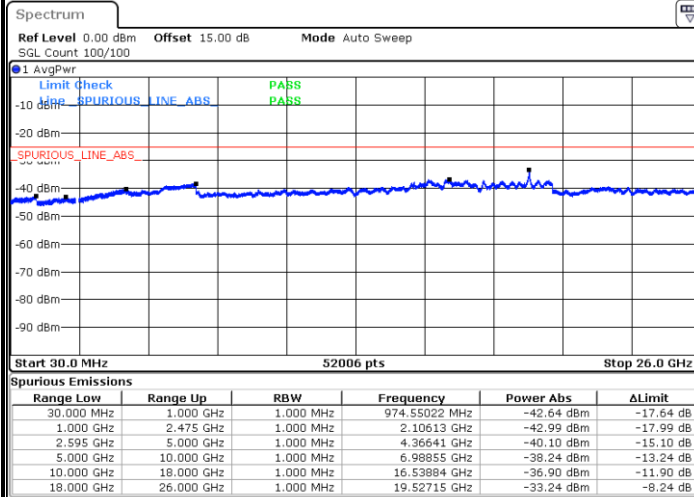




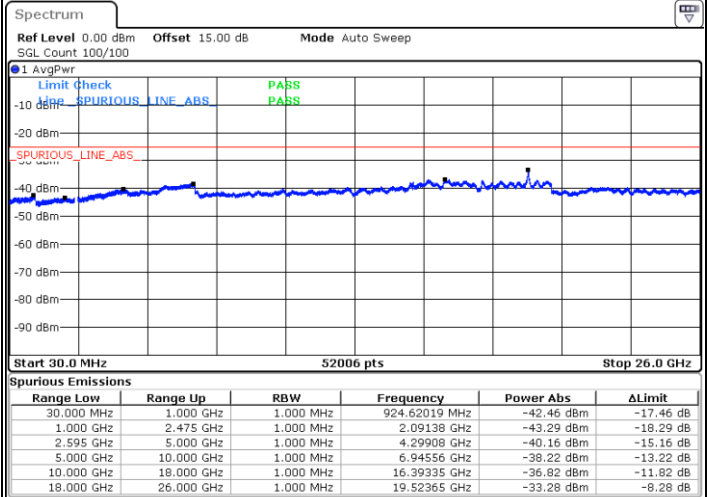
LTE Band 7 / 20MHz

Lowest Channel / QPSK



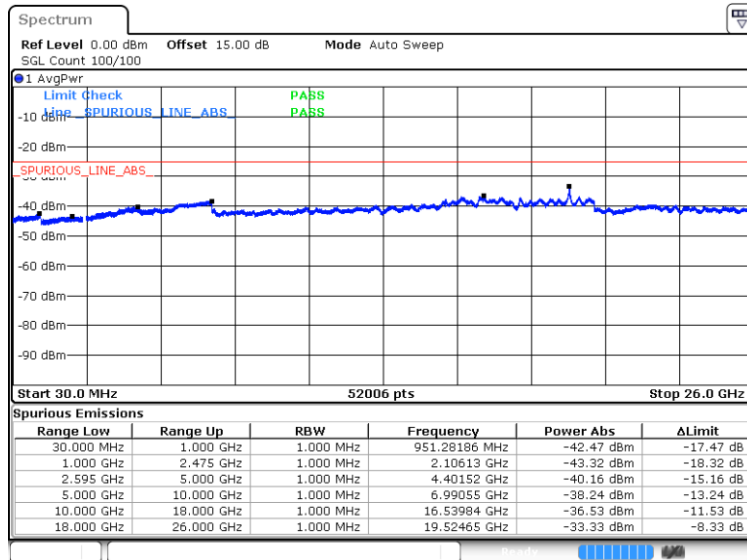
Date: 5 SEP. 2023 13:11:51

Middle Channel / QPSK



Date: 5 SEP. 2023 13:13:04

Highest Channel / QPSK



Date: 5 SEP. 2023 13:21:28

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0034	
0	Normal Voltage	0.0013	
-10	Normal Voltage	0.0017	
-20	Normal Voltage	0.0021	
-30	Normal Voltage	0.0004	
20	Maximum Voltage	0.0031	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

Note:

