



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	0.0137	PASS
40	Normal Voltage	0.0126	
30	Normal Voltage	0.0116	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0024	
-10	Normal Voltage	0.0044	
-20	Normal Voltage	0.0030	
-30	Normal Voltage	0.0025	
20	Maximum Voltage	0.0008	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0047	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

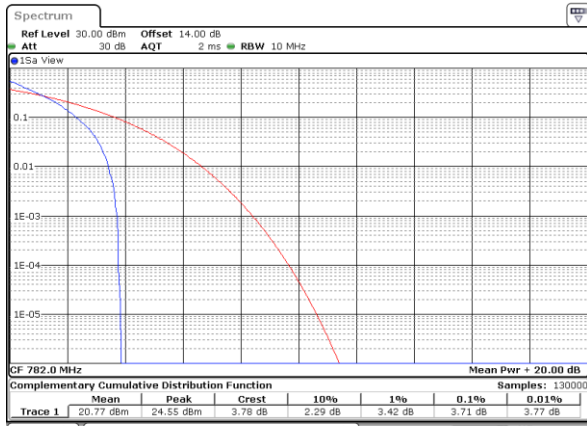
Peak-to-Average Ratio

Mode	LTE Band 13 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.71	4.61	4.78	5.51	
Highest CH	-	-	-	-	
Mode	LTE Band 13 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.22	5.97	-	-	
Highest CH	-	-	-	-	



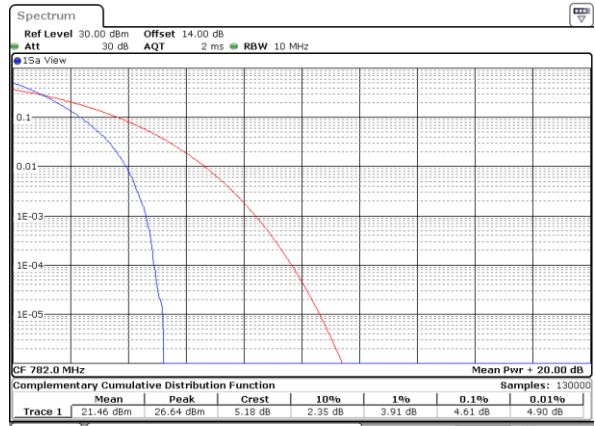
LTE Band 13 / 10MHz / QPSK

Middle Channel / 1RB



Date: 11.JUL.2022 17:26:19

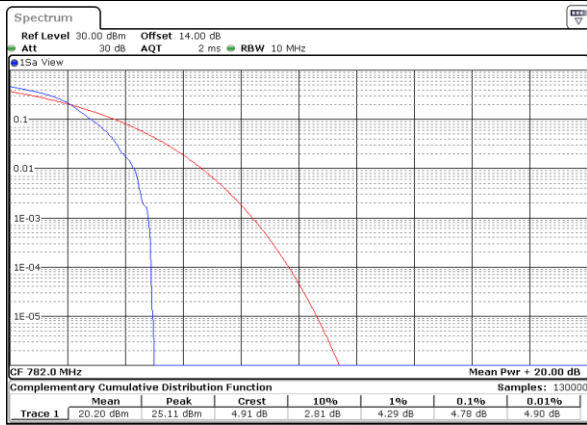
Middle Channel / Full RB



Date: 11.JUL.2022 17:26:44

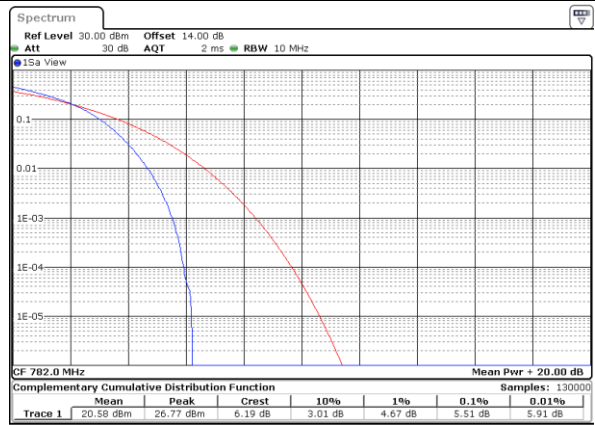
LTE Band 13 / 10MHz / 16QAM

Middle Channel / 1RB



Date: 11.JUL.2022 17:25:29

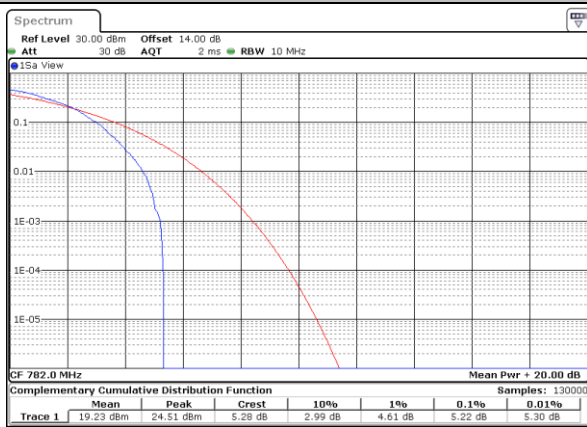
Middle Channel / Full RB



Date: 11.JUL.2022 17:25:54

LTE Band 13 / 10MHz / 64QAM

Middle Channel / 1RB



Date: 11.JUL.2022 17:24:39

Middle Channel / Full RB



Date: 11.JUL.2022 17:25:04



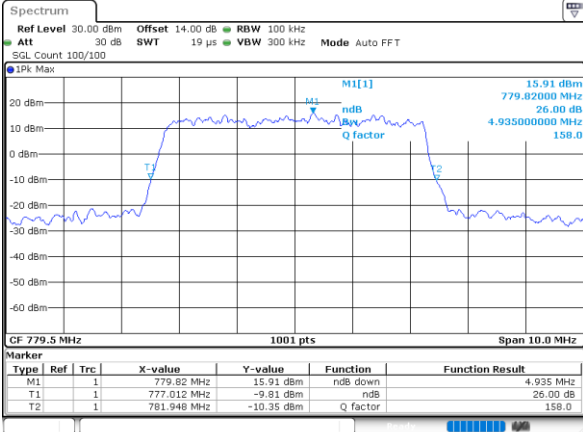
26dB Bandwidth

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	-	-	-	-	4.94	4.85	-	-	-	-	-	-
Middle CH	-	-	-	-	4.90	4.84	9.75	9.95	-	-	-	-
Highest CH	-	-	-	-	5.01	4.90	-	-	-	-	-	-
Mode	LTE Band 13 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.83	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.92	-	9.79	-	-	-	-	-
Highest CH	-	-	-	-	4.93	-	-	-	-	-	-	-



