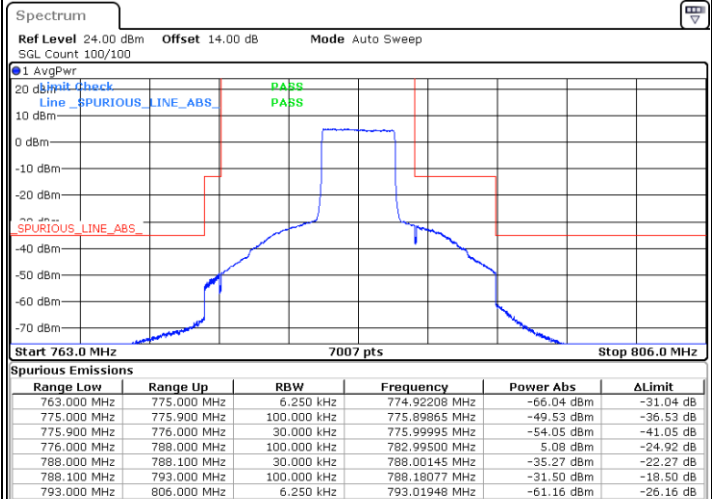
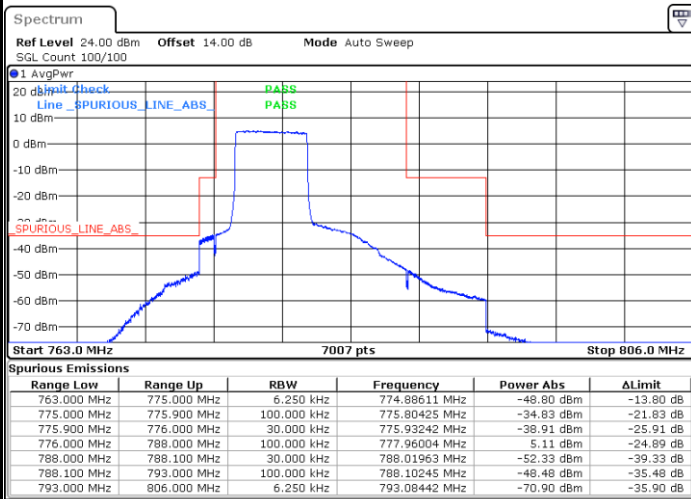


Date: 11.JUL.2022 10:20:06

Date: 11.JUL.2022 10:35:41

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUL.2022 10:18:13

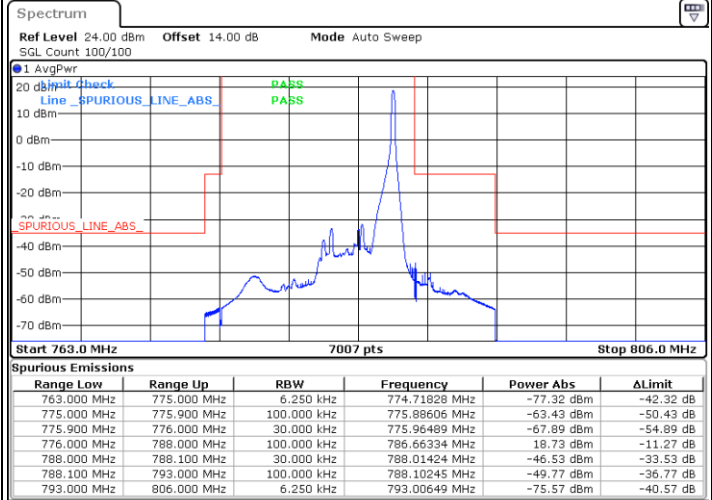
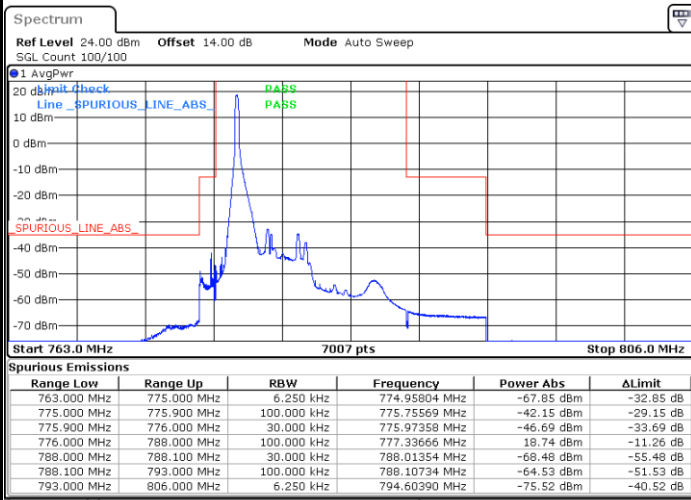
Date: 11.JUL.2022 10:33:49



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

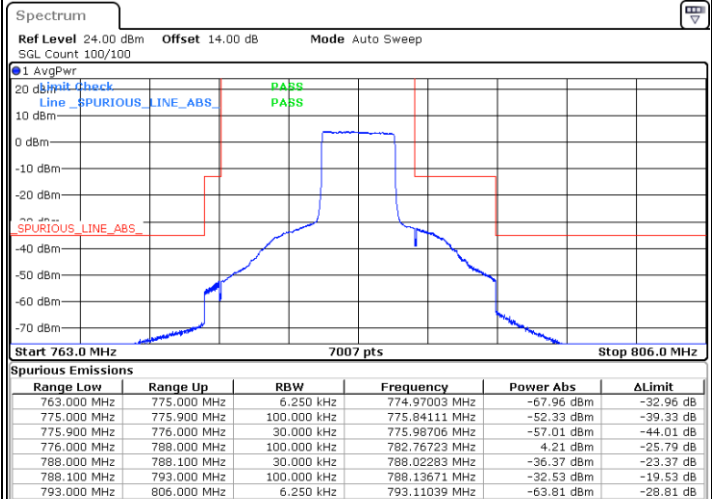
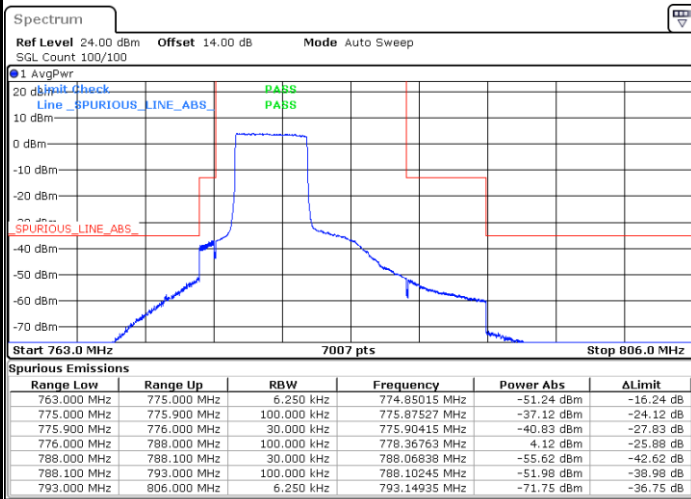


Date: 11.JUL.2022 10:44:34

Date: 11.JUL.2022 10:52:03

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUL.2022 10:42:41

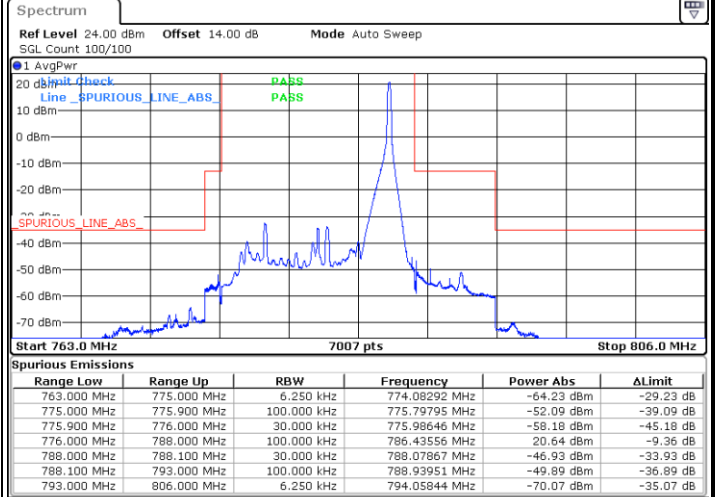
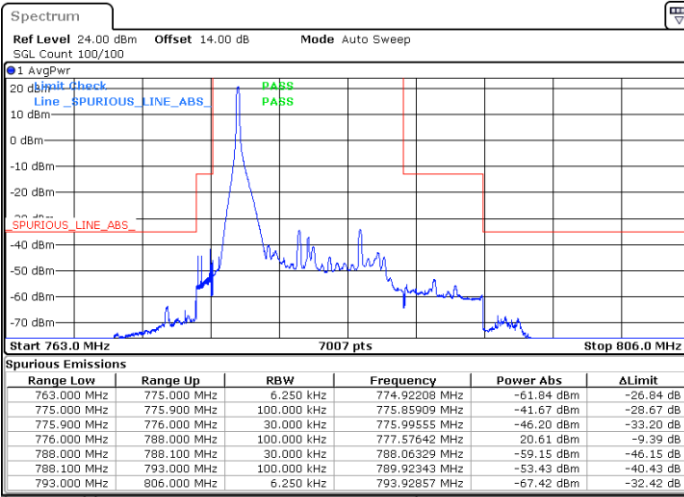
Date: 11.JUL.2022 10:50:10