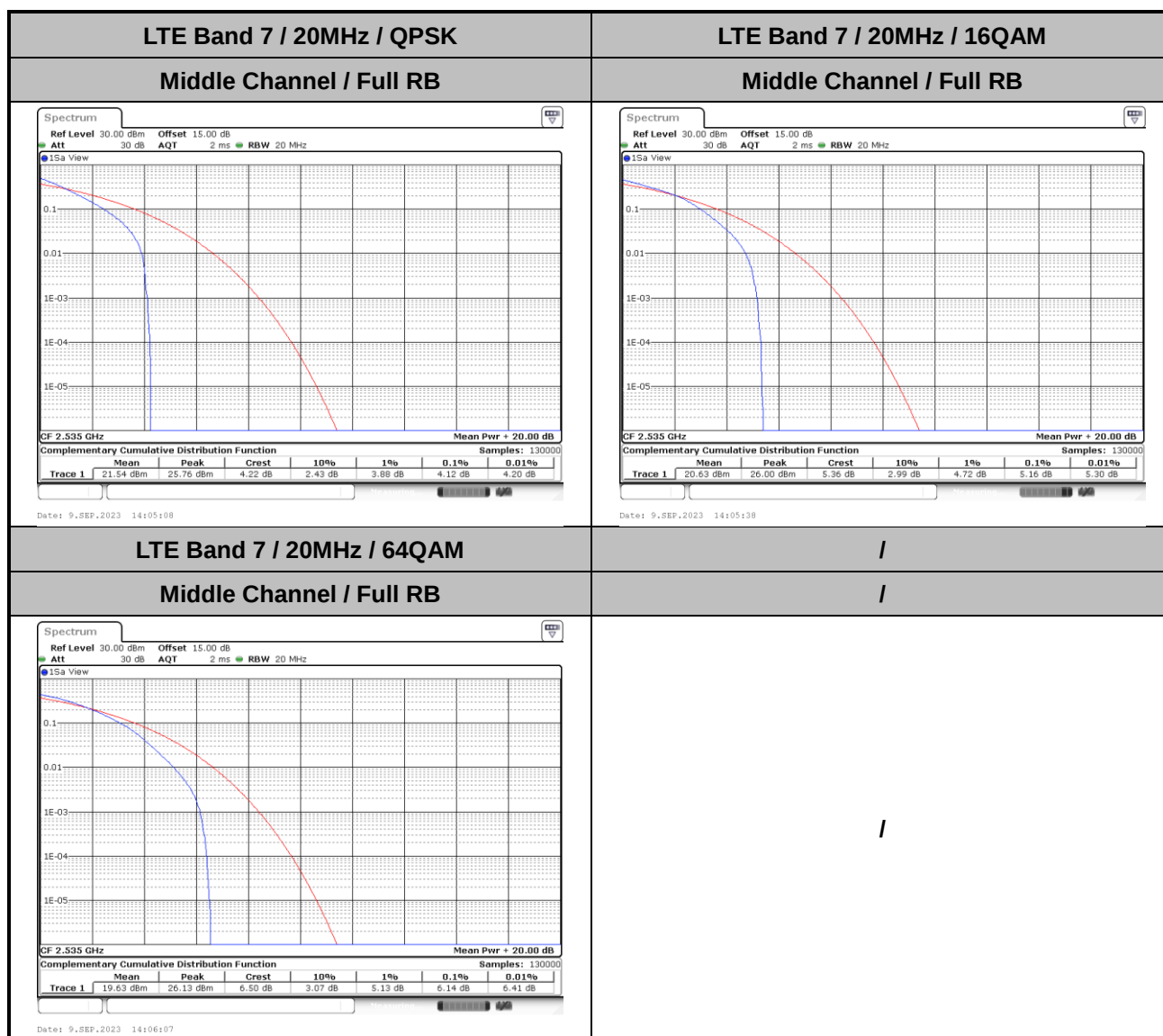
1. Normal Voltage = 7.82 V. ; Battery End Point (BEP) = 6.8 V. ; Maximum Voltage = 9 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7(Other PA)

