



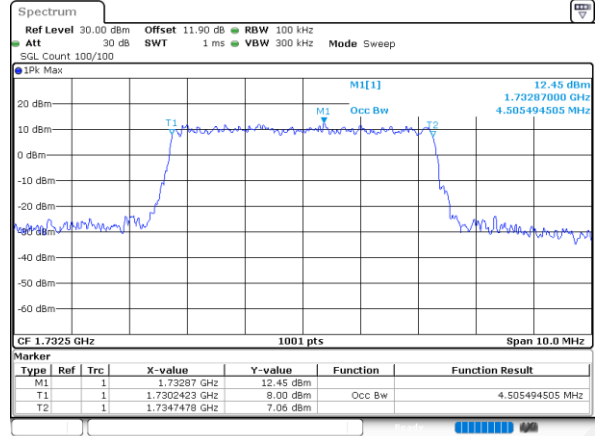
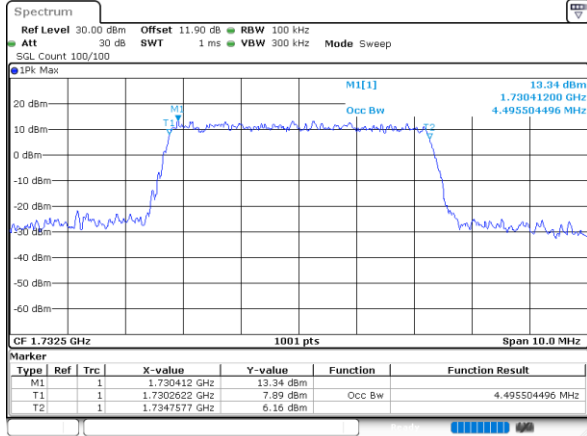
LTE Band 4

Middle Channel / 5MHz / QPSK

Middle Channel / 5MHz / 16QAM

Middle Channel / Full RB

Middle Channel / Full RB



Date: 4.DEC.2023 09:14:29

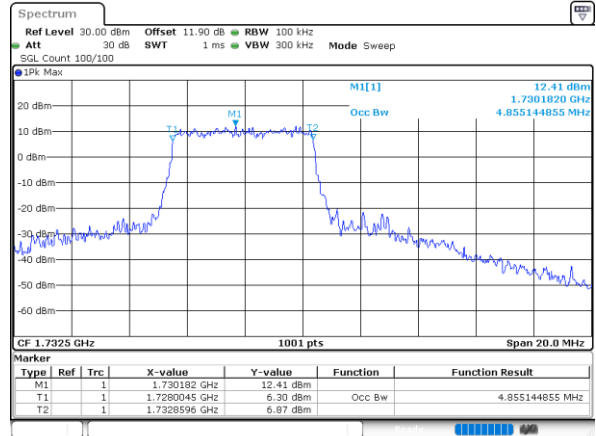
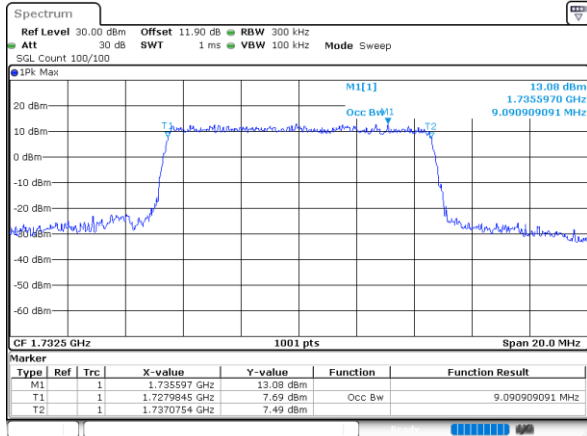
Date: 4.DEC.2023 09:14:54

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM

Middle Channel / Full RB

Middle Channel / 27 RB0



Date: 4.DEC.2023 09:22:26

Date: 4.DEC.2023 09:22:51



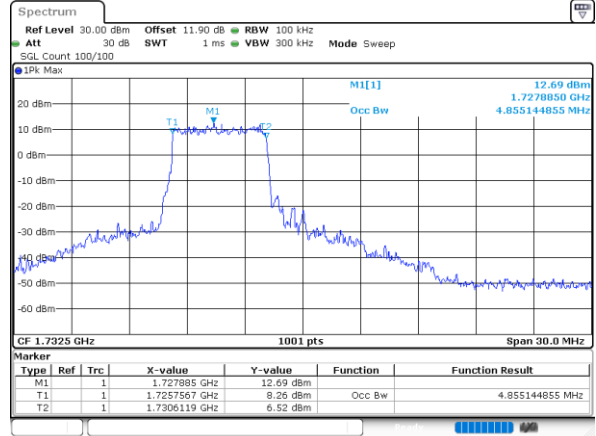
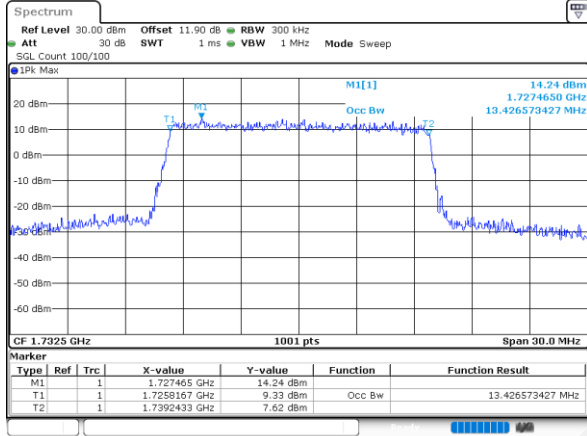
LTE Band 4

Middle Channel / 15MHz / QPSK

Middle Channel / 15MHz / 16QAM

Middle Channel / Full RB

Middle Channel / 27 RB0



Date: 4.DEC.2023 09:34:41

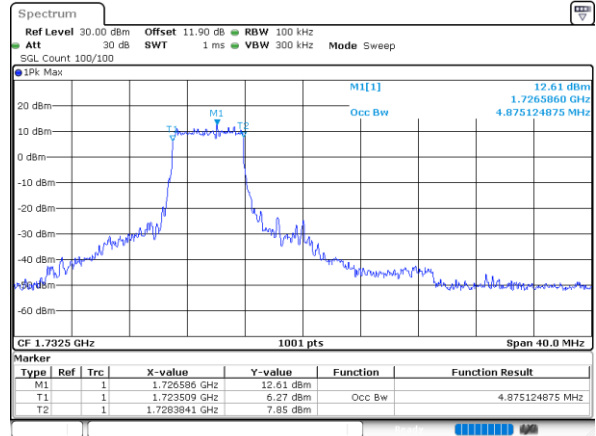
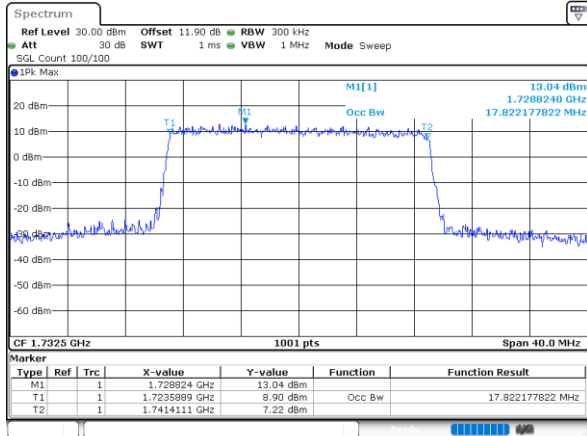
Date: 4.DEC.2023 09:35:06

Middle Channel / 20MHz / QPSK

Middle Channel / 20MHz / 16QAM

Middle Channel / Full RB

Middle Channel / 27 RB0



Date: 4.DEC.2023 09:46:39

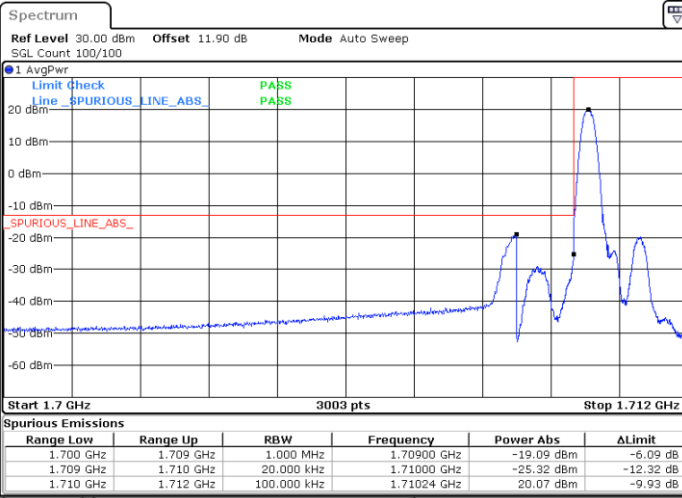
Date: 4.DEC.2023 09:47:04



Conducted Band Edge

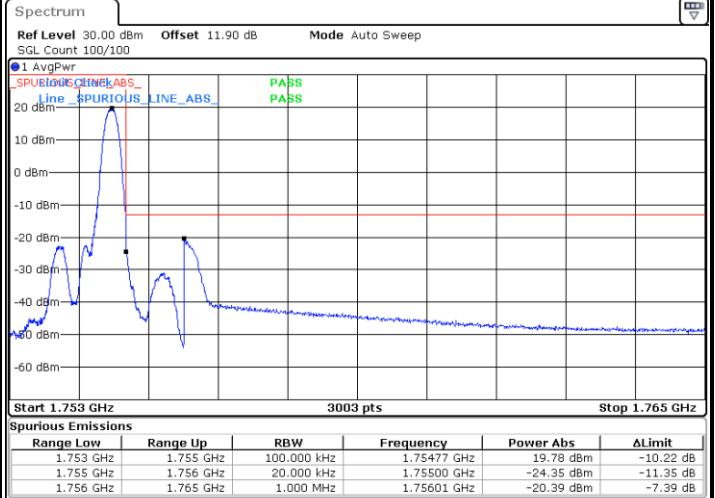
LTE Band 4 / 1.4MHz / QPSK

Lowest Band Edge / 1RB0



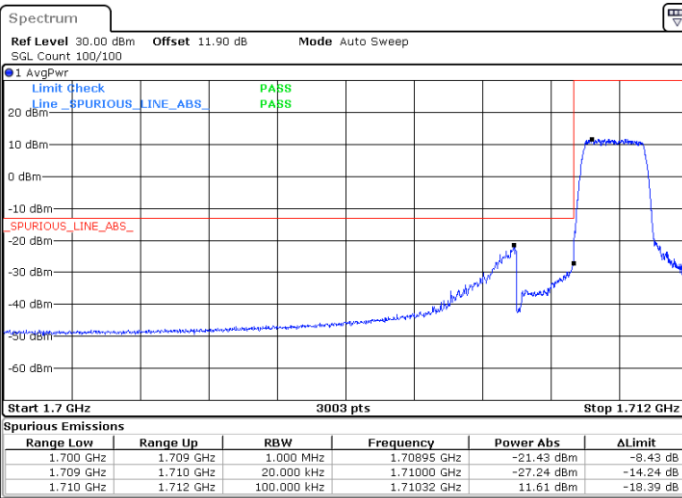
Date: 4.DEC.2023 08:02:30

Highest Band Edge / 1RBmax



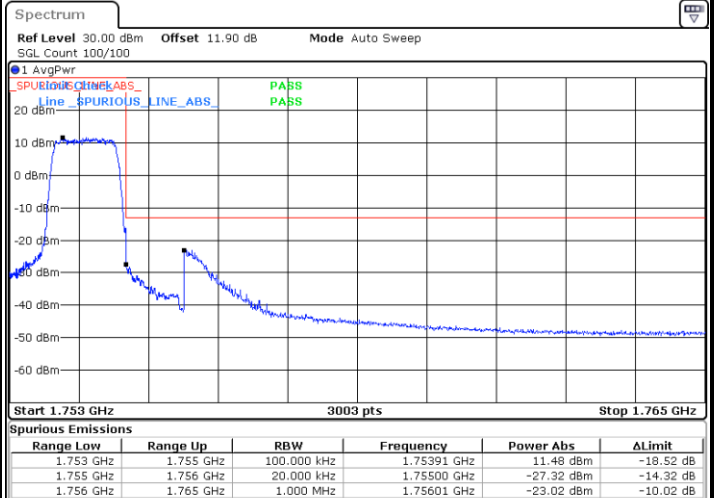
Date: 4.DEC.2023 08:11:33

Lowest Band Edge / Full RB



Date: 4.DEC.2023 08:04:59

Highest Band Edge / Full RB



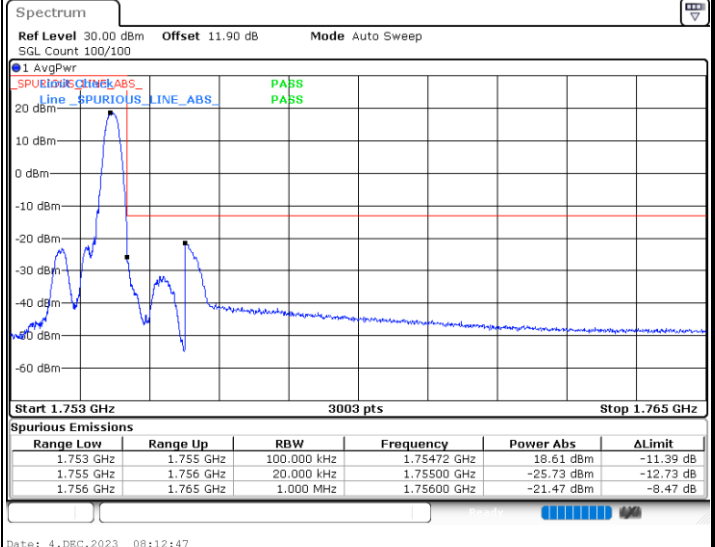
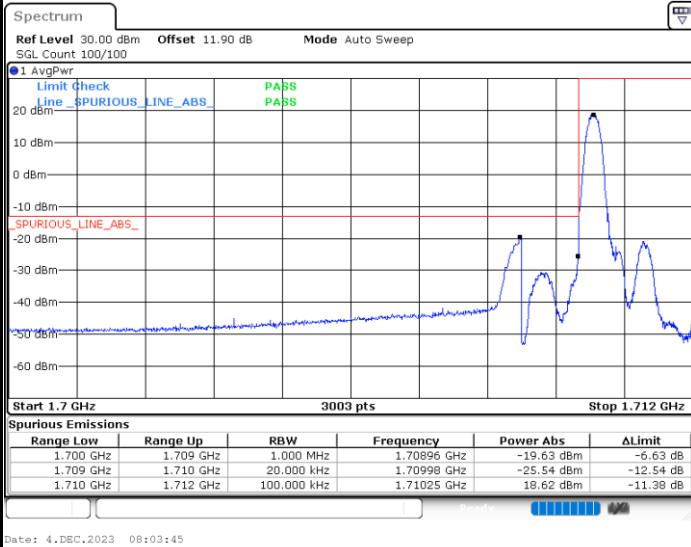
Date: 4.DEC.2023 08:14:02