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

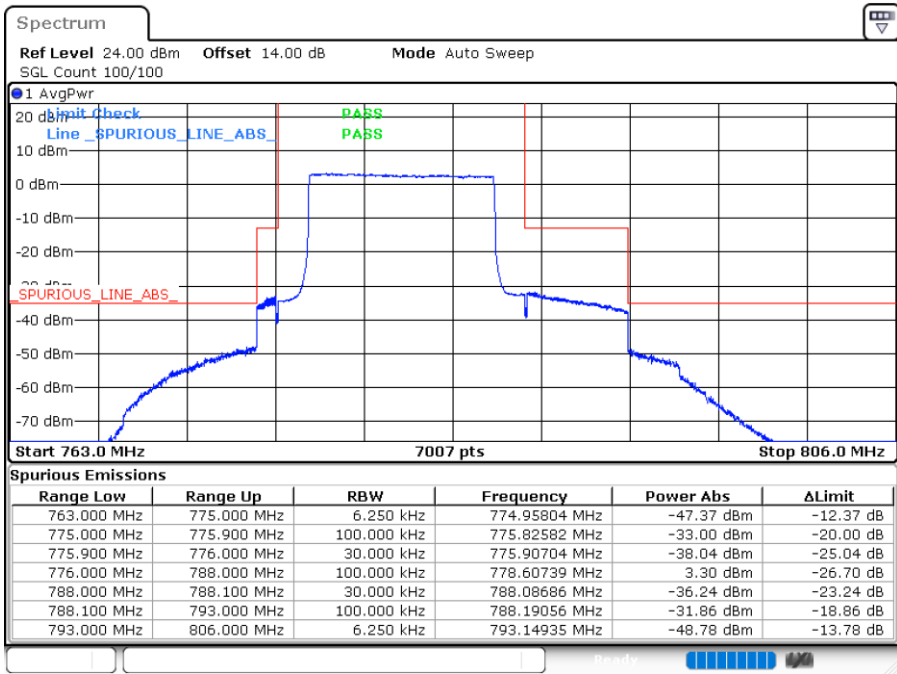
Highest Band Edge / 1 RB



Date: 11.JUL.2022 11:02:12

Date: 11.JUL.2022 11:04:04

Band Edge / Full RB



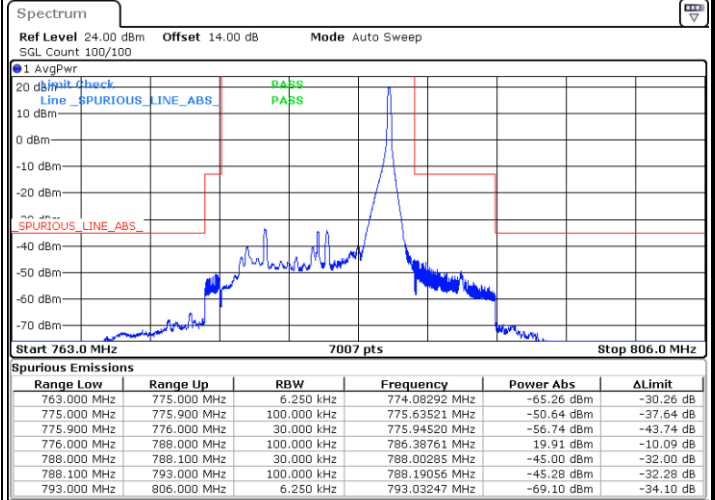
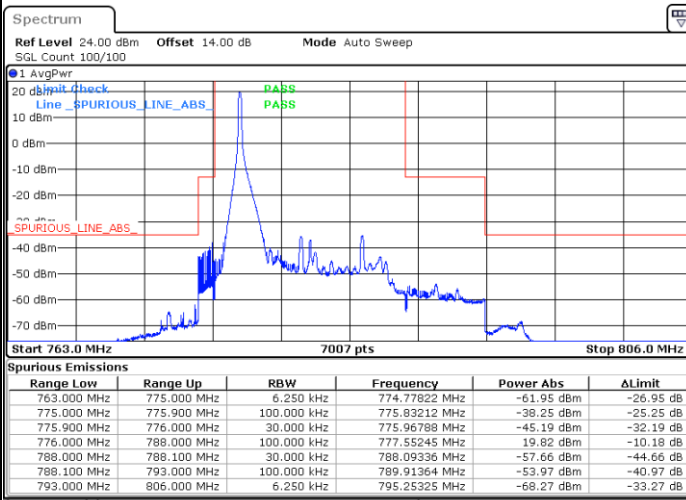
Date: 11.JUL.2022 10:56:36



LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

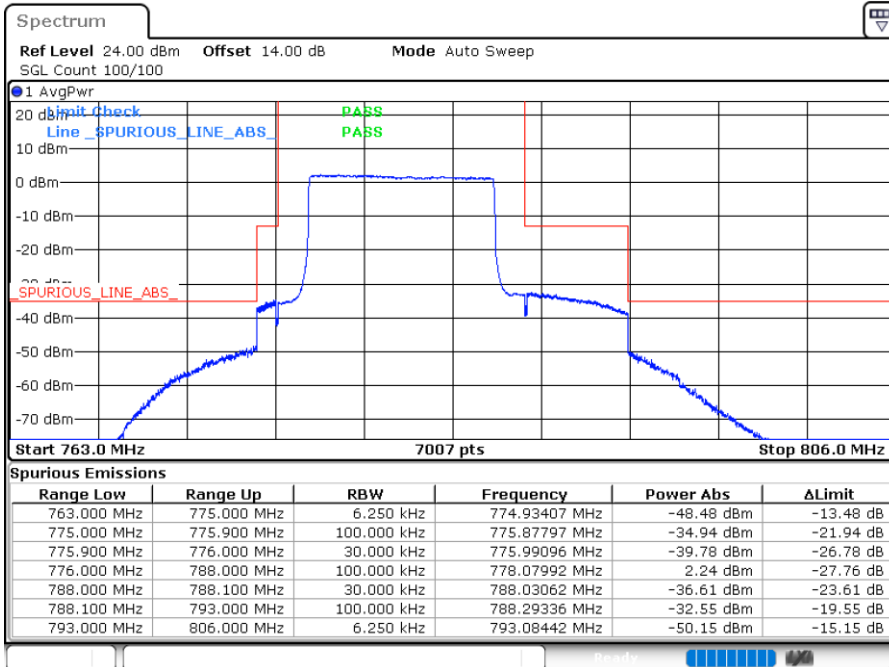
Highest Band Edge / 1 RB



Date: 11.JUL.2022 11:00:20

Date: 11.JUL.2022 11:05:56

Band Edge / Full RB



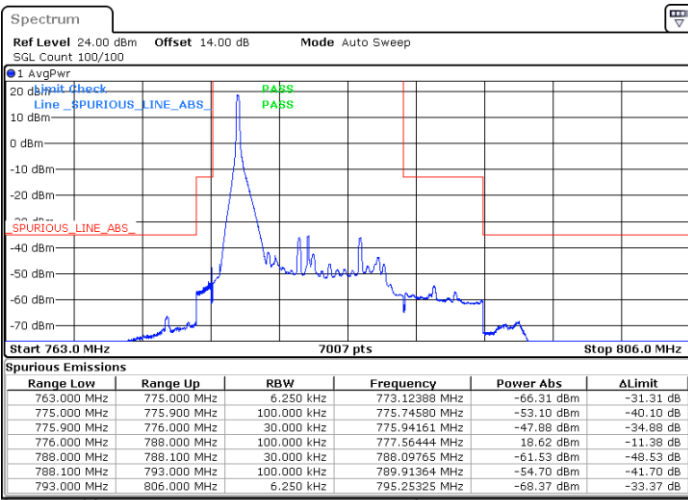
Date: 11.JUL.2022 10:58:28



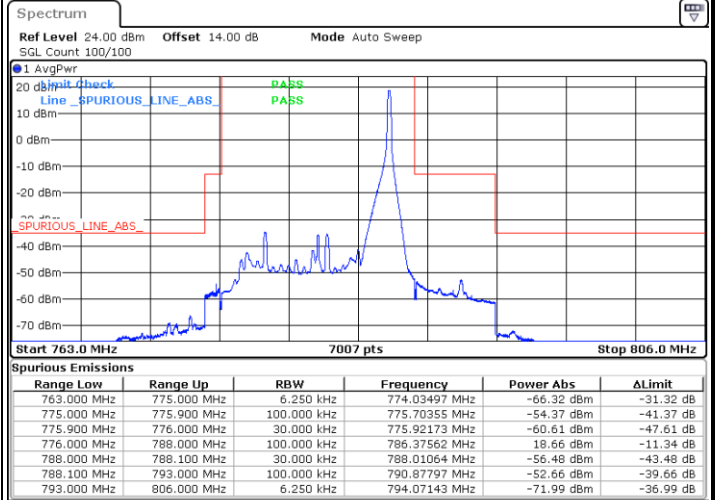
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