Peak-to-Average Ratio

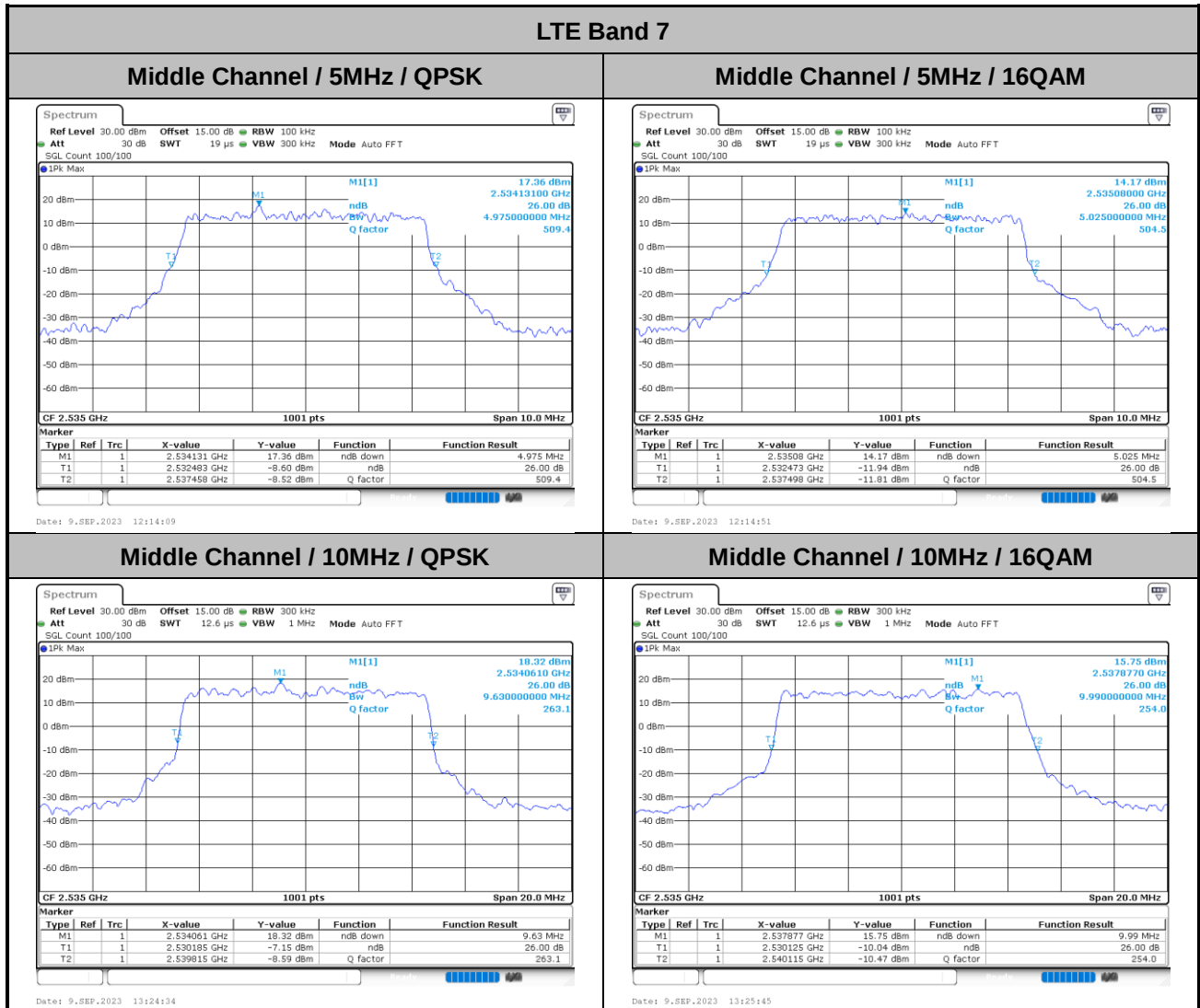
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.12	5.16	6.14	PASS