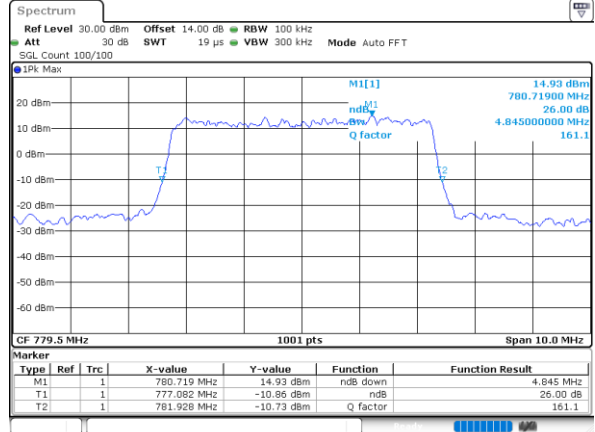
LTE Band 13

Lowest Channel / 5MHz / QPSK



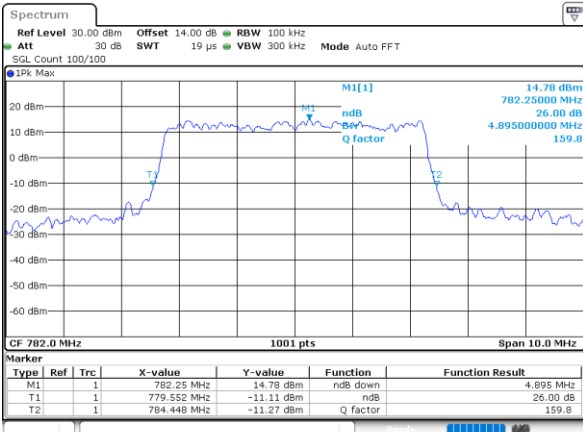
Date: 11.JUL.2022 16:27:07

Lowest Channel / 5MHz / 16QAM



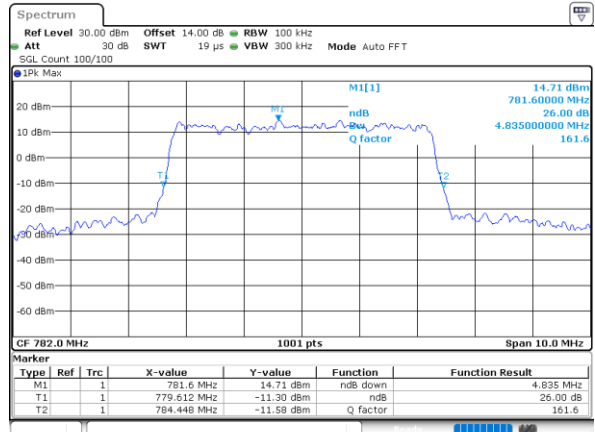
Date: 11.JUL.2022 16:26:44

Middle Channel / 5MHz / QPSK



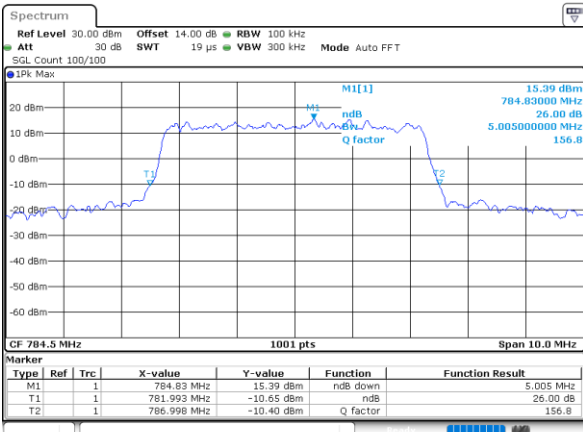
Date: 11.JUL.2022 16:38:51

Middle Channel / 5MHz / 16QAM



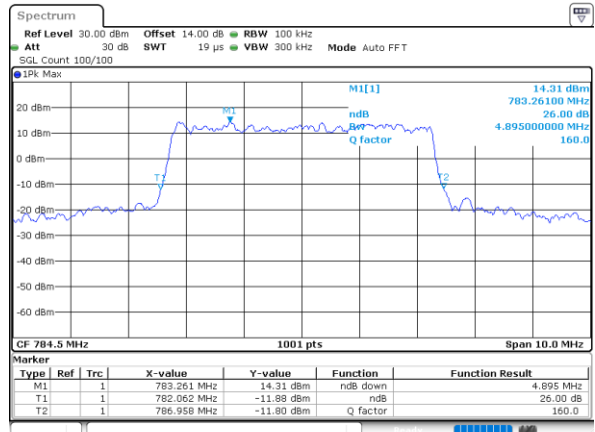
Date: 11.JUL.2022 16:39:14

Highest Channel / 5MHz / QPSK



Date: 11.JUL.2022 16:41:18

Highest Channel / 5MHz / 16QAM

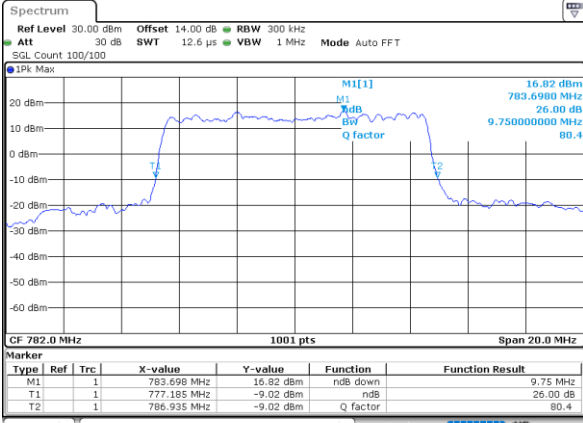


Date: 11.JUL.2022 16:40:54



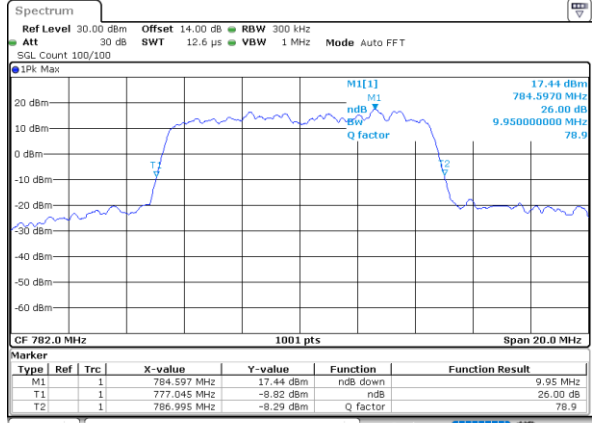
LTE Band 13

Middle Channel / 10MHz / QPSK



Date: 11_JUL_2022 17:04:11

Middle Channel / 10MHz / 16QAM

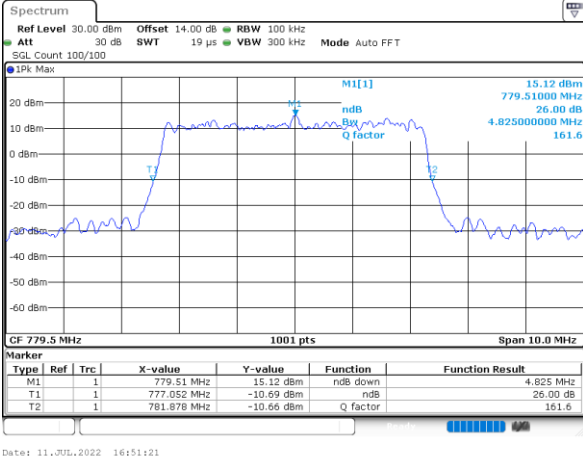


Date: 11_JUL_2022 17:03:48

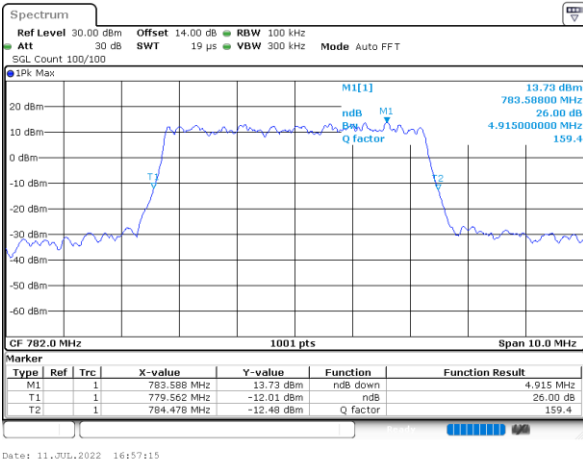


LTE Band 13

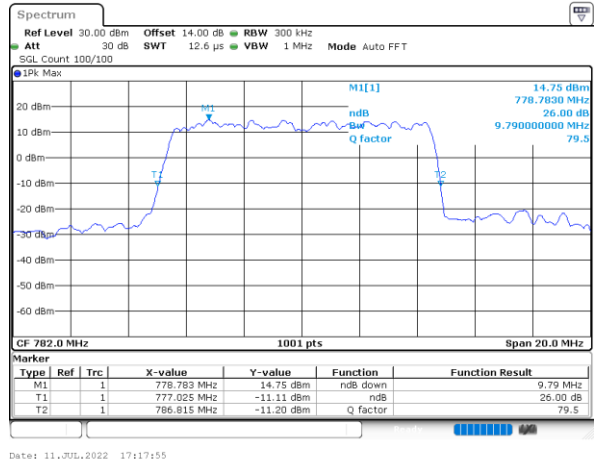
Lowest Channel / 5MHz / 64QAM



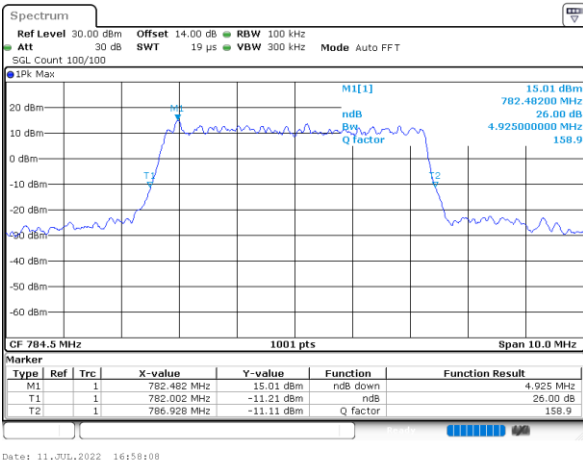
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM





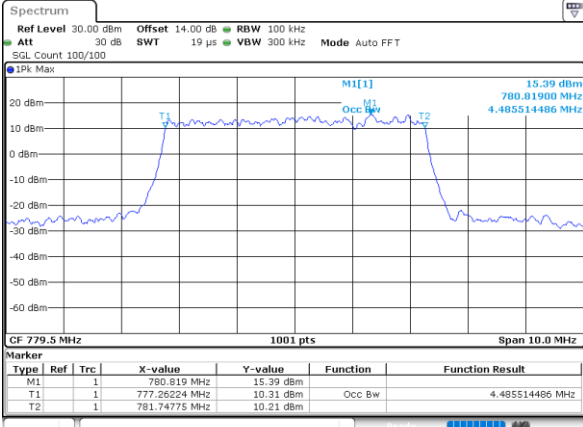
Occupied Bandwidth

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	-	-	-	-	4.49	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	4.47	4.49	9.01	9.05	-	-	-	-
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	-	-	-	-	4.50	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.48	-	8.95	-	-	-	-	-
Highest CH	-	-	-	-	4.47	-	-	-	-	-	-	-



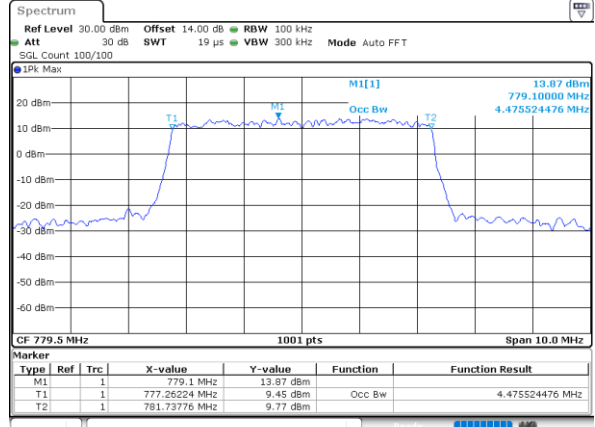
LTE Band 13

Lowest Channel / 5MHz / QPSK



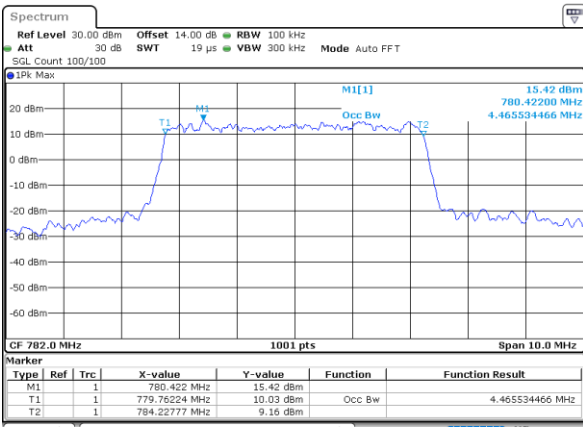
Date: 11.JUL.2022 16:26:05

Lowest Channel / 5MHz / 16QAM



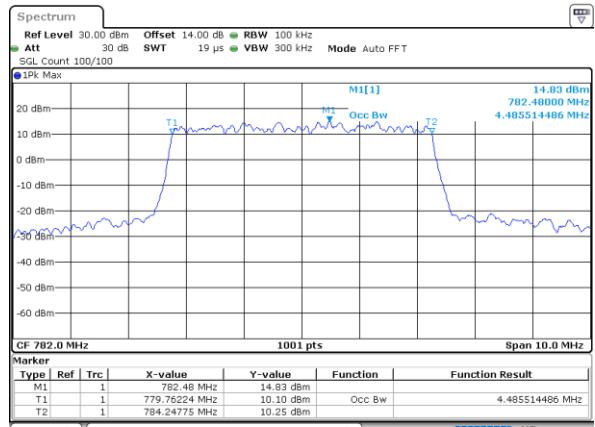
Date: 11.JUL.2022 16:26:29

Middle Channel / 5MHz / QPSK



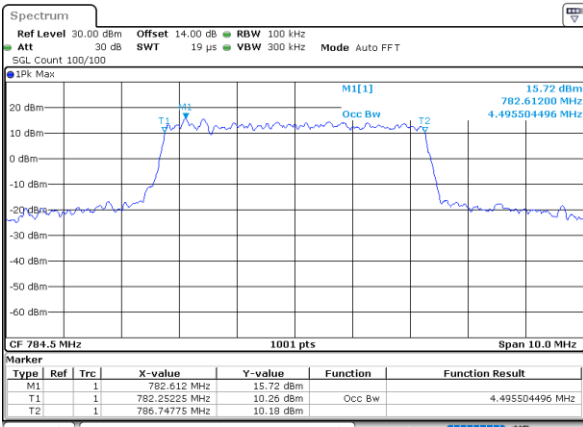
Date: 11.JUL.2022 16:39:52

Middle Channel / 5MHz / 16QAM



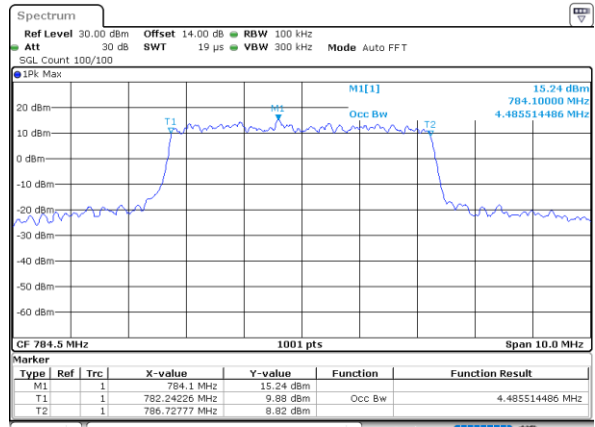
Date: 11.JUL.2022 16:39:29

Highest Channel / 5MHz / QPSK



Date: 11.JUL.2022 16:40:15

Highest Channel / 5MHz / 16QAM



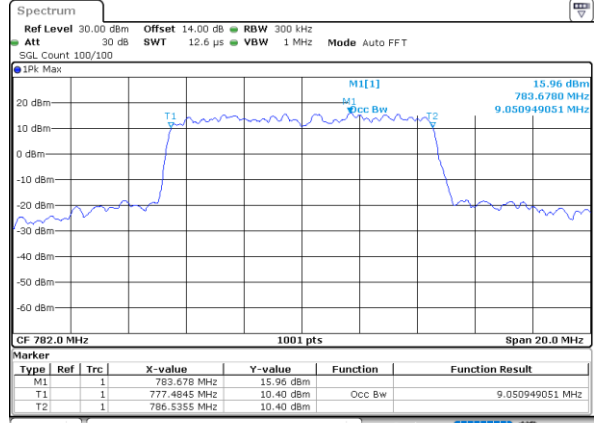
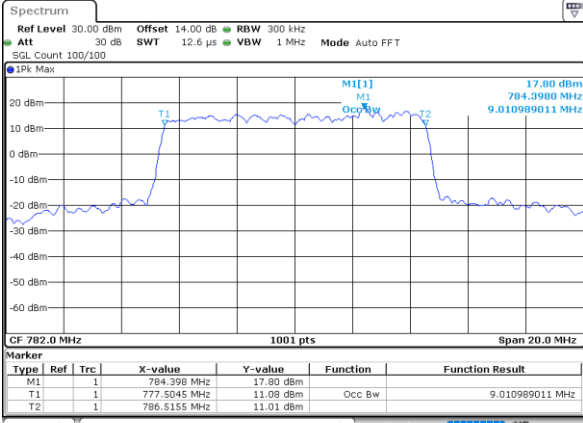
Date: 11.JUL.2022 16:40:39



