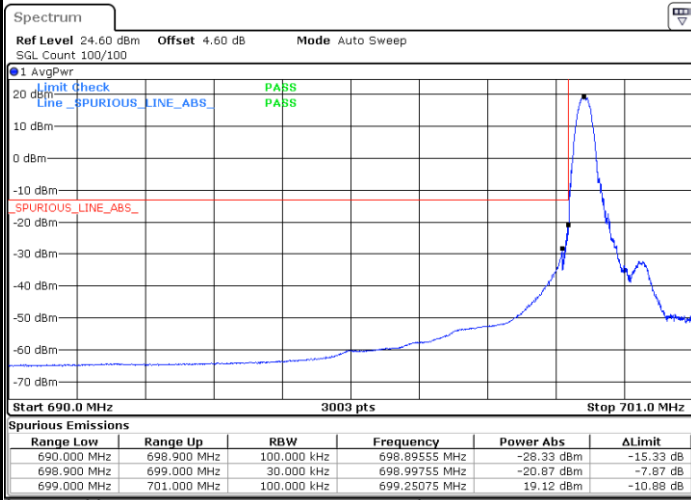




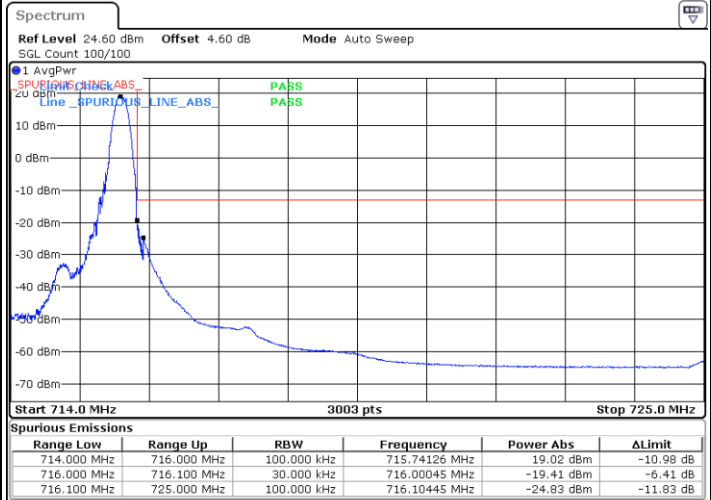
LTE Band 12 / 1.4MHz / 64QAM

Lowest Band Edge / 1 RB



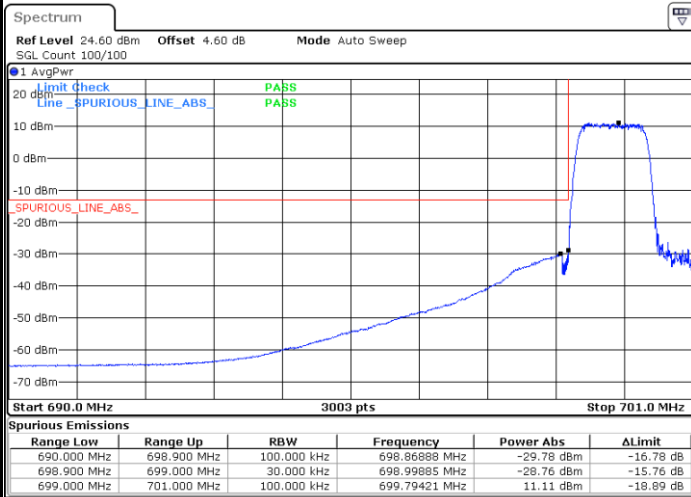
Date: 27 JUN 2023 03:14:05

Highest Band Edge / 1 RB



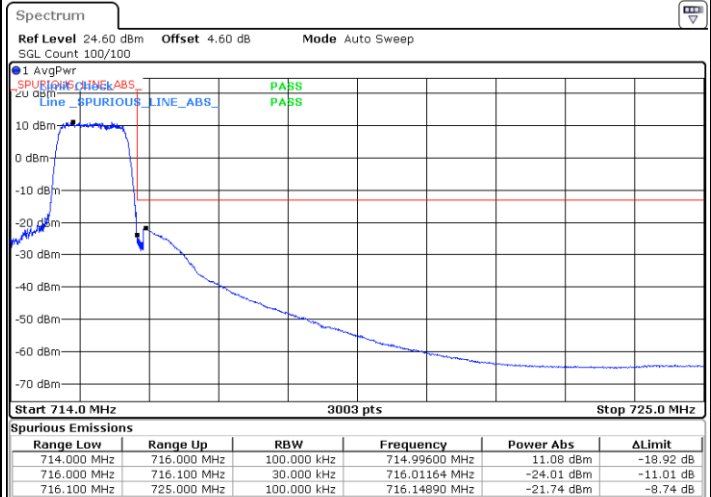
Date: 27 JUN 2023 03:23:53

Lowest Band Edge / Full RB



Date: 27 JUN 2023 03:15:25

Highest Band Edge / Full RB

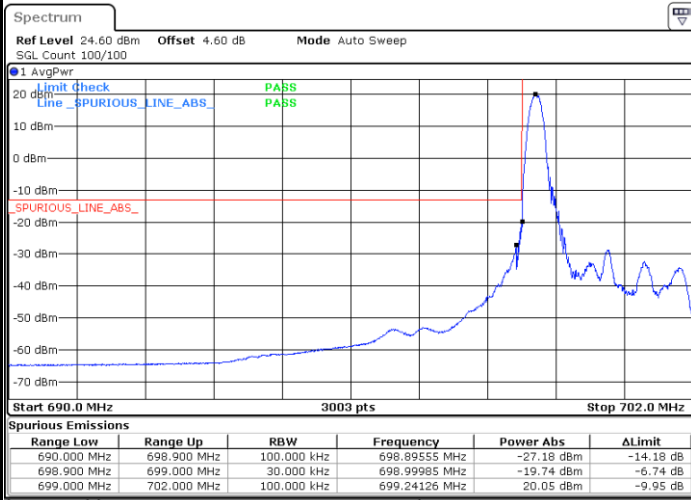


Date: 27 JUN 2023 03:25:13



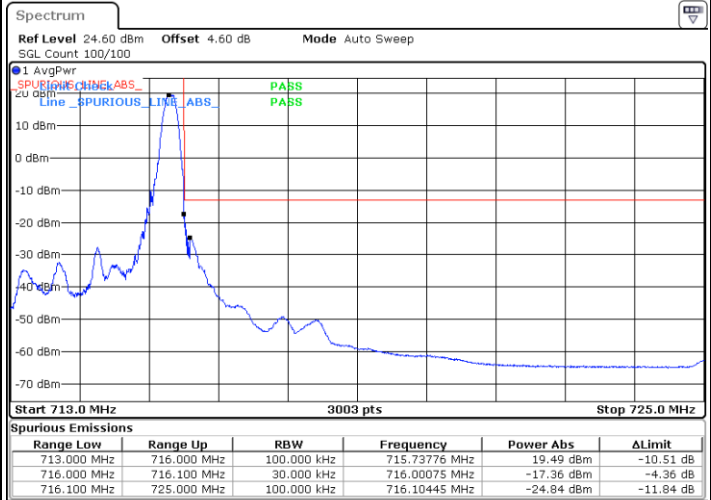
LTE Band 12 / 3MHz / QPSK

Lowest Band Edge / 1RB



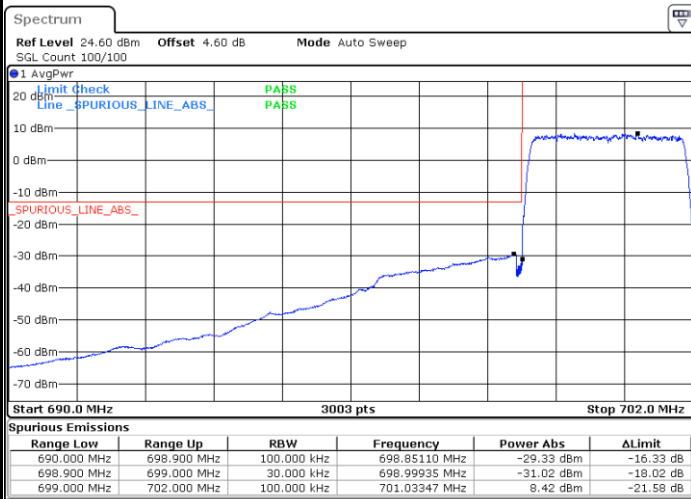
Date: 27 JUN 2023 03:30:08

Highest Band Edge / 1 RB



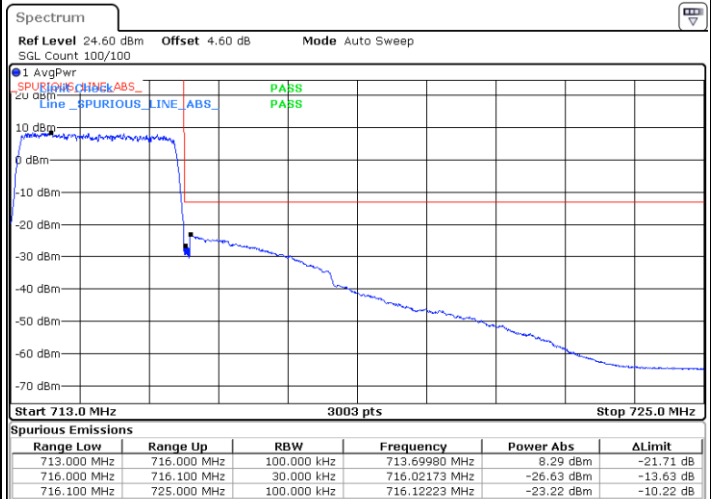
Date: 27 JUN 2023 03:39:56

Lowest Band Edge / Full RB



Date: 27 JUN 2023 03:36:49

Highest Band Edge / Full RB

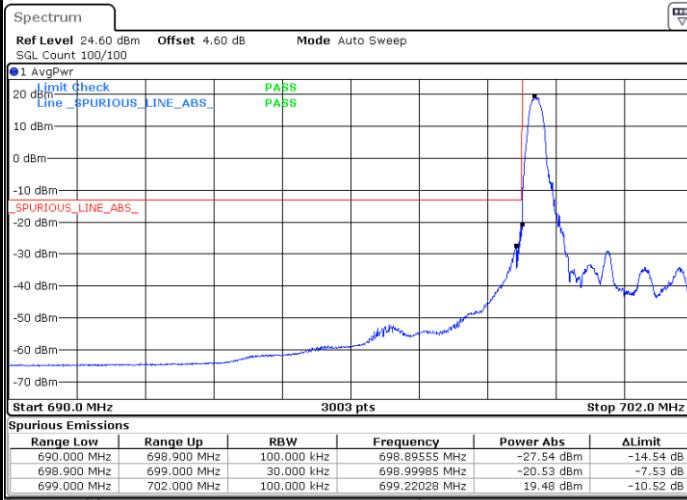


Date: 27 JUN 2023 03:46:37



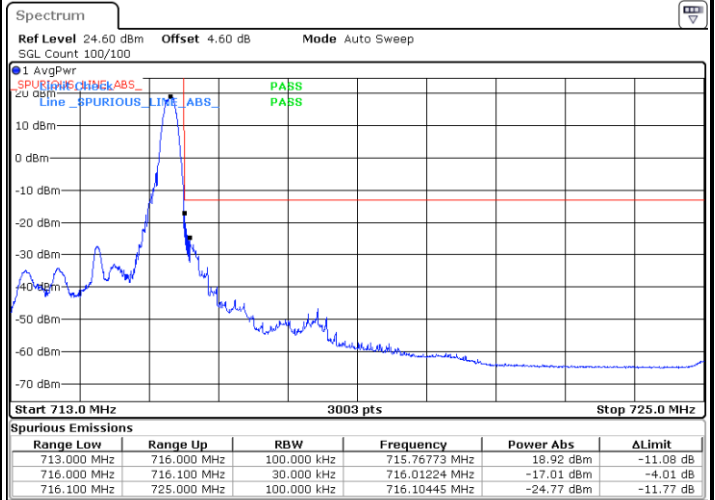
LTE Band 12 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