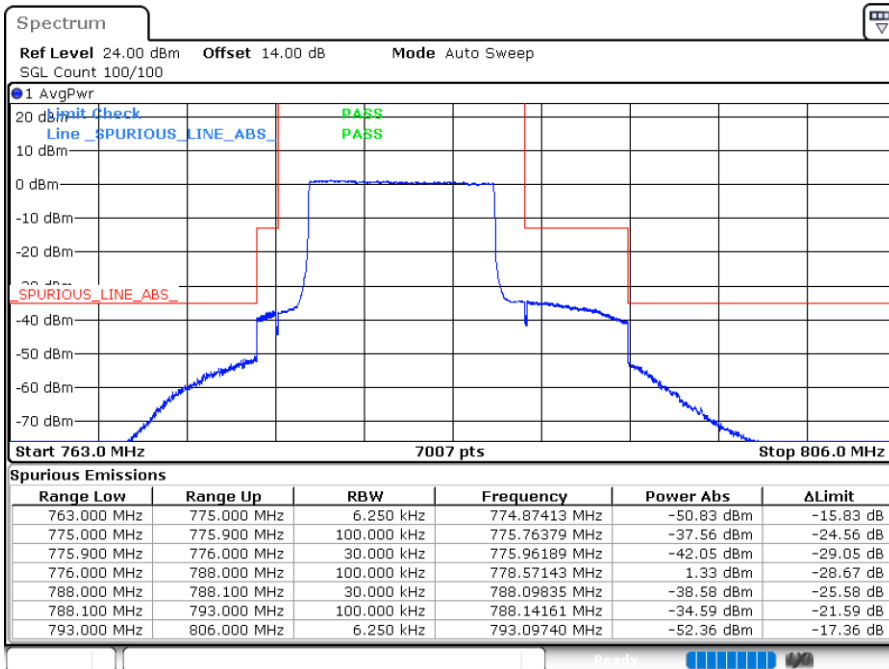


Date: 11.JUL.2022 11:12:53



Date: 11.JUL.2022 11:14:45

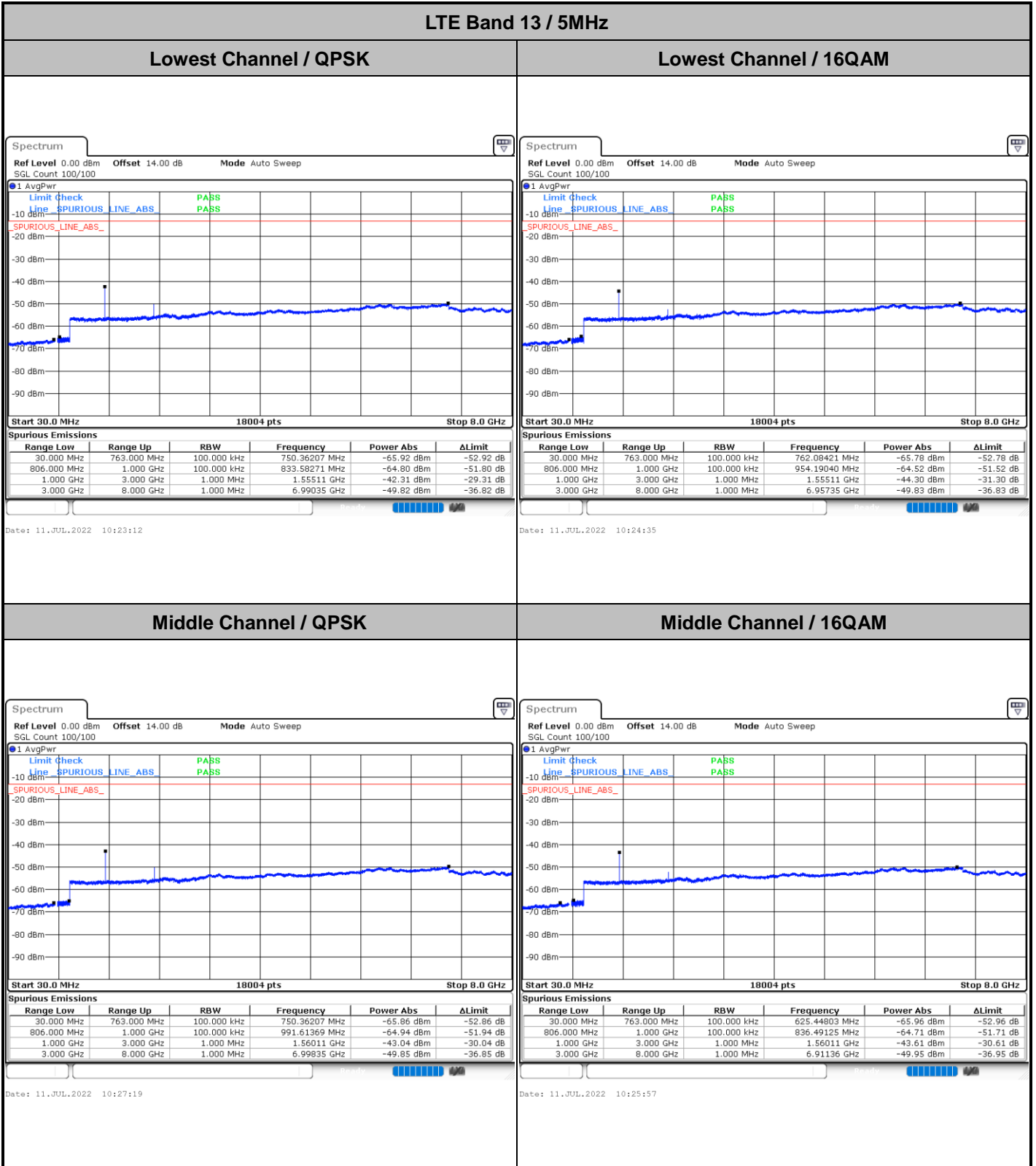
Band Edge / Full RB



Date: 11.JUL.2022 11:11:01



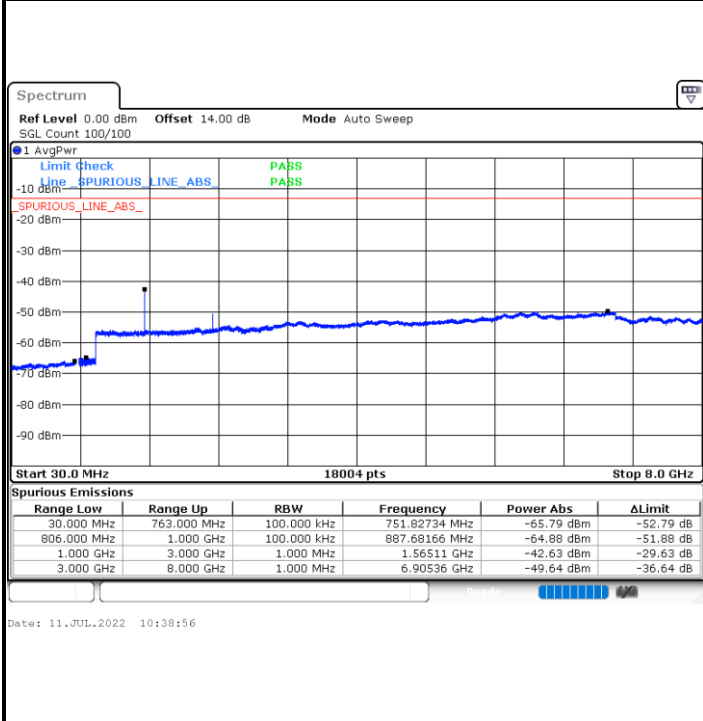
Conducted Spurious Emission



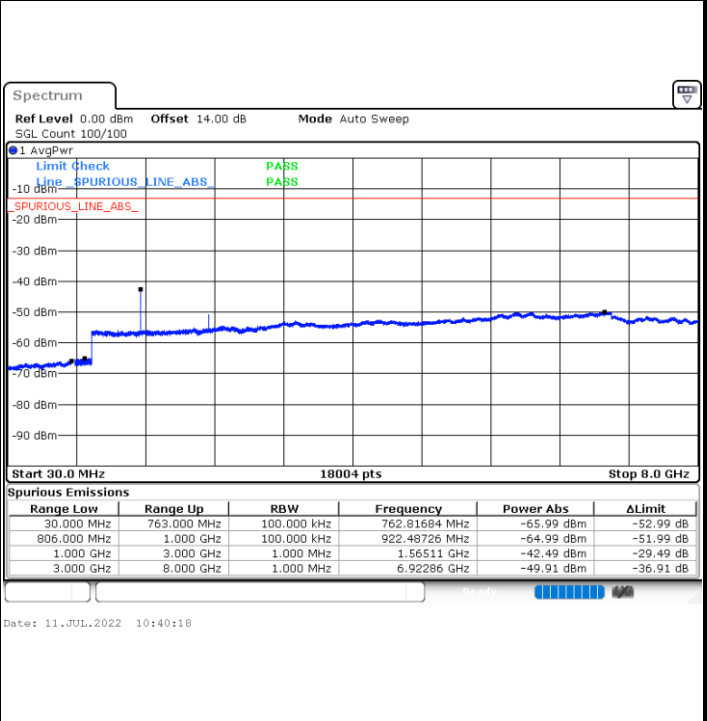


LTE Band 13 / 5MHz

Highest Channel / QPSK

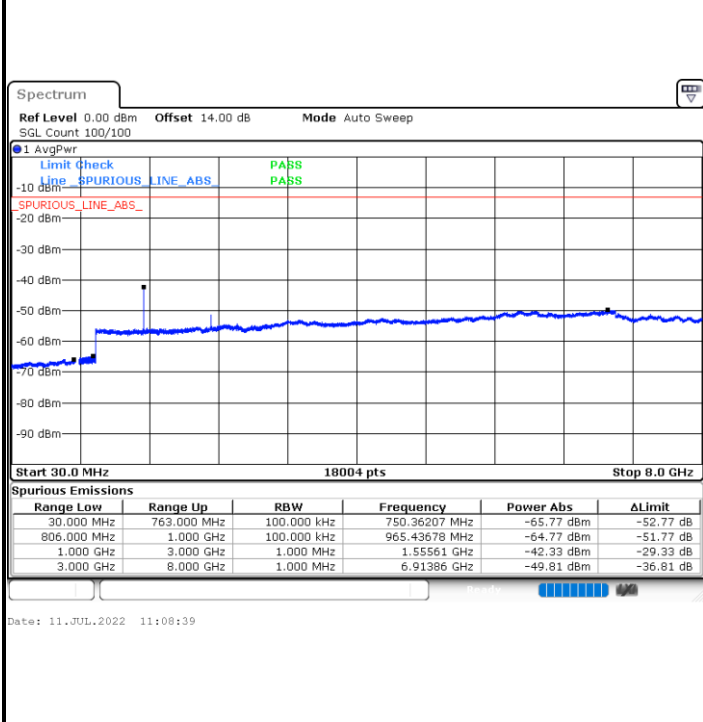


Highest Channel / 16QAM

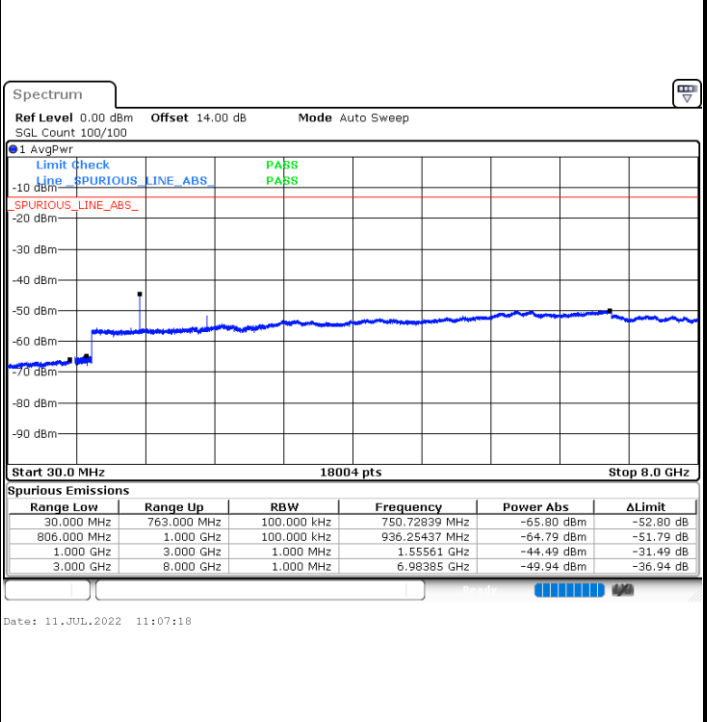


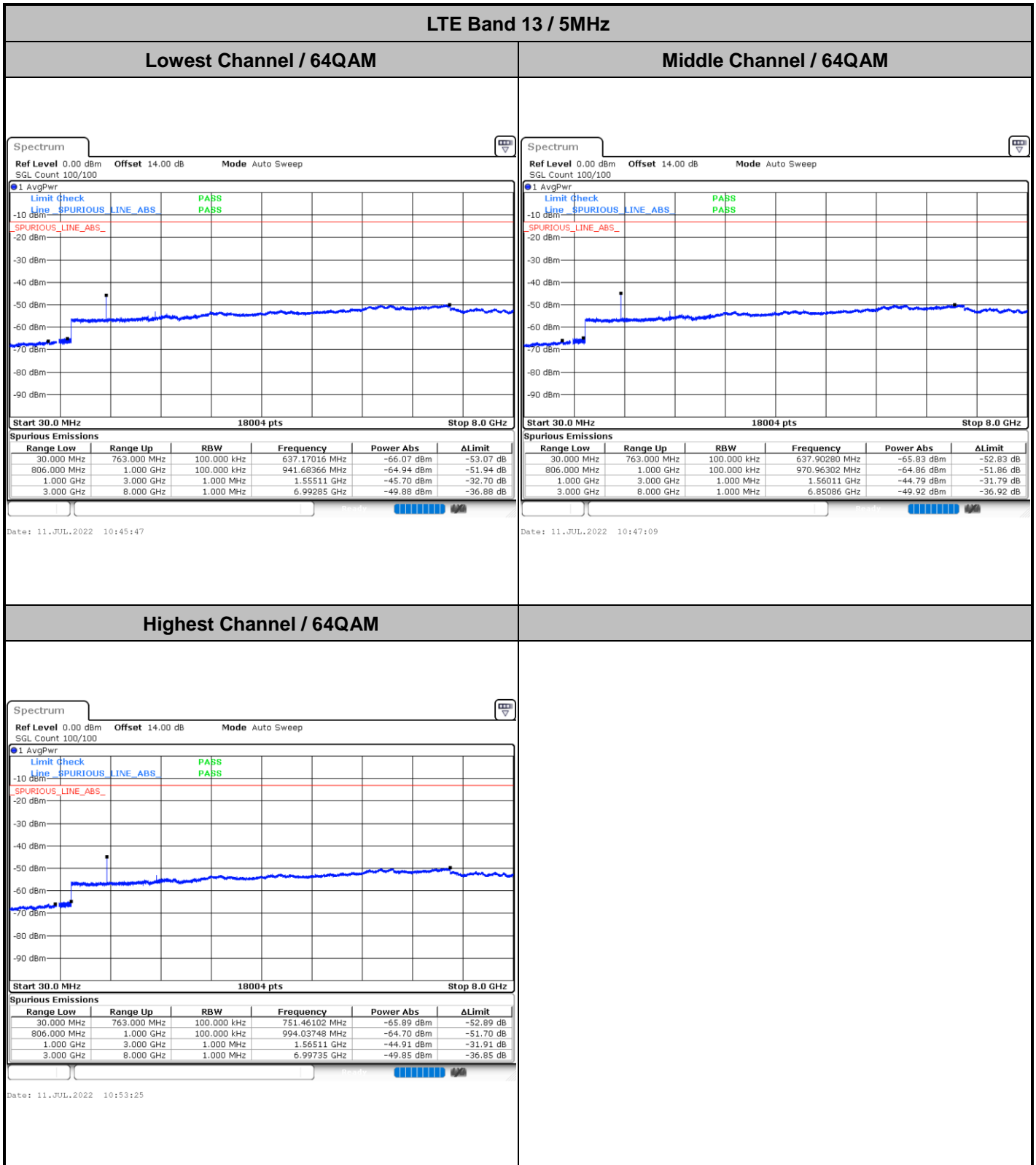
LTE Band 13 / 10MHz

Middle Channel / QPSK



Middle Channel / 16QAM

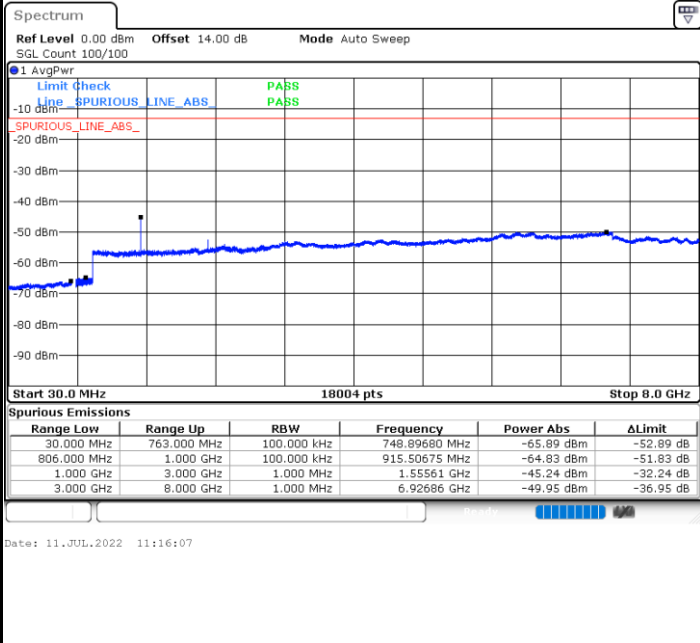






LTE Band 13 / 10MHz