LTE Band 4 / 1.4MHz / 16QAM

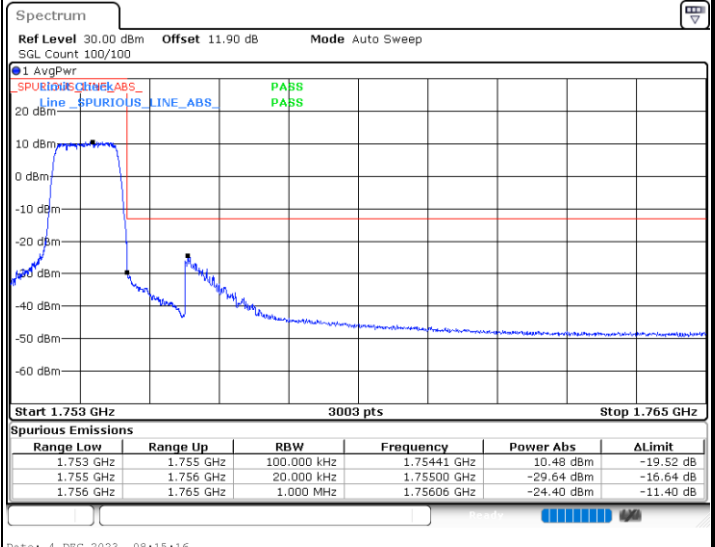
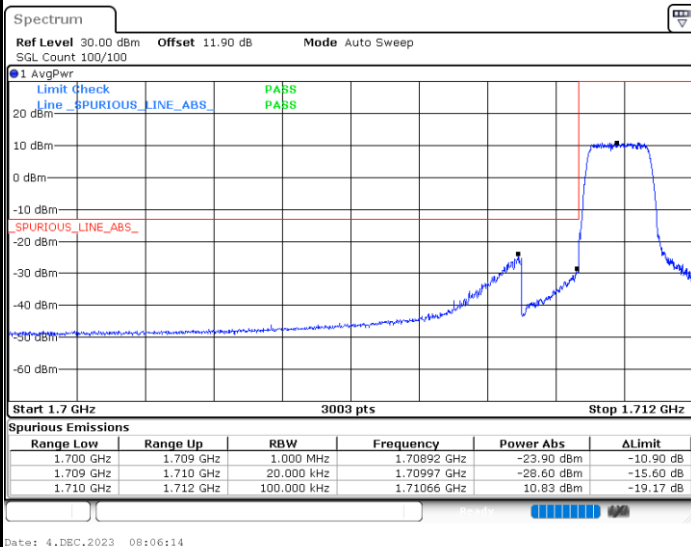
Lowest Band Edge / 1 RB0

Highest Band Edge / 1 RBmax



Lowest Band Edge / Full RB

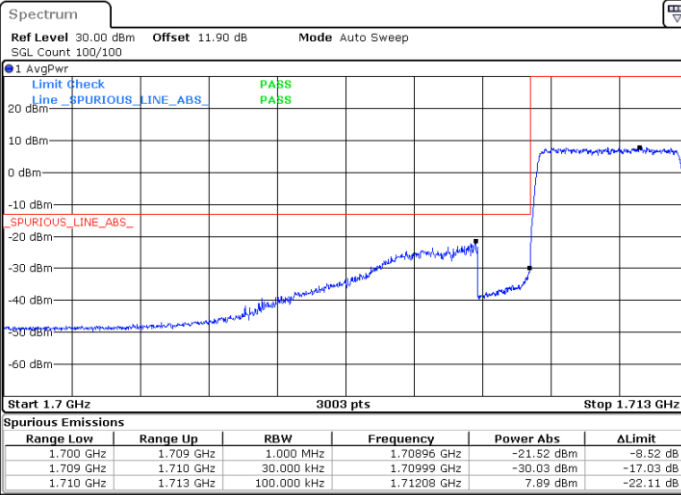
Highest Band Edge / Full RB





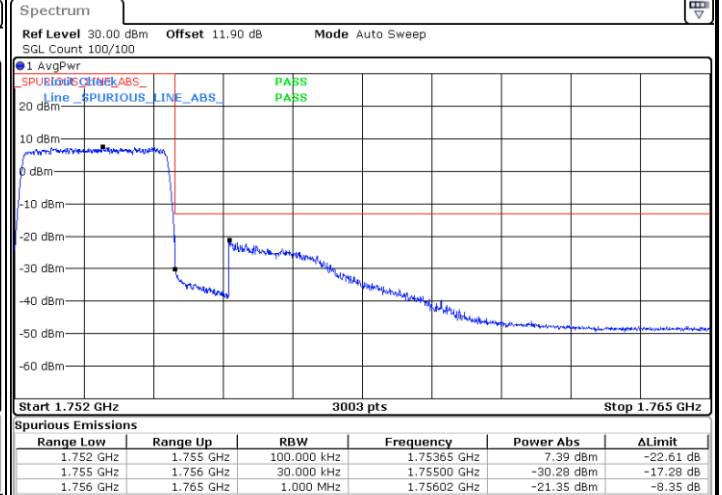
LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 4.DEC.2023 08:18:31

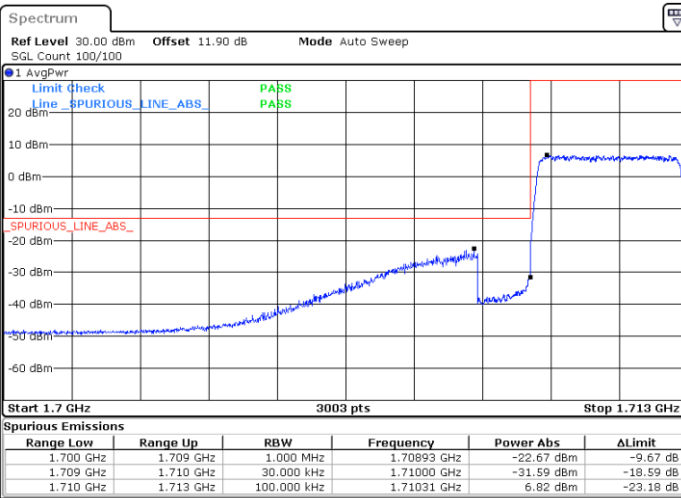
Highest Band Edge / Full RB



Date: 4.DEC.2023 09:04:56

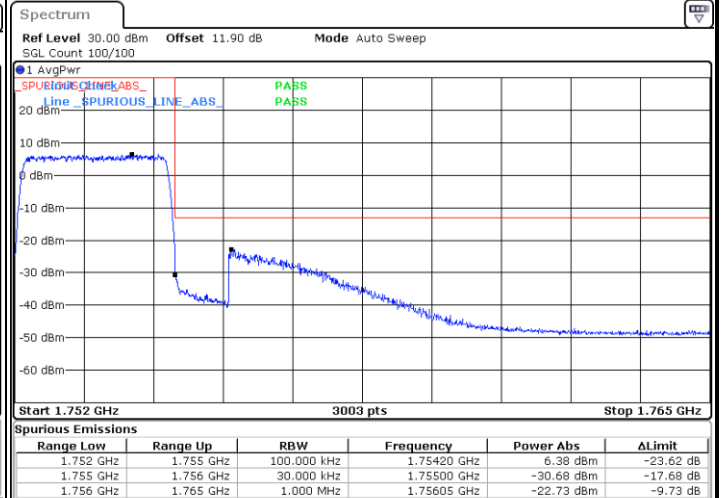
LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / Full RB



Date: 4.DEC.2023 08:19:46

Highest Band Edge / Full RB

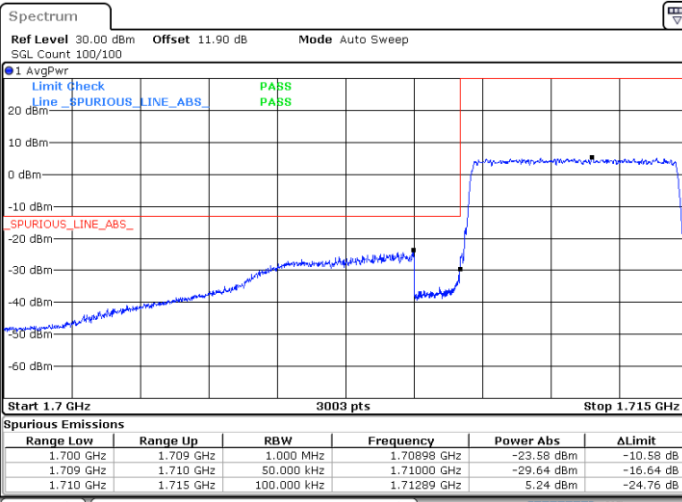


Date: 4.DEC.2023 09:06:10

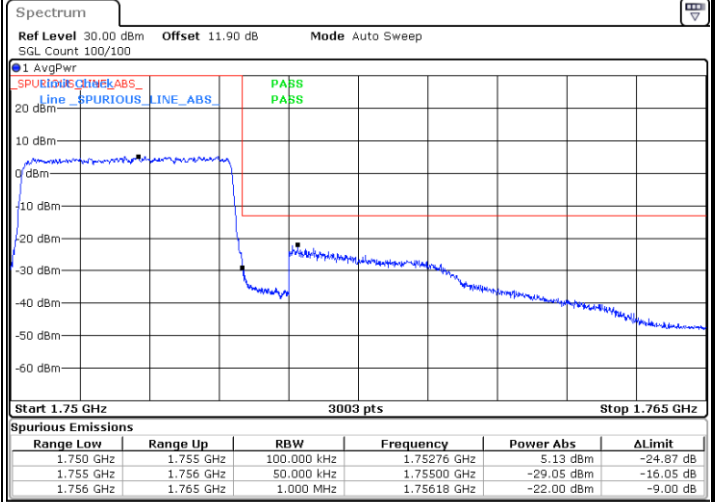


LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / Full RB

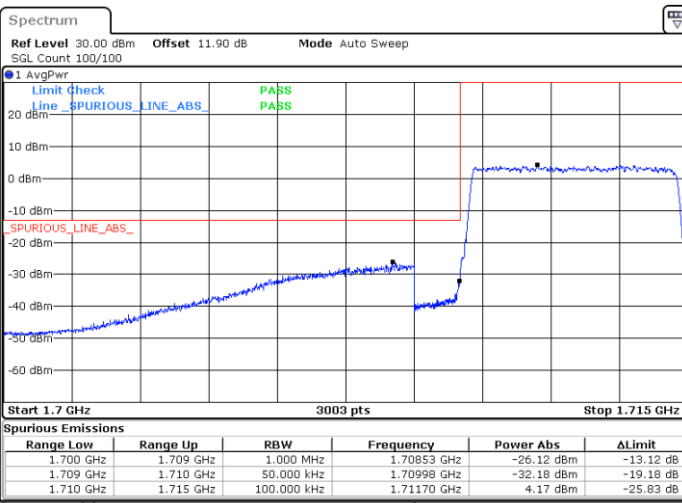


Highest Band Edge / Full RB

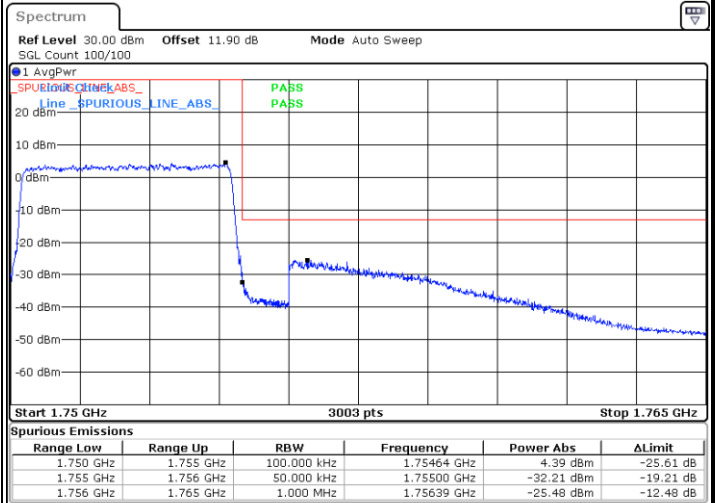


LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / Full RB



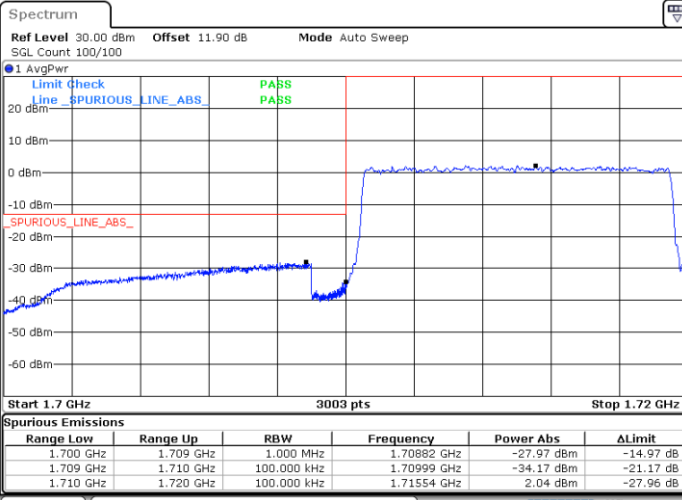
Highest Band Edge / Full RB





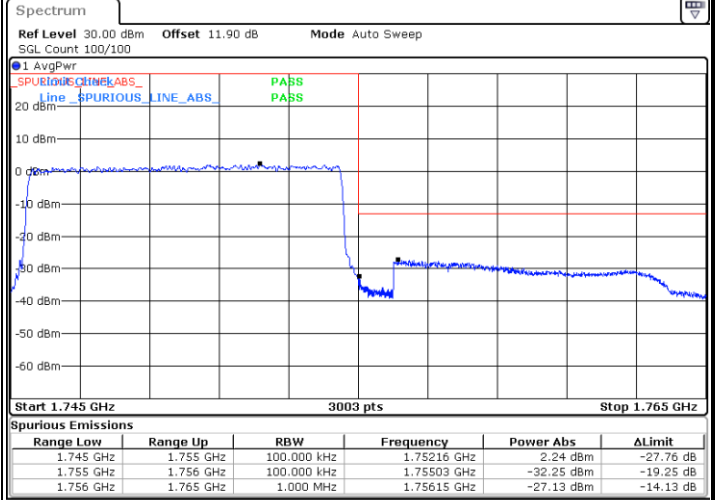
LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 4.DEC.2023 09:20:47

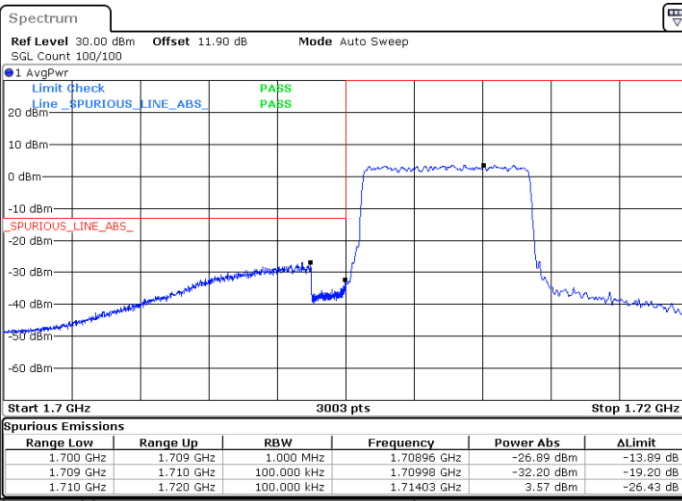
Highest Band Edge / Full RB



Date: 4.DEC.2023 09:24:54

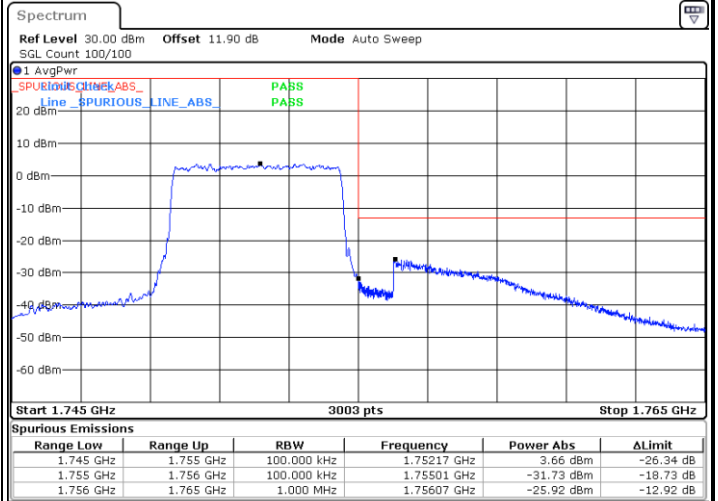
LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 27 RB0