LTE Band 13

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM



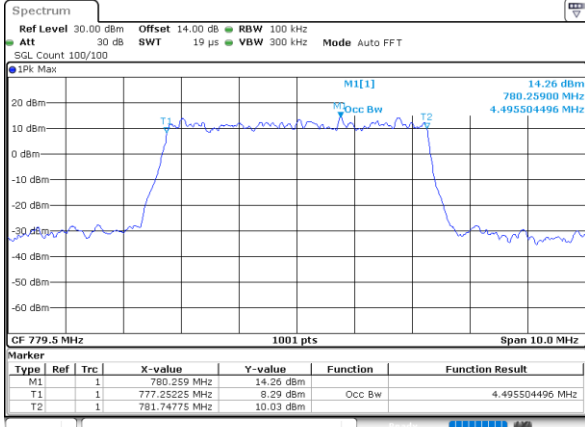
Date: 11.JUL.2022 17:03:10

Date: 11.JUL.2022 17:03:33



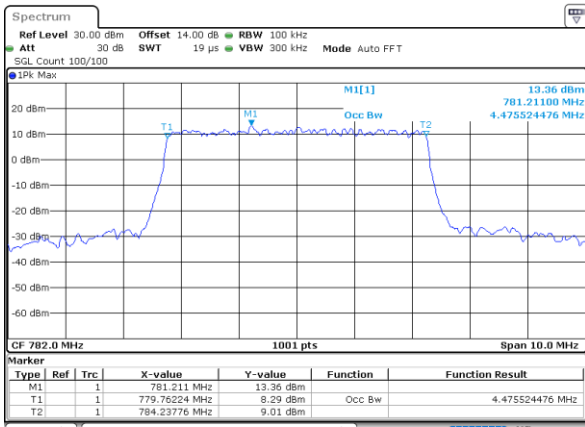
LTE Band 13

Lowest Channel / 5MHz / 64QAM



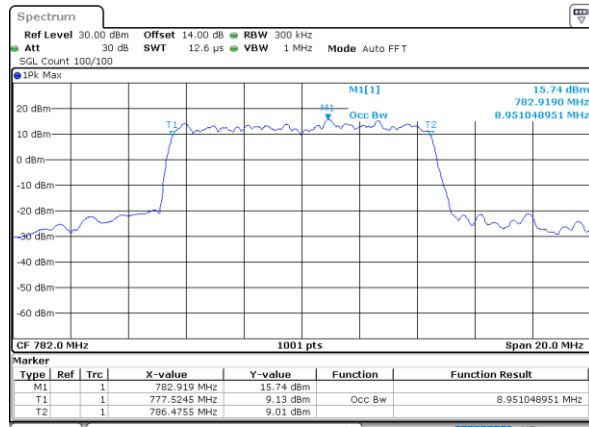
Date: 11.JUL.2022 16:51:07

Middle Channel / 5MHz / 64QAM



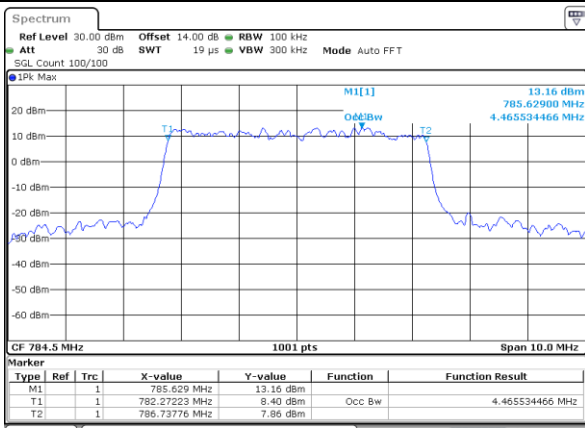
Date: 11.JUL.2022 16:57:30

Middle Channel / 10MHz / 64QAM



Date: 11.JUL.2022 17:17:41

Highest Channel / 5MHz / 64QAM



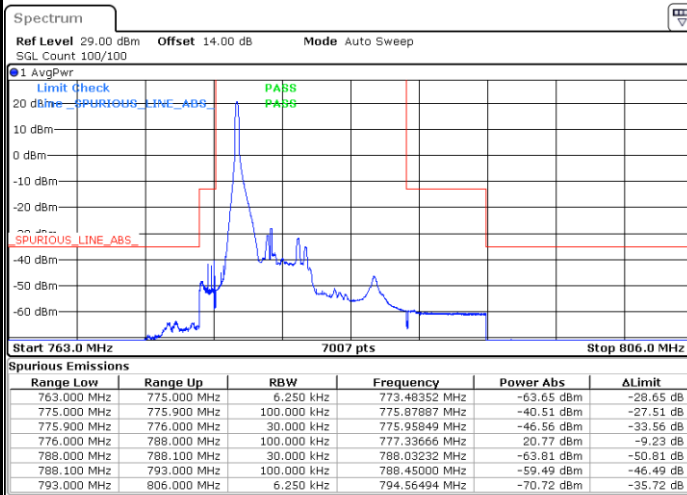
Date: 11.JUL.2022 16:57:53



Conducted Band Edge

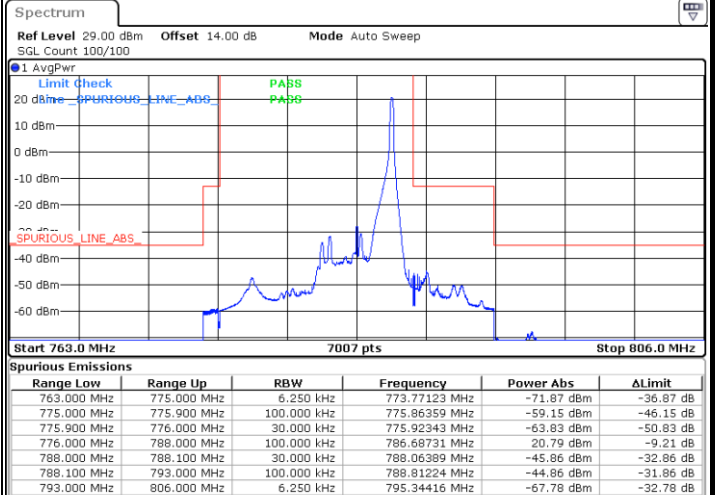
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



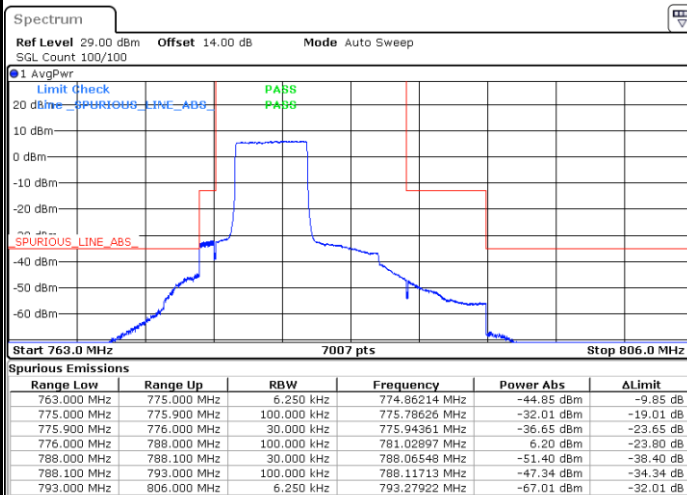
Date: 11.JUL.2022 16:34:28

Highest Band Edge / 1 RB



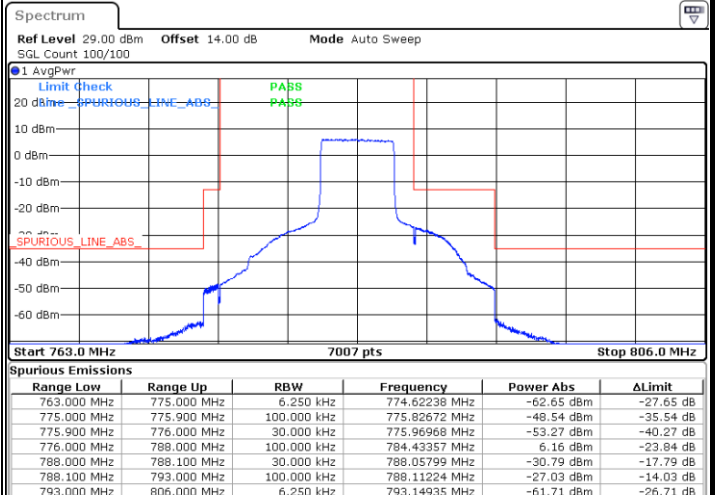
Date: 11.JUL.2022 16:48:38

Lowest Band Edge / Full RB



Date: 11.JUL.2022 16:28:51

Highest Band Edge / Full RB



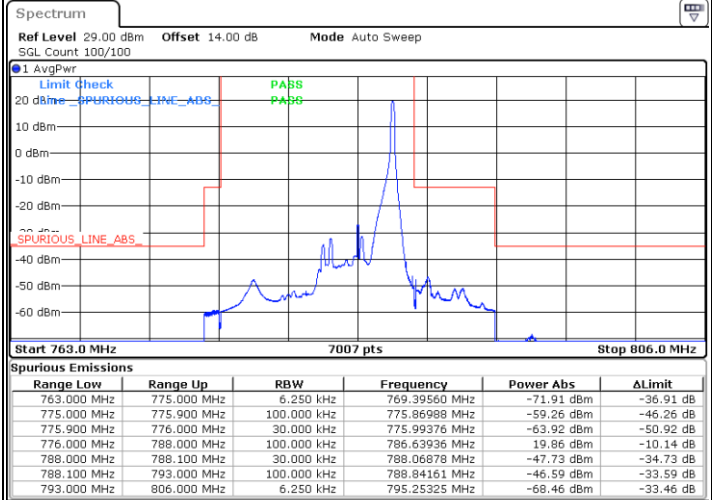
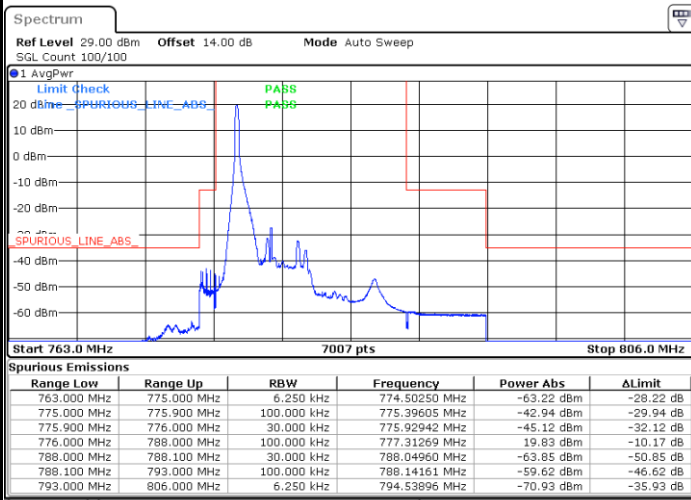
Date: 11.JUL.2022 16:43:01



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

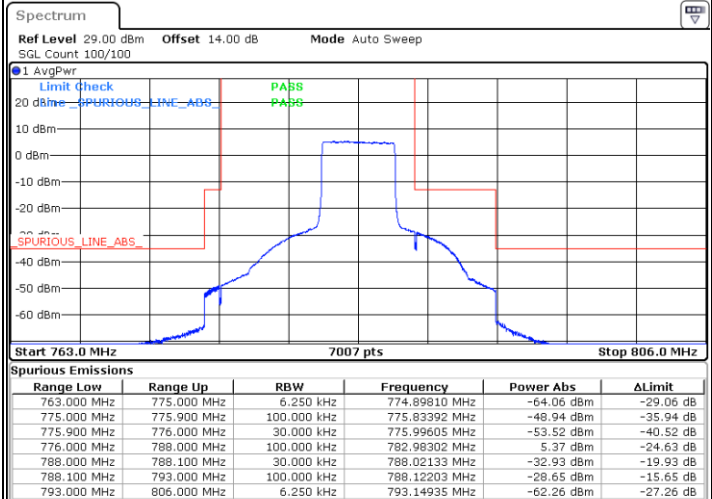
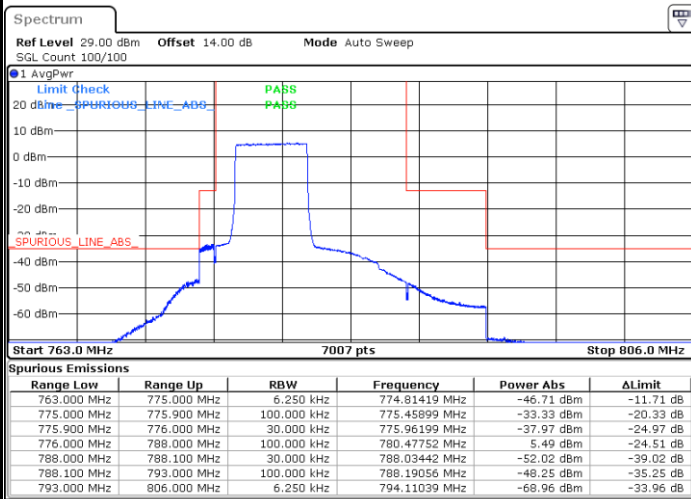


Date: 11.JUL.2022 16:32:35

Date: 11.JUL.2022 16:46:45

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUL.2022 16:30:43

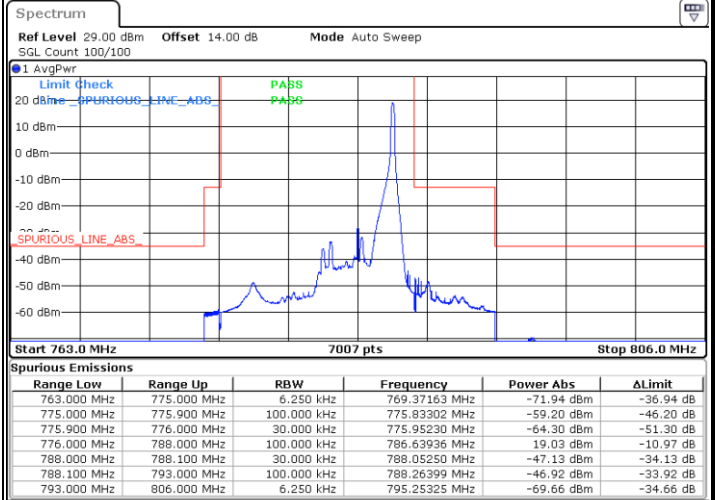
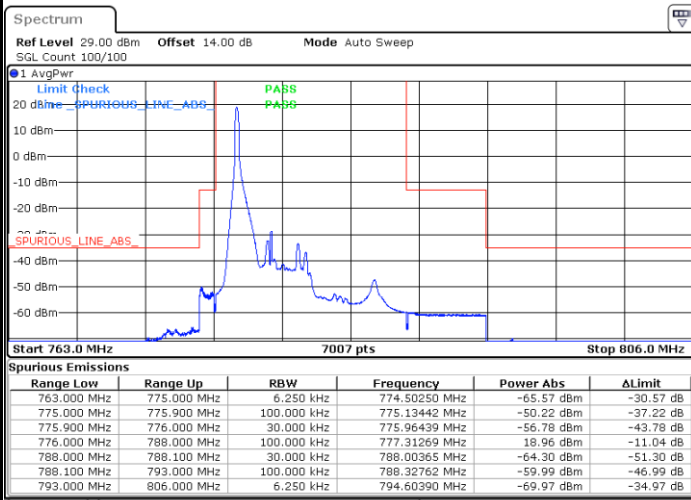
Date: 11.JUL.2022 16:44:53



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

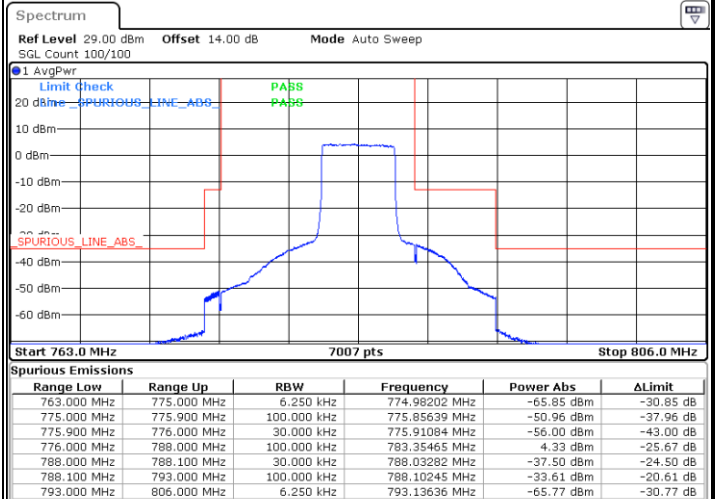
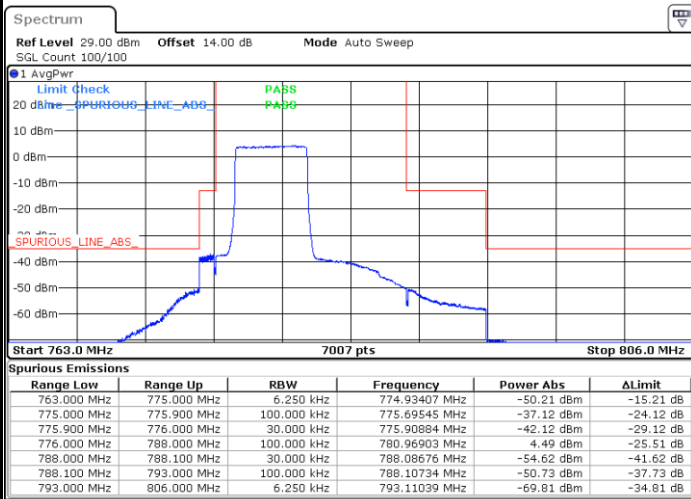