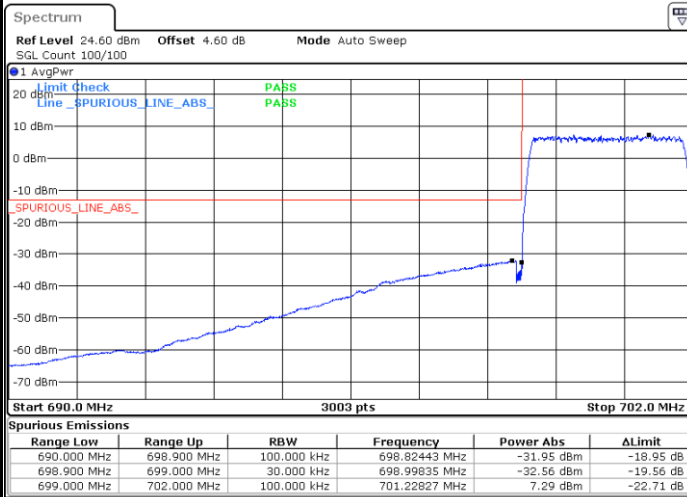
Date: 27 JUN.2023 03:31:28

Highest Band Edge / 1 RB



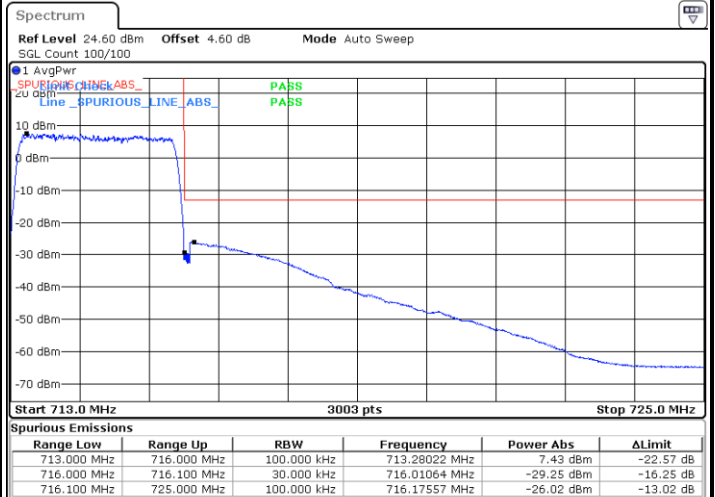
Date: 27 JUN.2023 03:41:16

Lowest Band Edge / Full RB



Date: 27 JUN.2023 03:35:29

Highest Band Edge / Full RB

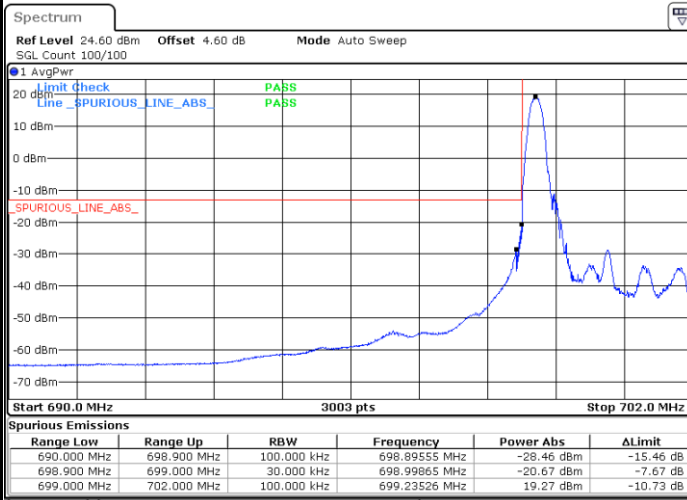


Date: 27 JUN.2023 03:45:17



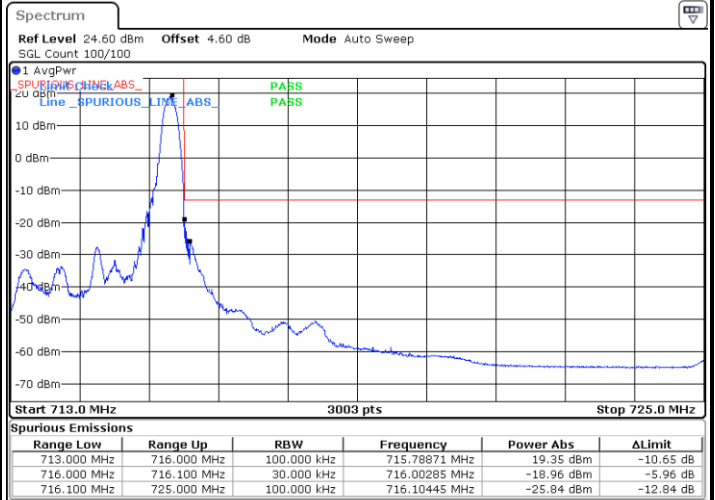
LTE Band 12 / 3MHz / 64QAM

Lowest Band Edge / 1 RB



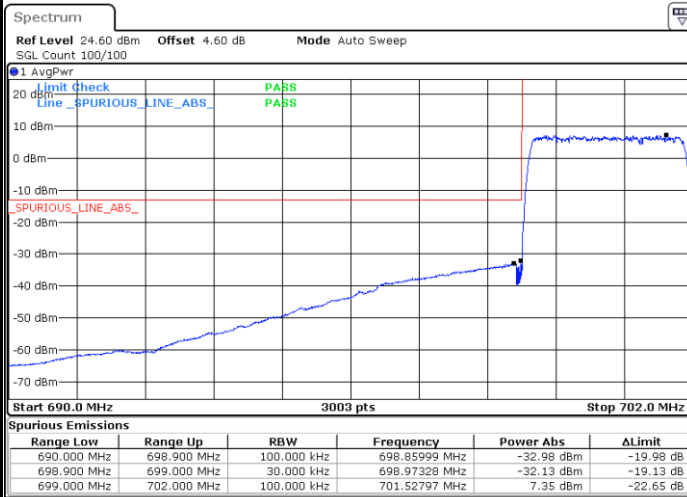
Date: 27 JUN 2023 03:32:48

Highest Band Edge / 1 RB



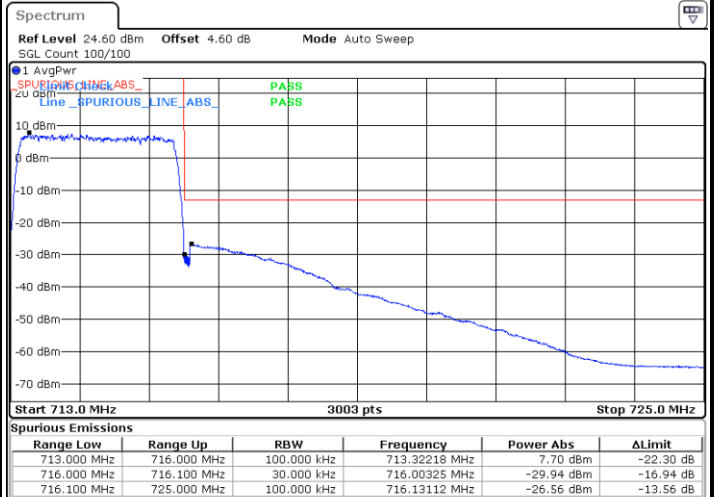
Date: 27 JUN 2023 03:42:36

Lowest Band Edge / Full RB



Date: 27 JUN 2023 03:34:09

Highest Band Edge / Full RB

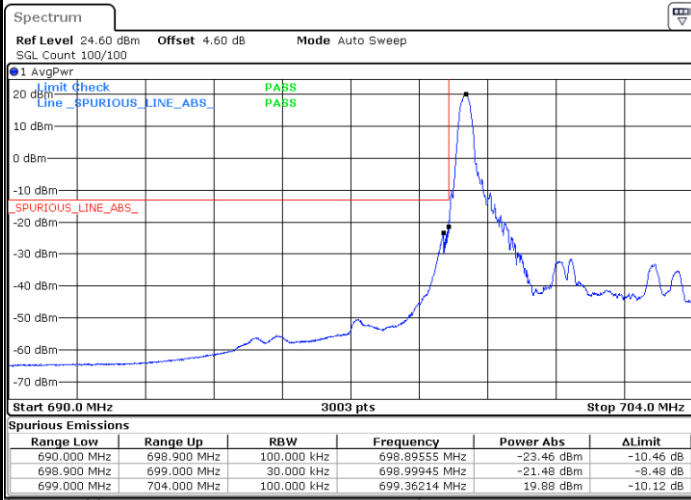


Date: 27 JUN 2023 03:43:57



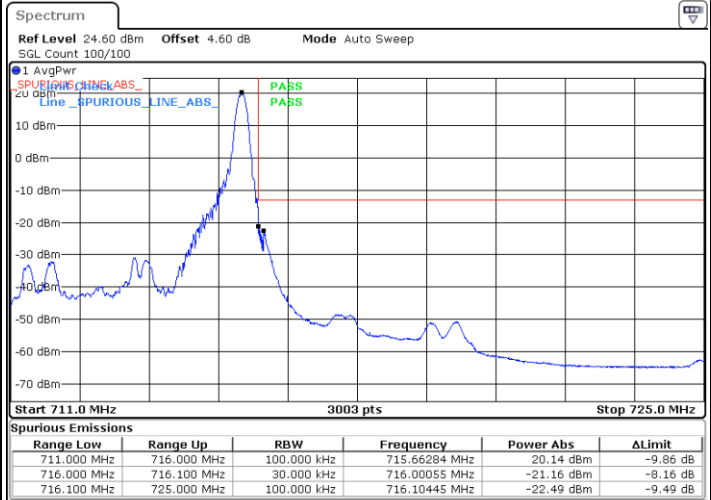
LTE Band 12 / 5MHz / QPSK

Lowest Band Edge / 1 RB



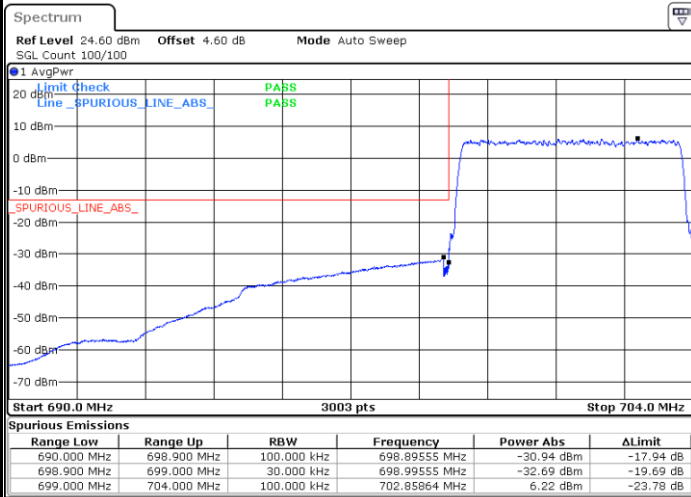
Date: 27 JUN 2023 03:48:52

Highest Band Edge / 1 RB



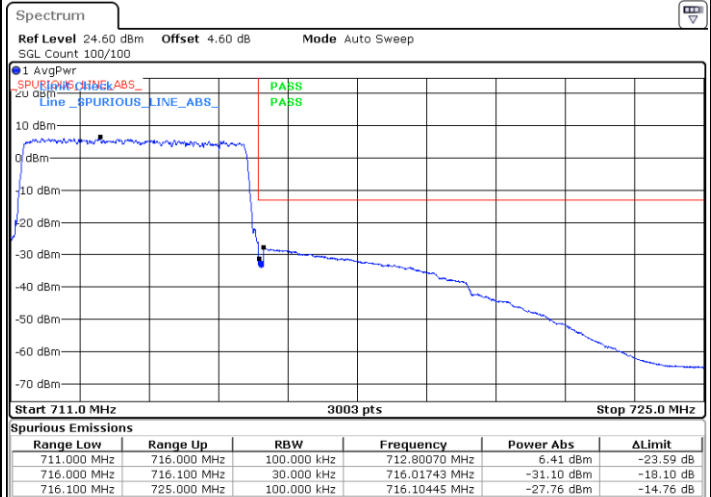
Date: 27 JUN 2023 03:58:40

Lowest Band Edge / Full RB



Date: 27 JUN 2023 03:55:34

Highest Band Edge / Full RB

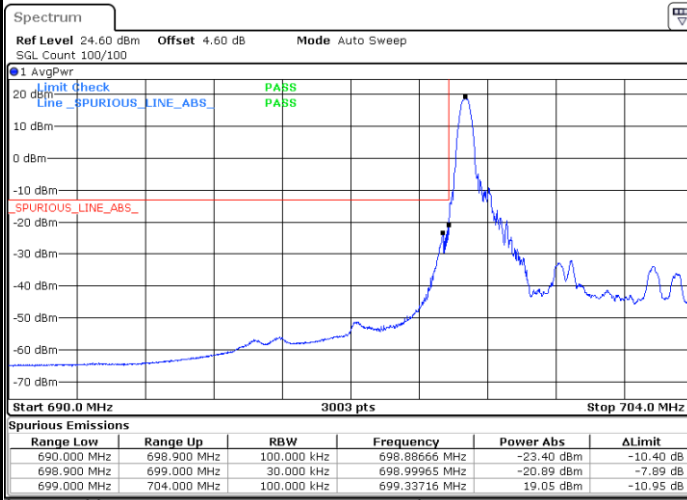


Date: 27 JUN 2023 04:05:22



LTE Band 12 / 5MHz / 16QAM

Lowest Band Edge / 1RB



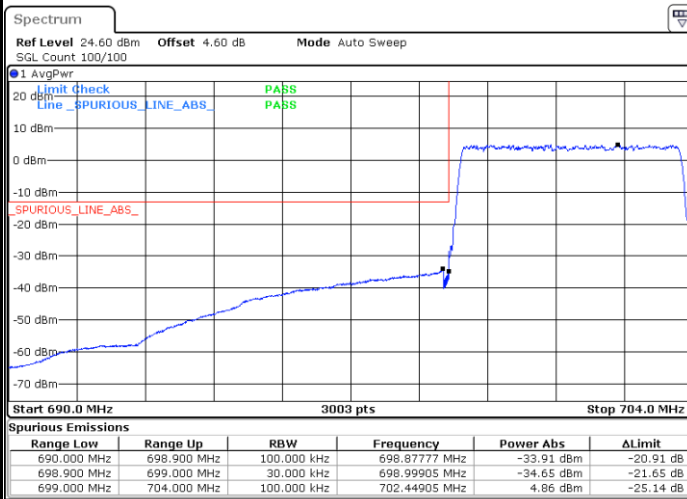
Date: 27 JUN.2023 03:50:12

Highest Band Edge / 1 RB



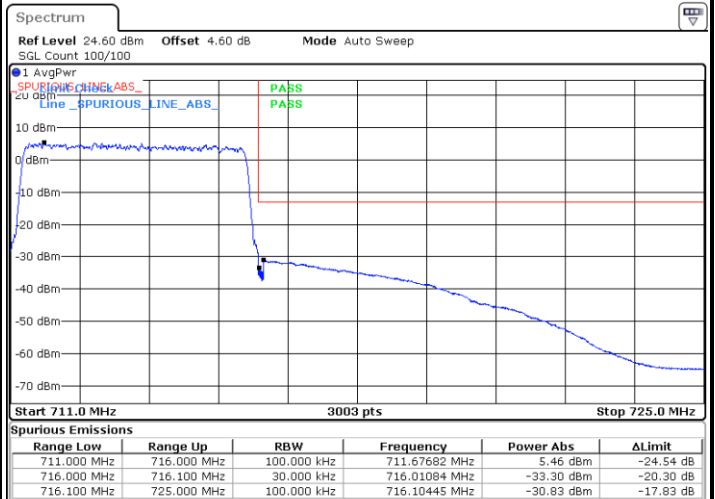
Date: 27 JUN.2023 04:00:00