Date: 4.DEC.2023 09:22:01

Highest Band Edge / 27 RBmax

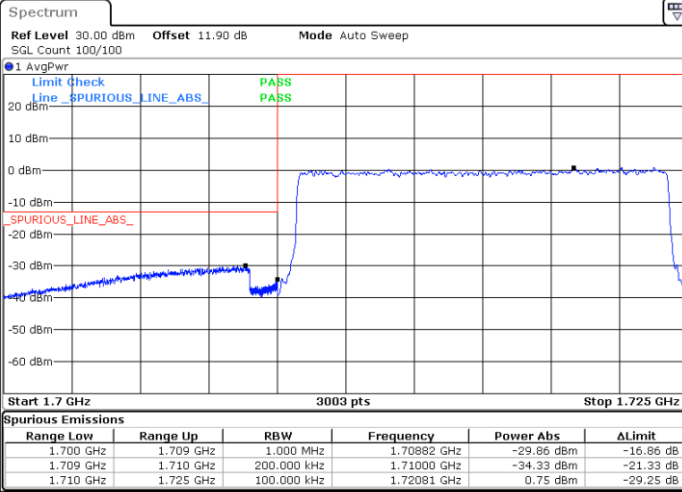


Date: 4.DEC.2023 09:26:08



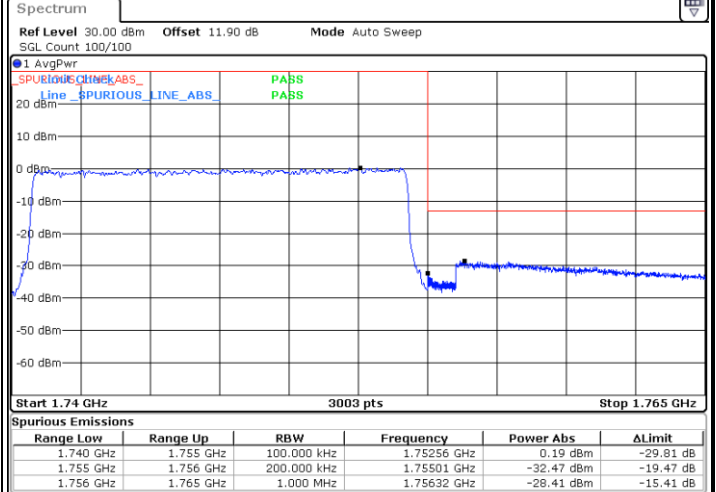
LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / Full RB



Date: 4.DEC.2023 09:33:02

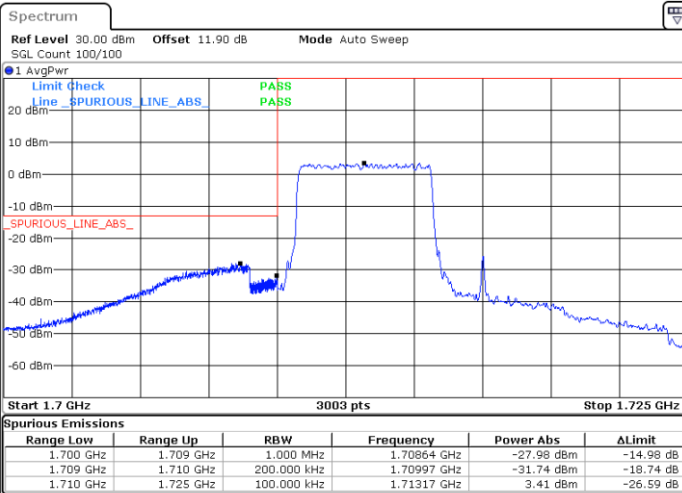
Highest Band Edge / Full RB



Date: 4.DEC.2023 09:40:48

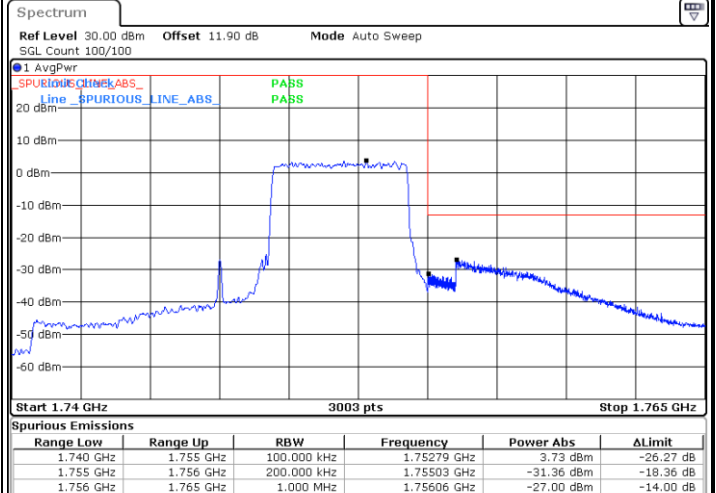
LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 27 RB0



Date: 4.DEC.2023 09:34:16

Highest Band Edge / 27 RBmax

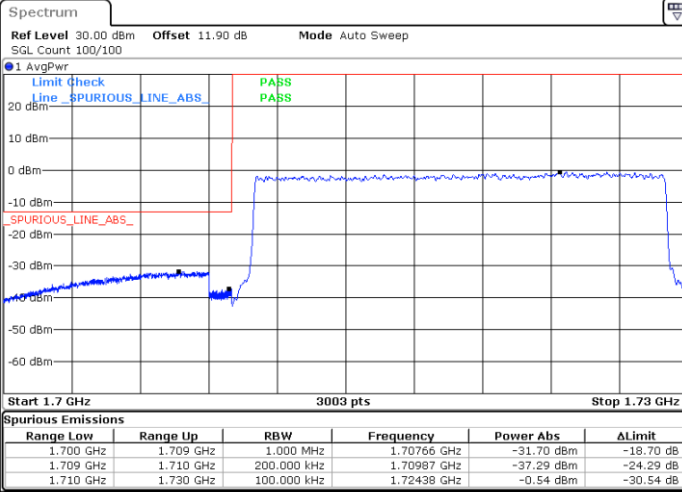


Date: 4.DEC.2023 09:42:02



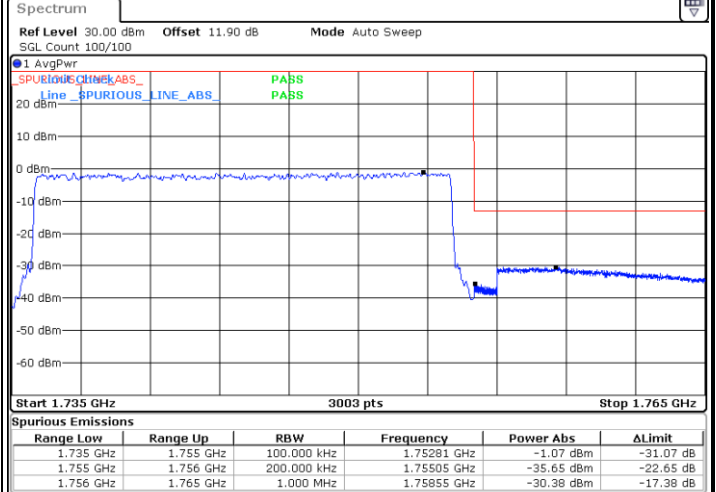
LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / Full RB



Date: 4.DEC.2023 09:44:59

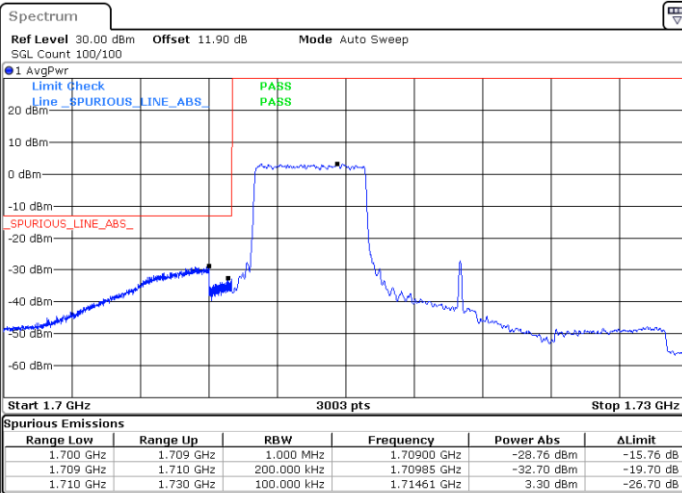
Highest Band Edge / Full RB



Date: 4.DEC.2023 09:52:46

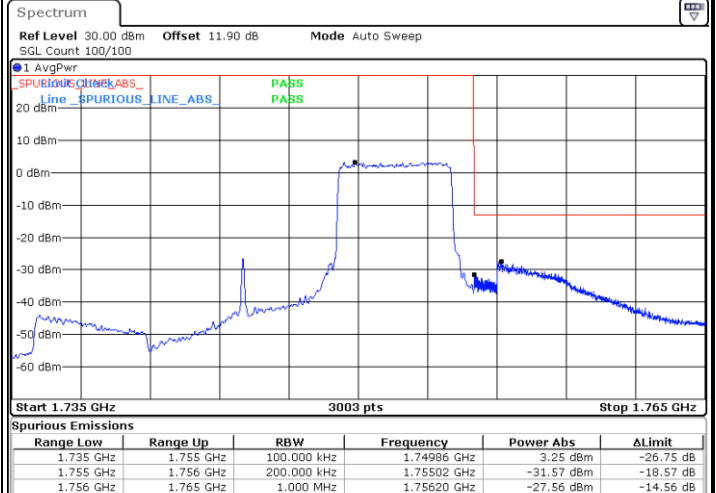
LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / Full RB



Date: 4.DEC.2023 09:46:14

Highest Band Edge / Full RB



Date: 4.DEC.2023 09:54:00

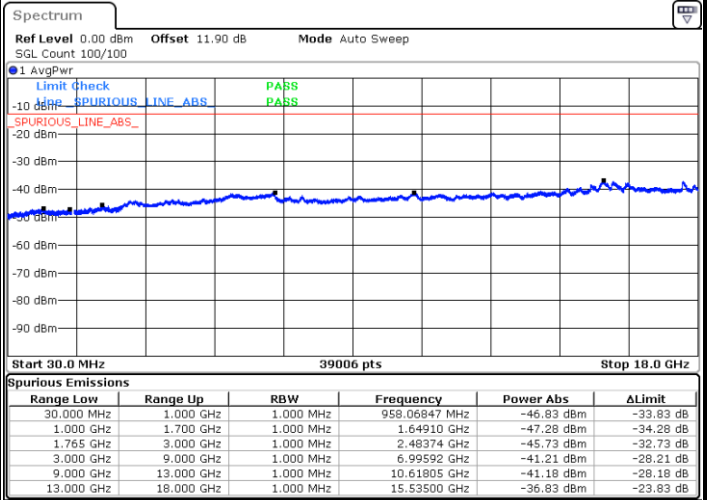
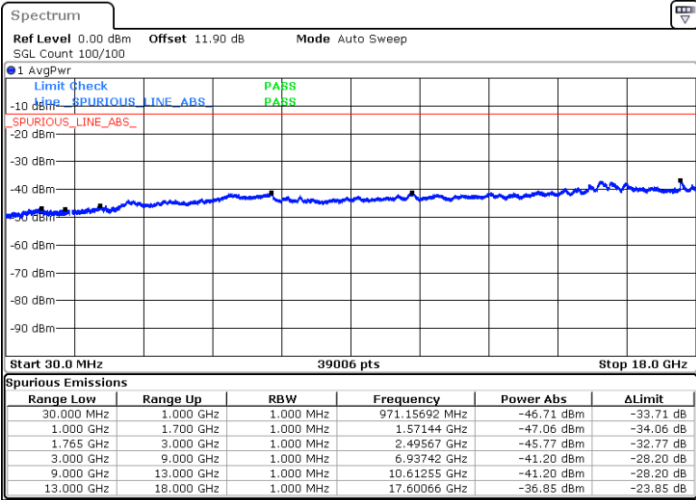


Conducted Spurious Emission

LTE Band 4 / 1.4MHz

Lowest Channel / QPSK

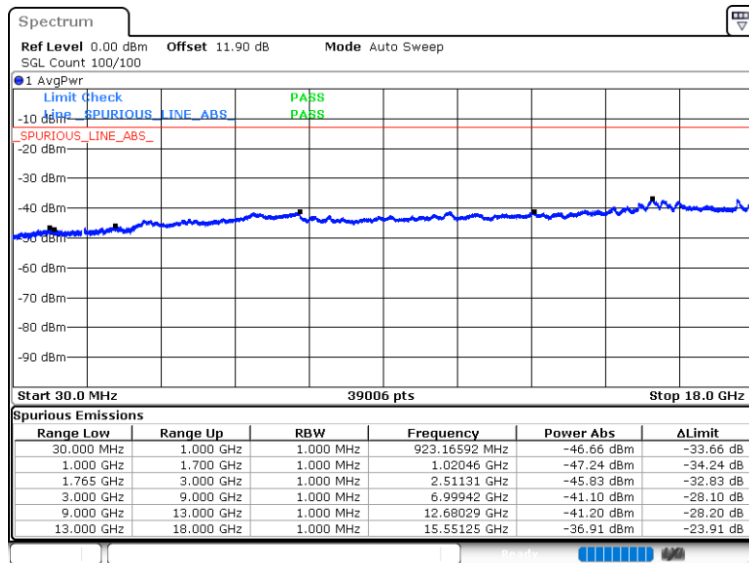
Middle Channel / QPSK



Date: 4.DEC.2023 08:07:28

Date: 4.DEC.2023 08:10:19

Highest Channel / QPSK



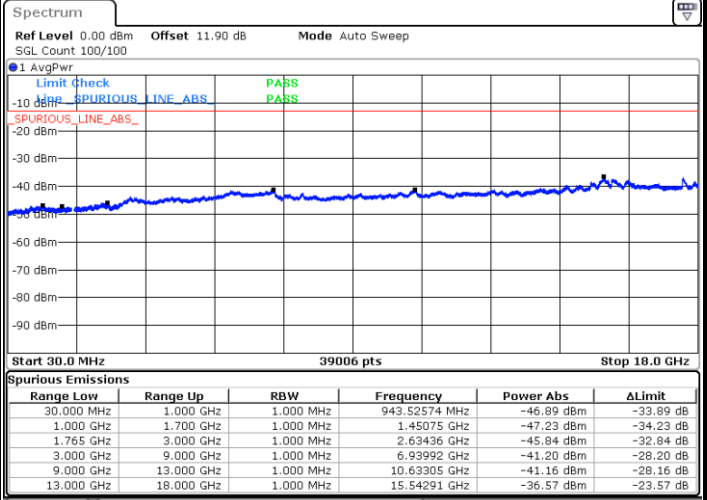
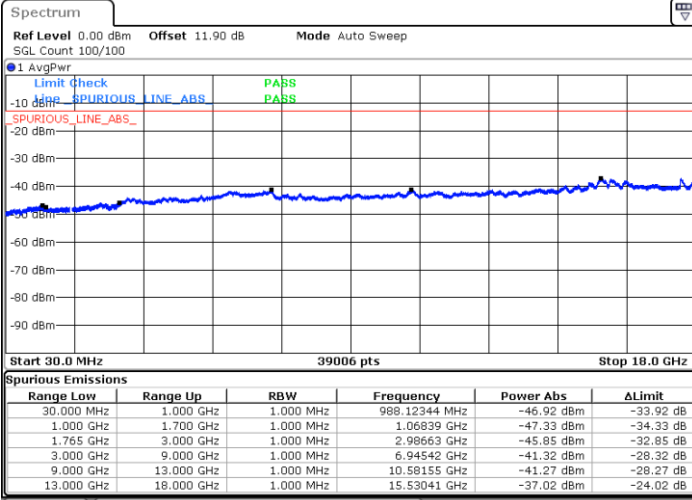
Date: 4.DEC.2023 08:16:30