26dB Bandwidth

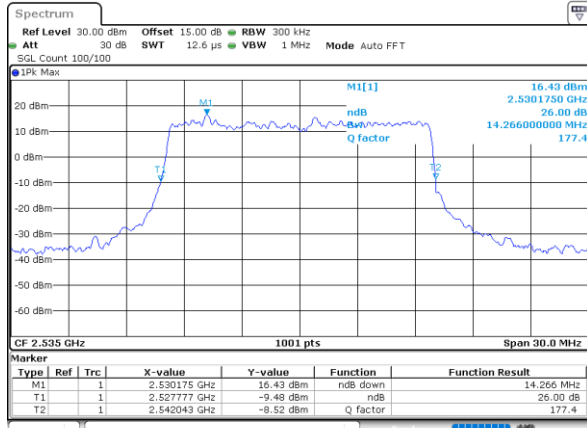
Mode	LTE Band 7 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.98	5.03	9.63	9.99	14.27	14.69	19.22	19.38





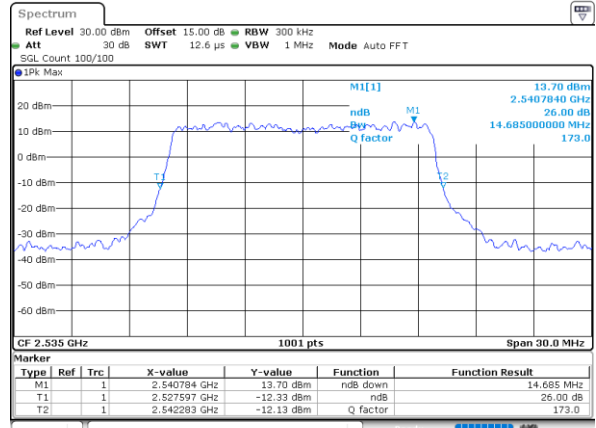
LTE Band 7

Middle Channel / 15MHz / QPSK



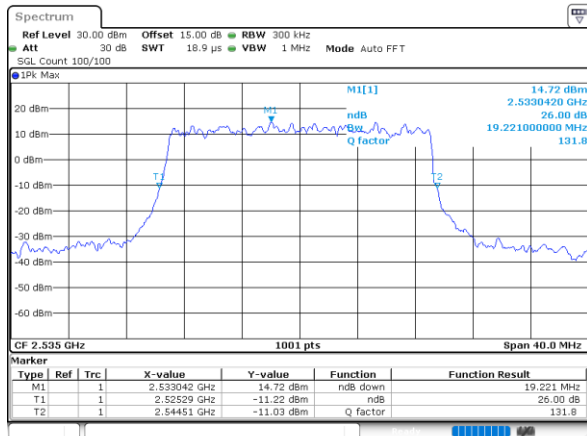
Date: 9,SEP,2023 13:45:27

Middle Channel / 15MHz / 16QAM



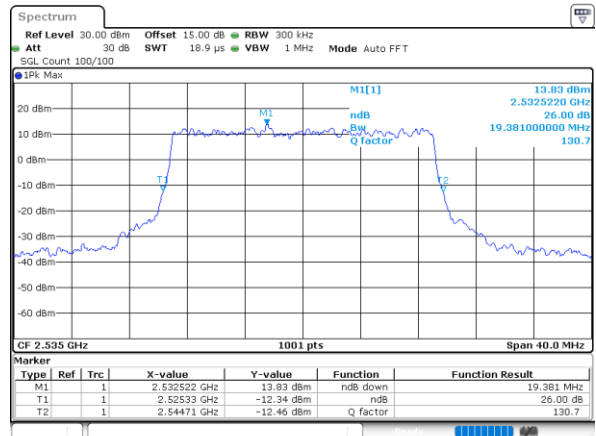