Date: 11.JUL.2022 16:54:57

Date: 11.JUL.2022 17:01:44

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11.JUL.2022 16:53:04

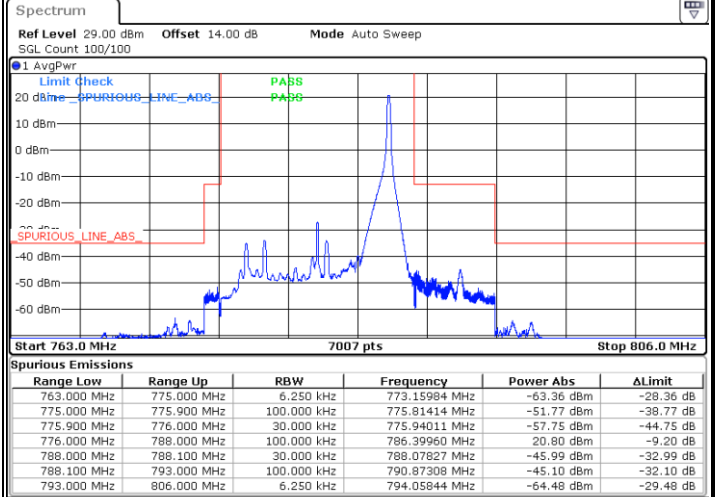
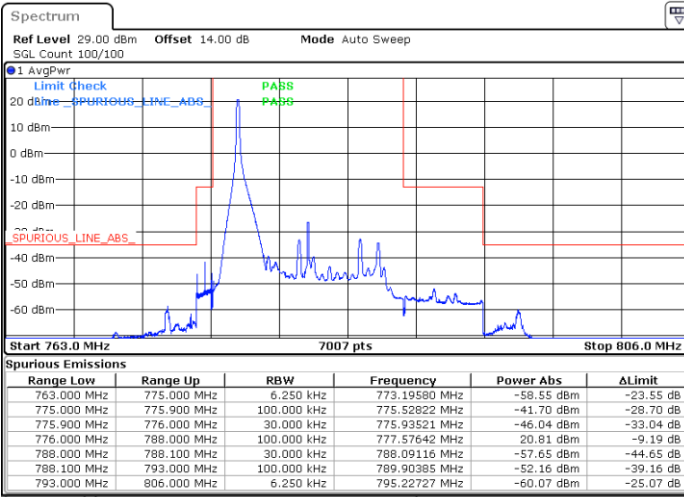
Date: 11.JUL.2022 16:59:51



LTE Band 13 / 10MHz / QPSK

Lowest Band Edge / 1 RB

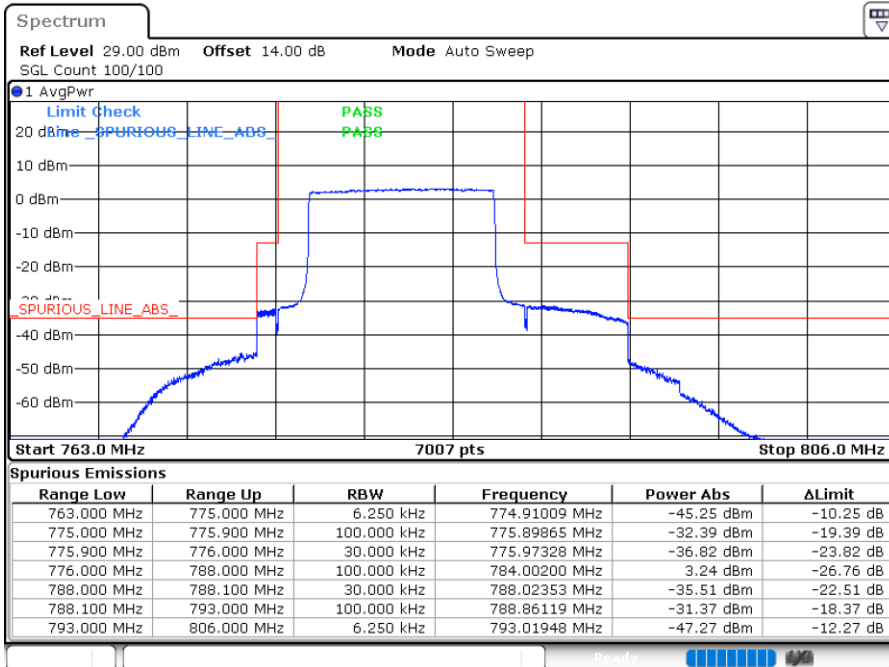
Highest Band Edge / 1 RB



Date: 11.JUL.2022 17:11:30

Date: 11.JUL.2022 17:13:22

Band Edge / Full RB

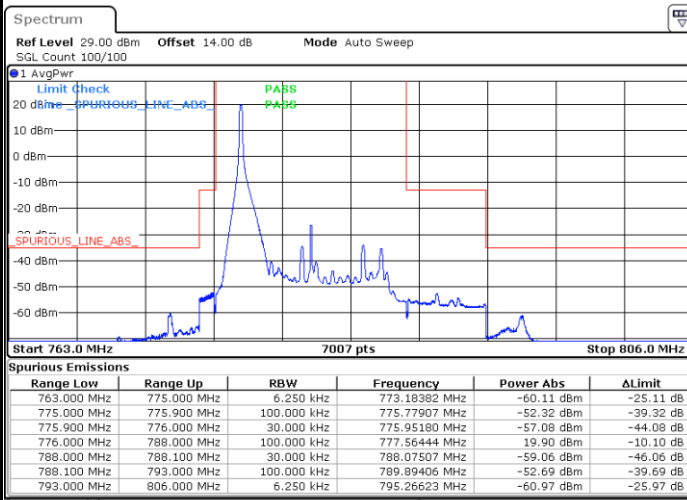


Date: 11.JUL.2022 17:05:54



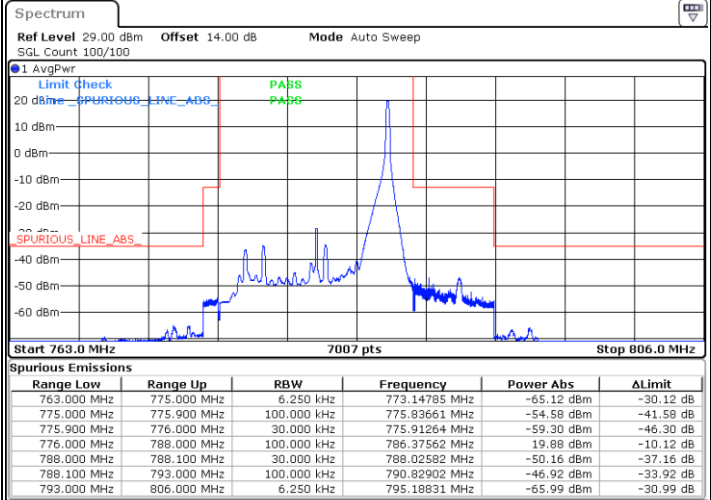
LTE Band 13 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



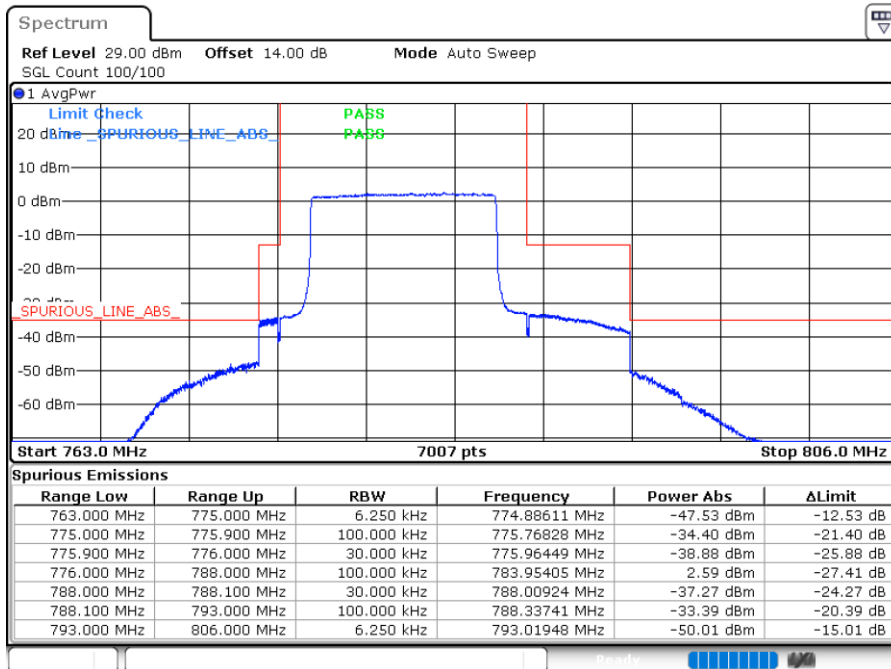
Date: 11.JUL.2022 17:09:38

Highest Band Edge / 1 RB



Date: 11.JUL.2022 17:15:13

Band Edge / Full RB



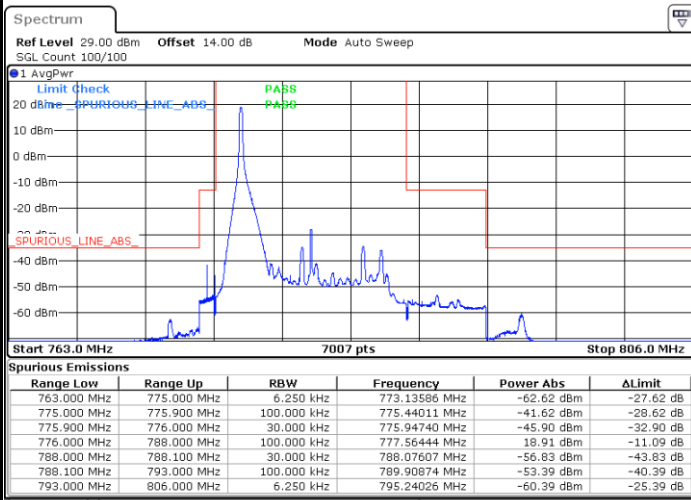
Date: 11.JUL.2022 17:07:46



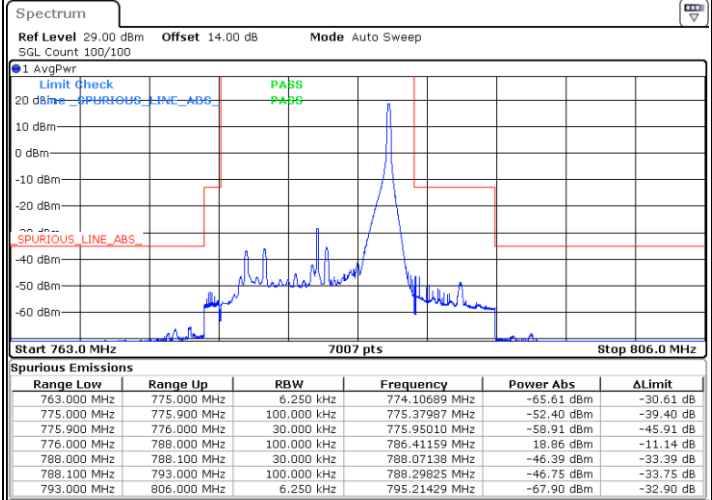
LTE Band 13 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