LTE Band 4 / 3MHz

Lowest Channel / QPSK

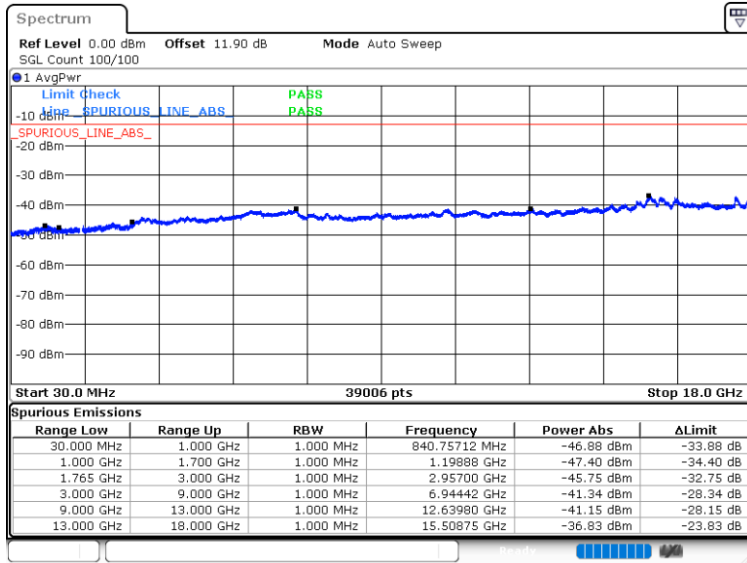
Middle Channel / QPSK



Date: 4.DEC.2023 09:00:28

Date: 4.DEC.2023 09:01:41

Highest Channel / QPSK



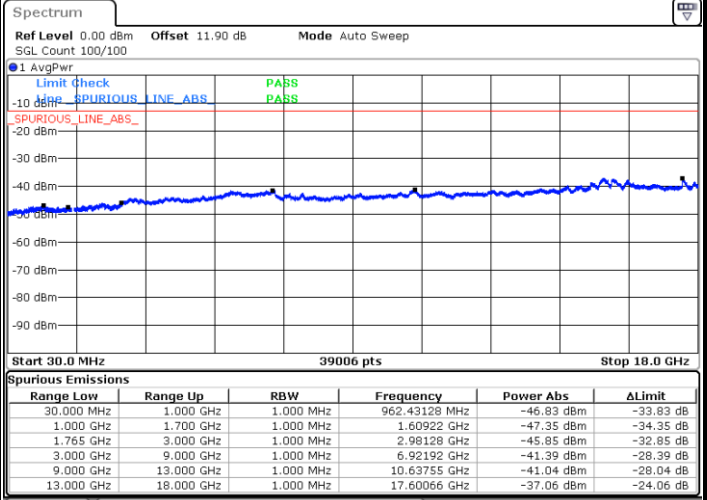
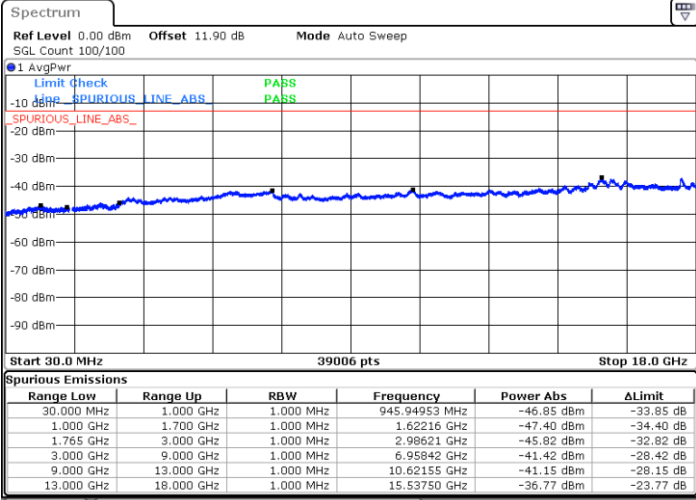
Date: 4.DEC.2023 09:58:10



LTE Band 4 / 5MHz

Lowest Channel / QPSK

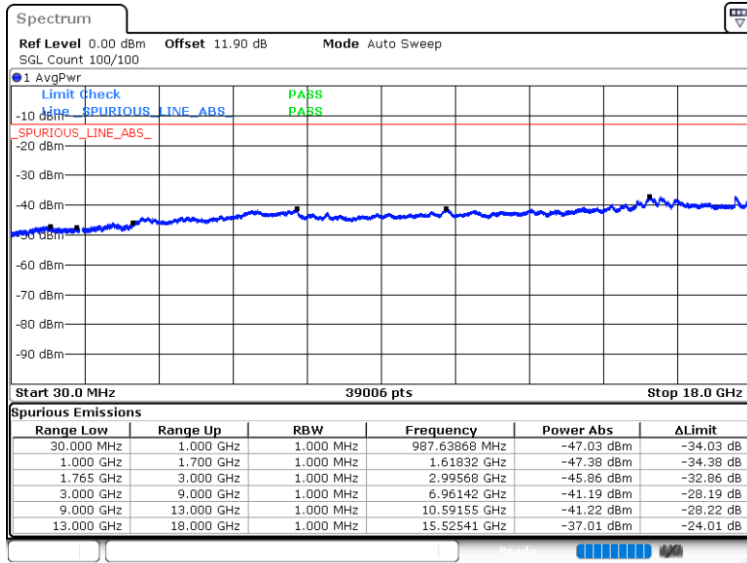
Middle Channel / QPSK



Date: 4.DEC.2023 09:09:09

Date: 4.DEC.2023 09:10:22

Highest Channel / QPSK



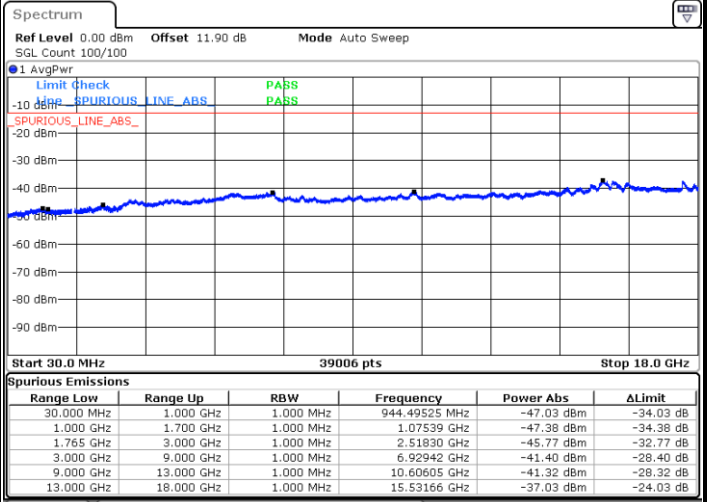
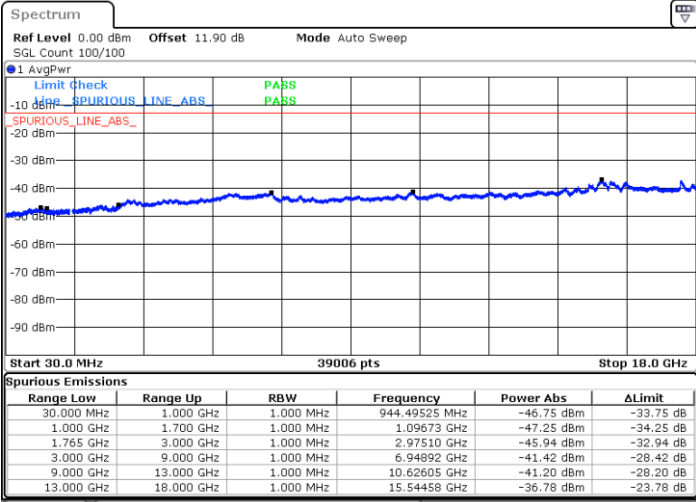
Date: 4.DEC.2023 09:11:36



LTE Band 4 / 10MHz

Lowest Channel / QPSK

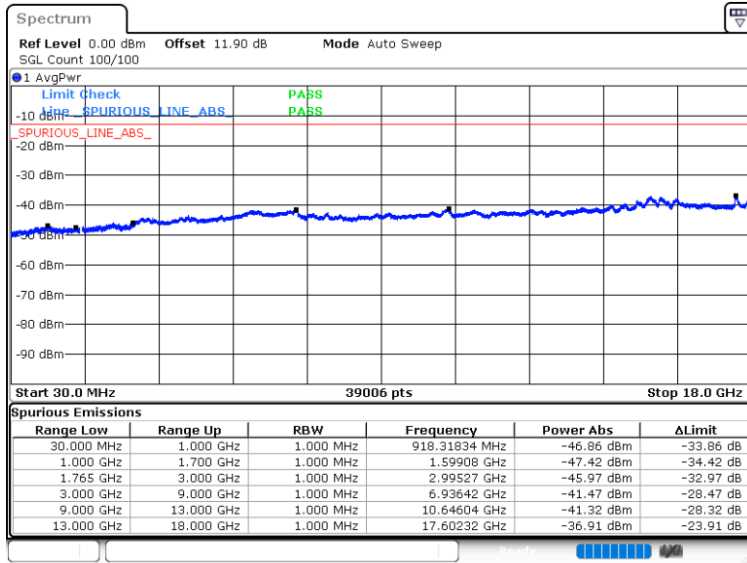
Middle Channel / QPSK



Date: 4. DEC. 2023 09:27:22

Date: 4. DEC. 2023 09:28:35

Highest Channel / QPSK



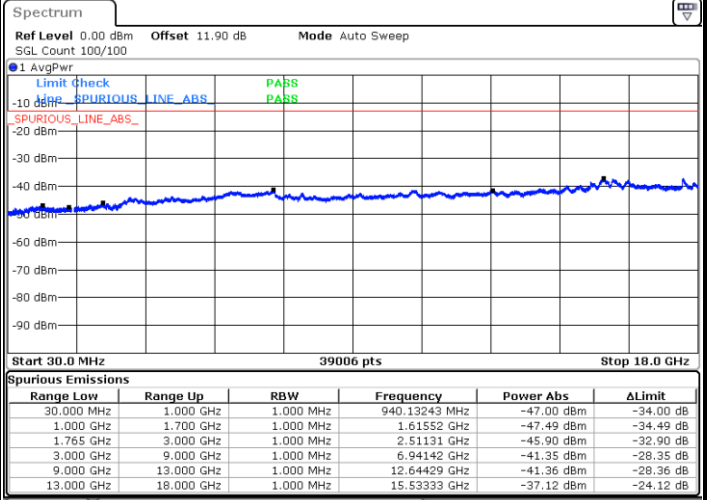
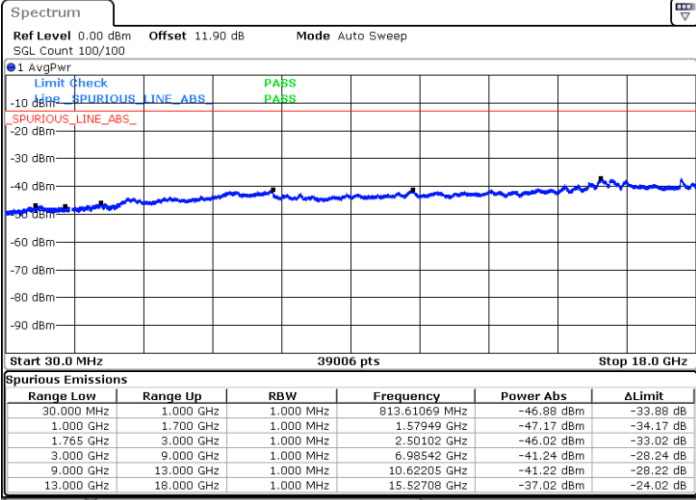
Date: 4. DEC. 2023 09:29:48



LTE Band 4 / 15MHz

Lowest Channel / QPSK

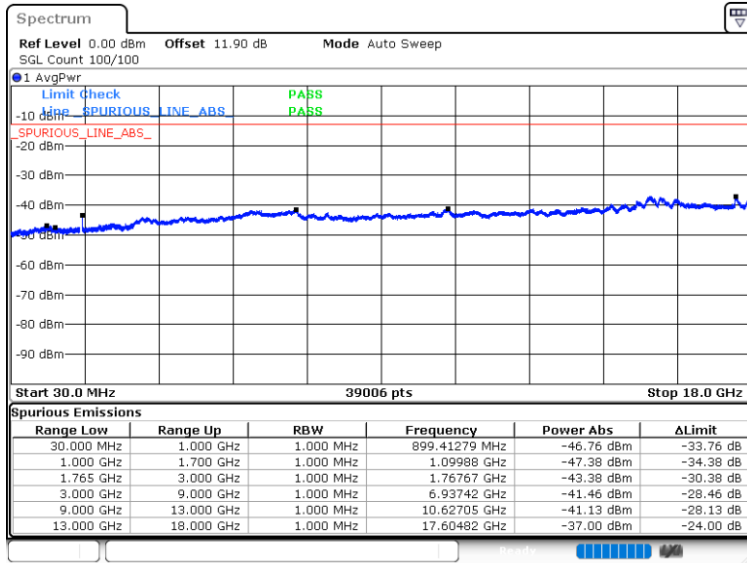
Middle Channel / QPSK



Date: 4. DEC. 2023 09:37:08

Date: 4. DEC. 2023 09:38:21

Highest Channel / QPSK



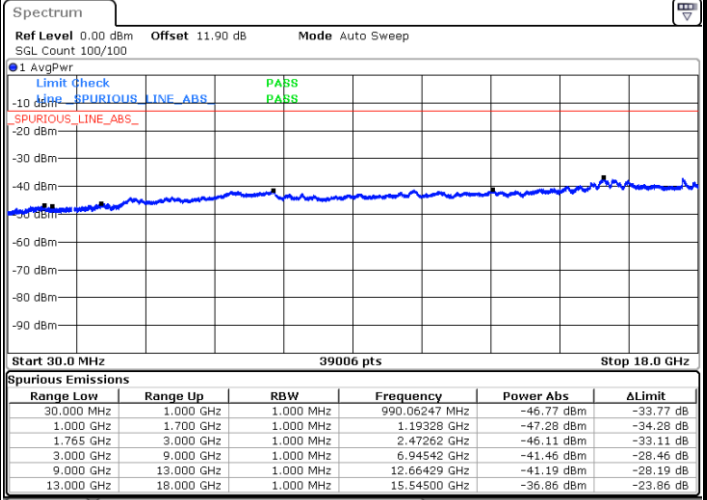
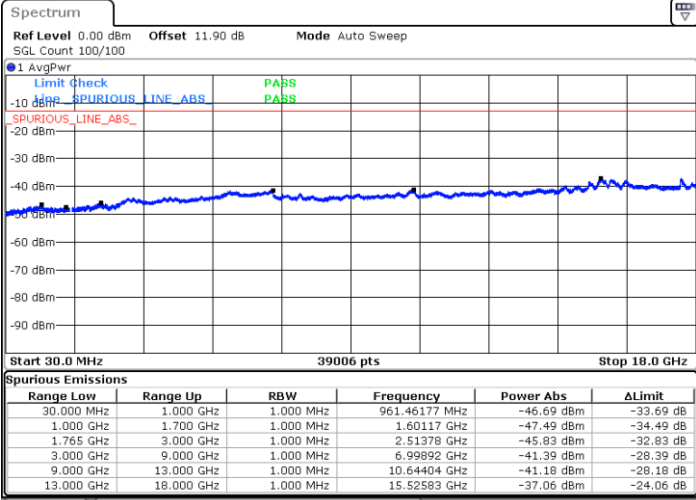
Date: 4. DEC. 2023 09:39:34