Lowest Band Edge / Full RB



Date: 27 JUN.2023 03:54:14

Highest Band Edge / Full RB

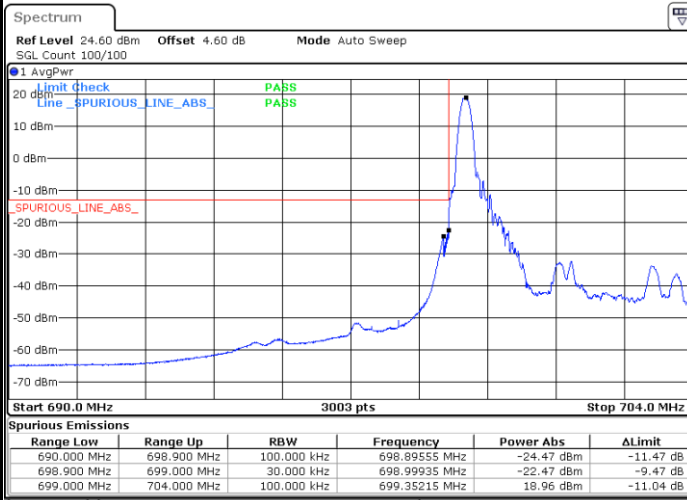


Date: 27 JUN.2023 04:04:01



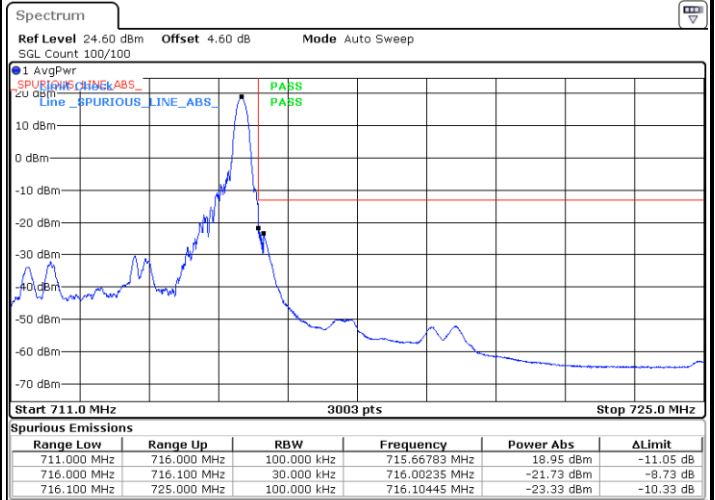
LTE Band 12 / 5MHz / 64QAM

Lowest Band Edge / 1RB



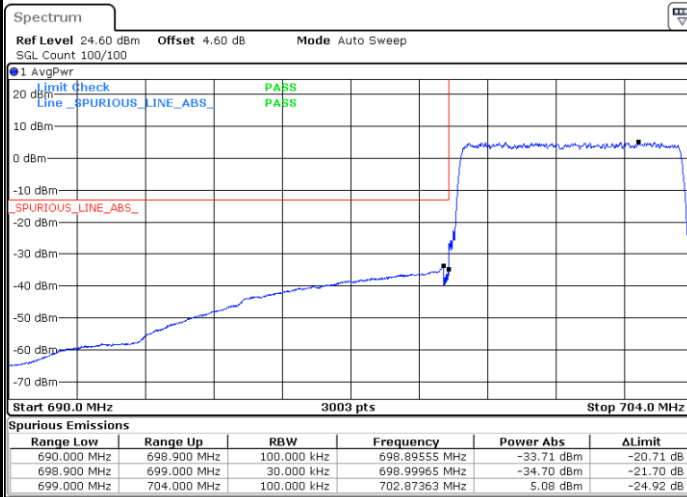
Date: 27 JUN 2023 03:51:32

Highest Band Edge / 1 RB



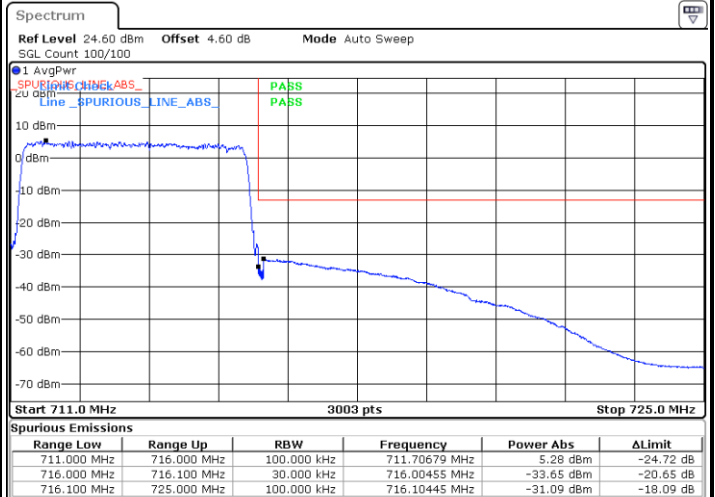
Date: 27 JUN 2023 04:01:20

Lowest Band Edge / Full RB



Date: 27 JUN 2023 03:52:53

Highest Band Edge / Full RB

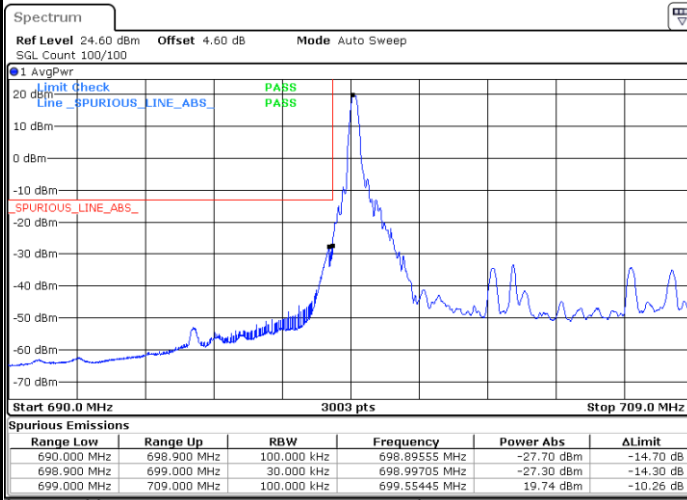


Date: 27 JUN 2023 04:02:41

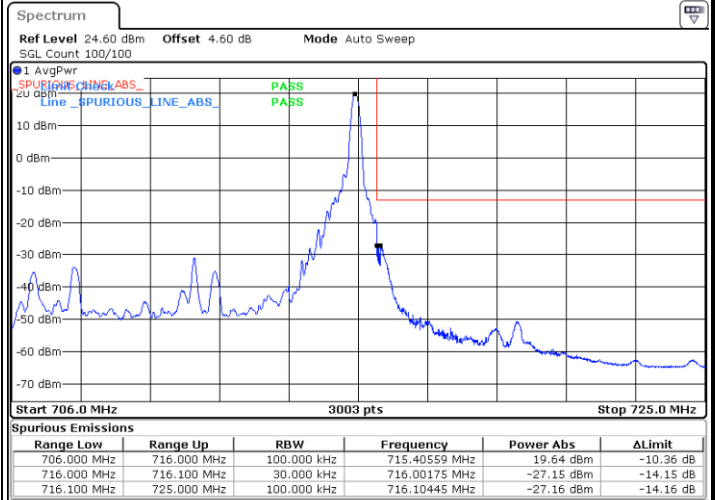


LTE Band 12 / 10MHz / QPSK

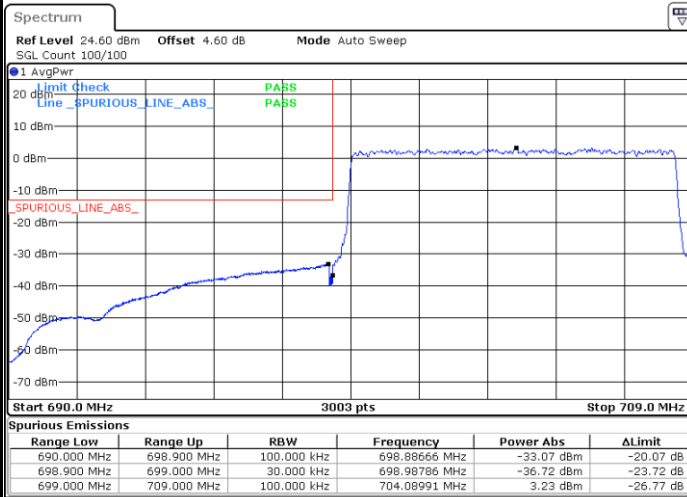
Lowest Band Edge / 1 RB



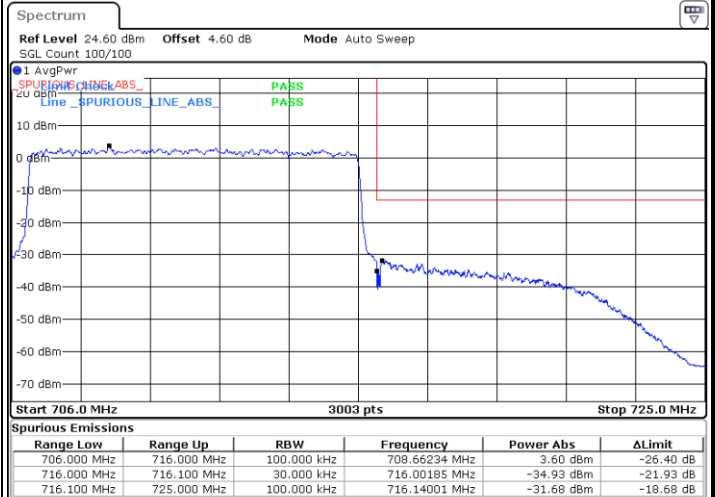
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



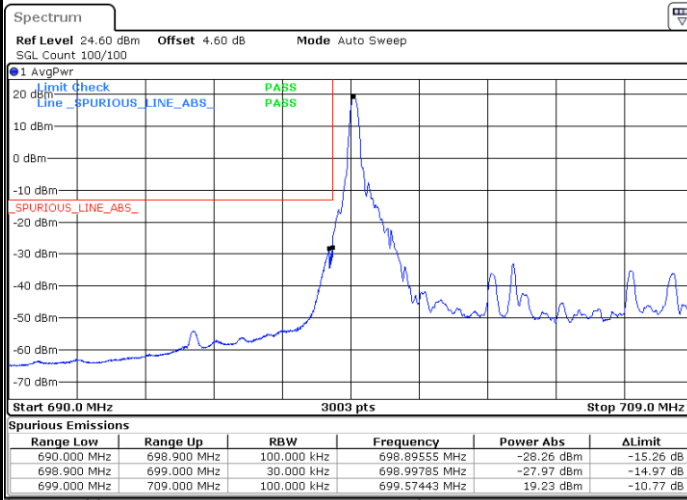
Highest Band Edge / Full RB





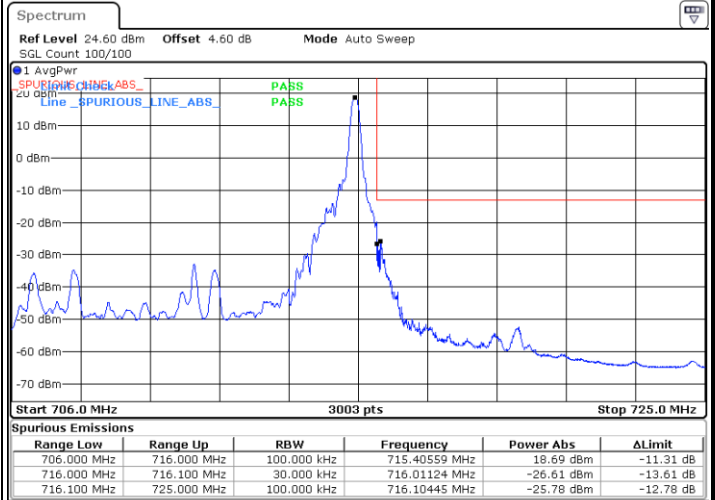
LTE Band 12 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



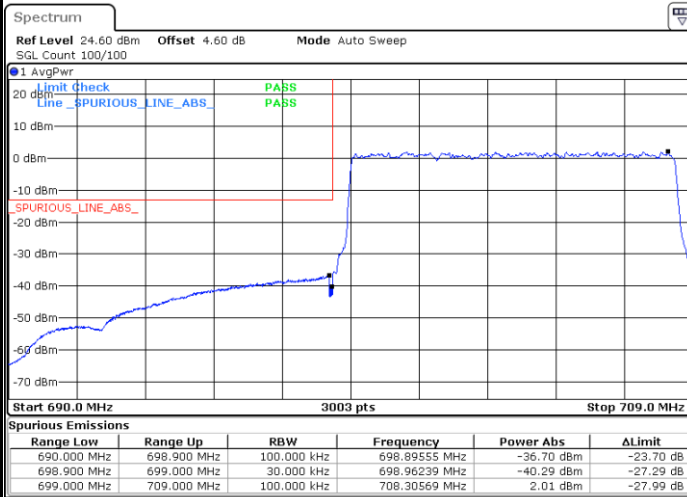
Date: 27 JUN 2023 04:08:56

Highest Band Edge / 1 RB



Date: 27 JUN 2023 04:18:45

Lowest Band Edge / Full RB



Date: 27 JUN 2023 04:12:58

Highest Band Edge / Full RB

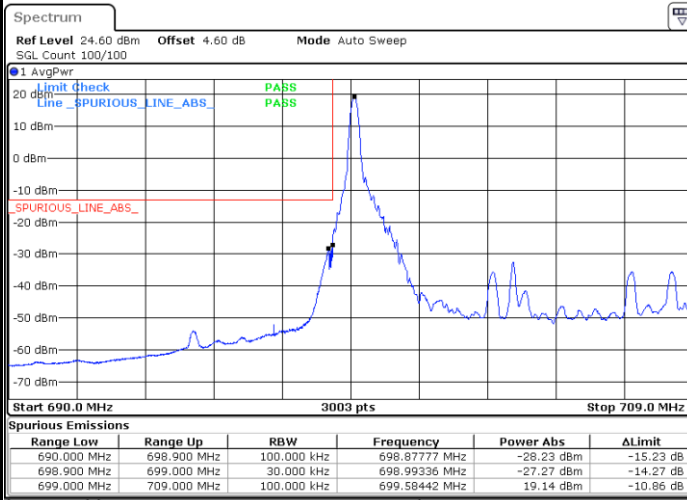


Date: 27 JUN 2023 04:22:46



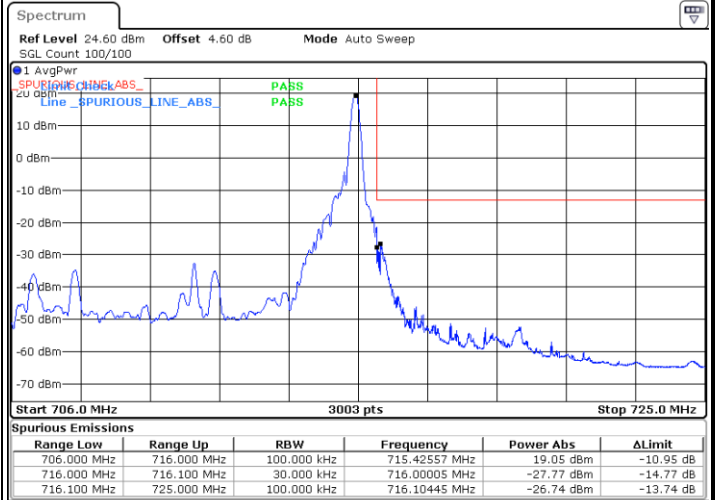
LTE Band 12 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