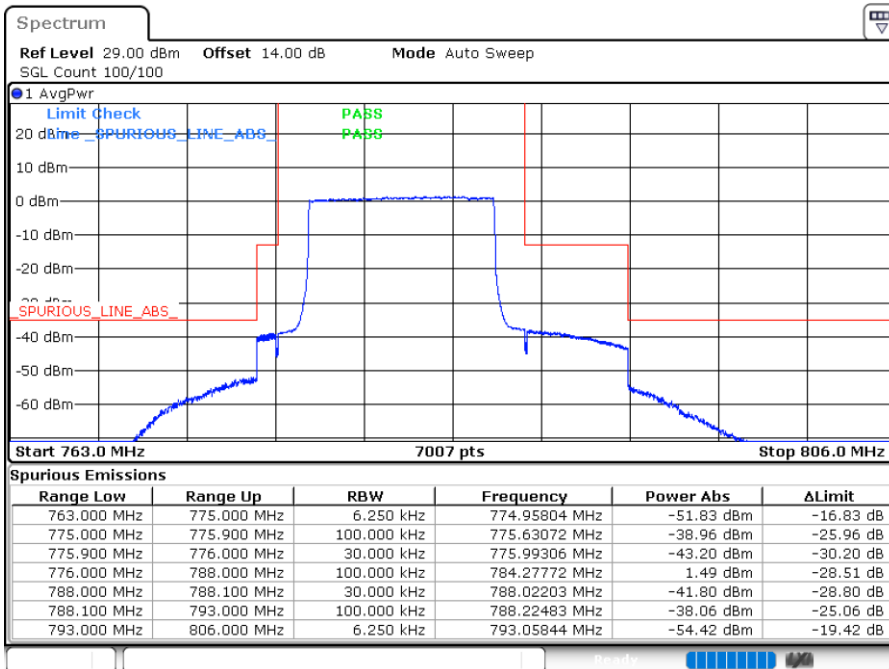


Date: 11.JUL.2022 17:21:30



Date: 11.JUL.2022 17:23:22

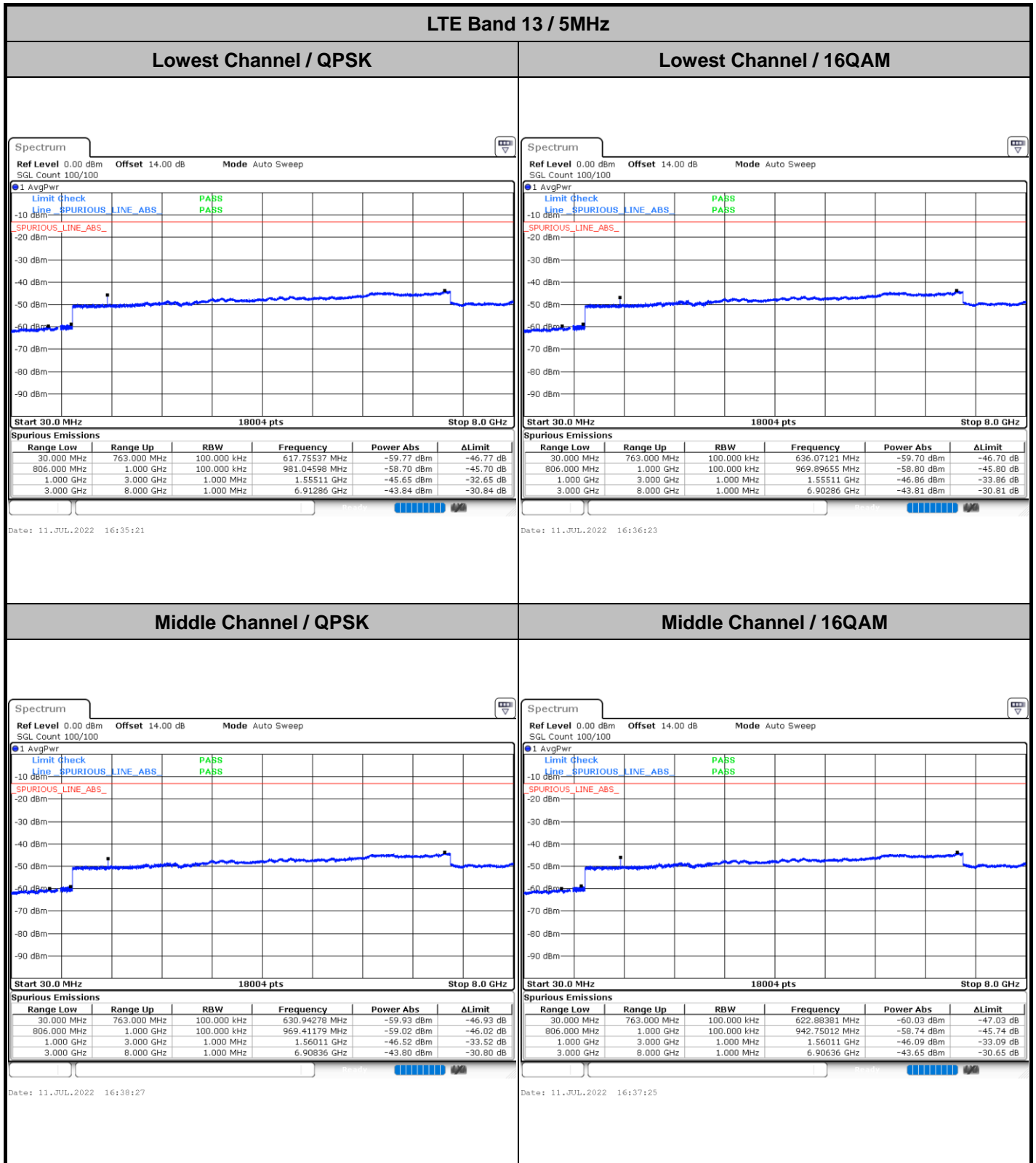
Band Edge / Full RB



Date: 11.JUL.2022 17:19:38



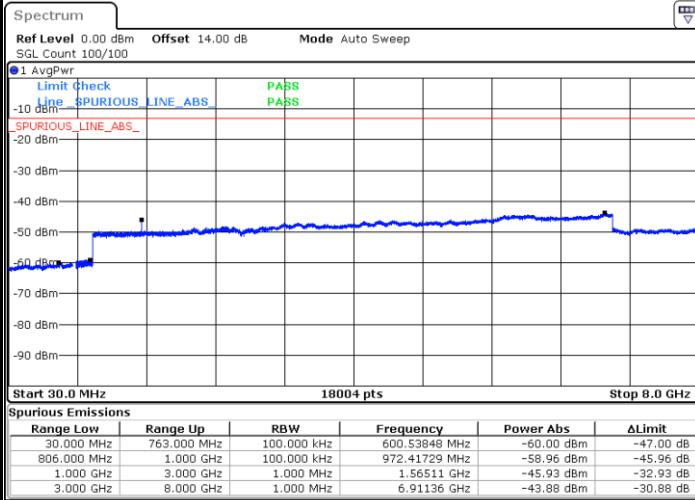
Conducted Spurious Emission





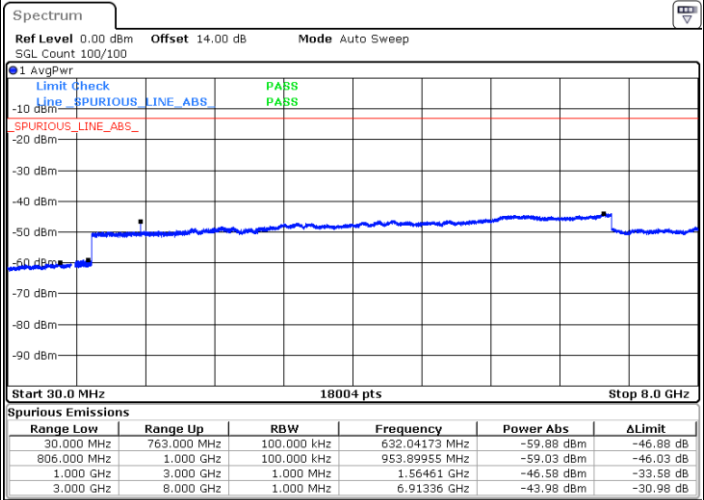
LTE Band 13 / 5MHz

Highest Channel / QPSK



Date: 11.JUL.2022 16:49:40

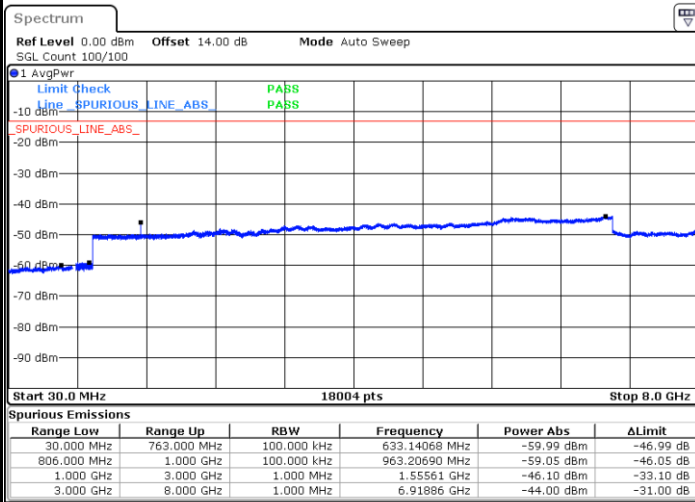
Highest Channel / 16QAM



Date: 11.JUL.2022 16:50:42

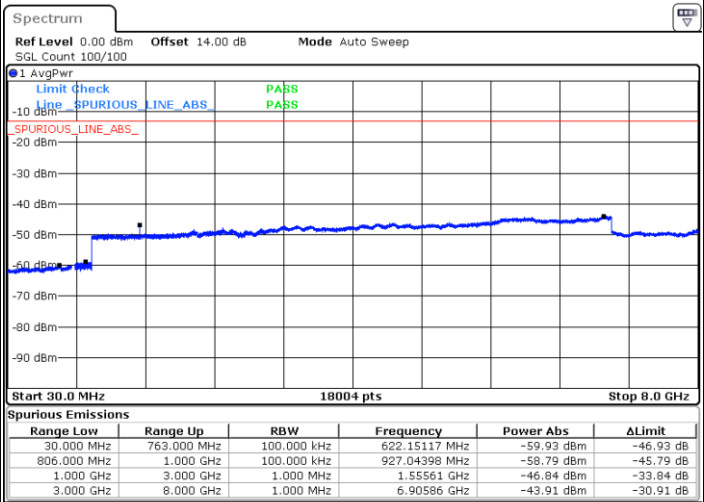
LTE Band 13 / 10MHz

Middle Channel / QPSK



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

Middle Channel / 16QAM



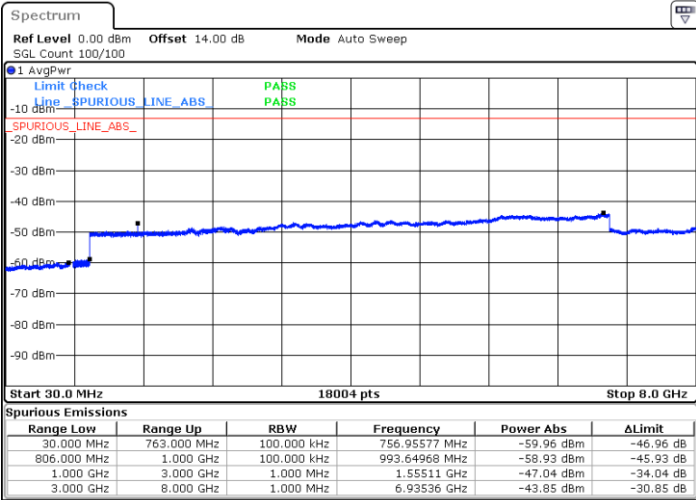
Date: 11.JUL.2022 17:16:15



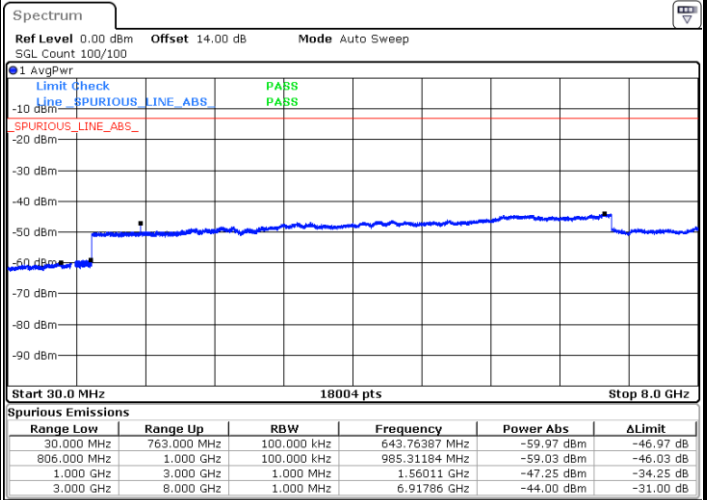
LTE Band 13 / 5MHz

Lowest Channel / 64QAM

Middle Channel / 64QAM

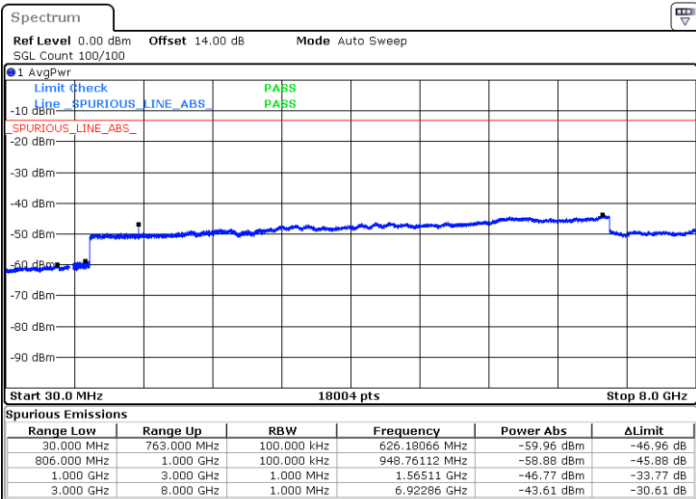


Date: 11.JUL.2022 16:55:50



Date: 11.JUL.2022 16:56:52

Highest Channel / 64QAM

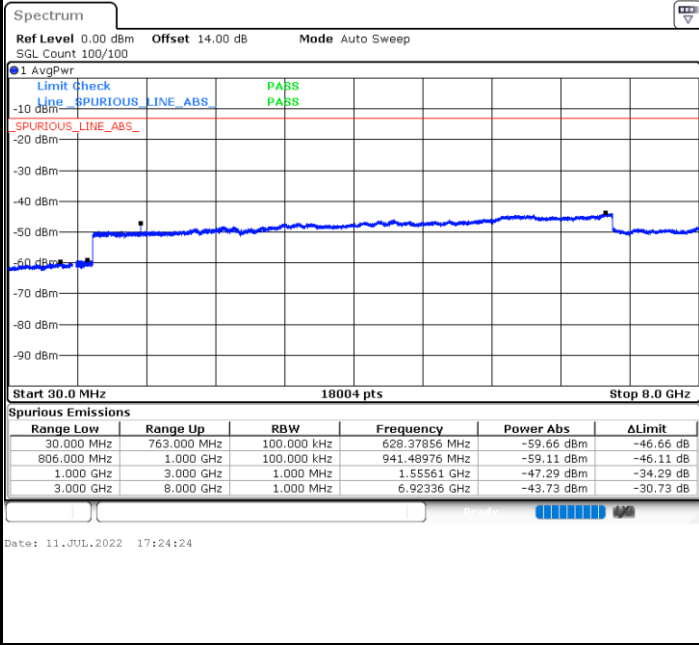


Date: 11.JUL.2022 17:02:46



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	0.0031	PASS
40	Normal Voltage	0.0036	
30	Normal Voltage	0.0026	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0038	
-10	Normal Voltage	0.0046	
-20	Normal Voltage	0.0020	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0009	