Middle Channel / 64QAM





Frequency Stability

Test Conditions		LTE Band 13 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0020	
30	Normal Voltage	0.0012	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0006	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0514	

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 26

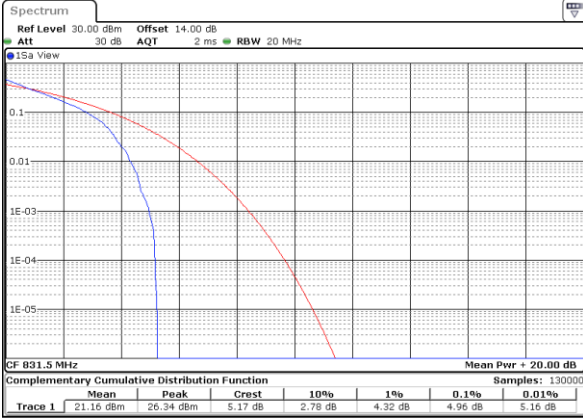
Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.96	5.19	6.00	5.88	PASS
Middle CH	4.32	5.16	5.65	5.97	
Highest CH	4.23	5.19	5.22	6.09	
Mode	LTE Band 26 / 15MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.26	6.41	-	-	PASS
Middle CH	6.00	6.35	-	-	
Highest CH	5.62	6.38	-	-	