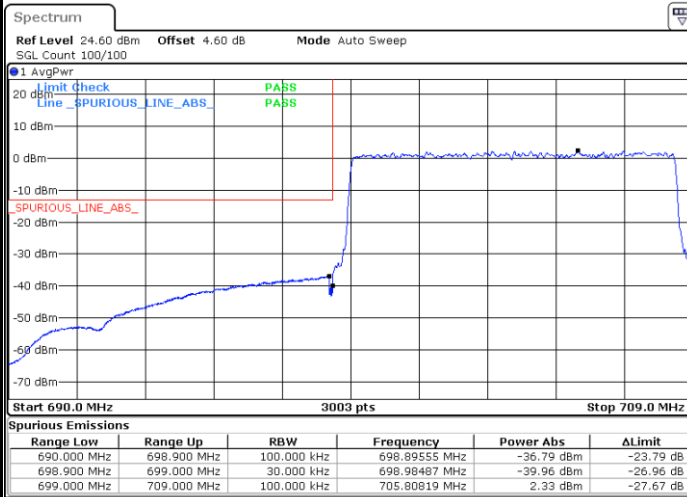
Date: 27 JUN 2023 04:10:17

Highest Band Edge / 1 RB



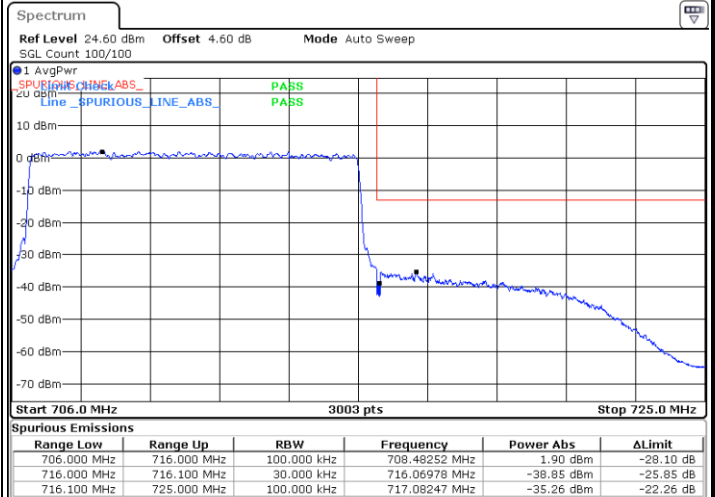
Date: 27 JUN 2023 04:20:05

Lowest Band Edge / Full RB



Date: 27 JUN 2023 04:11:37

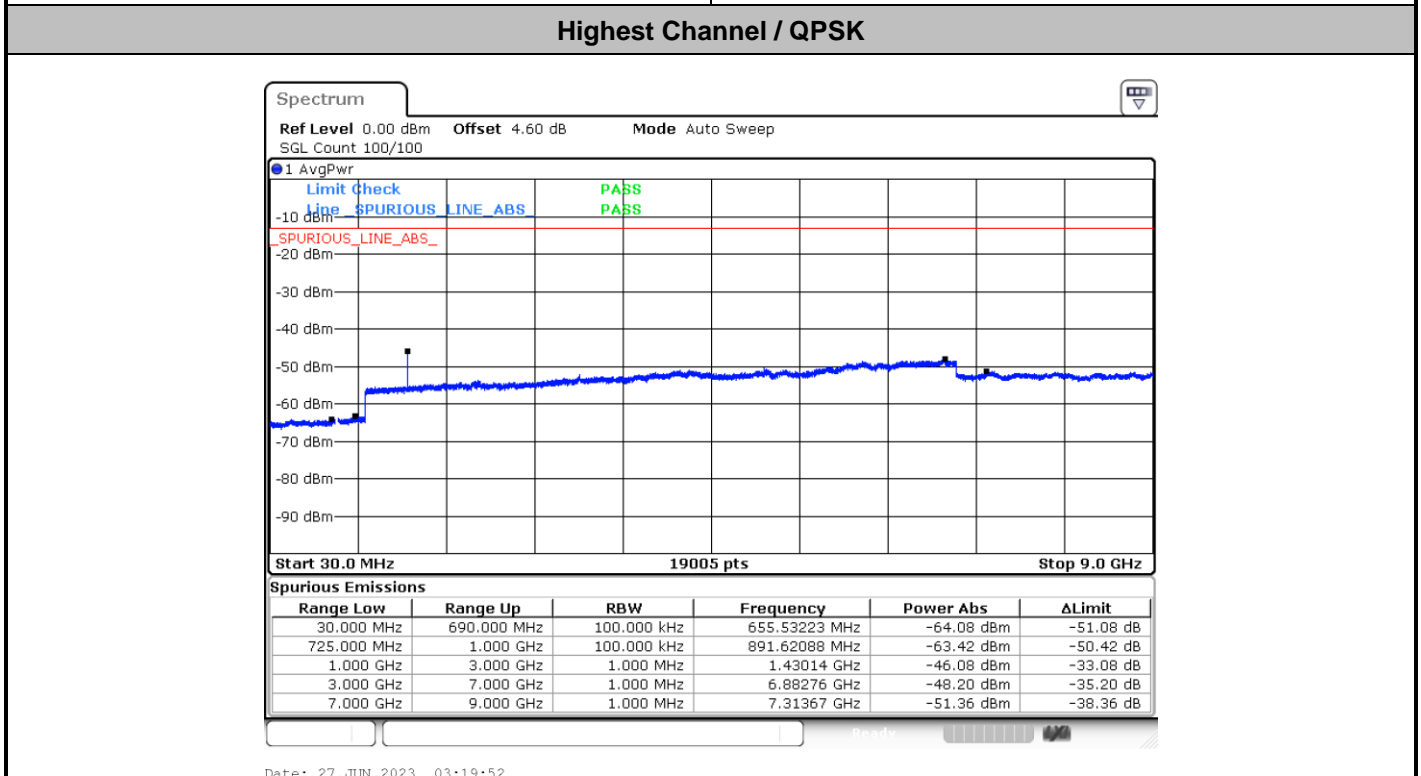
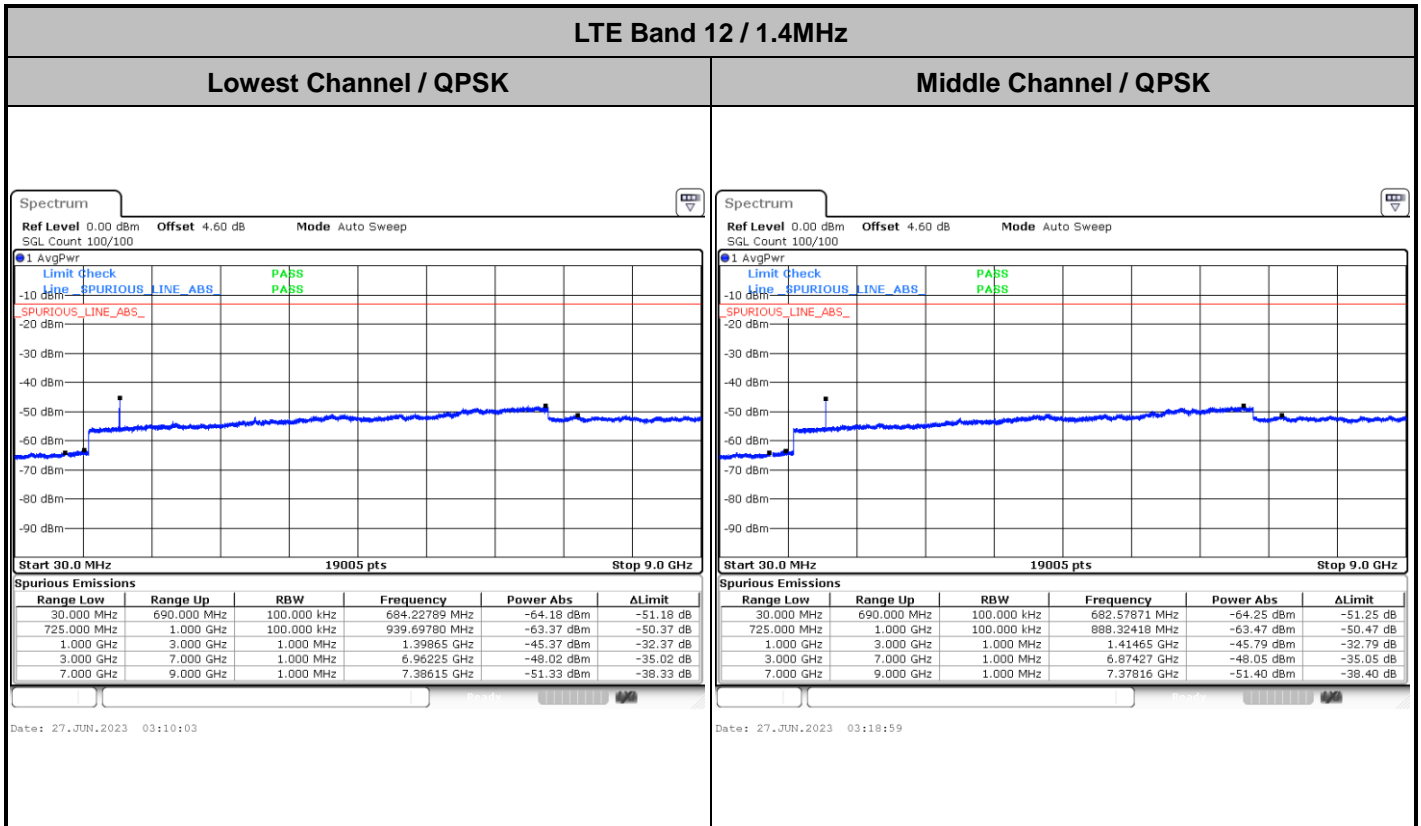
Highest Band Edge / Full RB



Date: 27 JUN 2023 04:21:26



Conducted Spurious Emission

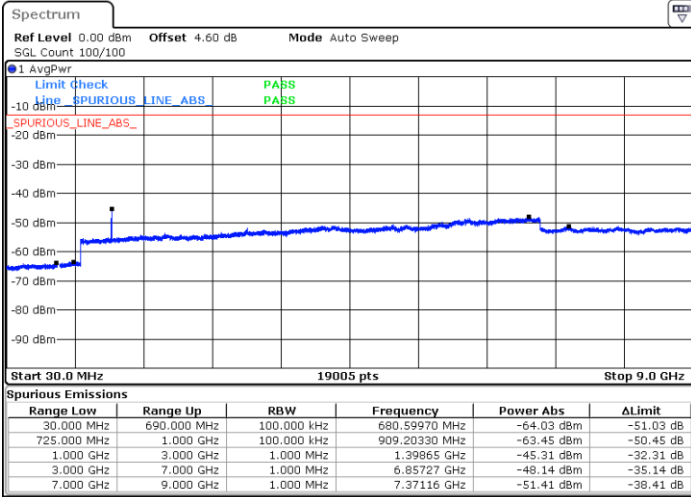




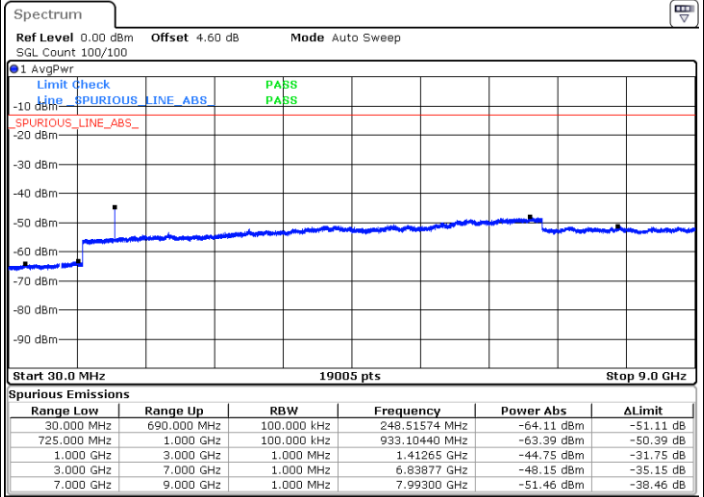
LTE Band 12 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK

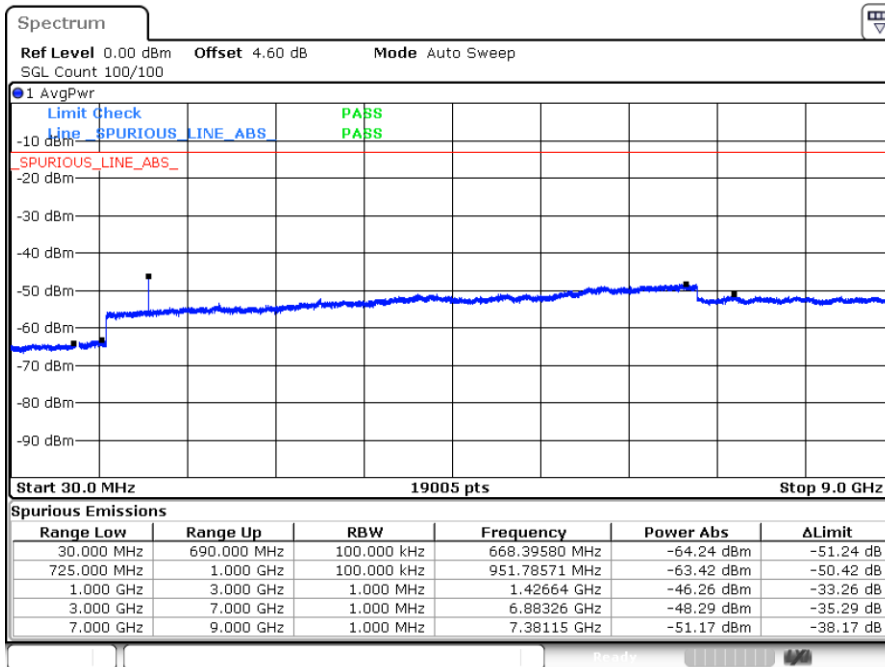


Date: 27 JUN 2023 03:28:48



Date: 27 JUN 2023 03:37:43

Highest Channel / QPSK

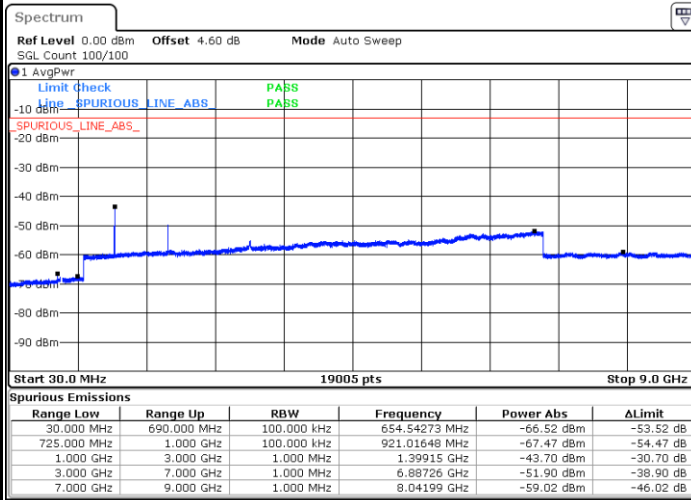


Date: 27 JUN 2023 03:38:35



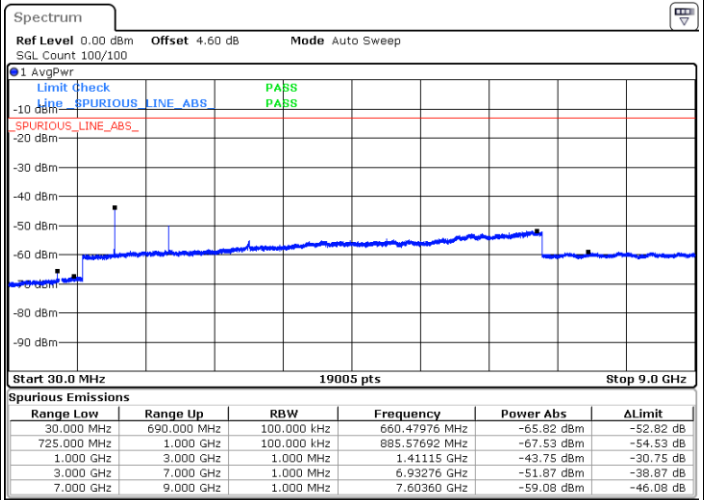
LTE Band 12 / 5MHz

Lowest Channel / QPSK



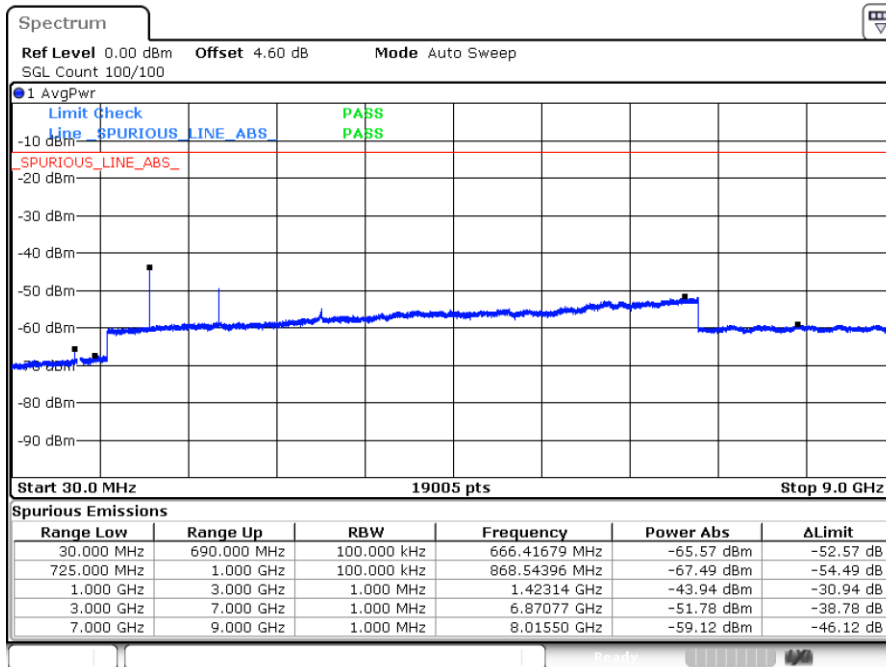
Date: 27 JUN 2023 03:47:32

Middle Channel / QPSK



Date: 27 JUN 2023 03:56:27

Highest Channel / QPSK



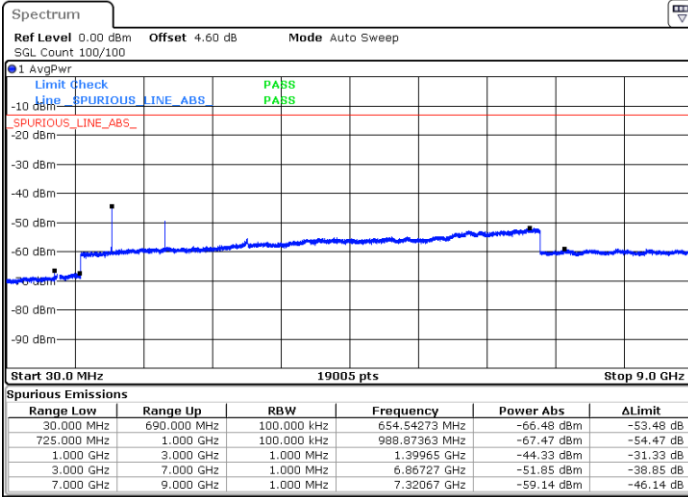
Date: 27 JUN 2023 03:57:20



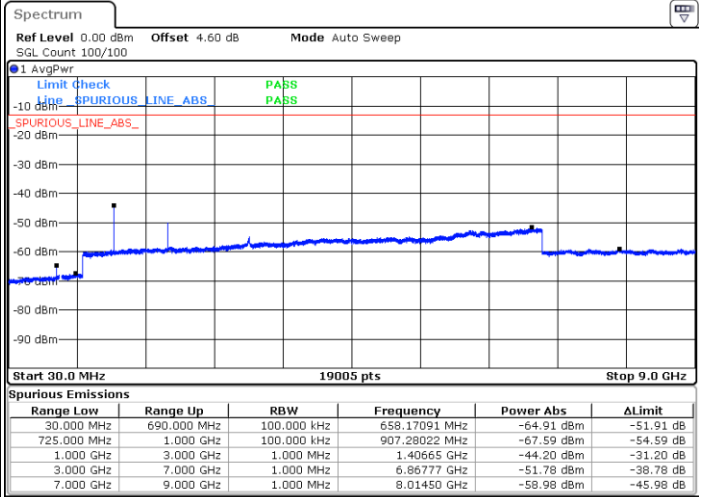
LTE Band 12 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK

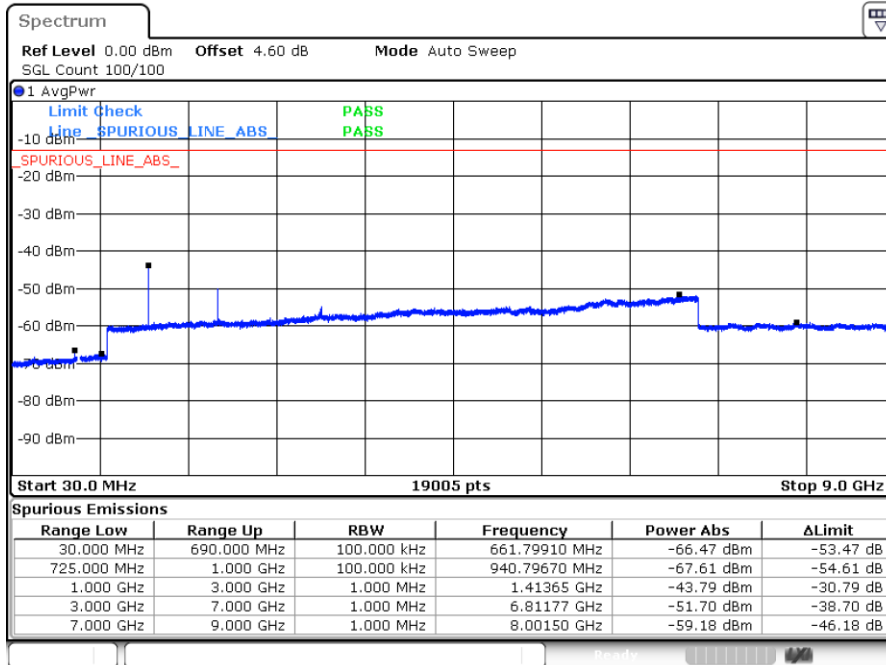


Date: 27.JUN.2023 04:06:16



Date: 27.JUN.2023 04:15:11

Highest Channel / QPSK



Date: 27.JUN.2023 04:16:04



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	0.0023	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0018	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0029	
20	Maximum Voltage	0.0014	
20	Normal Voltage	0.0007	
20	Battery End Point	0.0013	

Note:

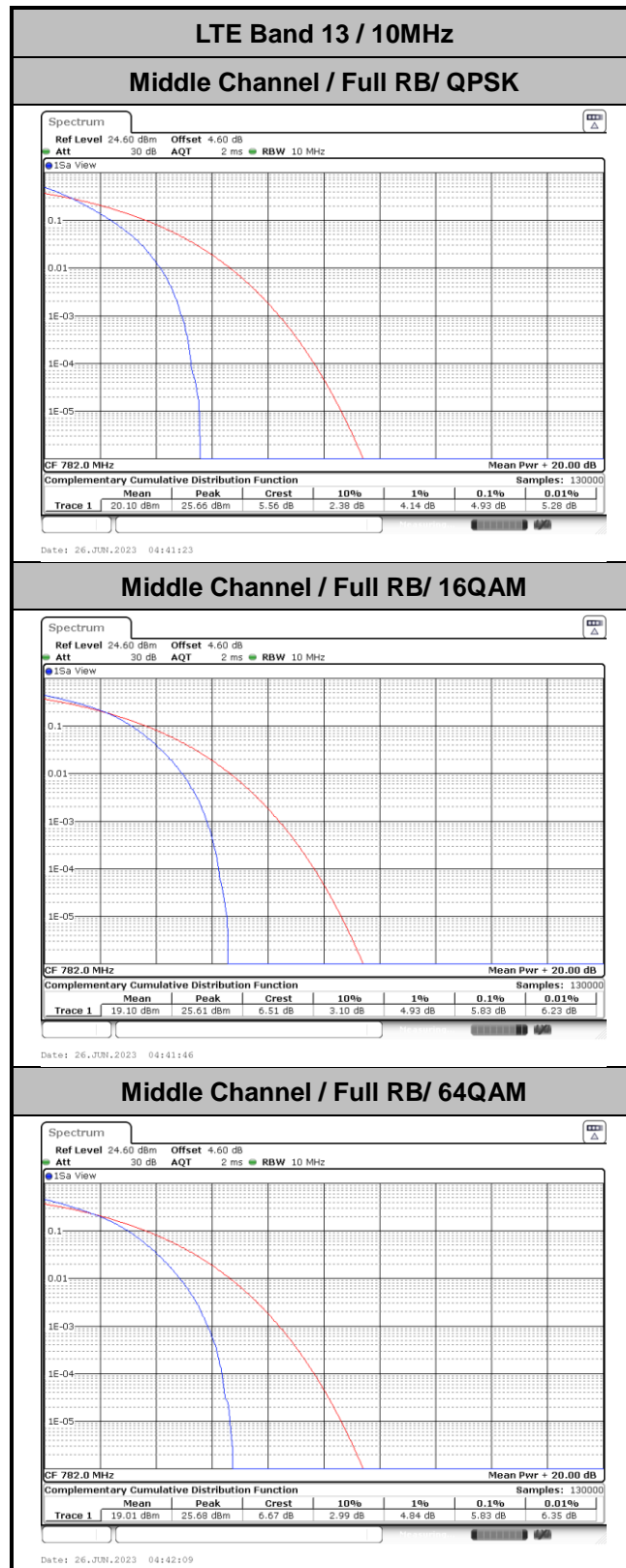
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 13

Peak-to-Average Ratio

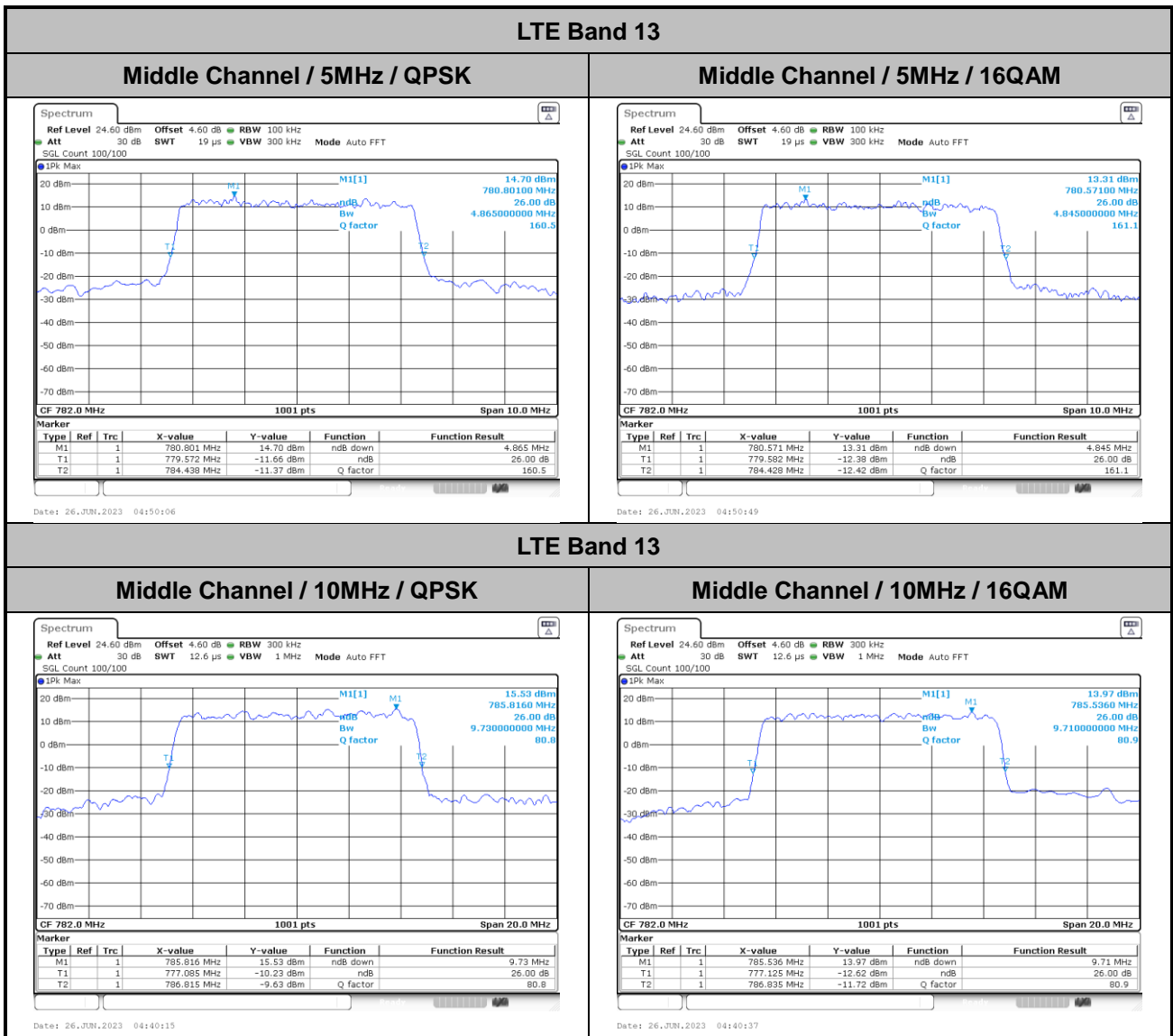
Mode	LTE Band 13 / 10MHz				
Mod.	QPSK	16QAM	64QAM	-	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	-	Result
Middle CH	4.93	5.83	5.83	-	PASS





26dB Bandwidth

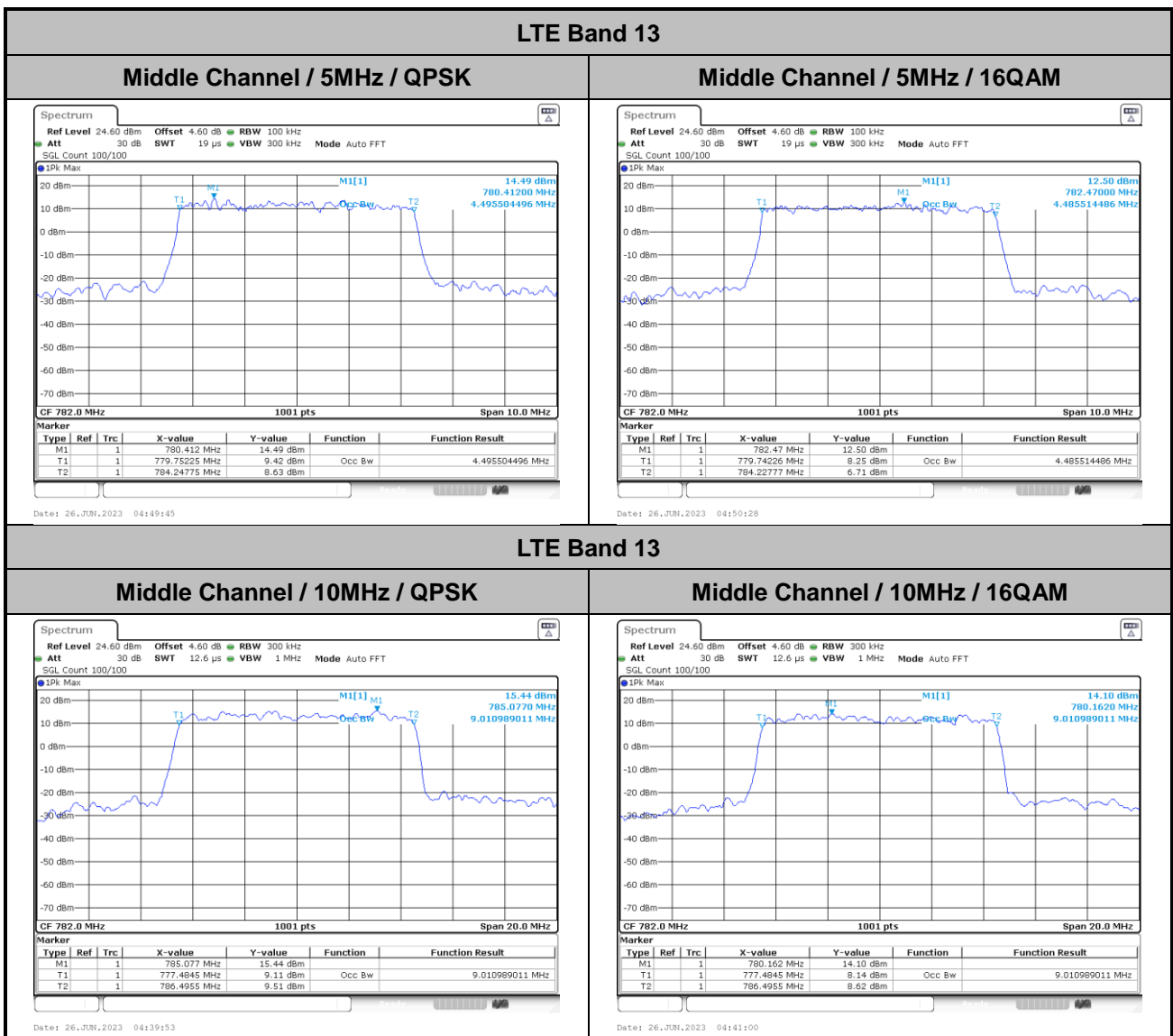
Mode	LTE Band 13 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.87	4.85
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.73	9.71





Occupied Bandwidth

Mode	LTE Band 13 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.50	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.01	9.01