Note:

1. Normal Voltage =3.87 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 26_Part 22H

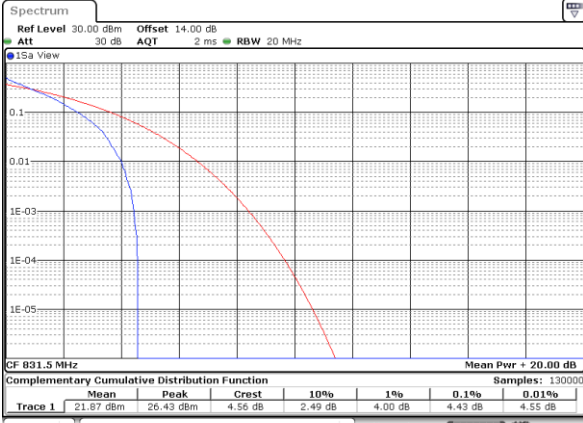
Peak-to-Average Ratio

Mode	LTE Band 26 / 15MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.43	5.10	5.33	5.83	PASS
Middle CH	3.65	5.19	4.26	6.00	
Highest CH	3.74	5.22	4.78	6.00	
Mode	LTE Band 26 / 15MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	6.20	6.12	-	-	PASS
Middle CH	5.30	6.09	-	-	
Highest CH	5.45	6.29	-	-	