LTE Band 4 / 20MHz

Lowest Channel / QPSK

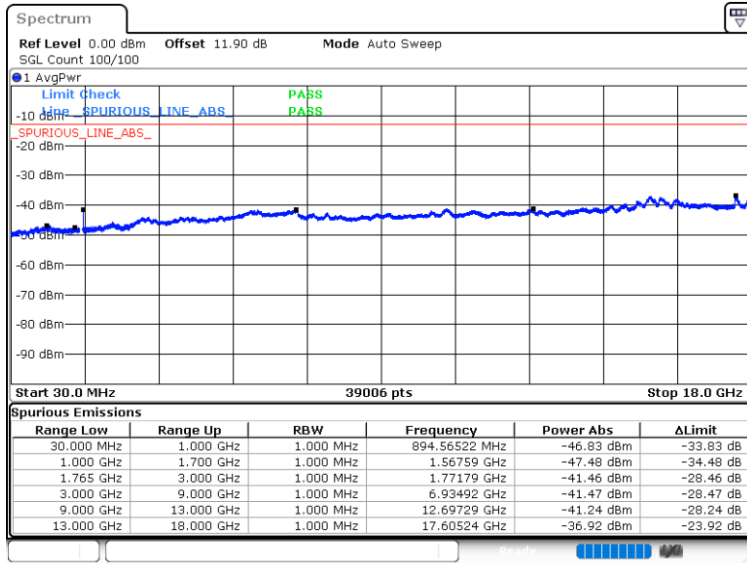
Middle Channel / QPSK



Date: 4.DEC.2023 09:49:06

Date: 4.DEC.2023 09:50:19

Highest Channel / QPSK



Date: 4.DEC.2023 09:51:32



Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
35	Normal Voltage	0.0070	PASS
30	Normal Voltage	0.0088	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0068	
0	Normal Voltage	0.0003	
20	Maximum Voltage	0.0035	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

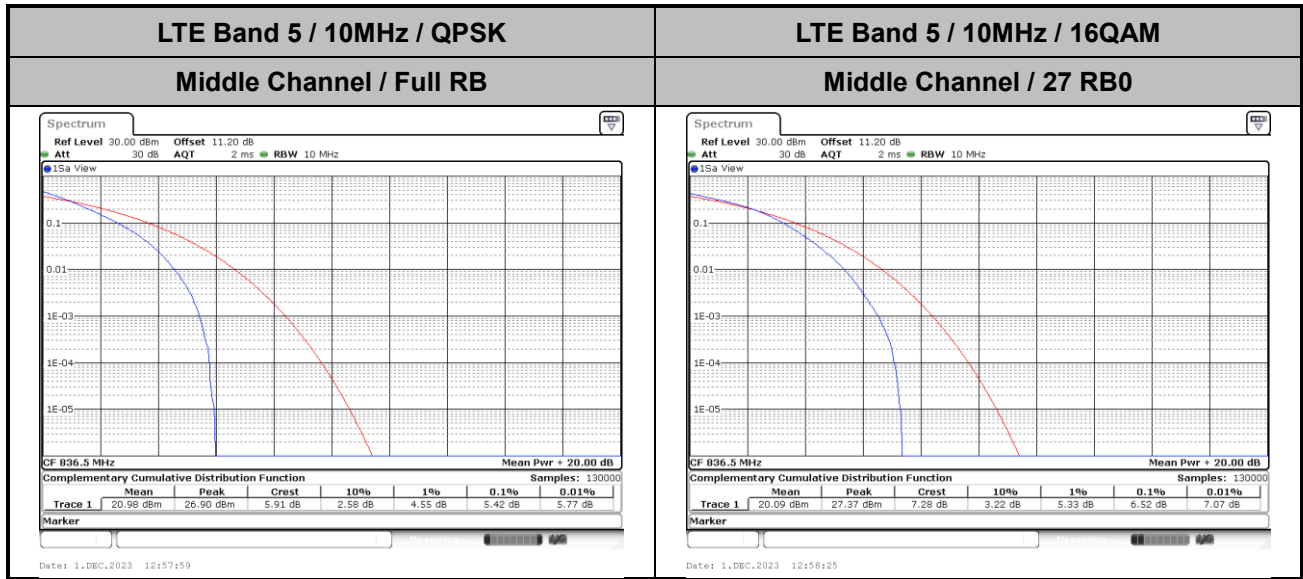
- 1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 5

Peak-to-Average Ratio

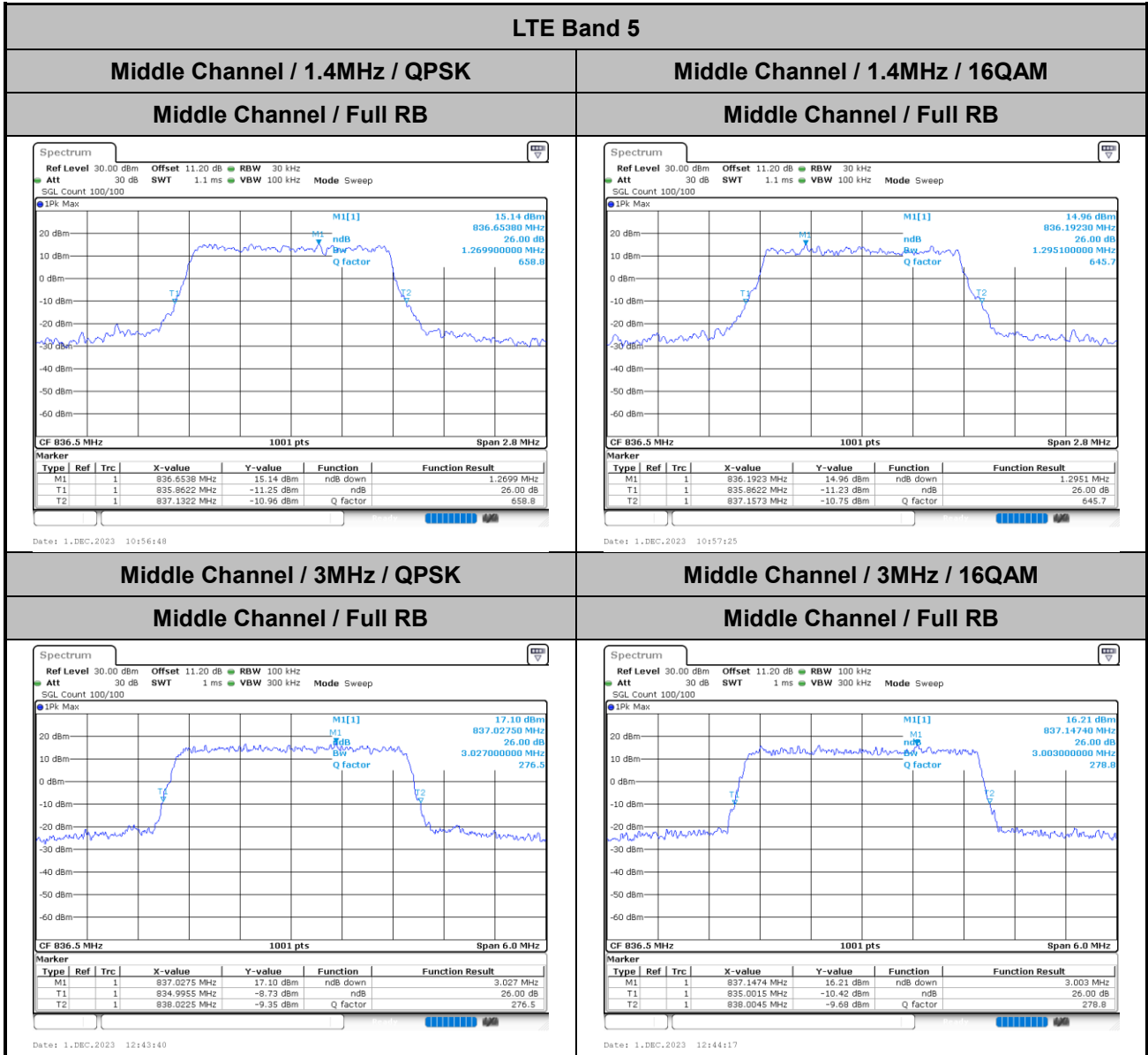
Mode	LTE Band 5 / 10MHz		
Mod.	QPSK	16QAM	Limit: 13dB
RB Size	Full RB	27 RB	Result
Middle CH	5.42	6.52	PASS





26dB Bandwidth

Mode	LTE Band 5 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.26	1.29	3.02	3.00	4.88	4.90	9.76	5.33	-	-	-	-





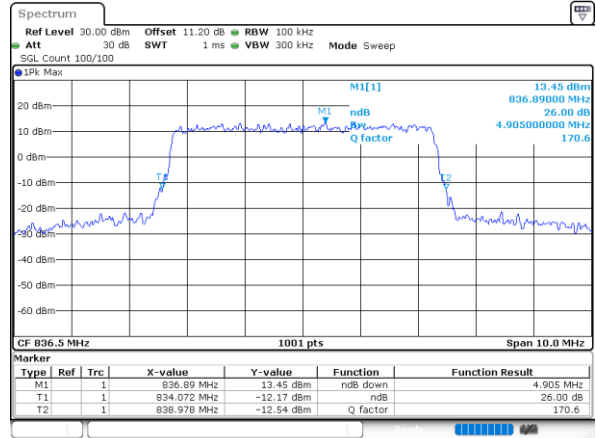
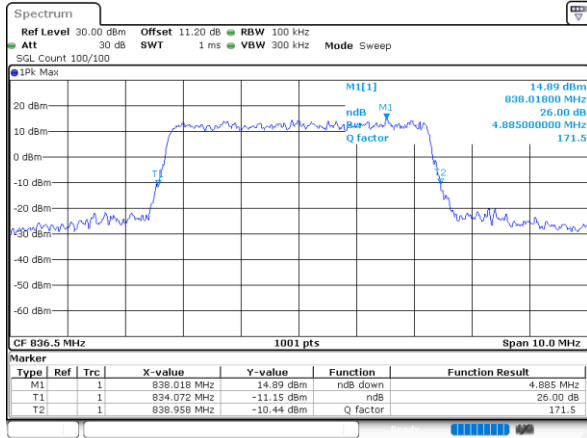
LTE Band 5

Middle Channel / 5MHz / QPSK

Middle Channel / 5MHz / 16QAM

Middle Channel / Full RB

Middle Channel / Full RB



Date: 1.DEC.2023 12:50:58

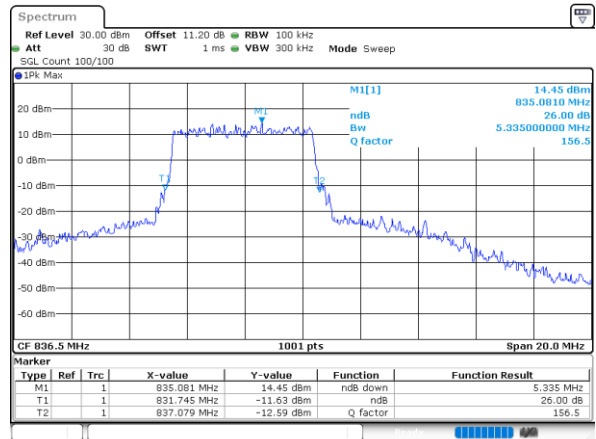
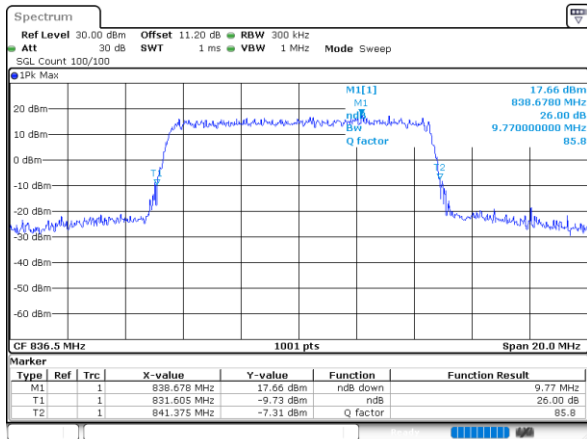
Date: 1.DEC.2023 12:51:35