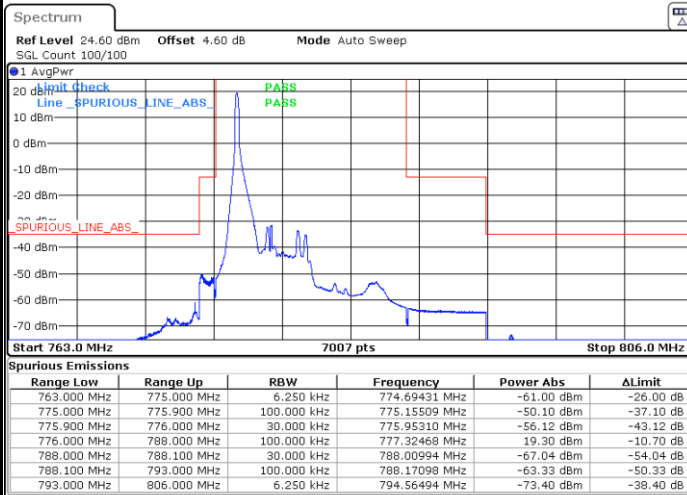




Conducted Band Edge

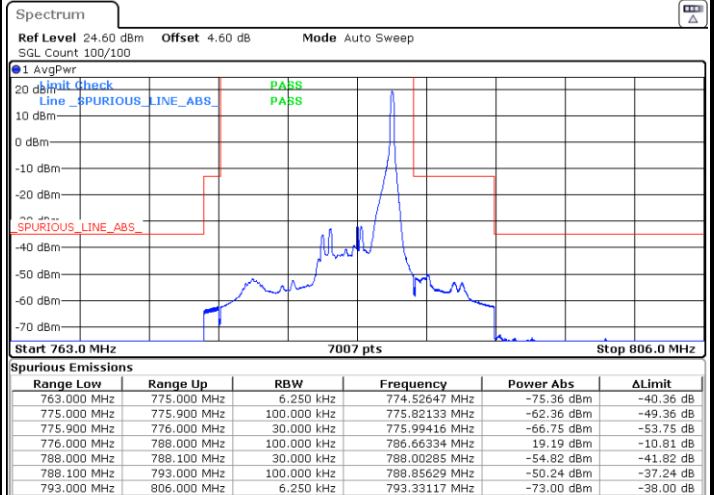
LTE Band 13 / 5MHz / QPSK

Lowest Band Edge / 1 RB



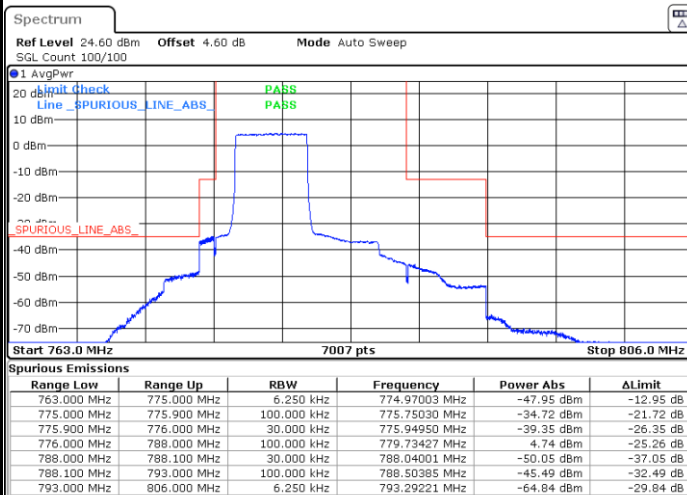
Date: 26.JUN.2023 03:58:30

Highest Band Edge / 1 RB



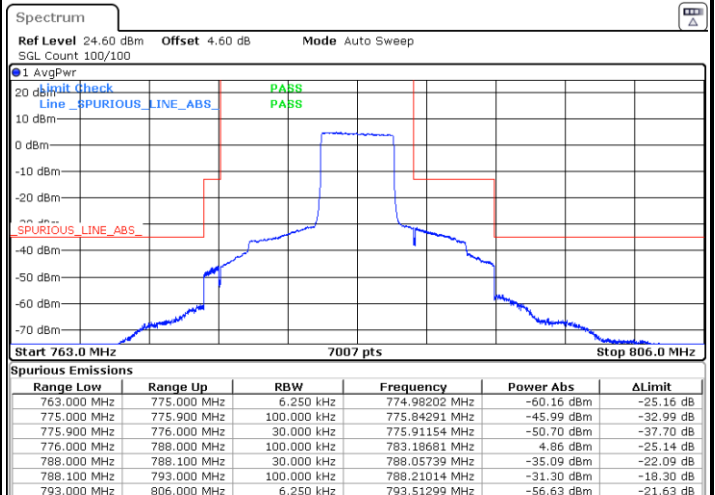
Date: 26.JUN.2023 04:12:22

Lowest Band Edge / Full RB



Date: 26.JUN.2023 04:07:44

Highest Band Edge / Full RB



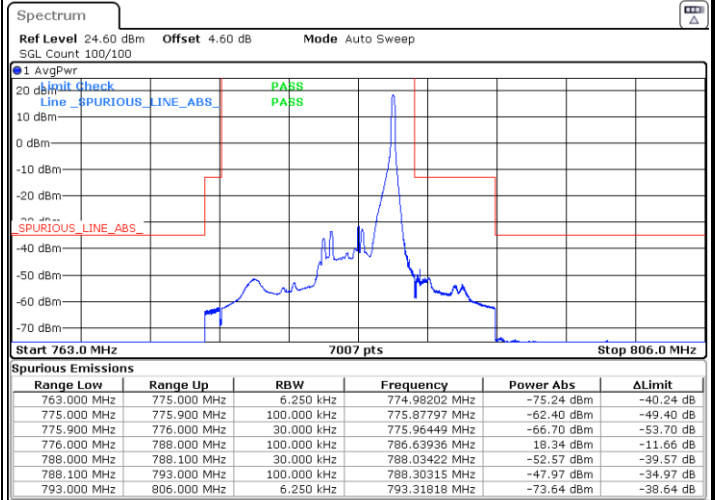
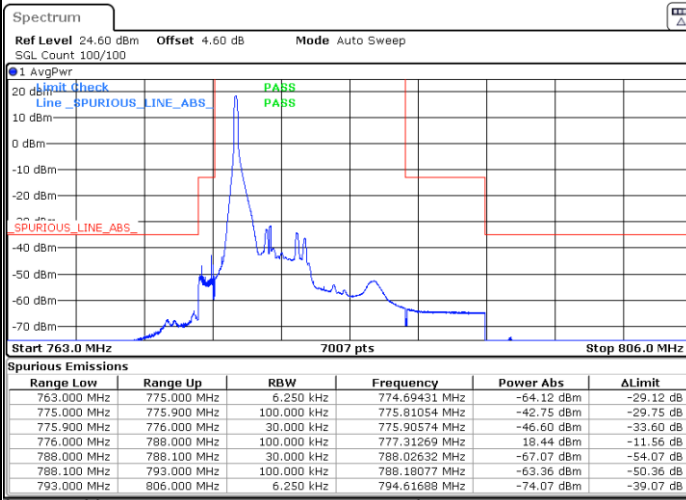
Date: 26.JUN.2023 04:21:36



LTE Band 13 / 5MHz / 16QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

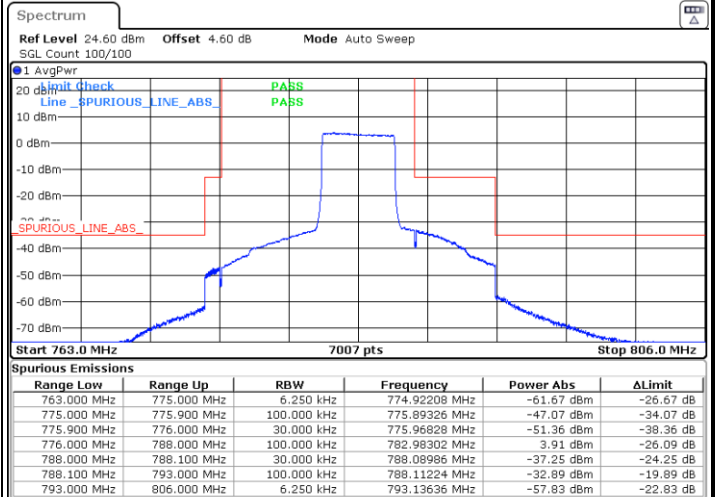
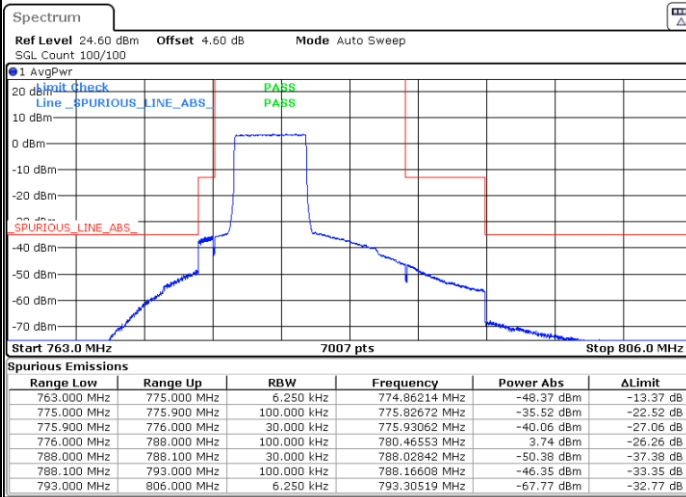


Date: 26.JUN.2023 04:00:21

Date: 26.JUN.2023 04:14:13

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 26.JUN.2023 04:05:53

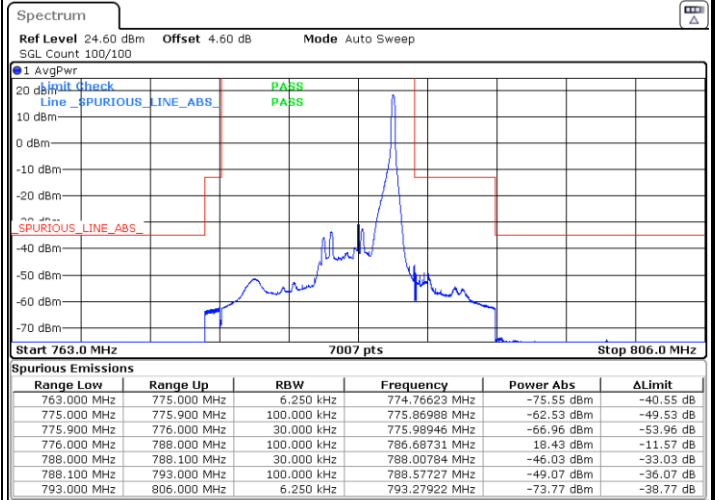
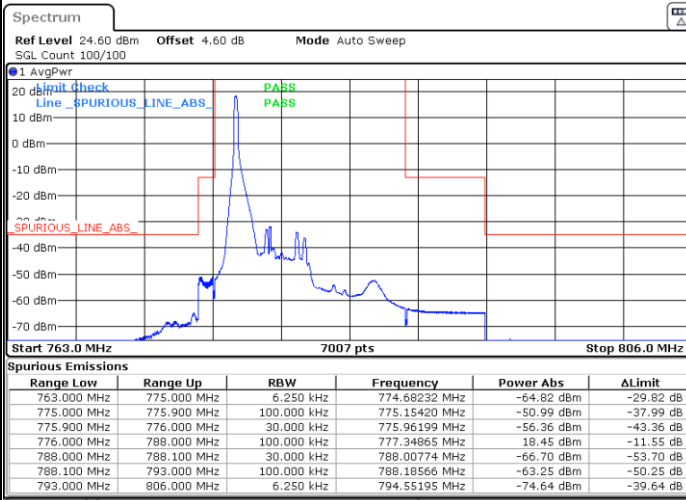
Date: 26.JUN.2023 04:19:45



LTE Band 13 / 5MHz / 64QAM

Lowest Band Edge / 1RB

Highest Band Edge / 1 RB

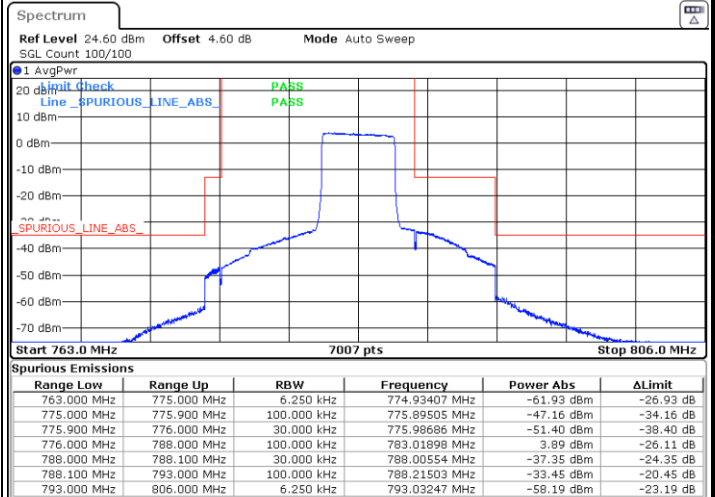
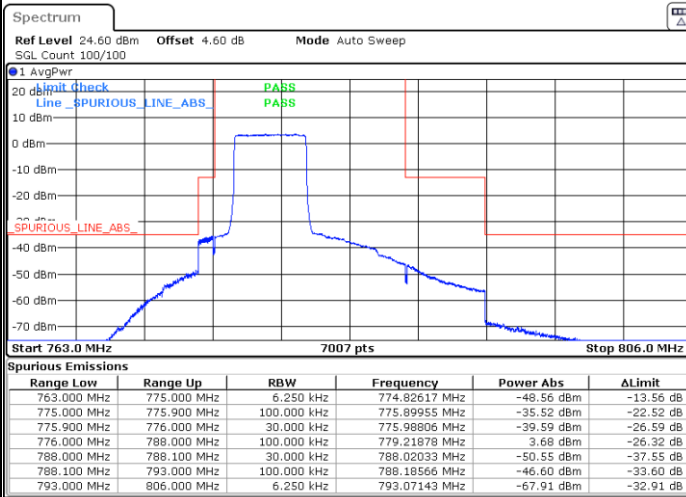