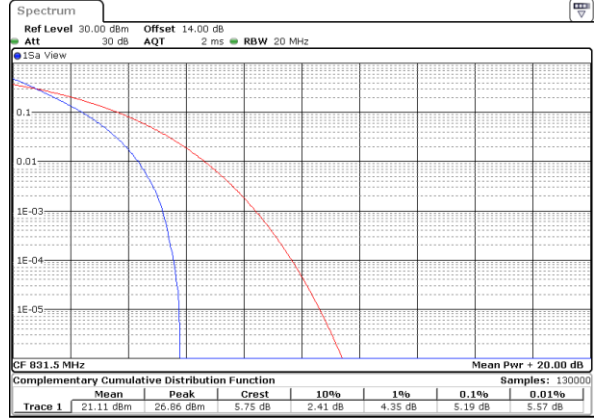
LTE Band 26 / 15MHz / QPSK

Lowest Channel / 1RB



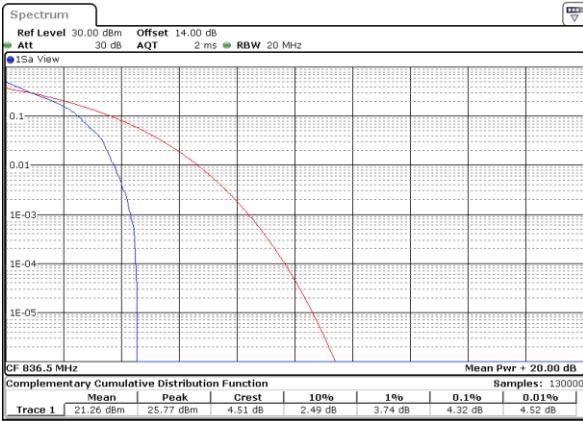
Date: 8 JUL 2022 23:11:50

Lowest Channel / Full RB



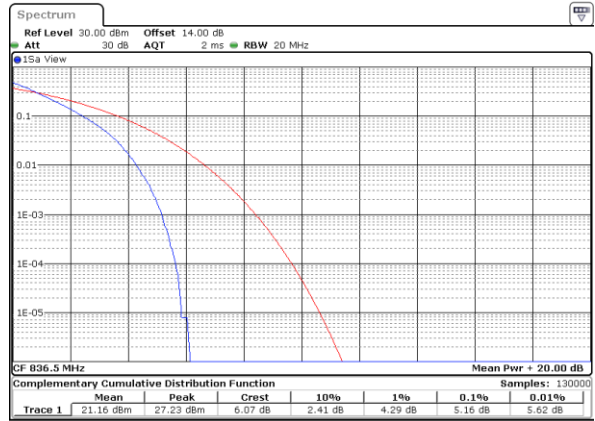
Date: 8 JUL 2022 23:10:34

Middle Channel / 1RB



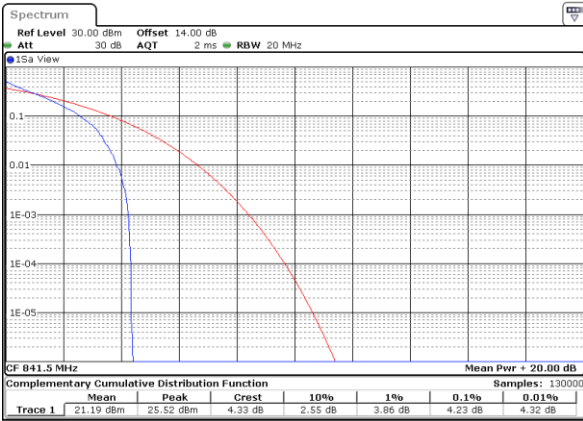
Date: 8 JUL 2022 23:12:15

Middle Channel / Full RB



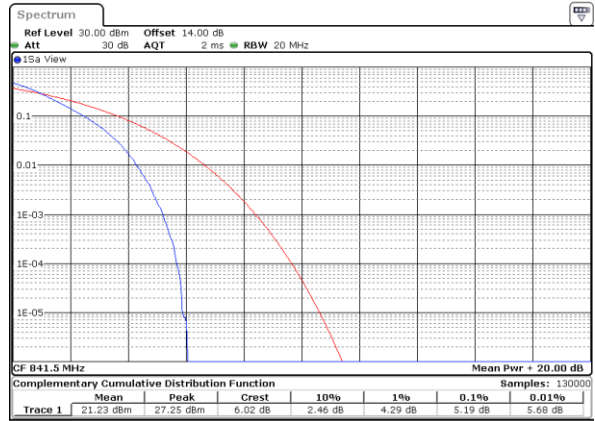
Date: 8 JUL 2022 23:13:32

Highest Channel / 1RB



Date: 8 JUL 2022 23:15:14

Highest Channel / Full RB

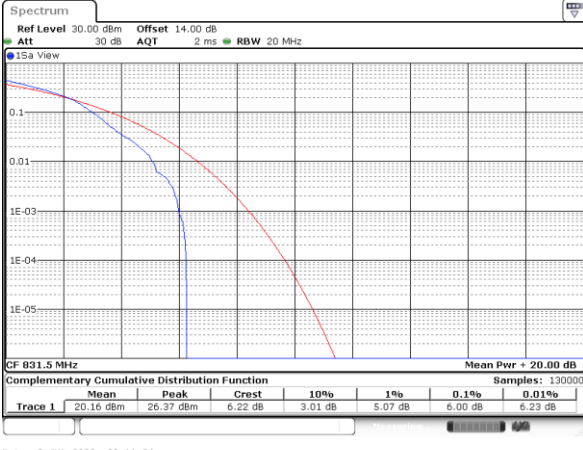


Date: 8 JUL 2022 23:13:57



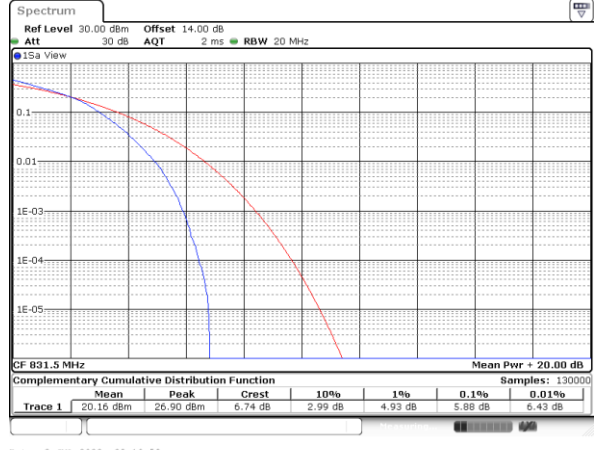
LTE Band 26 / 15MHz / 16QAM

Lowest Channel / 1RB



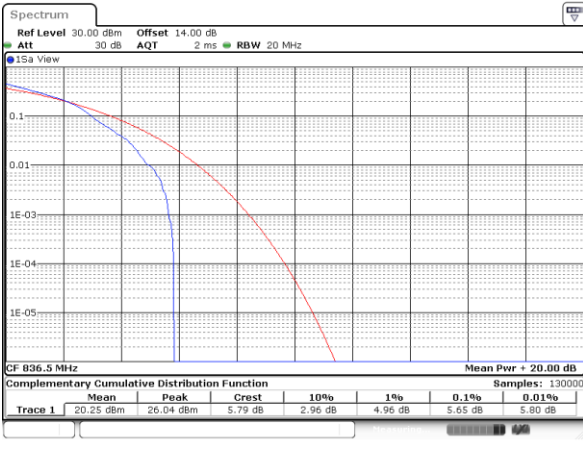
Date: 8 JUL 2022 23:11:24

Lowest Channel / Full RB



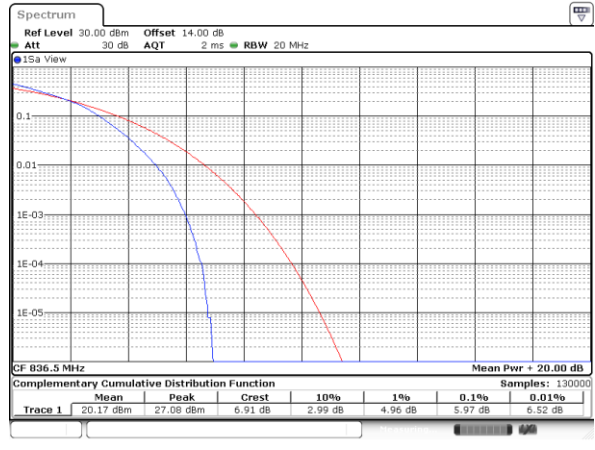
Date: 8 JUL 2022 23:10:59

Middle Channel / 1RB



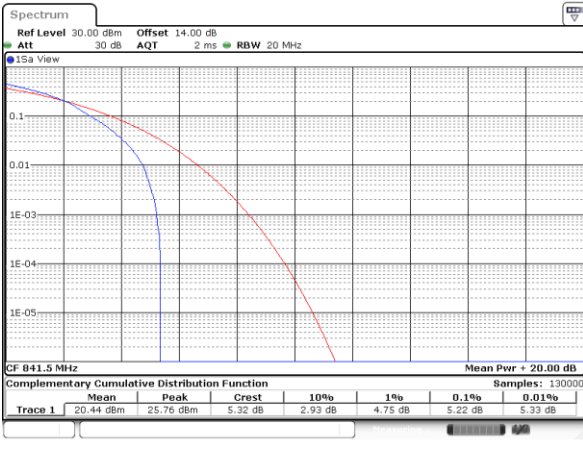
Date: 8 JUL 2022 23:12:40

Middle Channel / Full RB



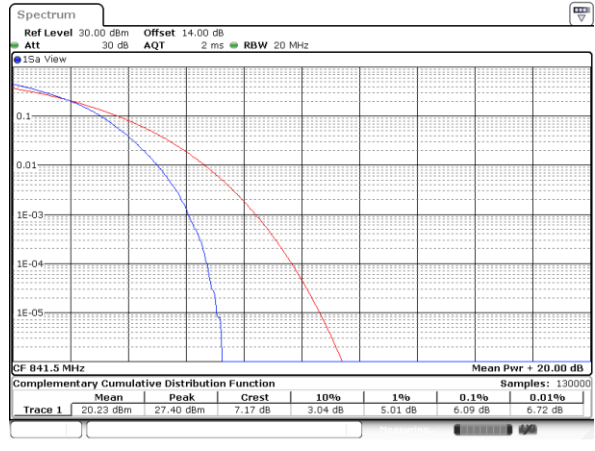
Date: 8 JUL 2022 23:13:06

Highest Channel / 1RB



Date: 8 JUL 2022 23:14:48

Highest Channel / Full RB



Date: 8 JUL 2022 23:14:23