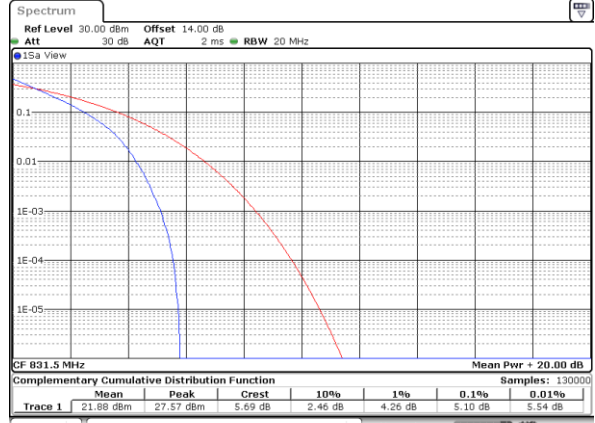
LTE Band 26 / 15MHz / QPSK

Lowest Channel / 1RB



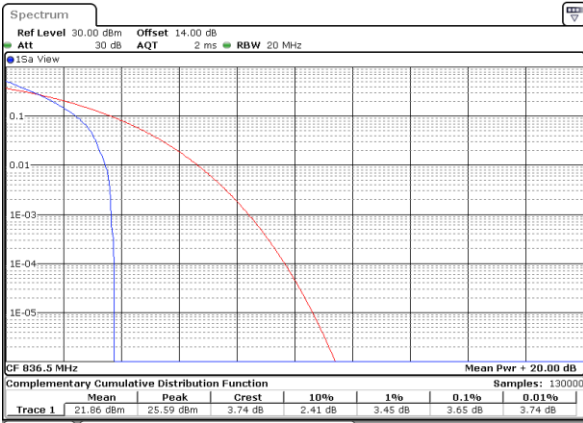
Date: 9_JUL.2022 01:53:40

Lowest Channel / Full RB



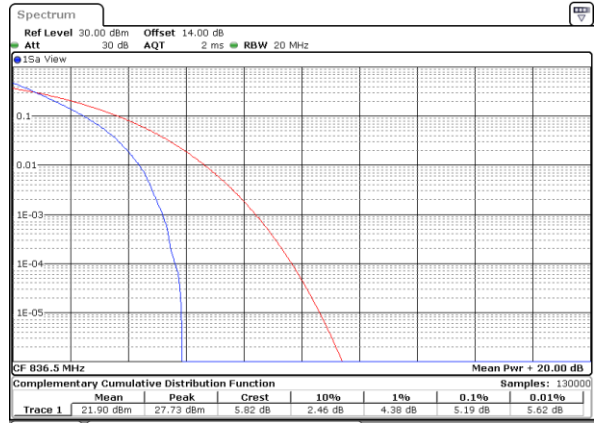
Date: 9_JUL.2022 01:52:25

Middle Channel / 1RB



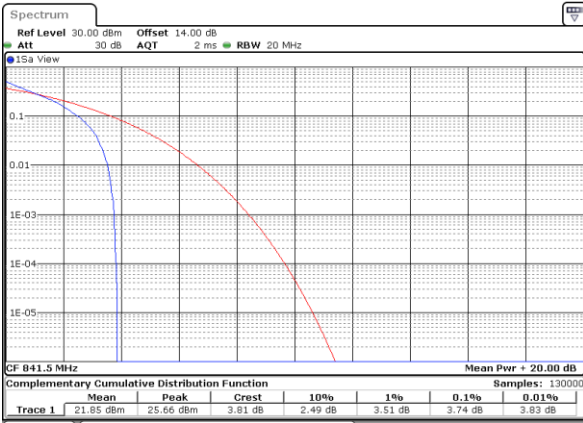
Date: 9_JUL.2022 01:54:05

Middle Channel / Full RB



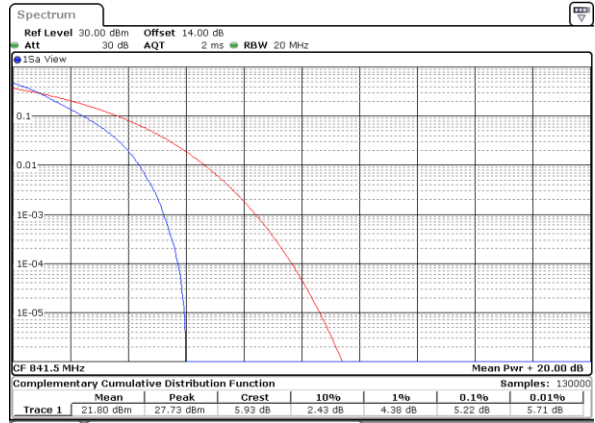
Date: 9_JUL.2022 01:55:22

Highest Channel / 1RB



Date: 9_JUL.2022 01:57:04

Highest Channel / Full RB

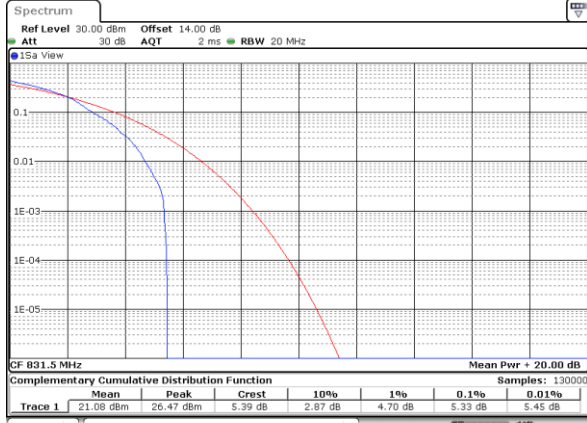


Date: 9_JUL.2022 01:55:47



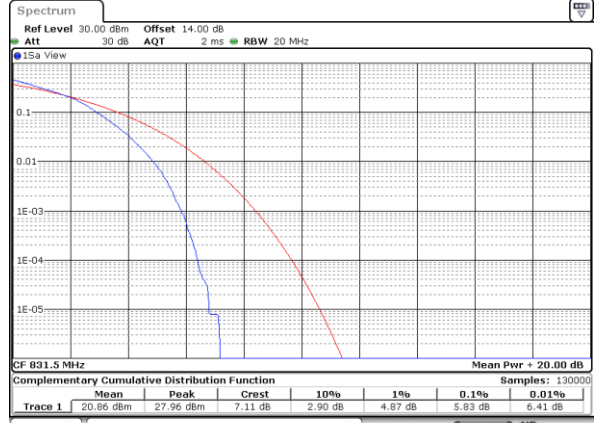
LTE Band 26 / 15MHz / 16QAM

Lowest Channel / 1RB



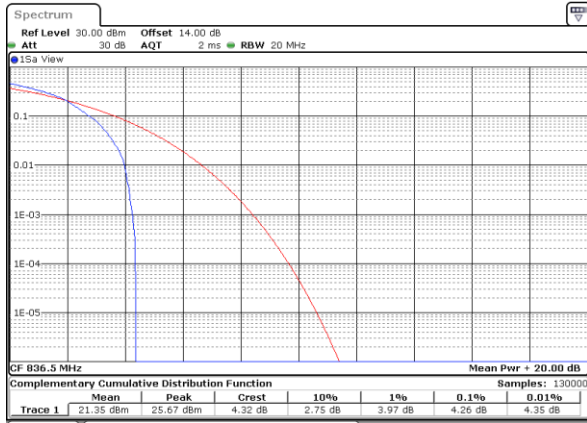
Date: 9_JUL.2022 01:53:15

Lowest Channel / Full RB



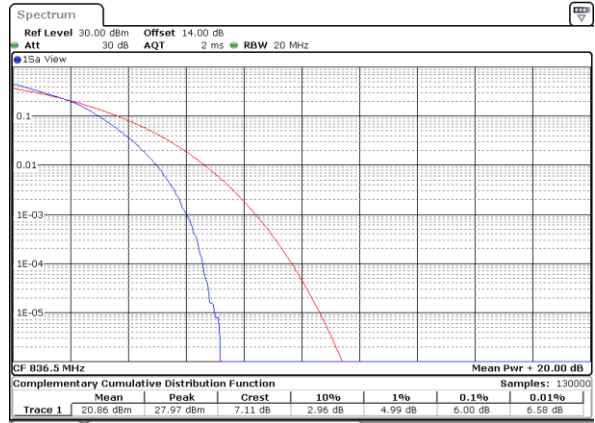
Date: 9_JUL.2022 01:52:50

Middle Channel / 1RB



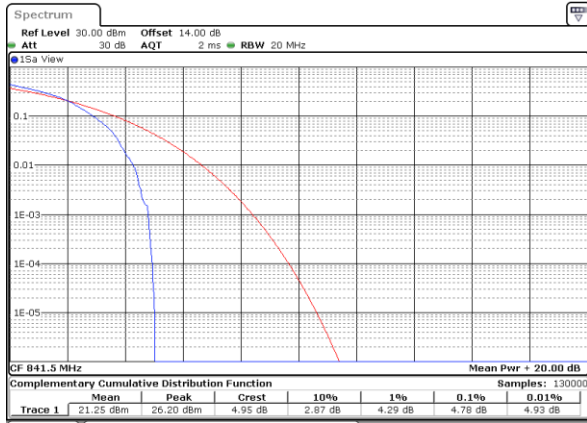
Date: 9_JUL.2022 01:54:30

Middle Channel / Full RB



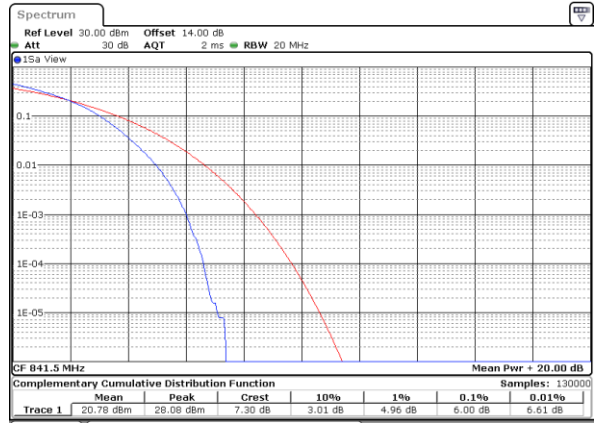
Date: 9_JUL.2022 01:54:56

Highest Channel / 1RB



Date: 9_JUL.2022 01:56:38

Highest Channel / Full RB

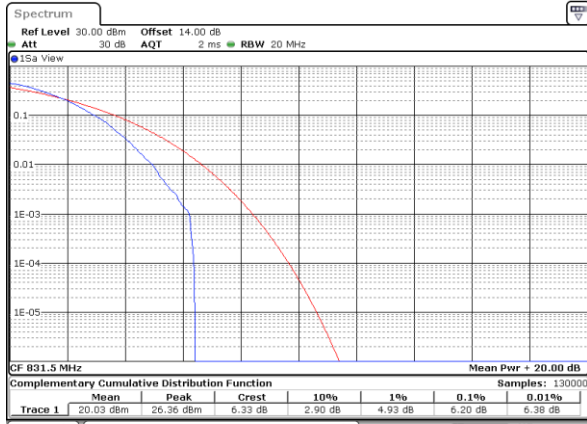


Date: 9_JUL.2022 01:56:13



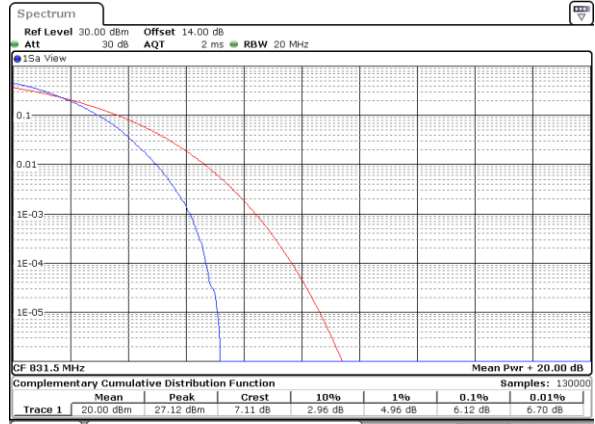
LTE Band 26 / 15MHz / 64QAM

Lowest Channel / 1RB



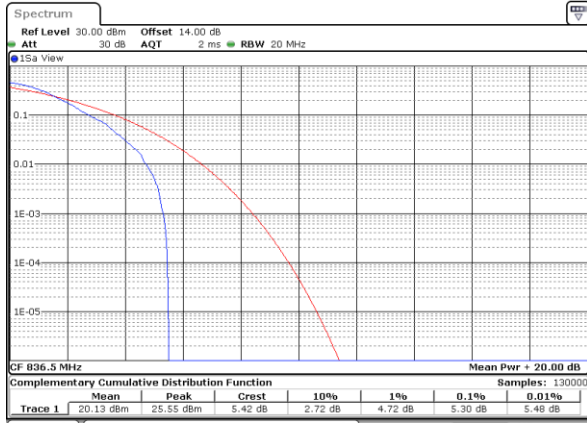
Date: 9_JUL.2022 01:57:54

Lowest Channel / Full RB



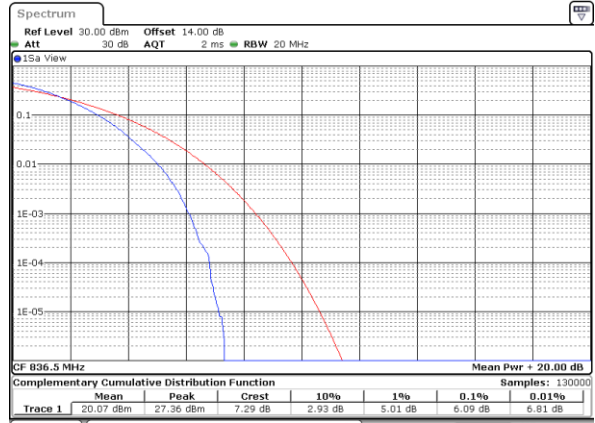
Date: 9_JUL.2022 01:57:29

Middle Channel / 1RB



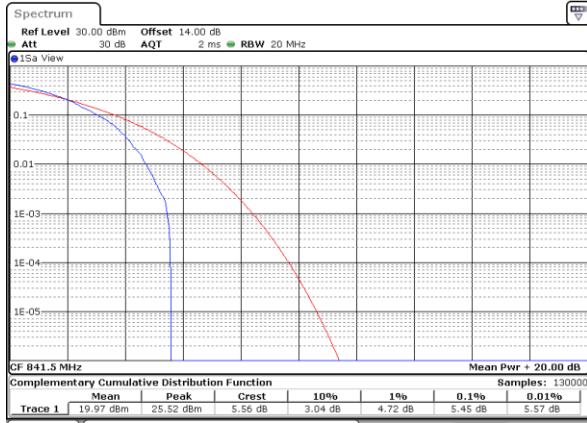
Date: 9_JUL.2022 01:58:19

Middle Channel / Full RB



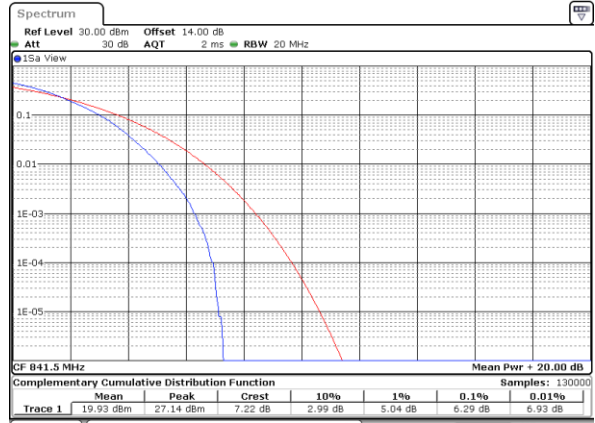
Date: 9_JUL.2022 01:58:45

Highest Channel / 1RB



Date: 9_JUL.2022 01:59:36

Highest Channel / Full RB



Date: 9_JUL.2022 01:59:10



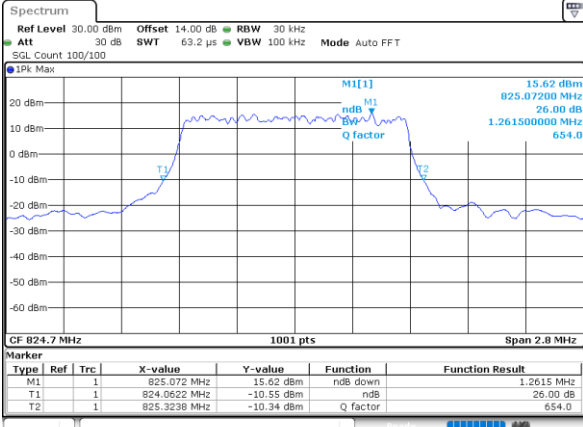
26dB Bandwidth

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	1.28	2.94	3.00	4.90	4.94	9.71	9.69	14.33	14.36	-	-
Middle CH	1.26	1.26	2.97	2.95	4.99	4.85	9.81	9.87	14.42	14.36	-	-
Highest CH	1.28	1.26	2.97	2.97	4.93	4.88	9.67	9.73	14.63	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	1.23	-	2.99	-	4.89	-	9.77	-	14.39	-	-	-
Middle CH	1.29	-	2.98	-	4.85	-	9.85	-	14.39	-	-	-
Highest CH	1.29	-	2.96	-	4.89	-	9.67	-	14.15	-	-	-