Date: 26.JUN.2023 04:02:12

Date: 26.JUN.2023 04:16:04

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



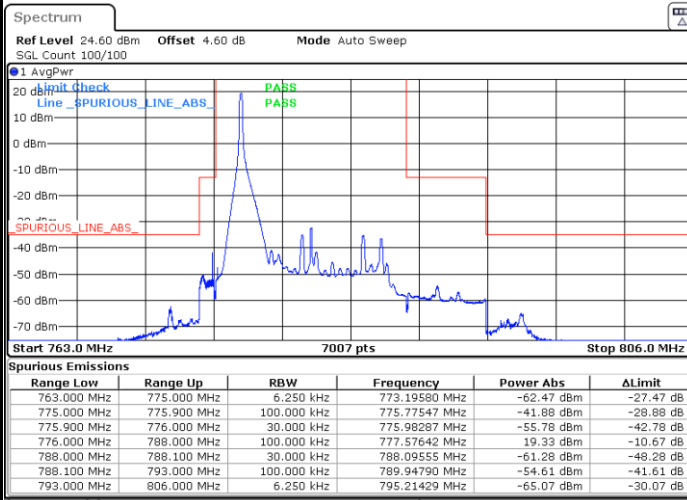
Date: 26.JUN.2023 04:04:03

Date: 26.JUN.2023 04:17:54



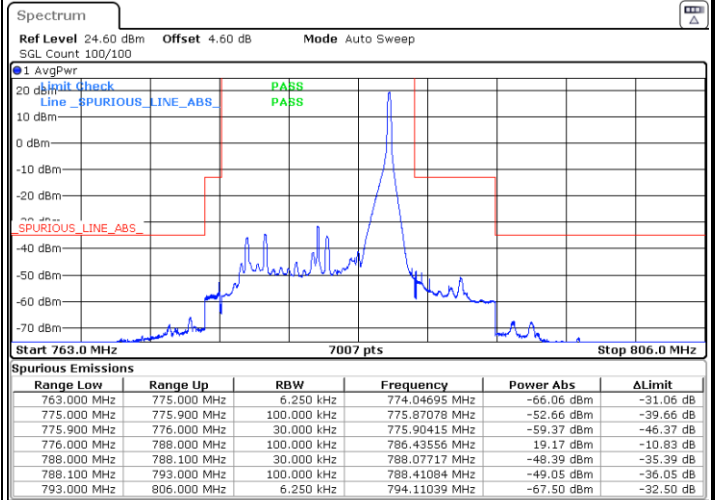
LTE Band 13 / 10MHz / QPSK

middle Band Edge / 1 RB



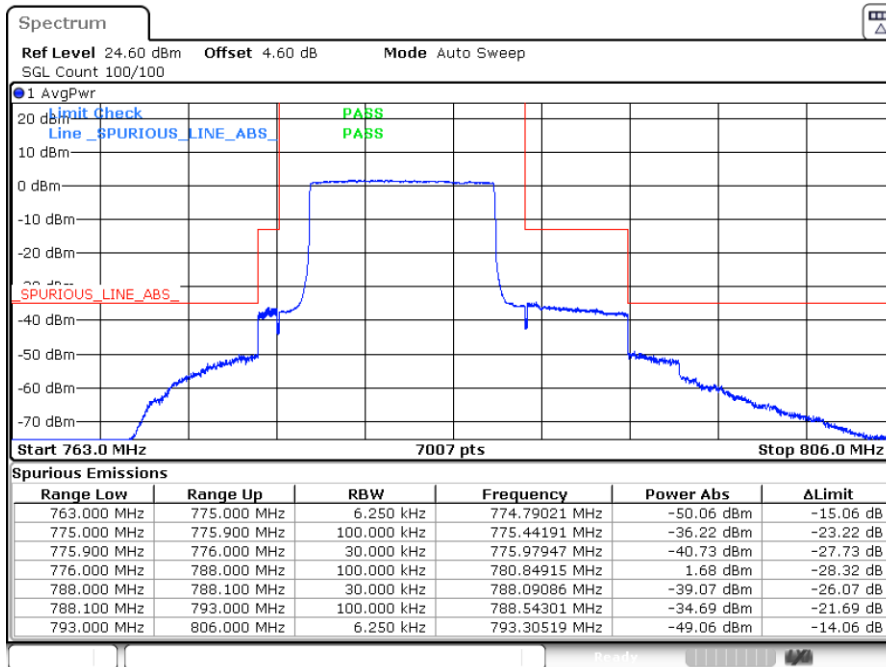
Date: 26. JUN. 2023 04:24:49

middle Band Edge / 1 RB



Date: 26. JUN. 2023 04:35:50

Middle Band Edge / Full RB

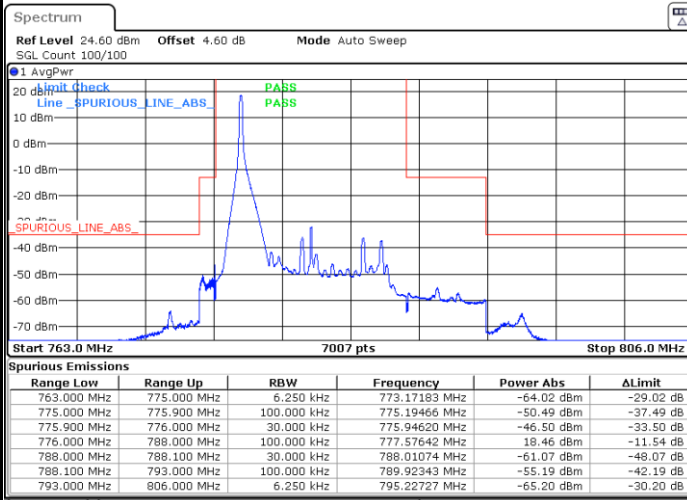


Date: 26. JUN. 2023 04:34:00



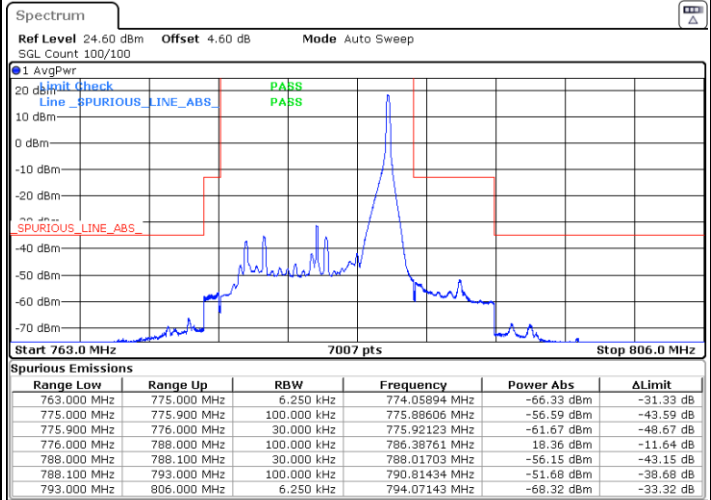
LTE Band 13 / 10MHz / 16QAM

middle Band Edge / 1 RB



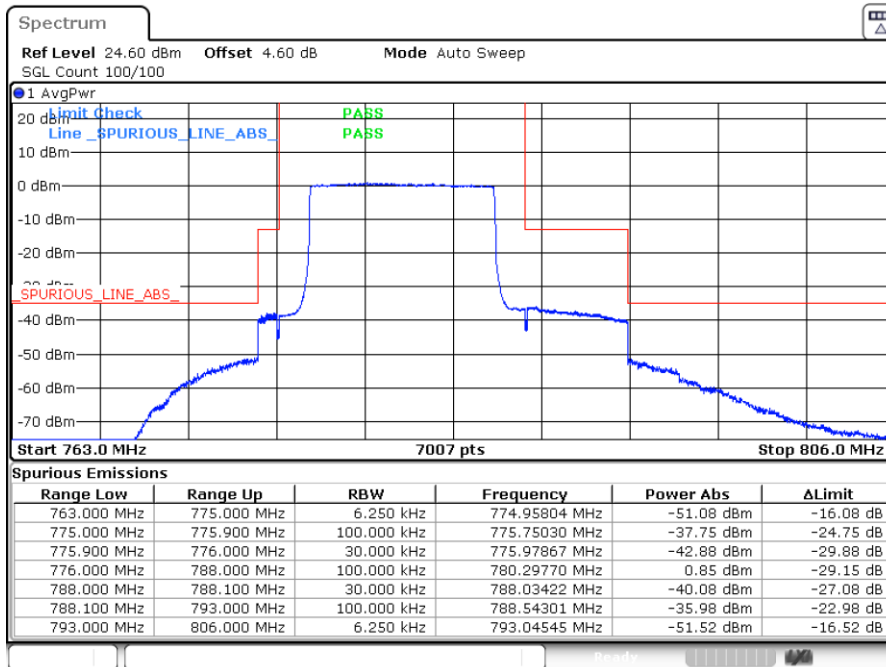
Date: 26 JUN 2023 04:26:39

middle Band Edge / 1 RB



Date: 26 JUN 2023 04:37:41

middle Band Edge / Full RB

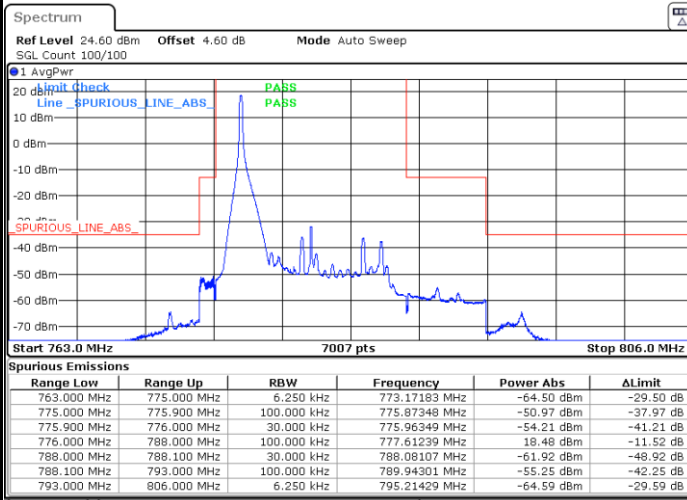


Date: 26 JUN 2023 04:32:10



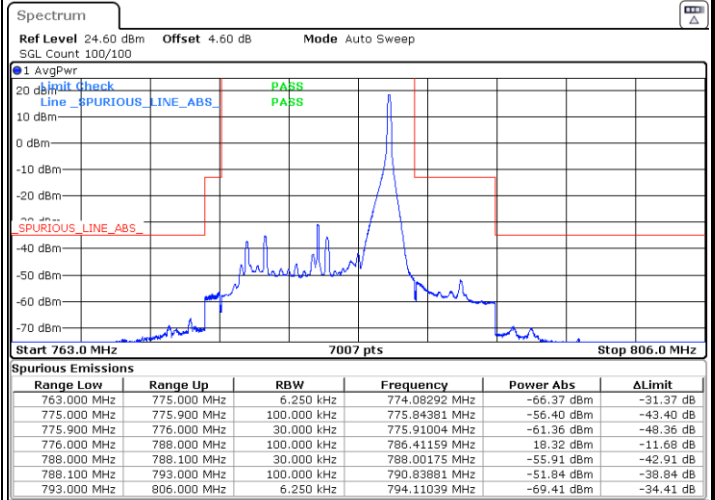
LTE Band 13 / 10MHz / 64QAM

middle Band Edge / 1 RB



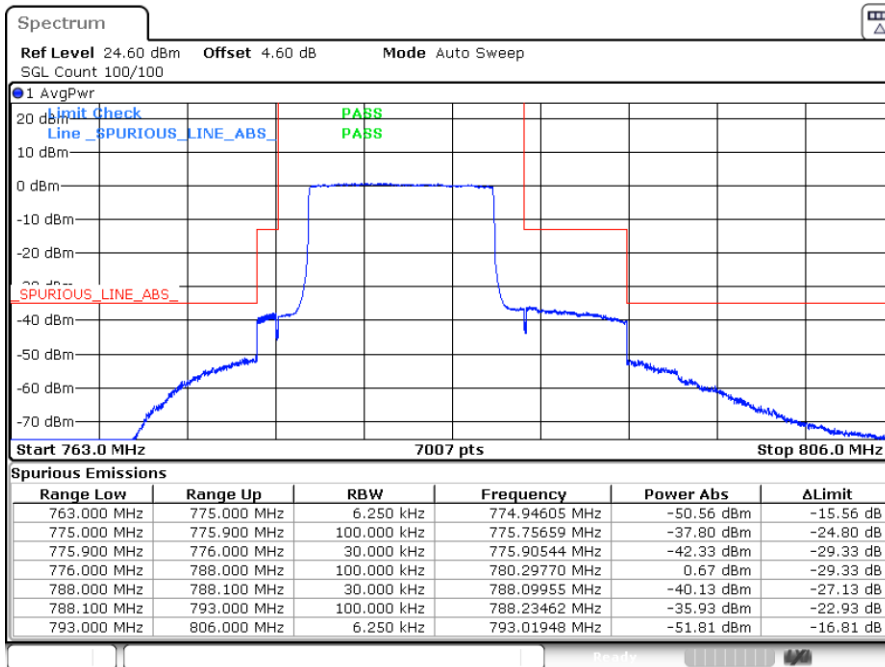
Date: 26 JUN 2023 04:28:29

middle Band Edge / 1 RB



Date: 26 JUN 2023 04:39:31

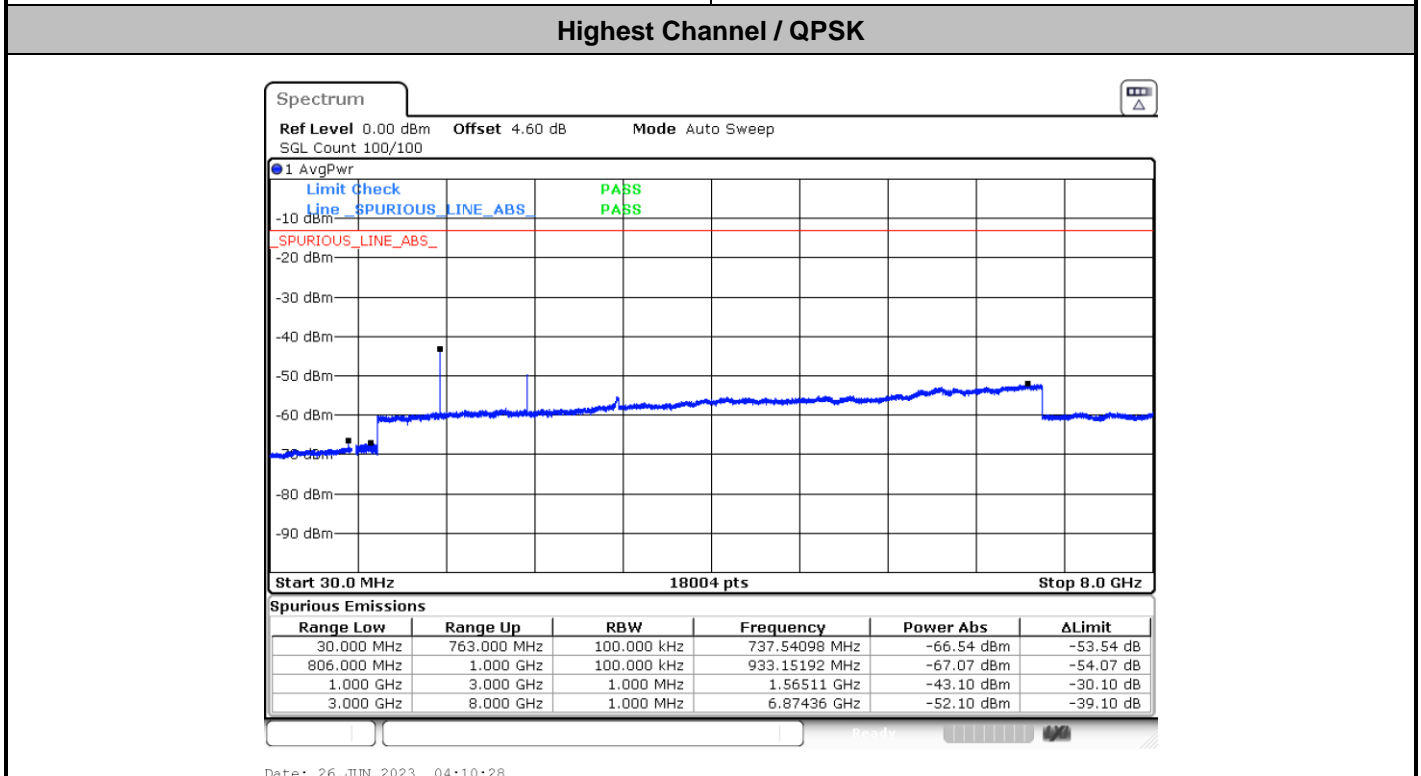
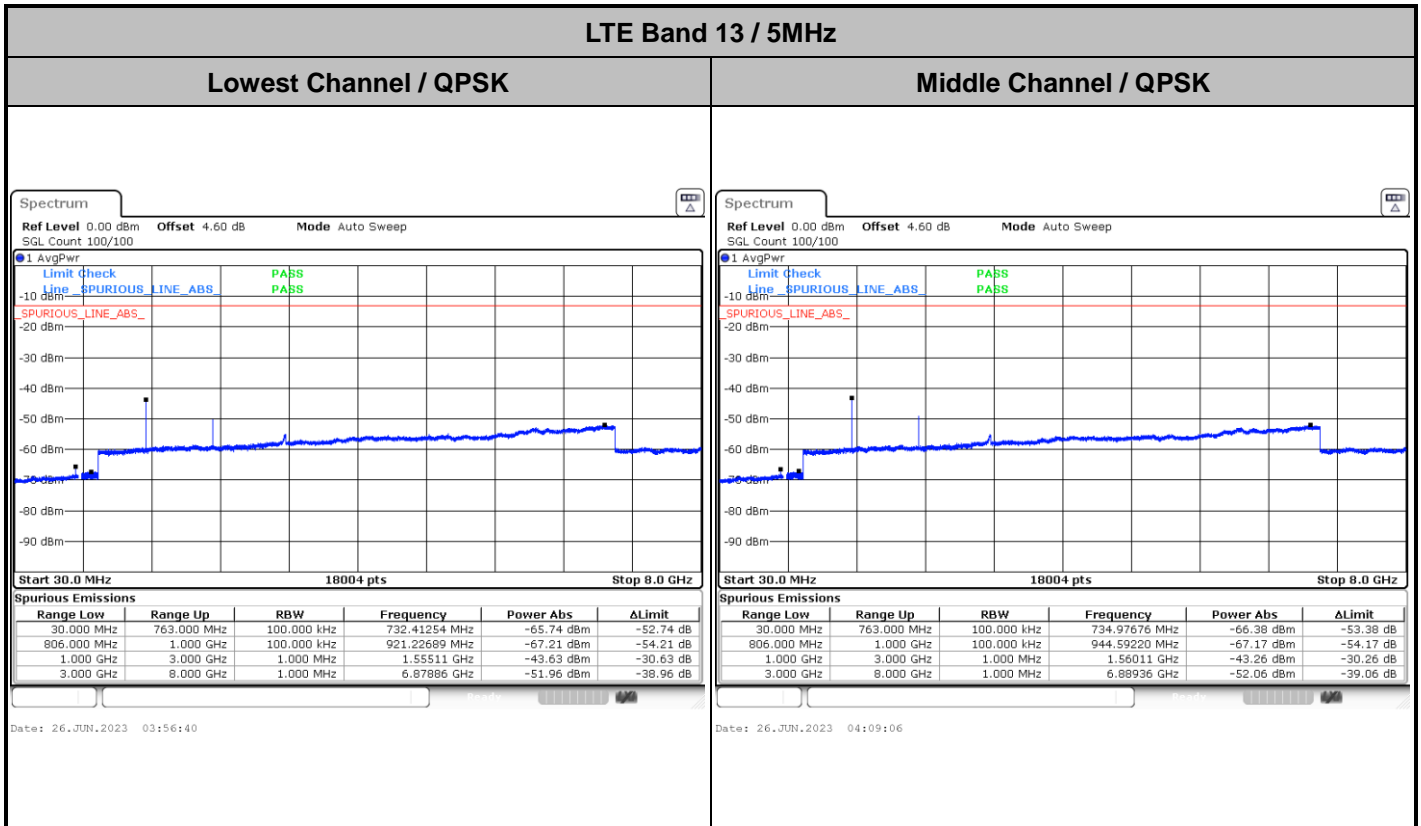
middle Band Edge / Full RB