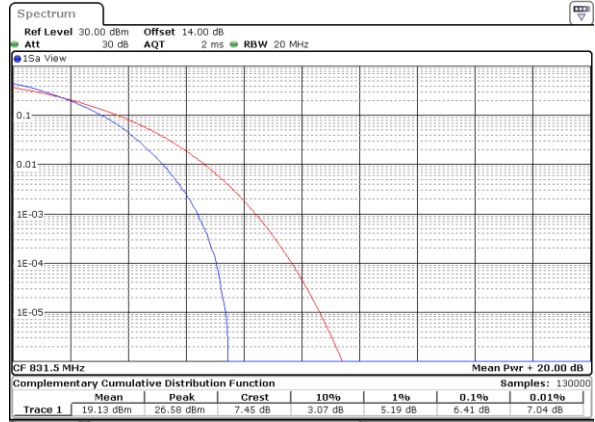
LTE Band 26 / 15MHz / 64QAM

Lowest Channel / 1RB



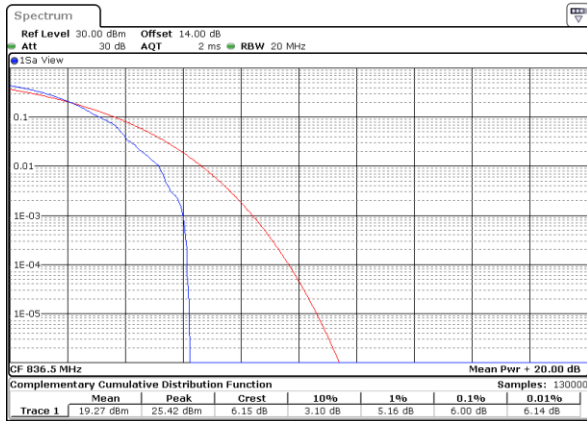
Date: 8 JUL 2022 23:16:05

Lowest Channel / Full RB



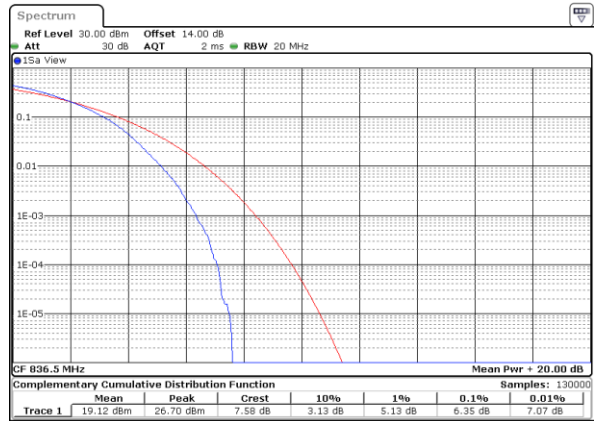
Date: 8 JUL 2022 23:15:40

Middle Channel / 1RB



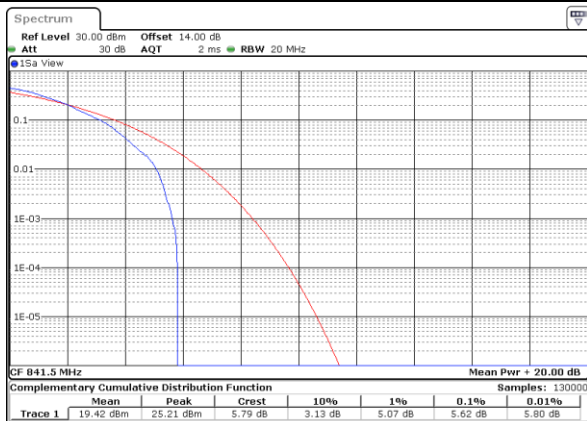
Date: 8 JUL 2022 23:16:30

Middle Channel / Full RB



Date: 8 JUL 2022 23:16:56

Highest Channel / 1RB



Date: 8 JUL 2022 23:17:47

Highest Channel / Full RB



Date: 8 JUL 2022 23:17:21



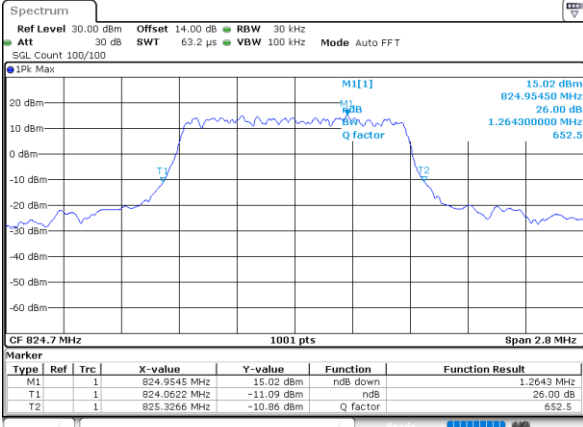
26dB Bandwidth

Mode	LTE Band 26 : 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	1.26	1.30	3.01	2.97	4.83	4.89	9.61	9.81	14.36	14.57	-	-
Middle CH	1.28	1.26	2.99	2.97	4.92	4.92	9.81	9.81	14.54	14.54	-	-
Highest CH	1.28	1.29	2.96	3.00	4.81	4.84	9.75	9.75	14.21	14.21	-	-
Mode	LTE Band 26 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	1.28	-	2.94	-	4.86	-	9.73	-	14.45	-	-	-
Middle CH	1.30	-	2.94	-	4.91	-	9.79	-	14.42	-	-	-
Highest CH	1.26	-	2.98	-	4.91	-	9.79	-	14.48	-	-	-



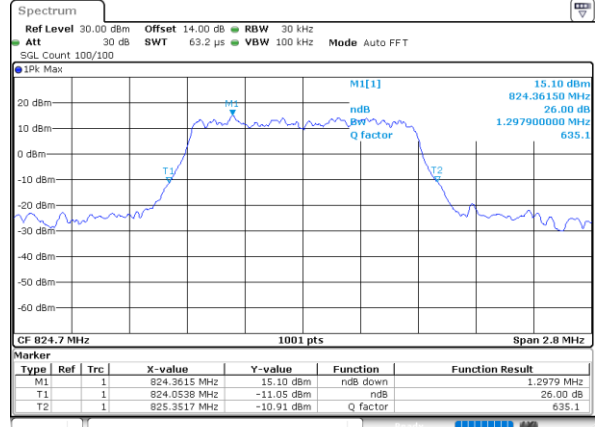
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