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM

Middle Channel / Full RB

Middle Channel / 27 RB0



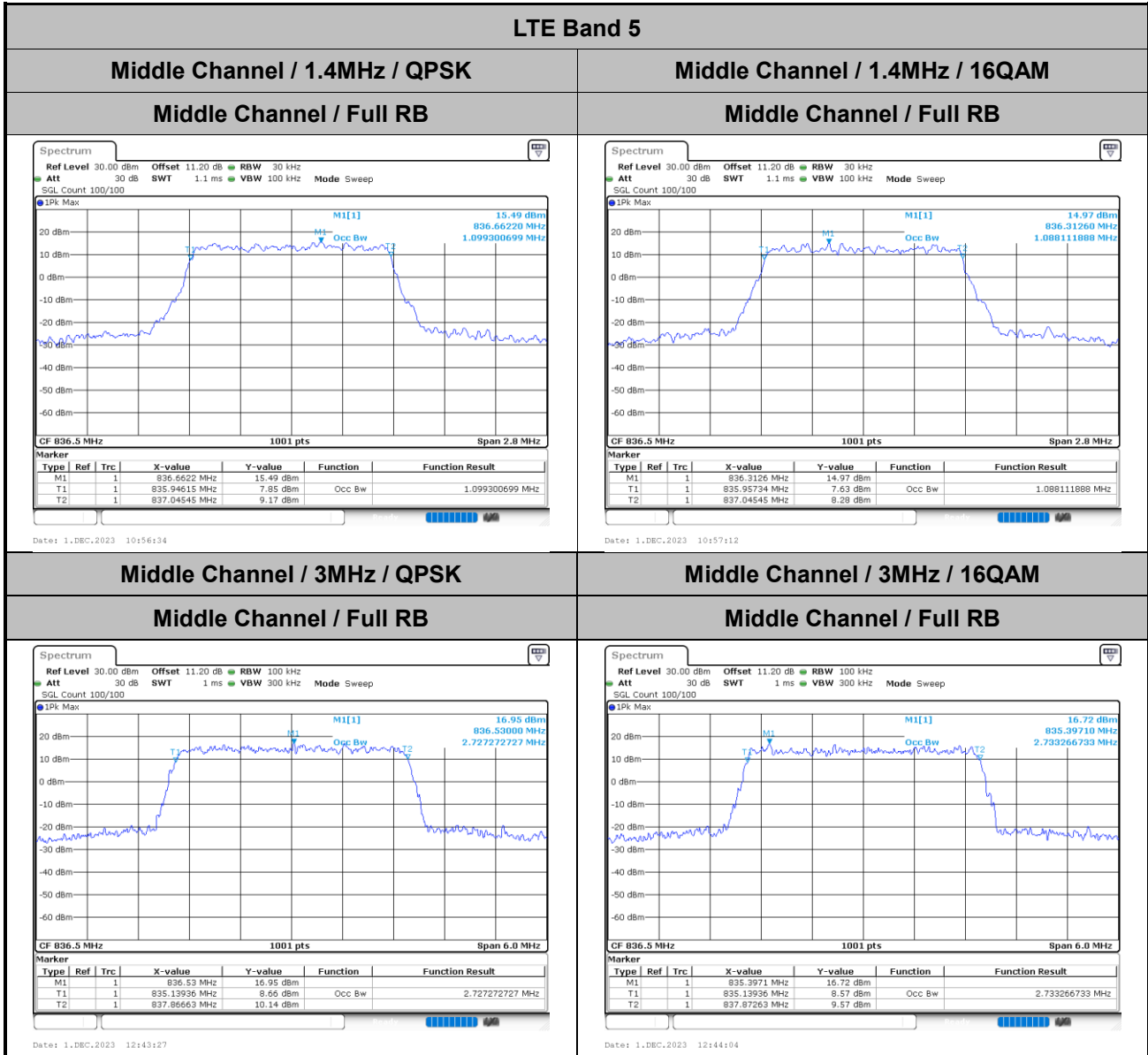
Date: 1.DEC.2023 12:57:45

Date: 1.DEC.2023 12:58:51



Occupied Bandwidth

Mode	LTE Band 5 : 99%OBW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.09	1.08	2.72	2.73	4.50	4.48	9.03	4.87	-	-	-	-





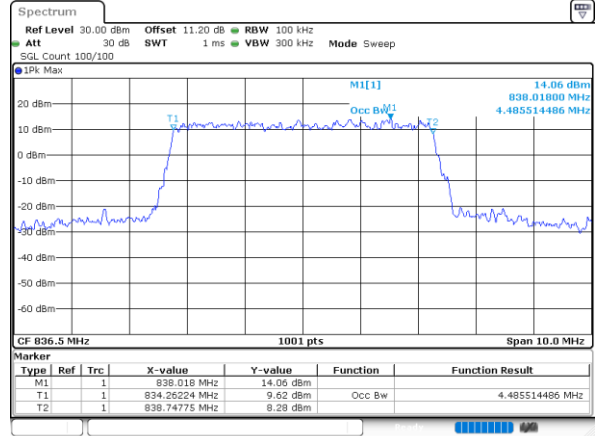
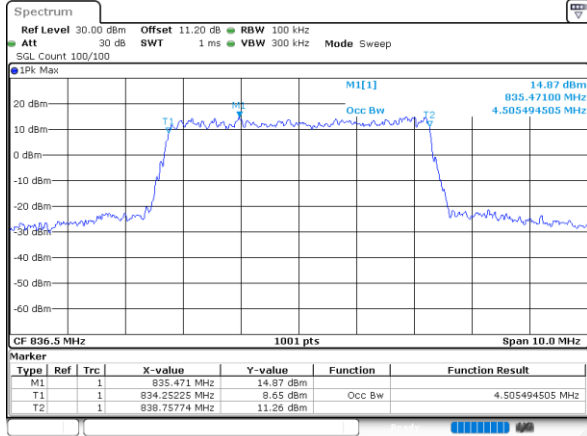
LTE Band 5

Middle Channel / 5MHz / QPSK

Middle Channel / 5MHz / 16QAM

Middle Channel / Full RB

Middle Channel / Full RB



Date: 1.DEC.2023 12:50:45

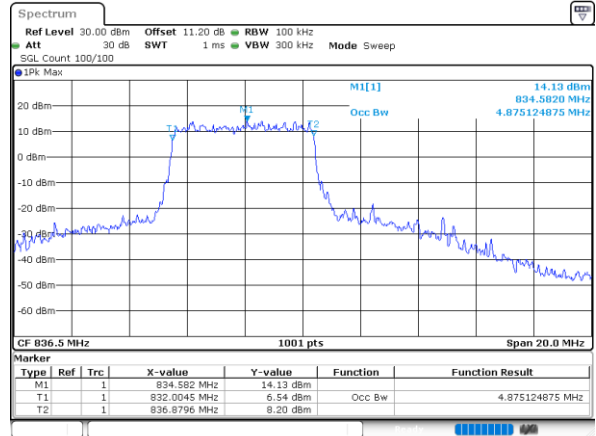
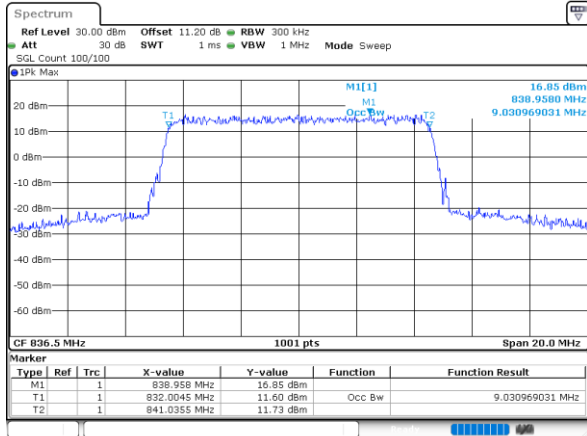
Date: 1.DEC.2023 12:51:23

Middle Channel / 10MHz / QPSK

Middle Channel / 10MHz / 16QAM

Middle Channel / Full RB

Middle Channel / 27RB0



Date: 1.DEC.2023 12:57:32

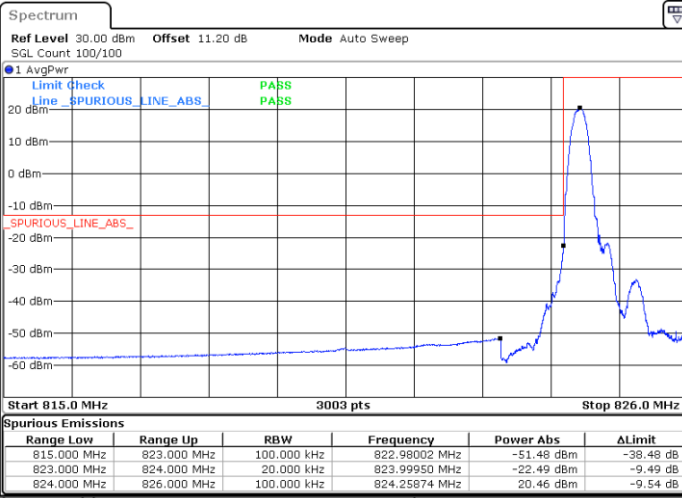
Date: 1.DEC.2023 12:58:38



Conducted Band Edge

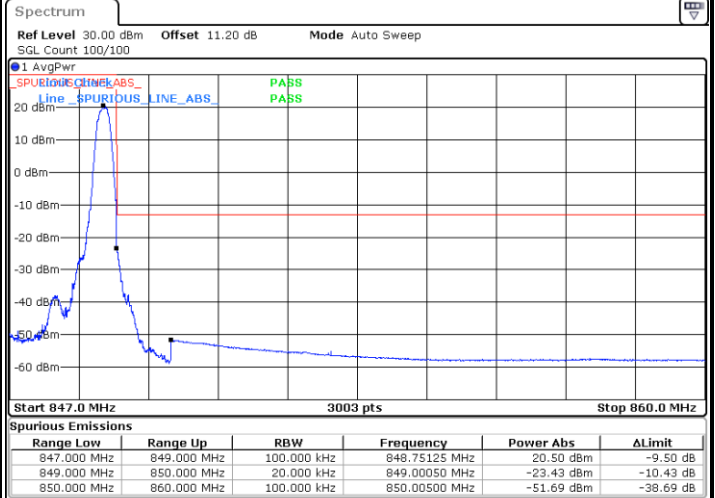
LTE Band 5 / 1.4MHz / QPSK

Lowest Band Edge / 1RB0



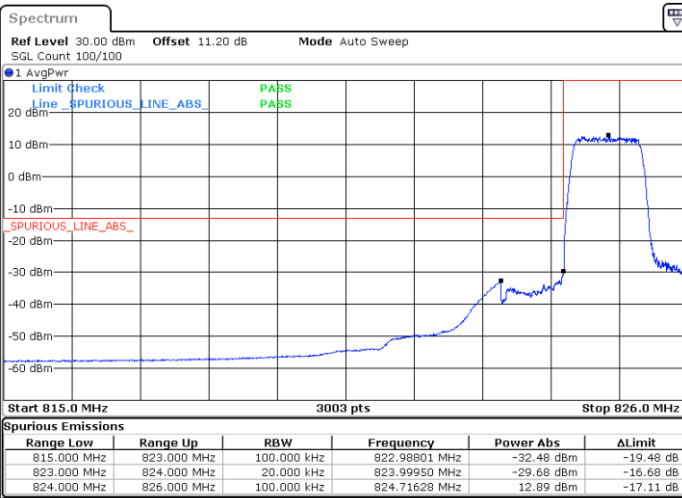
Date: 1.DEC.2023 10:47:53

Highest Band Edge / 1RBmax



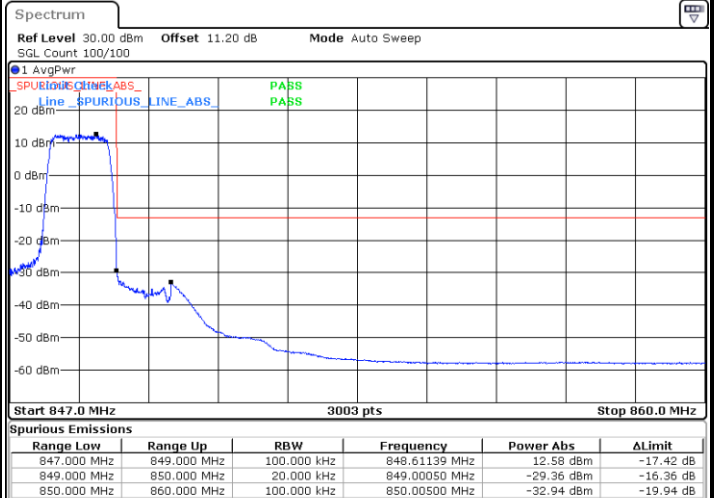
Date: 1.DEC.2023 12:38:33

Lowest Band Edge / Full RB



Date: 1.DEC.2023 10:53:40

Highest Band Edge / Full RB



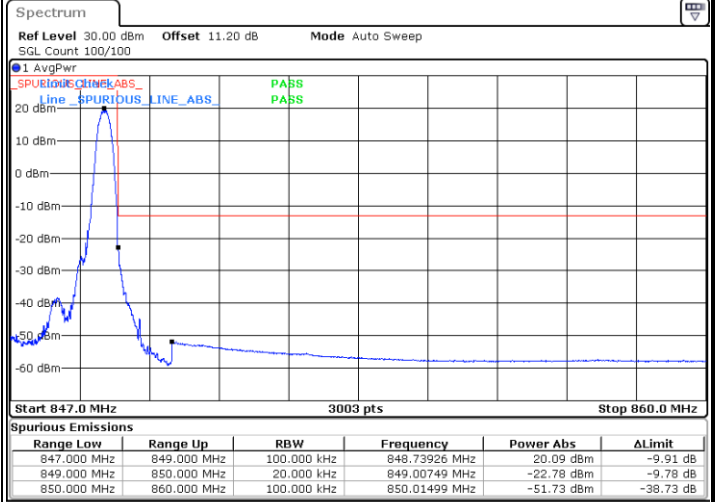
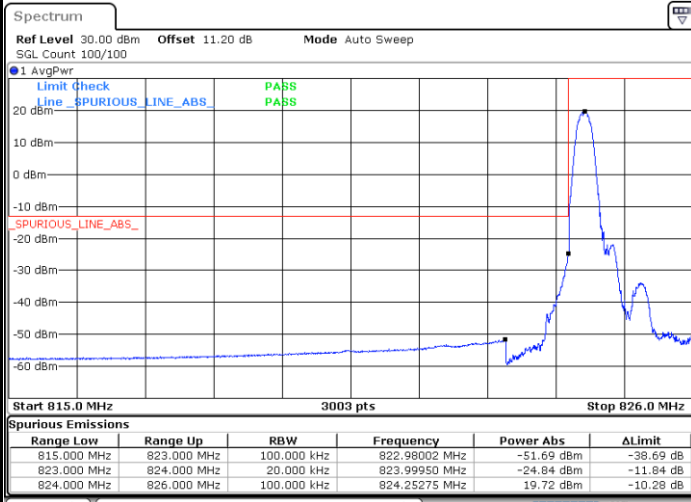
Date: 1.DEC.2023 12:36:02



LTE Band 5 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB0

Highest Band Edge / 1 RBmax

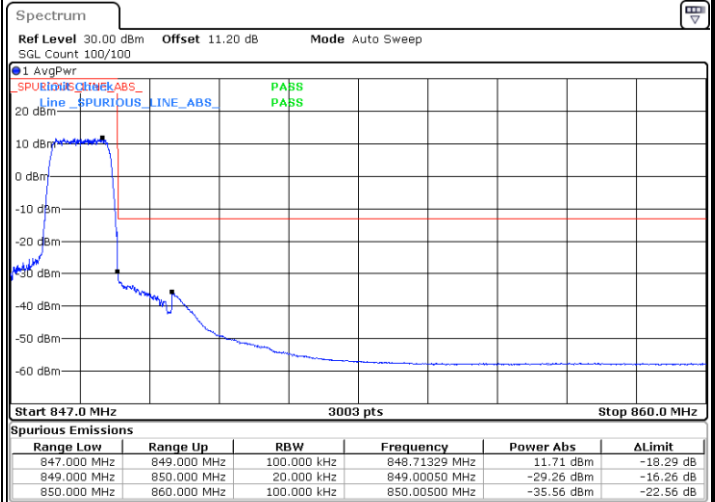
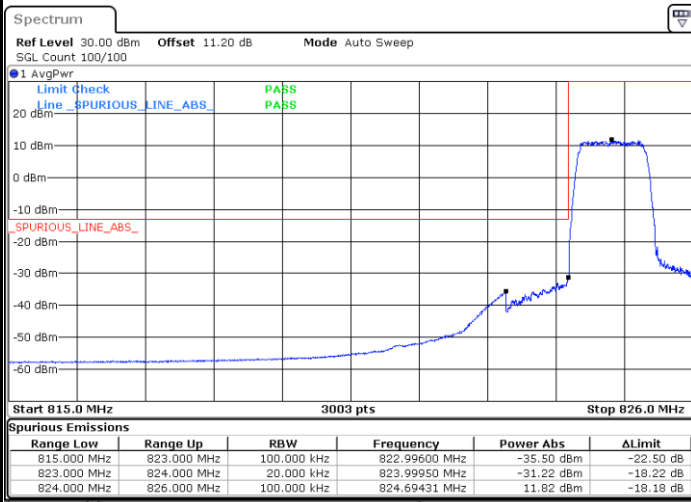