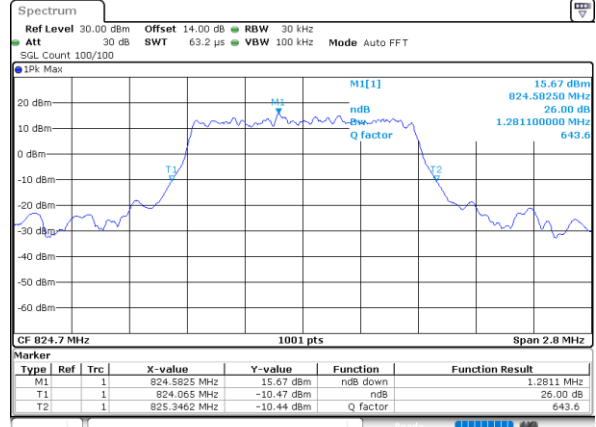
LTE Band 26

Lowest Channel / 1.4MHz / QPSK



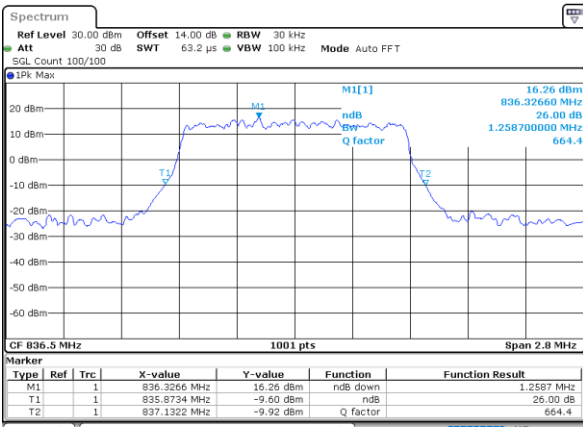
Date: 8 JUL 2022 23:05:00

Lowest Channel / 1.4MHz / 16QAM



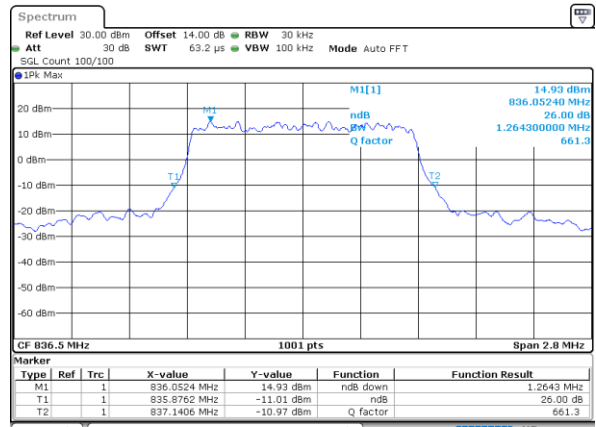
Date: 8 JUL 2022 23:04:36

Middle Channel / 1.4MHz / QPSK



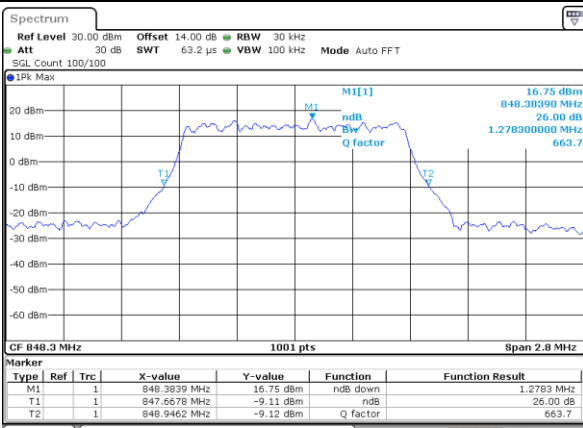
Date: 8 JUL 2022 23:14:30

Middle Channel / 1.4MHz / 16QAM



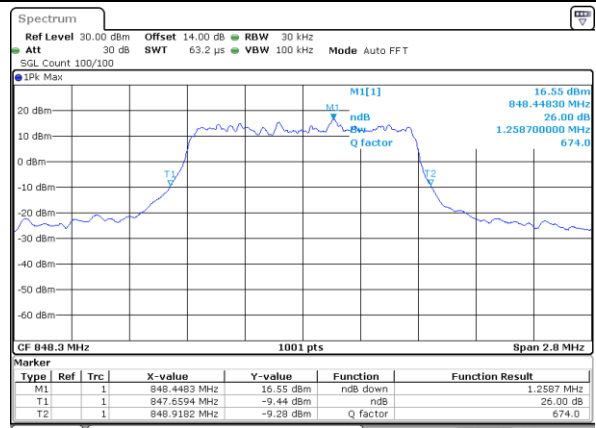
Date: 8 JUL 2022 23:14:06

Highest Channel / 1.4MHz / QPSK



Date: 8 JUL 2022 23:18:01

Highest Channel / 1.4MHz / 16QAM

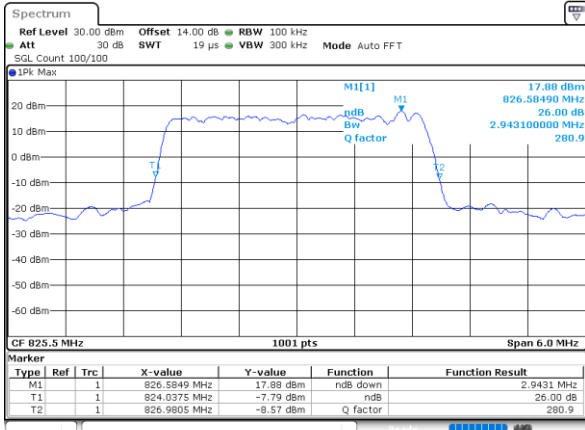


Date: 8 JUL 2022 23:17:38



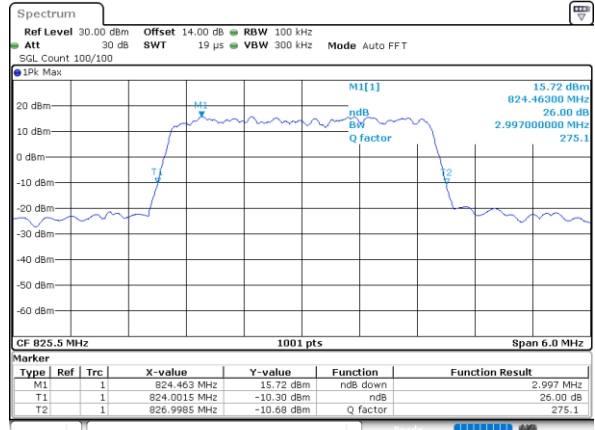
LTE Band 26

Lowest Channel / 3MHz / QPSK



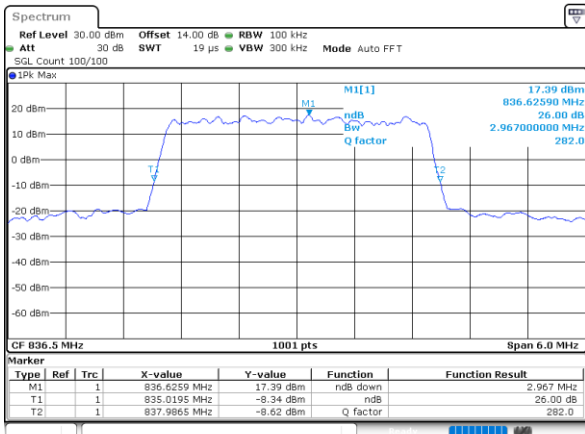
Date: 9 JUL 2022 00:22:57

Lowest Channel / 3MHz / 16QAM



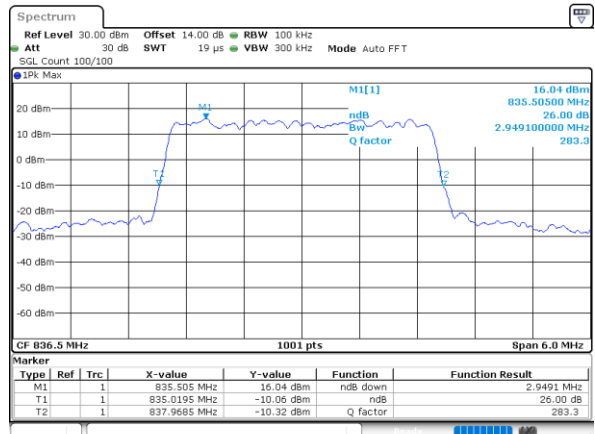
Date: 9 JUL 2022 00:22:33

Middle Channel / 3MHz / QPSK



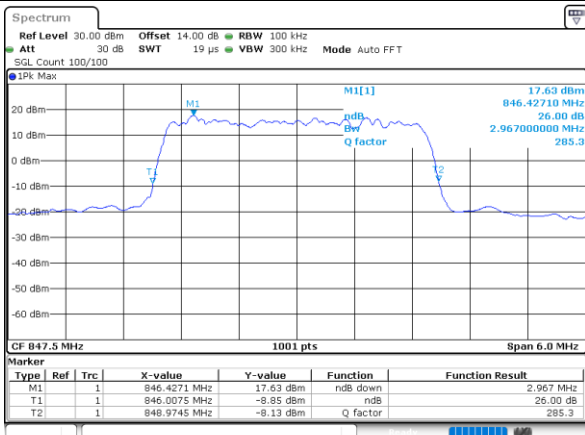
Date: 9 JUL 2022 00:32:20

Middle Channel / 3MHz / 16QAM



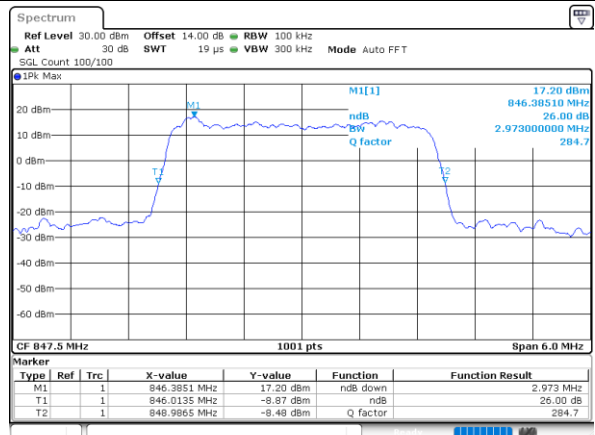
Date: 9 JUL 2022 00:31:56

Highest Channel / 3MHz / QPSK



Date: 9 JUL 2022 00:35:52

Highest Channel / 3MHz / 16QAM

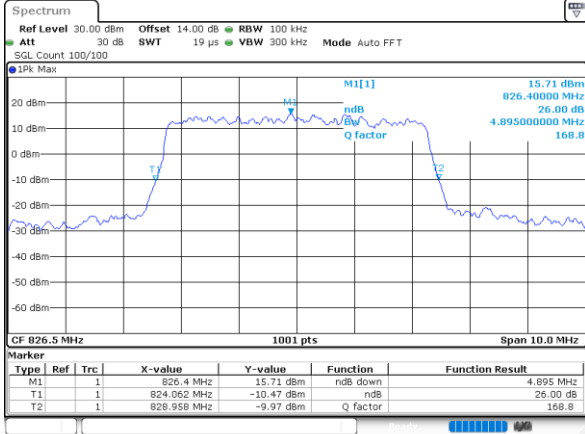


Date: 9 JUL 2022 00:35:28



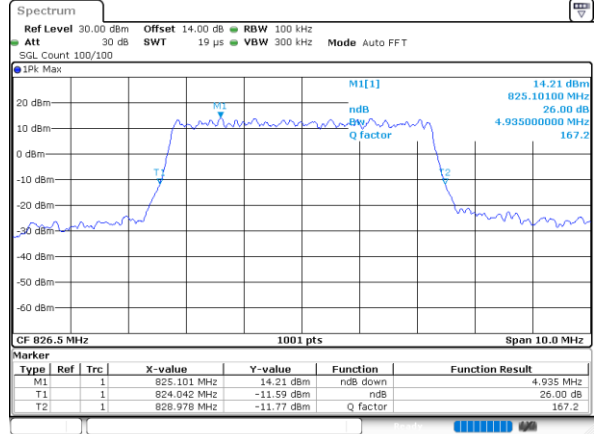
LTE Band 26

Lowest Channel / 5MHz / QPSK



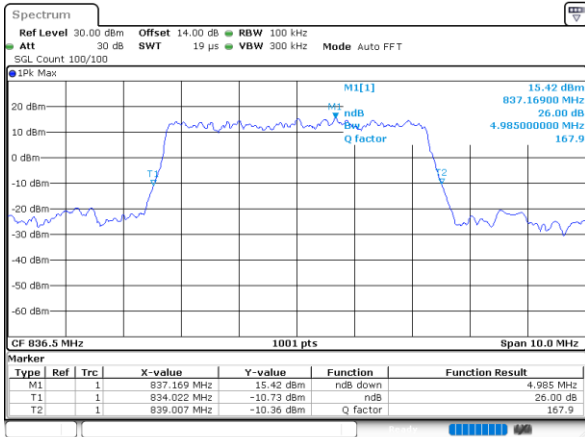
Date: 9_JUL.2022 00:45:14

Lowest Channel / 5MHz / 16QAM



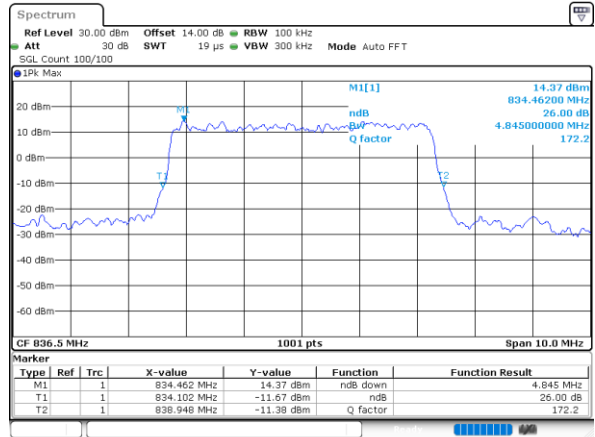
Date: 9_JUL.2022 00:45:10

Middle Channel / 5MHz / QPSK



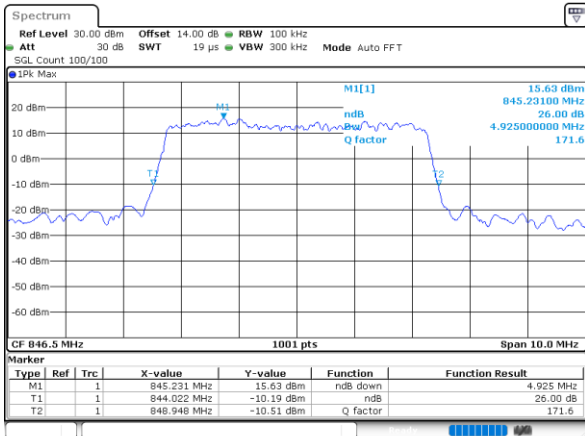
Date: 9_JUL.2022 00:54:57

Middle Channel / 5MHz / 16QAM



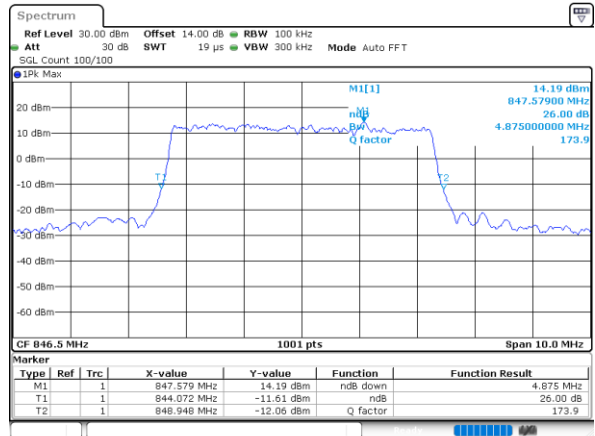
Date: 9_JUL.2022 00:54:33

Highest Channel / 5MHz / QPSK



Date: 9_JUL.2022 00:58:29

Highest Channel / 5MHz / 16QAM

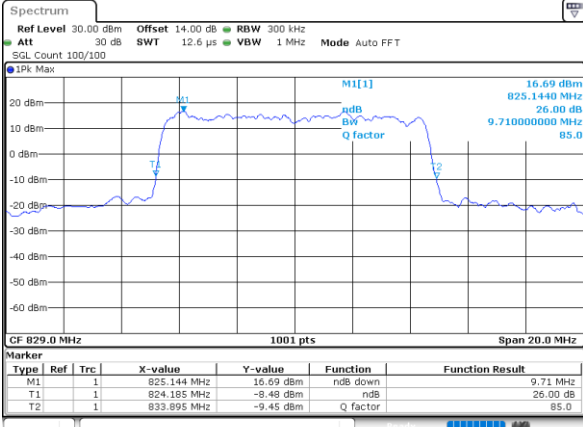


Date: 9_JUL.2022 00:58:05



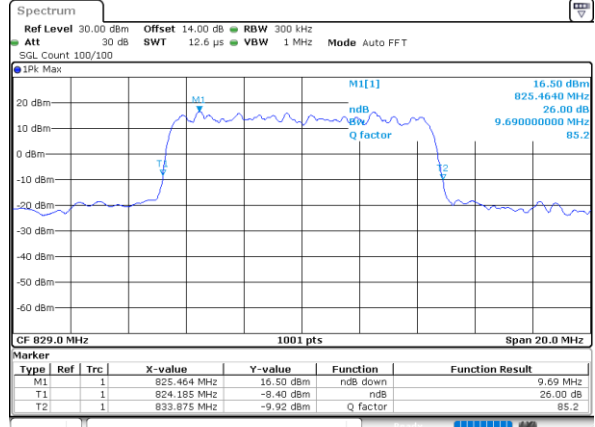
LTE Band 26

Lowest Channel / 10MHz / QPSK



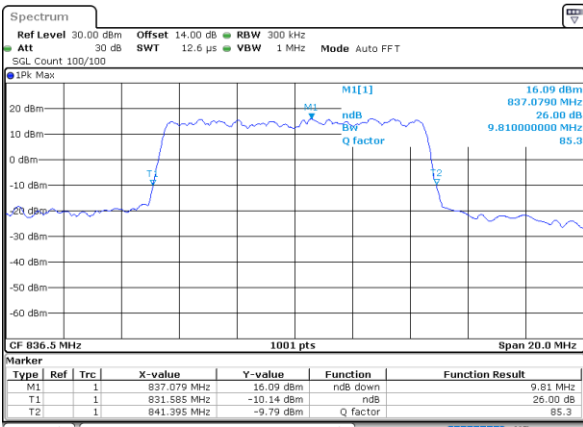
Date: 9_JUL.2022 01:08:11

Lowest Channel / 10MHz / 16QAM



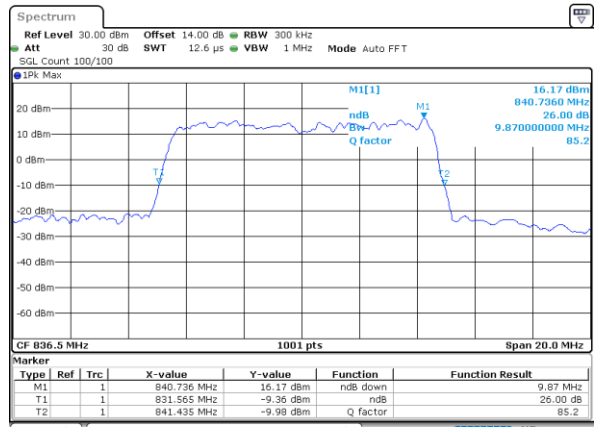
Date: 9_JUL.2022 01:07:47

Middle Channel / 10MHz / QPSK



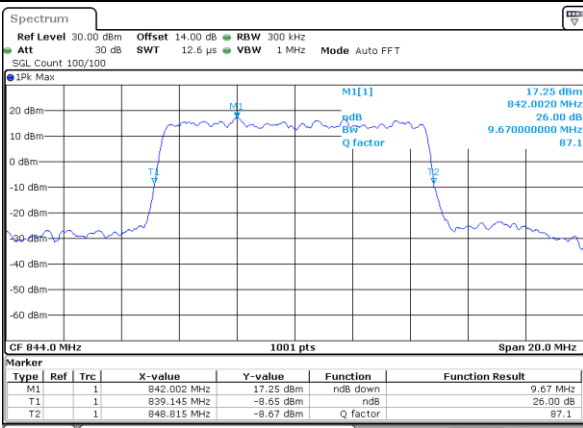
Date: 9_JUL.2022 01:17:34

Middle Channel / 10MHz / 16QAM



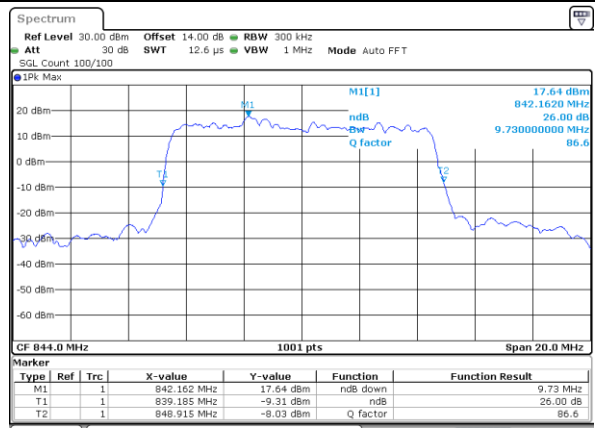
Date: 9_JUL.2022 01:17:10

Highest Channel / 10MHz / QPSK



Date: 9_JUL.2022 01:21:05

Highest Channel / 10MHz / 16QAM



Date: 9_JUL.2022 01:20:42