Date: 26 JUN 2023 04:30:19



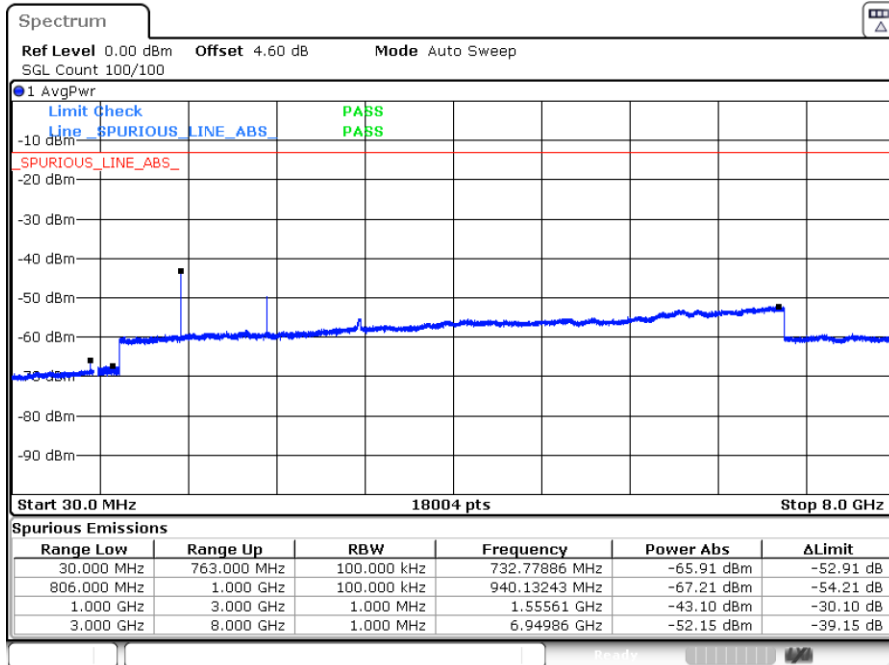
Conducted Spurious Emission





LTE Band 13 / 10MHz

Middle Channel / QPSK



Date: 26 JUN 2023 04:22:58



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	0.0005	PASS
40	Normal Voltage	0.0031	
30	Normal Voltage	0.0052	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0023	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0008	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0025	
20	Normal Voltage	0.0002	
20	Battery End Point	0.0018	

Note:

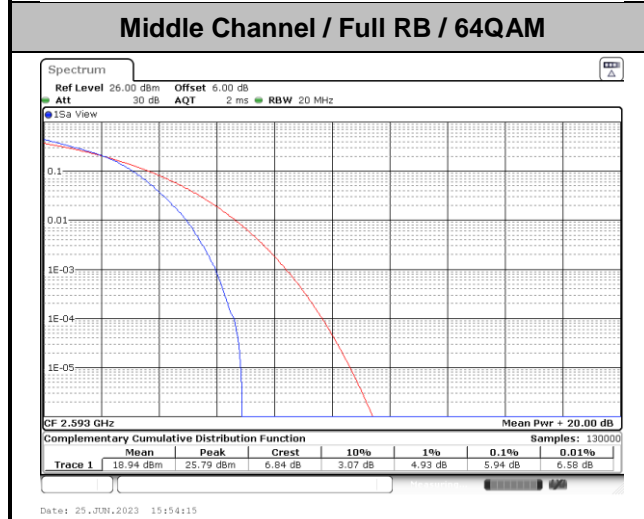
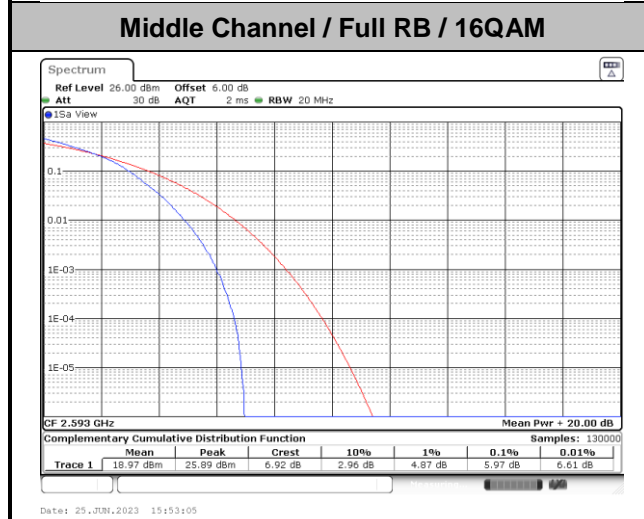
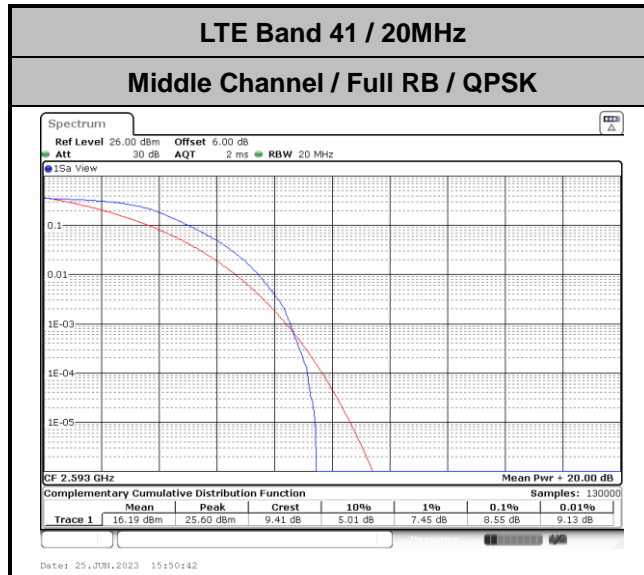
1. Normal Voltage =3.91 V. ; Battery End Point (BEP) =3.6 V. ; Maximum Voltage =4.45 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41

Peak-to-Average Ratio

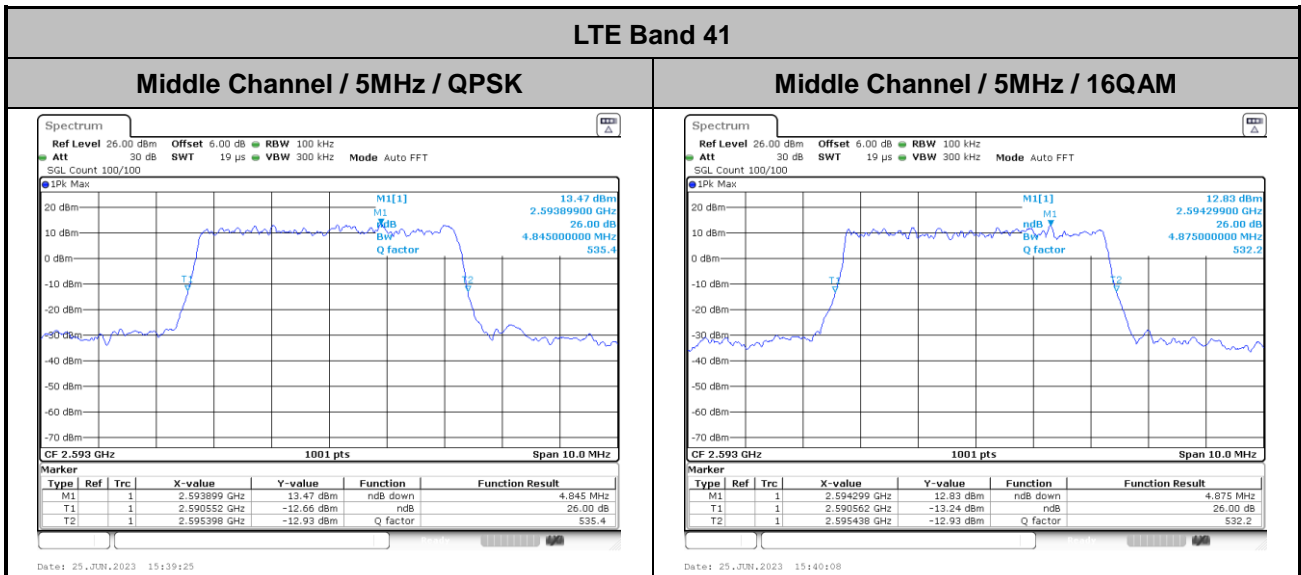
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	8.55	5.97	5.94	PASS





26dB Bandwidth

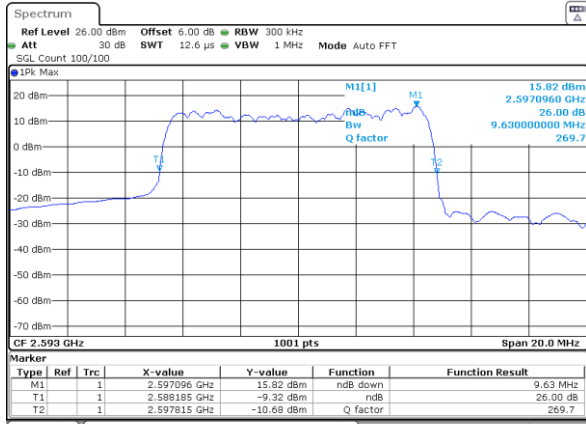
Mode	LTE Band 41 : 26dB BW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.85	4.88
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.63	9.61
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	14.39	14.42
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	19.10	18.94





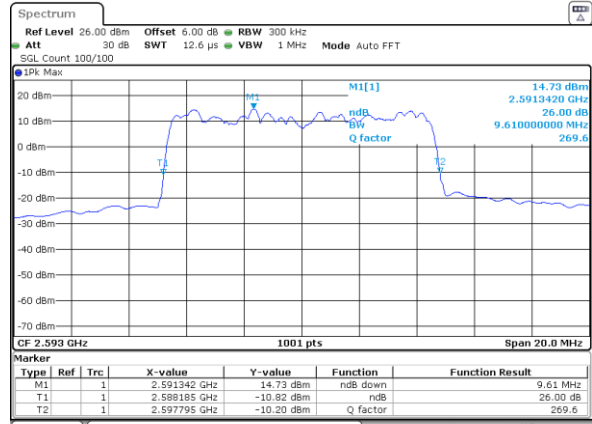
LTE Band 41

Middle Channel / 10MHz / QPSK



Date: 25 JUN 2023 15:43:52

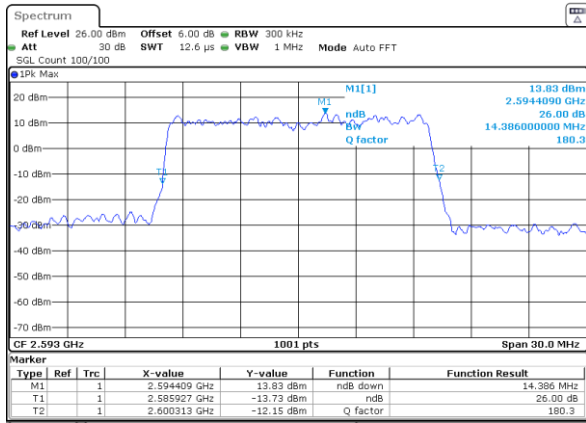
Middle Channel / 10MHz / 16QAM



Date: 25 JUN 2023 15:44:14

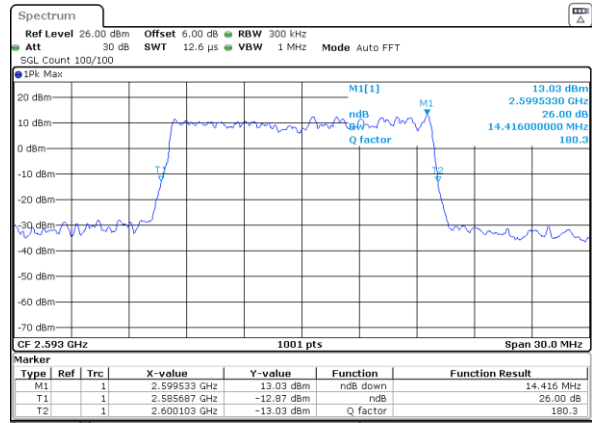
LTE Band 41

Middle Channel / 15MHz / QPSK



Date: 25 JUN 2023 15:46:45

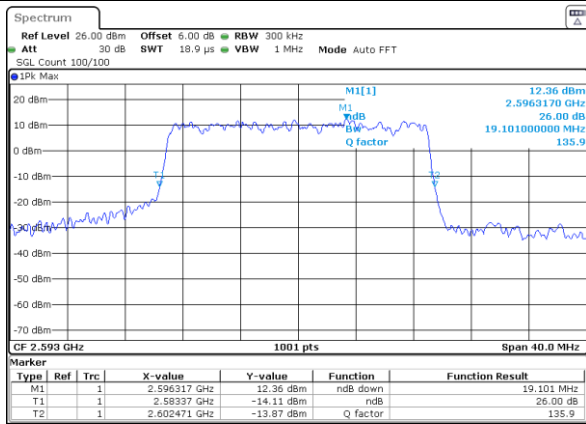
Middle Channel / 15MHz / 16QAM



Date: 25 JUN 2023 15:47:06

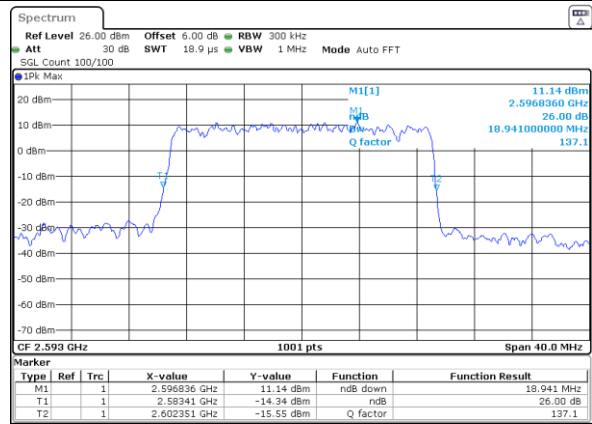
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 25 JUN 2023 15:49:37

Middle Channel / 20MHz / 16QAM



Date: 25 JUN 2023 15:49:58



Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)	
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.48	4.49
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.09	9.01
BW	15MHz	
Mod.	QPSK	16QAM
Middle CH	13.49	13.46
BW	20MHz	
Mod.	QPSK	16QAM
Middle CH	17.90	17.86