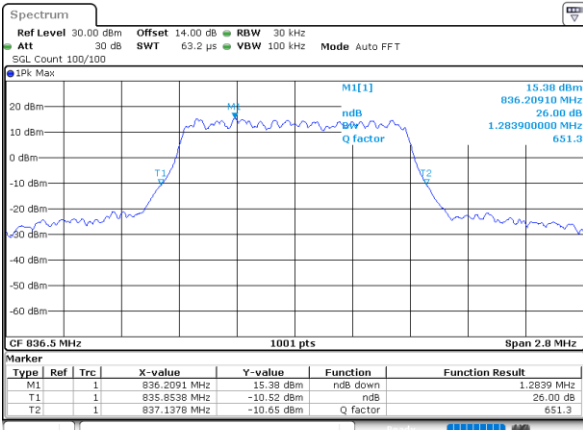
Date: 8 JUL 2022 19:51:27

Lowest Channel / 1.4MHz / 16QAM



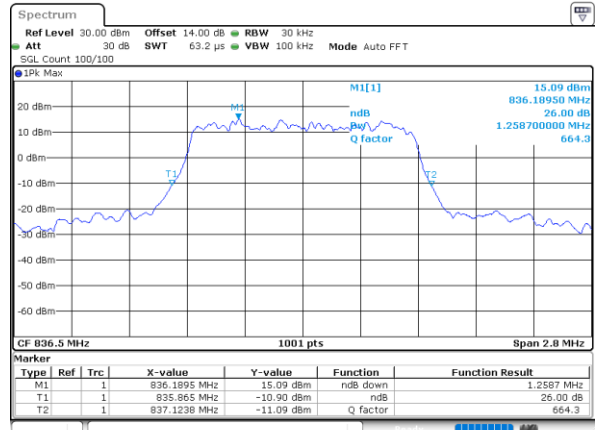
Date: 8 JUL 2022 19:51:03

Middle Channel / 1.4MHz / QPSK



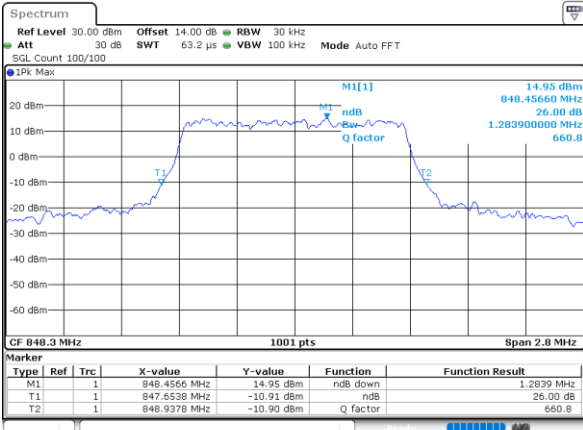
Date: 8 JUL 2022 20:09:15

Middle Channel / 1.4MHz / 16QAM



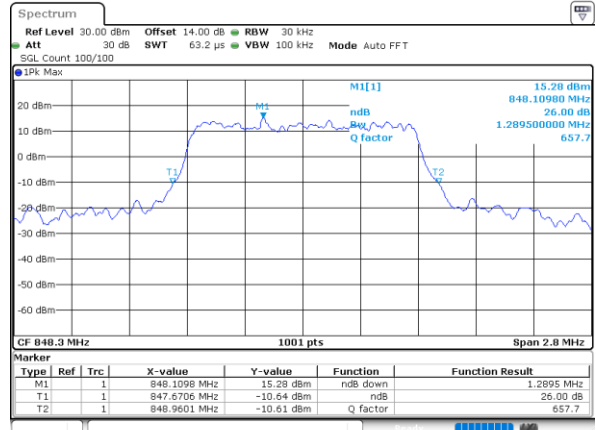
Date: 8 JUL 2022 20:08:51

Highest Channel / 1.4MHz / QPSK



Date: 8 JUL 2022 20:13:29

Highest Channel / 1.4MHz / 16QAM

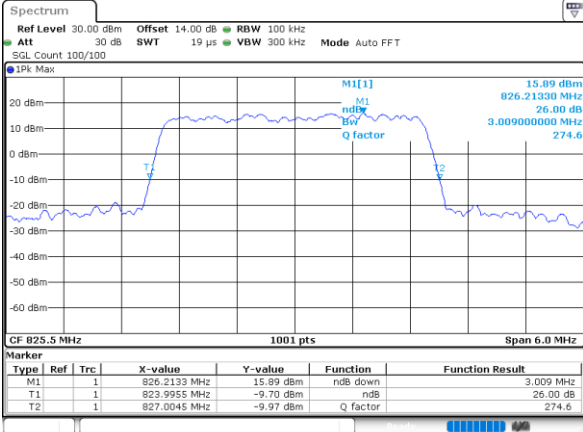


Date: 8 JUL 2022 20:13:05



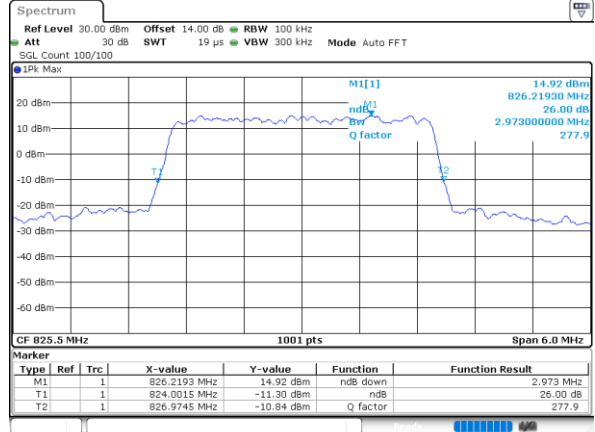
LTE Band 26

Lowest Channel / 3MHz / QPSK



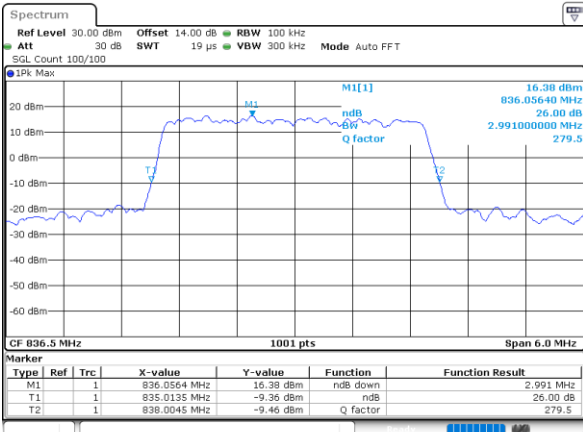
Date: 8 JUL 2022 21:27:19

Lowest Channel / 3MHz / 16QAM



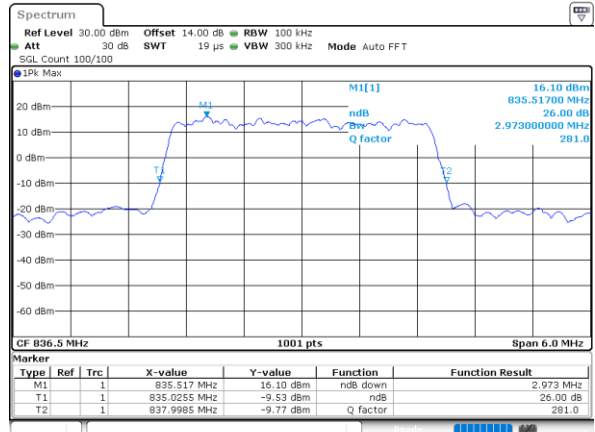
Date: 8 JUL 2022 21:27:15

Middle Channel / 3MHz / QPSK



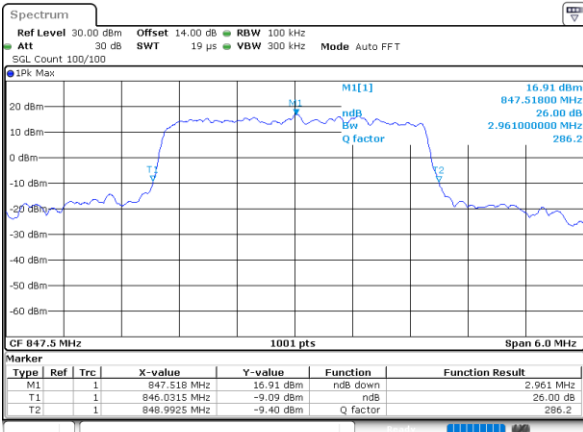
Date: 8 JUL 2022 21:38:22

Middle Channel / 3MHz / 16QAM



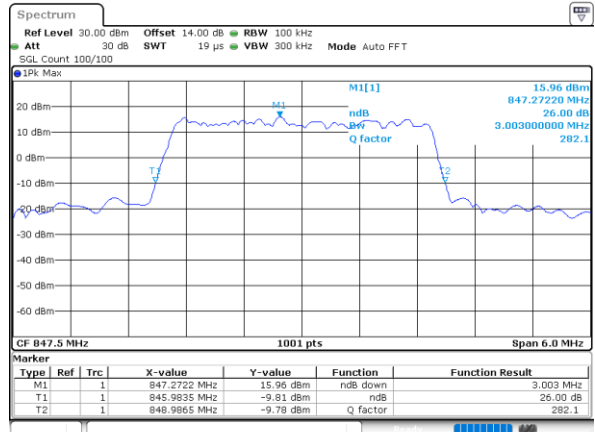
Date: 8 JUL 2022 21:37:58

Highest Channel / 3MHz / QPSK



Date: 8 JUL 2022 21:42:35

Highest Channel / 3MHz / 16QAM

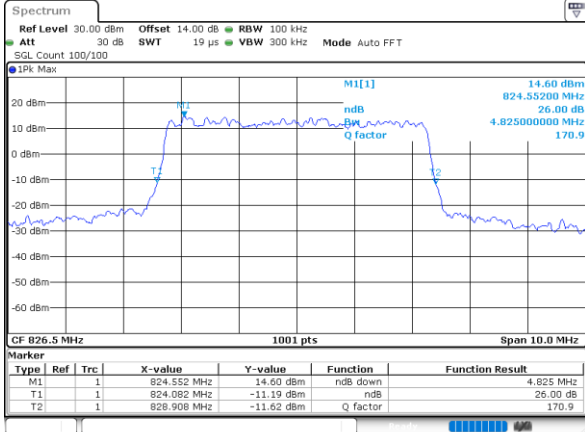


Date: 8 JUL 2022 21:42:10