Date: 9,SEP,2023 13:46:10

Middle Channel / 20MHz / QPSK



Date: 9,SEP,2023 14:03:56

Middle Channel / 20MHz / 16QAM

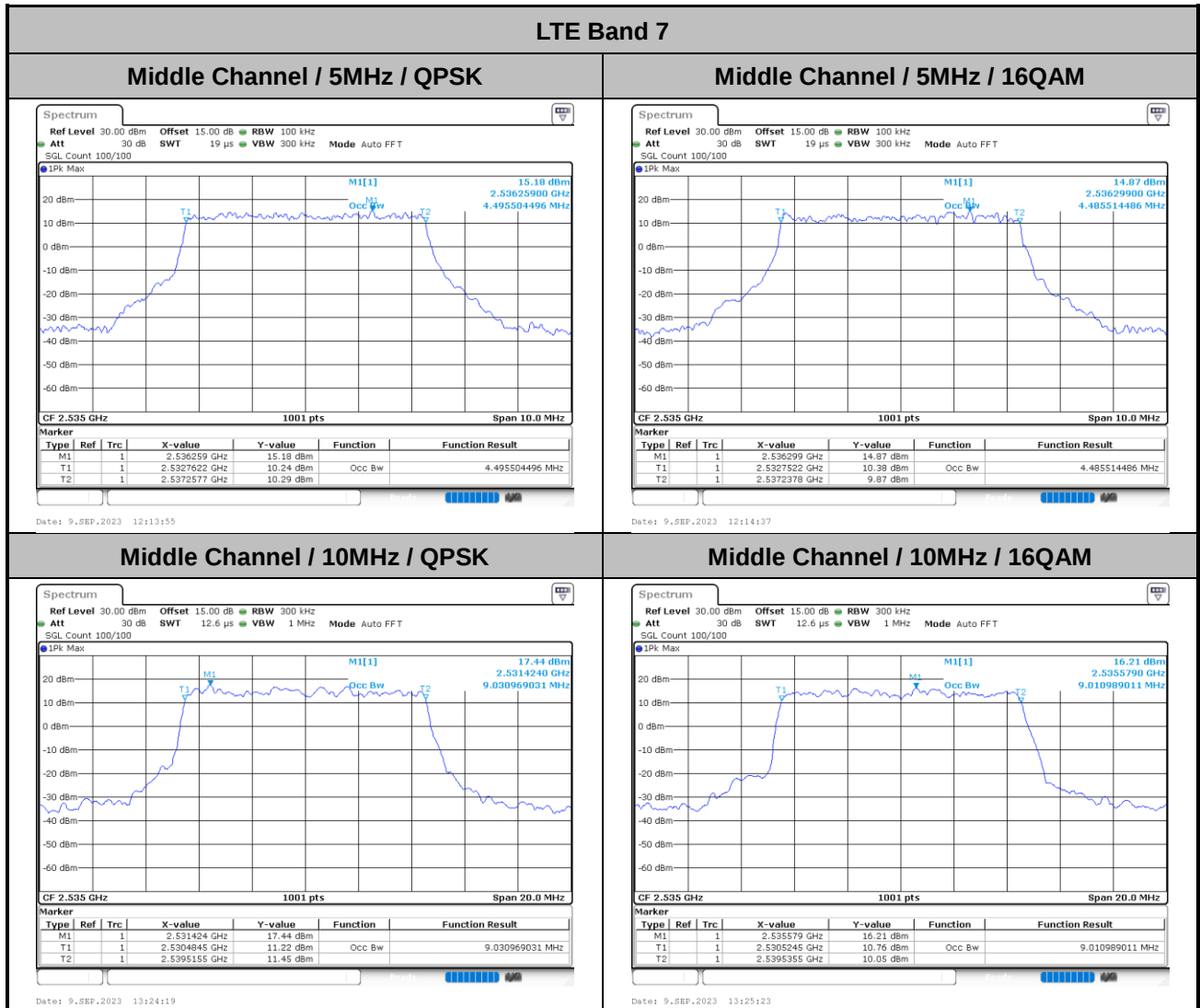


Date: 9,SEP,2023 14:04:39



Occupied Bandwidth

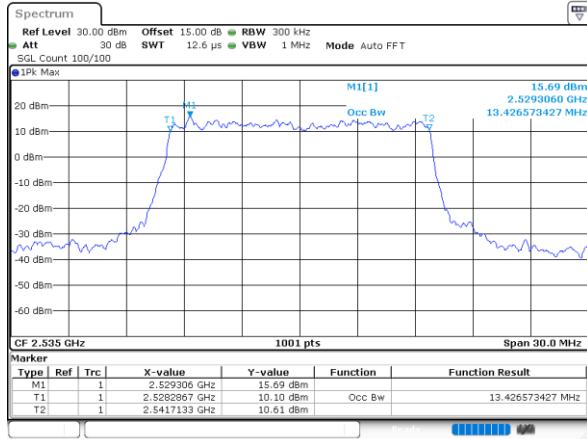
Mode	LTE Band 7 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.50	4.49	9.03	9.01	13.43	13.55	17.90	17.94