Date: 1.DEC.2023 10:51:10

Date: 1.DEC.2023 12:39:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



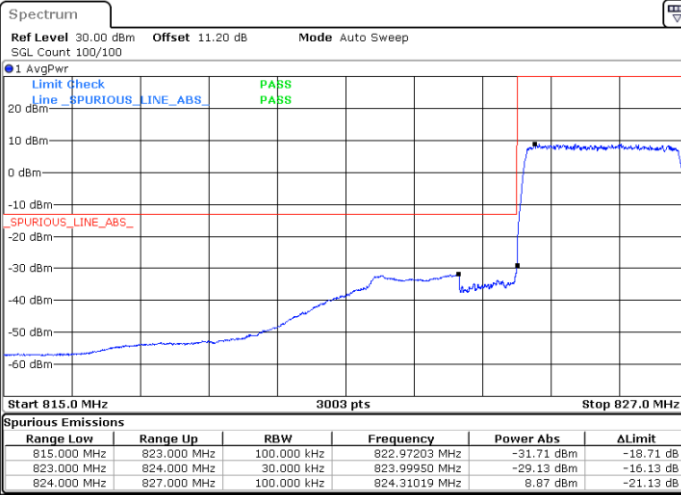
Date: 1.DEC.2023 10:54:54

Date: 1.DEC.2023 12:37:17



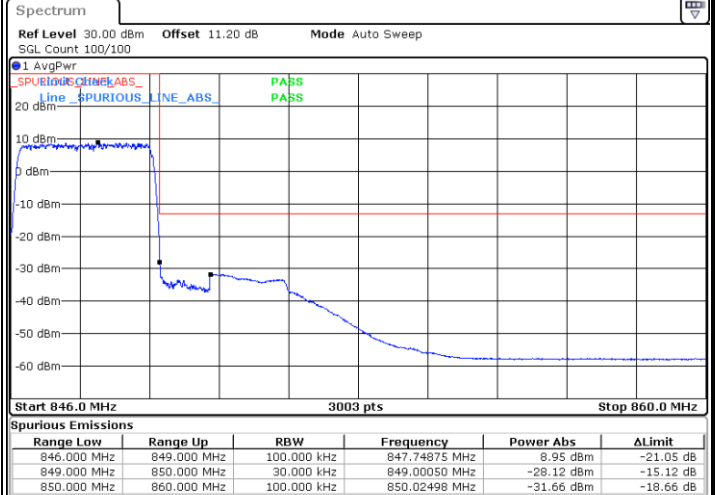
LTE Band 5 / 3MHz / QPSK

Lowest Band Edge / Full RB



Date: 1.DEC.2023 12:41:46

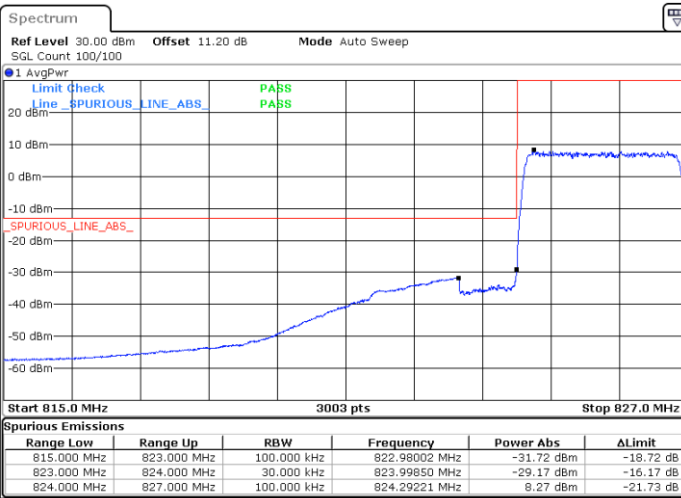
Highest Band Edge / Full RB



Date: 1.DEC.2023 12:45:30

LTE Band 5 / 3MHz / 16QAM

Lowest Band Edge / Full RB



Date: 1.DEC.2023 12:43:01

Highest Band Edge / Full RB

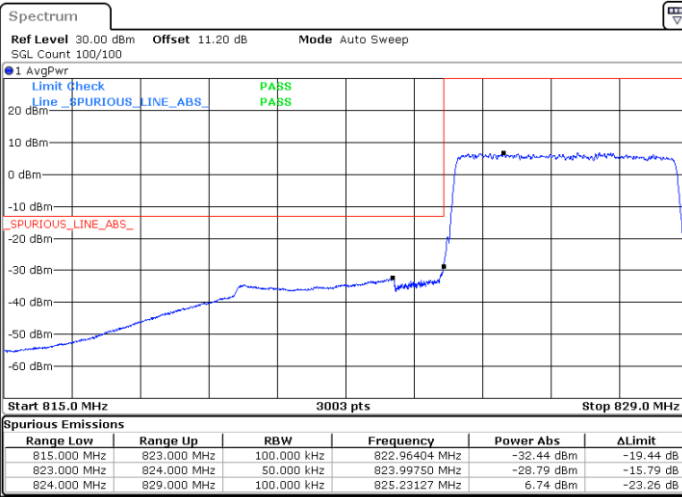


Date: 1.DEC.2023 12:46:45



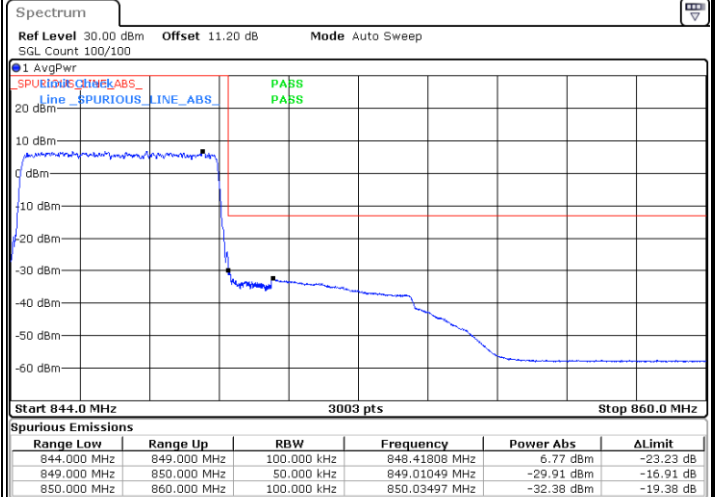
LTE Band 5 / 5MHz / QPSK

Lowest Band Edge / Full RB



Date: 1.DEC.2023 12:49:05

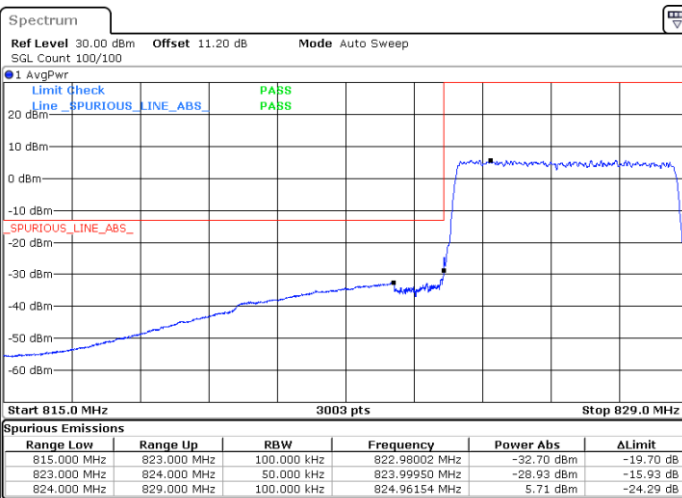
Highest Band Edge / Full RB



Date: 1.DEC.2023 12:52:49

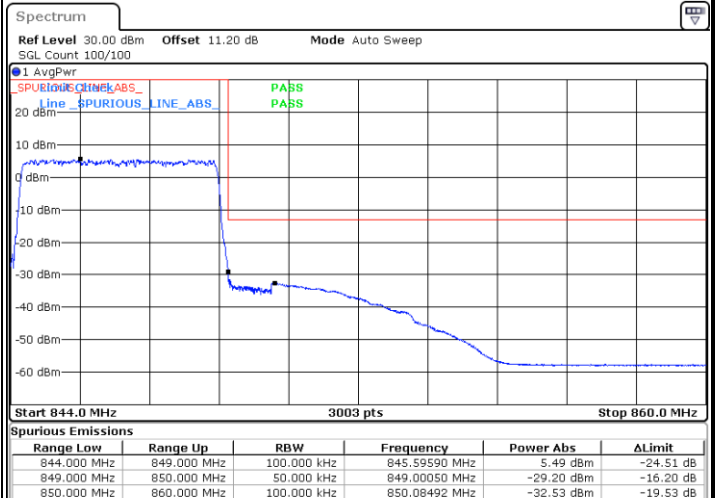
LTE Band 5 / 5MHz / 16QAM

Lowest Band Edge / Full RB



Date: 1.DEC.2023 12:50:19

Highest Band Edge / Full RB

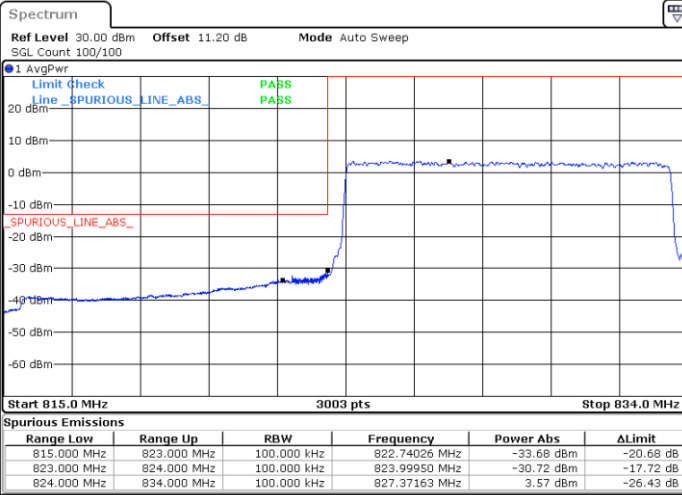


Date: 1.DEC.2023 12:54:03



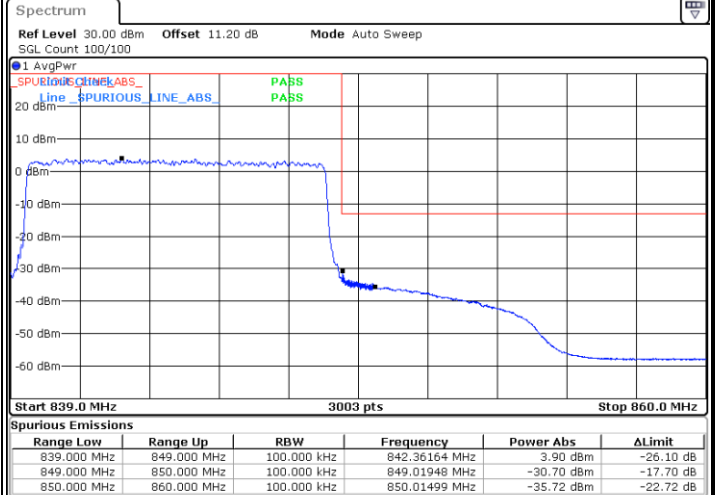
LTE Band 5 / 10MHz / QPSK

Lowest Band Edge / Full RB



Date: 1.DEC.2023 12:55:52

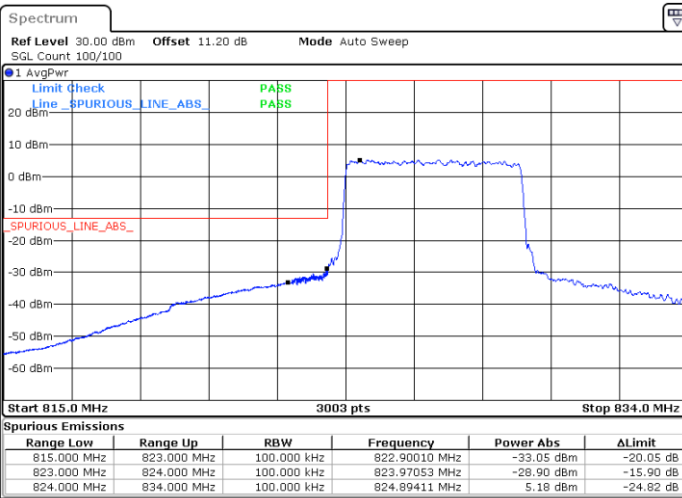
Highest Band Edge / Full RB



Date: 1.DEC.2023 13:00:05

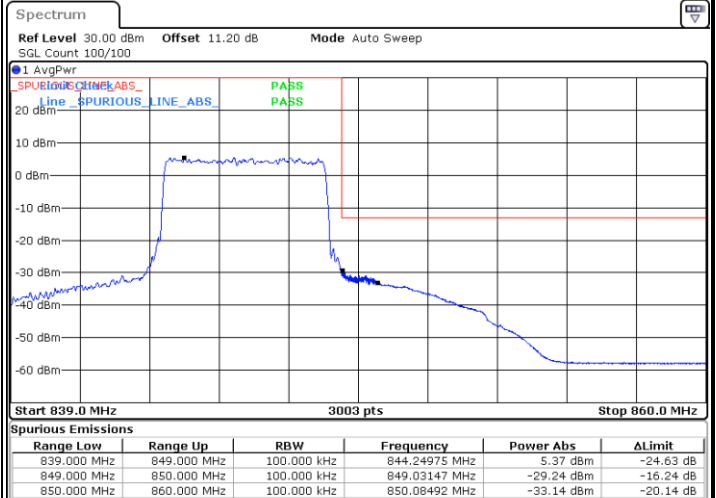
LTE Band 5 / 10MHz / 16QAM

Lowest Band Edge / 27 RB0



Date: 1.DEC.2023 12:57:06

Highest Band Edge / 27 RBmax



Date: 1.DEC.2023 13:01:19

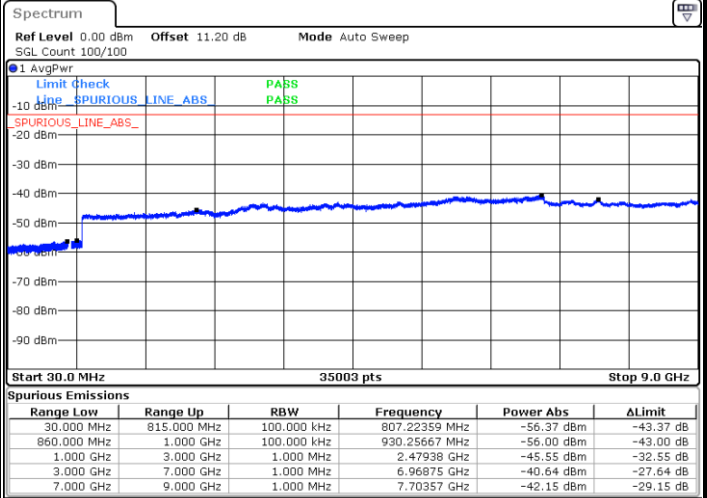
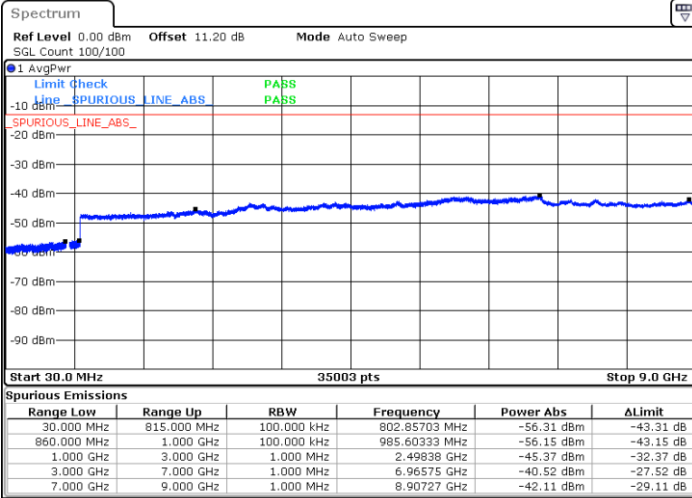