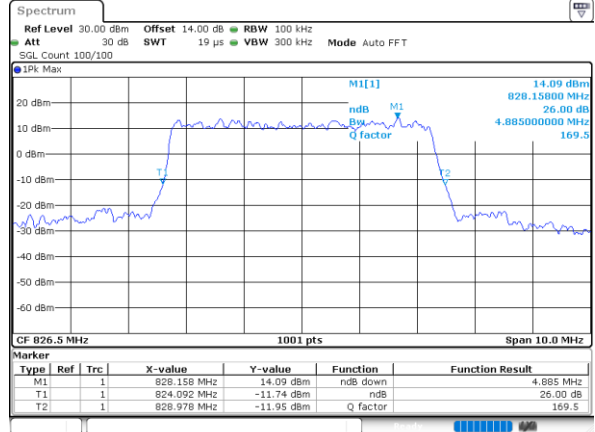
LTE Band 26

Lowest Channel / 5MHz / QPSK



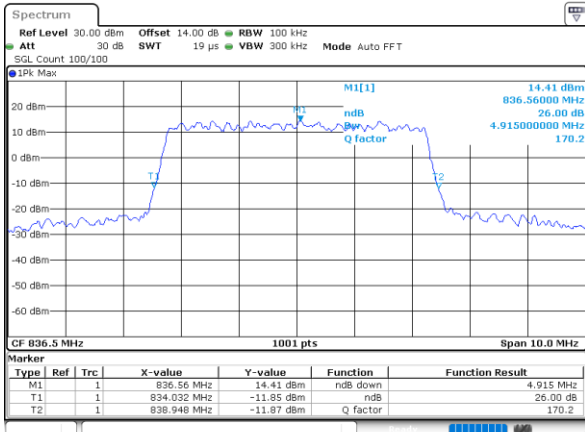
Date: 8 JUL 2022 21:53:17

Lowest Channel / 5MHz / 16QAM



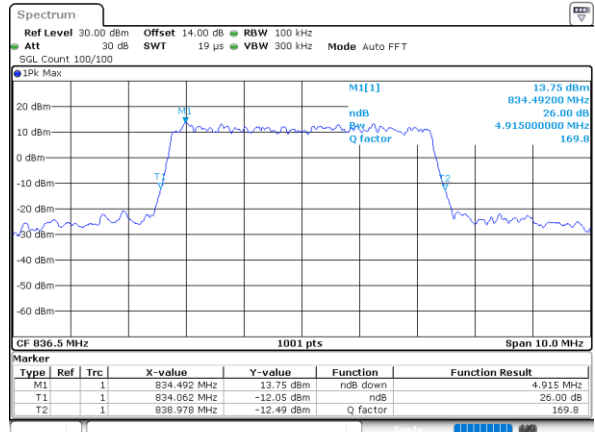
Date: 8 JUL 2022 21:53:12

Middle Channel / 5MHz / QPSK



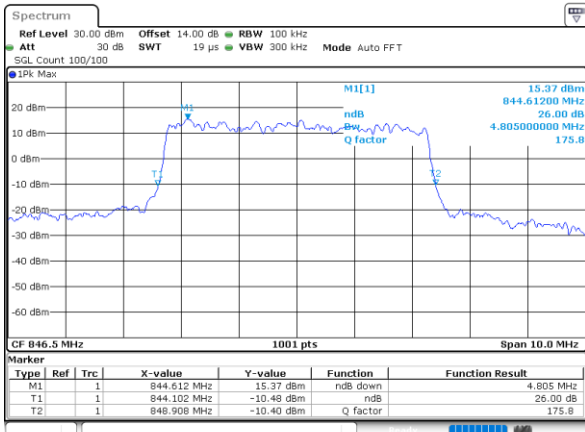
Date: 8 JUL 2022 22:04:21

Middle Channel / 5MHz / 16QAM



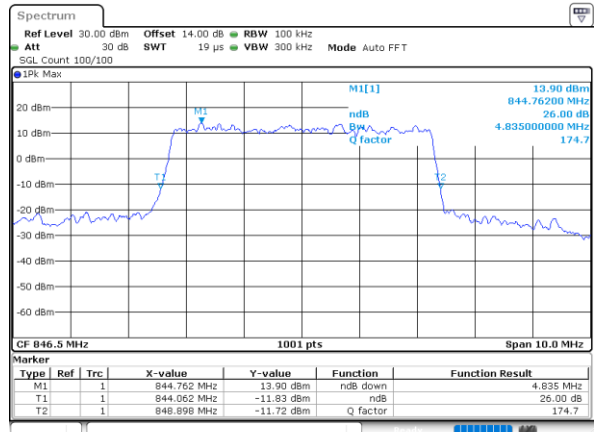
Date: 8 JUL 2022 22:03:57

Highest Channel / 5MHz / QPSK



Date: 8 JUL 2022 22:08:34

Highest Channel / 5MHz / 16QAM

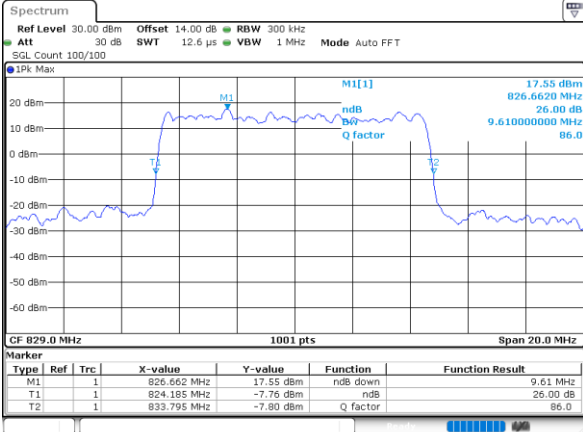


Date: 8 JUL 2022 22:08:10



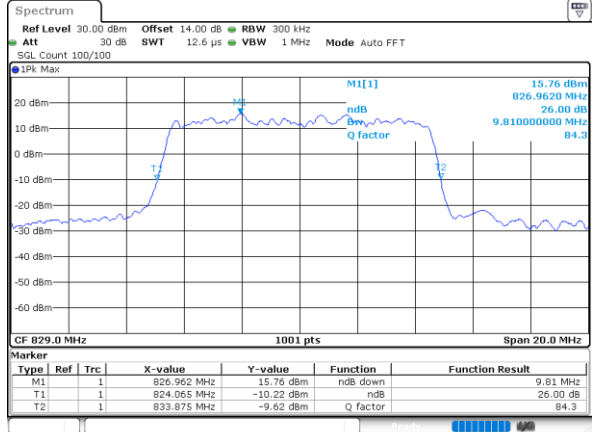
LTE Band 26

Lowest Channel / 10MHz / QPSK



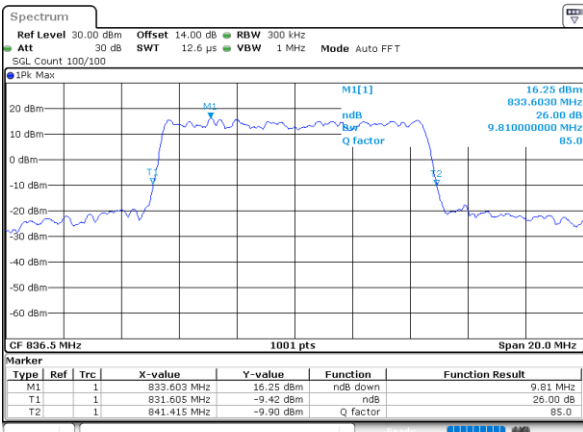
Date: 8 JUL 2022 22:19:36

Lowest Channel / 10MHz / 16QAM



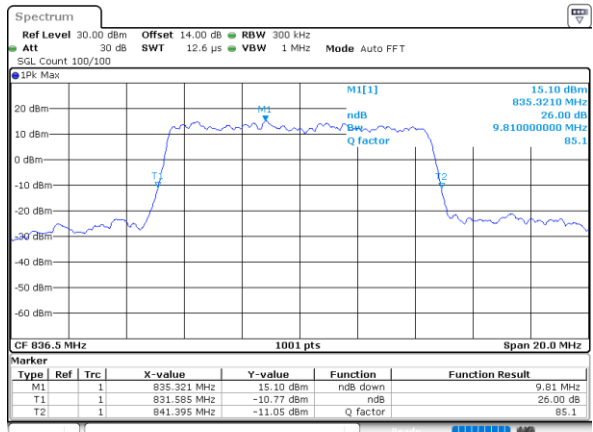
Date: 8 JUL 2022 22:19:12

Middle Channel / 10MHz / QPSK



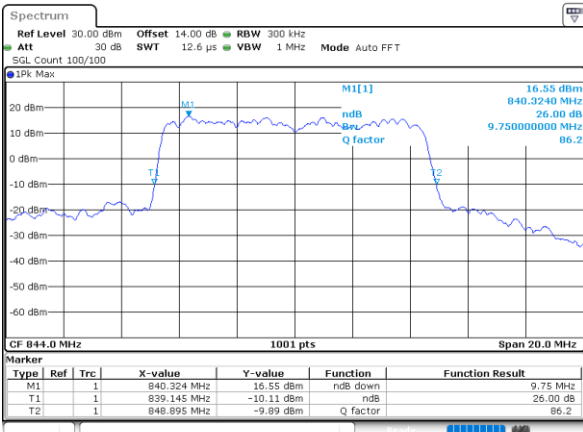
Date: 8 JUL 2022 22:30:20

Middle Channel / 10MHz / 16QAM



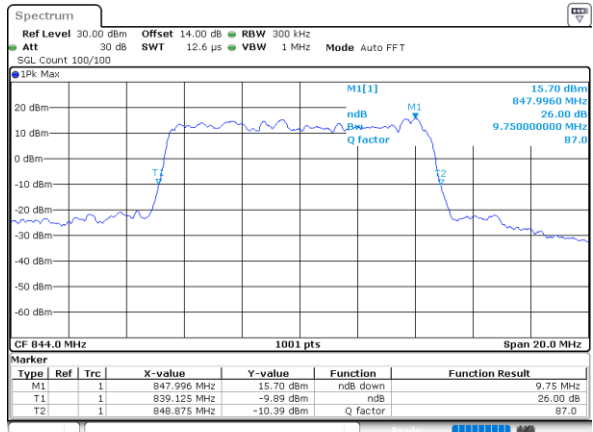
Date: 8 JUL 2022 22:29:56

Highest Channel / 10MHz / QPSK



Date: 8 JUL 2022 22:34:33

Highest Channel / 10MHz / 16QAM



Date: 8 JUL 2022 22:34:09