Conducted Spurious Emission

LTE Band 5 / 1.4MHz

Lowest Channel / QPSK

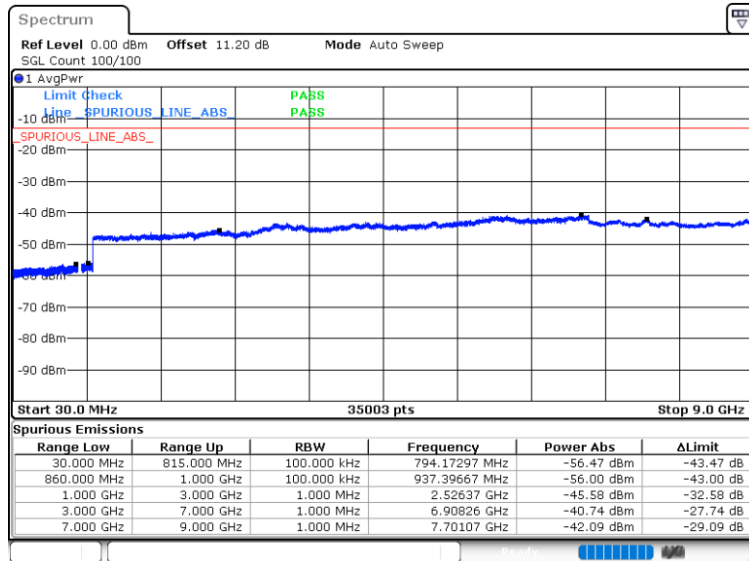
Middle Channel / QPSK



Date: 1.DEC.2023 10:52:24

Date: 1.DEC.2023 10:56:09

Highest Channel / QPSK



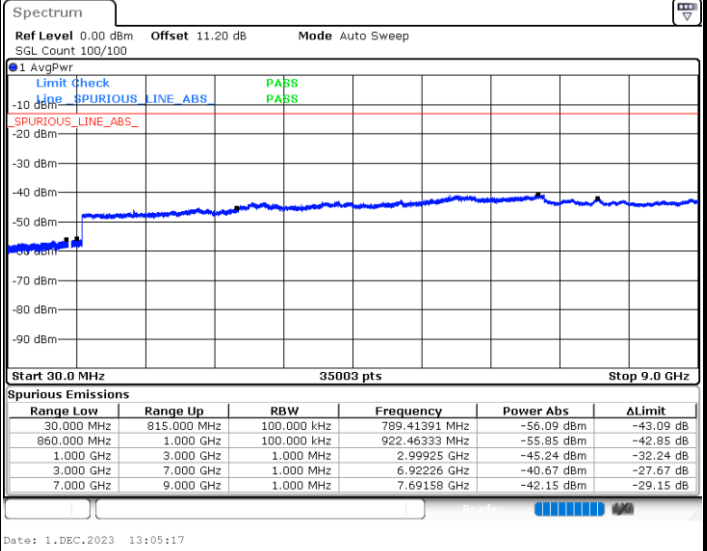
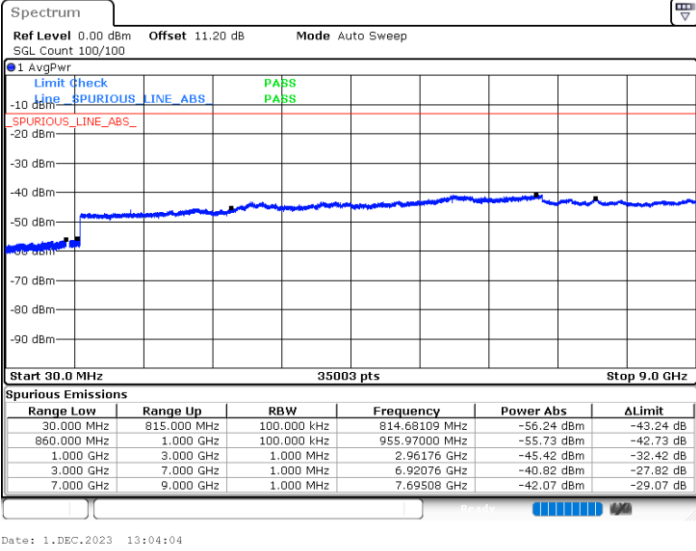
Date: 1.DEC.2023 10:58:47



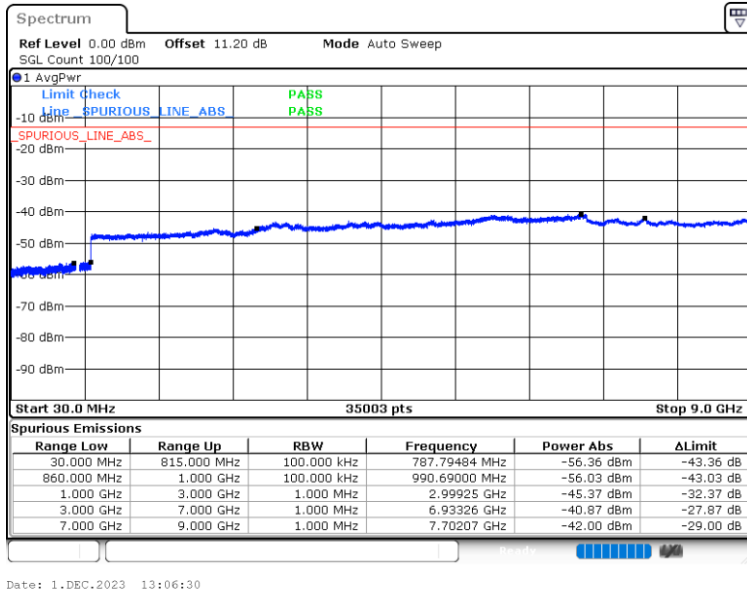
LTE Band 5 / 3MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

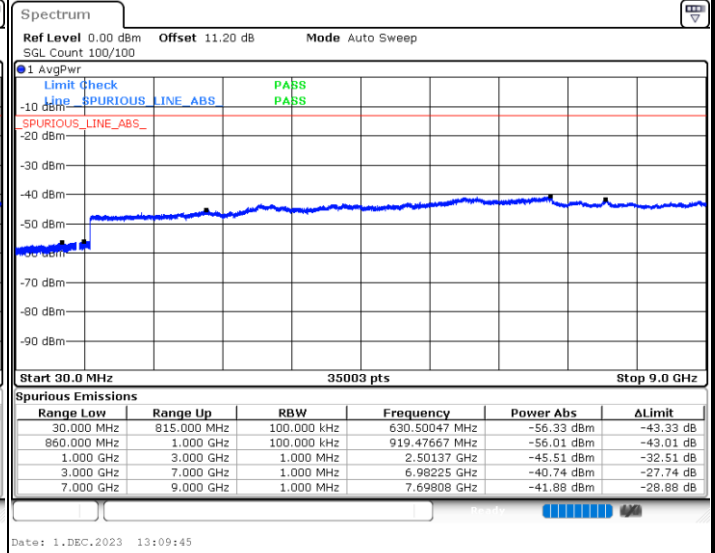
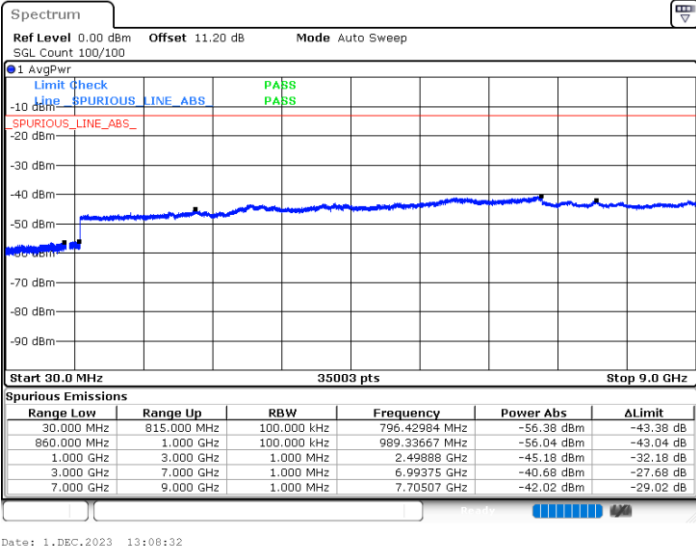




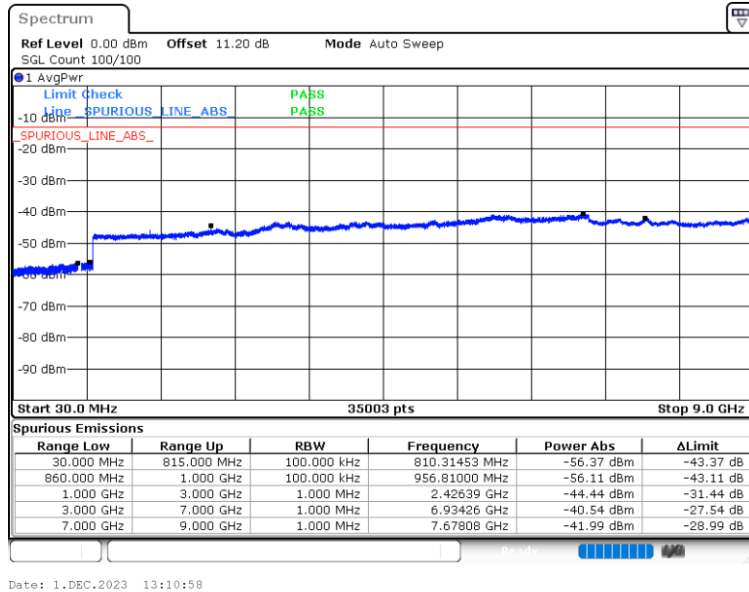
LTE Band 5 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

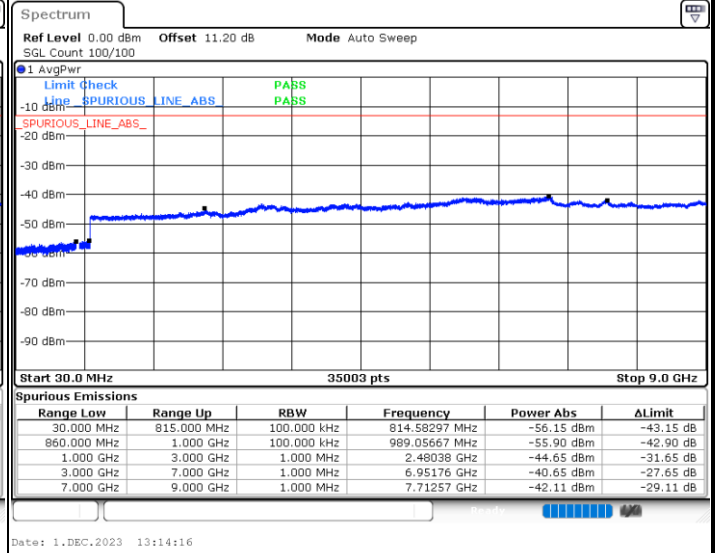
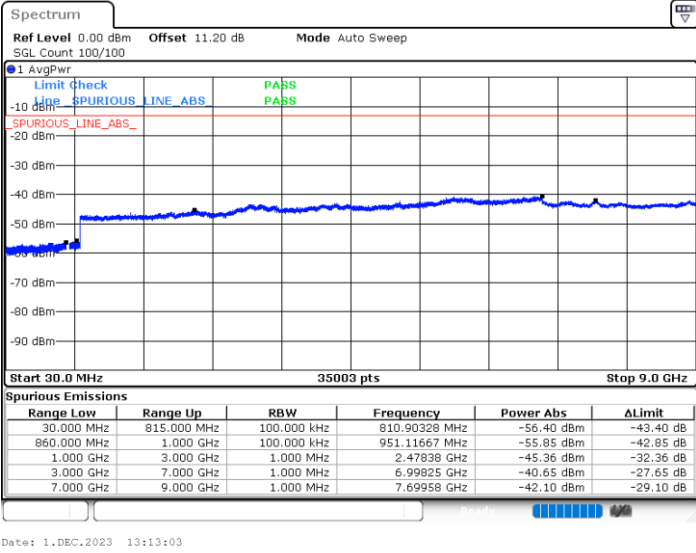




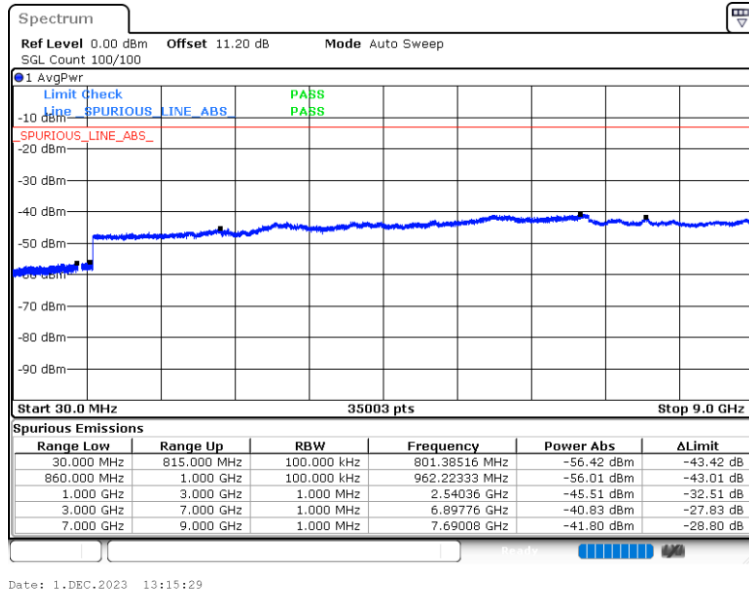
LTE Band 5 / 10MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK





Frequency Stability

Test Conditions		LTE Band 5 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	2.5ppm
		Deviation (ppm)	Result
35	Normal Voltage	0.0011	PASS
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0145	
0	Normal Voltage	0.0012	
20	Maximum Voltage	0.0035	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0018	

Note: Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.