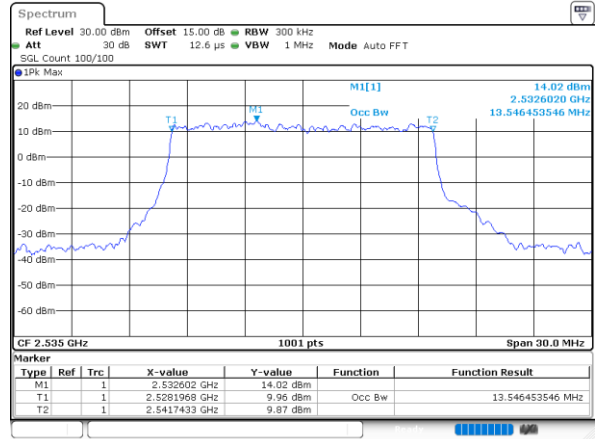


LTE Band 7

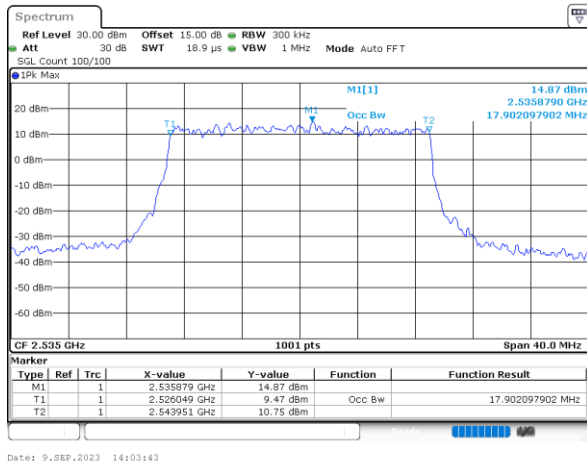
Middle Channel / 15MHz / QPSK



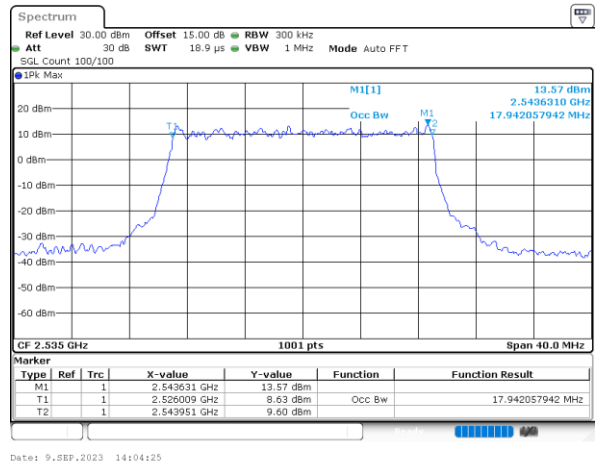
Middle Channel / 15MHz / 16QAM



Middle Channel / 20MHz / QPSK



Middle Channel / 20MHz / 16QAM

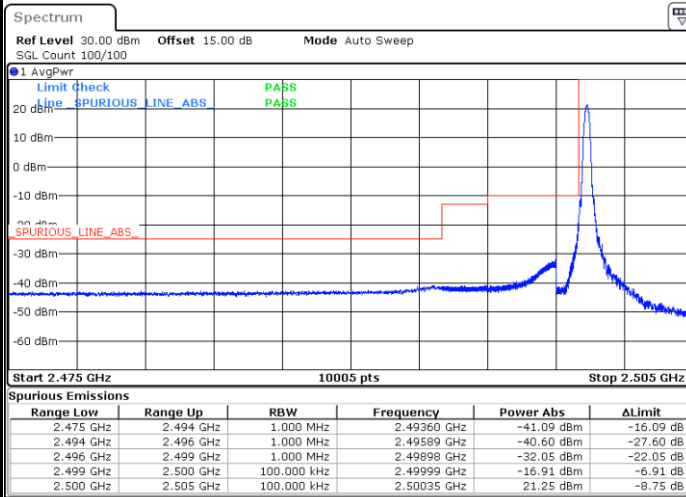




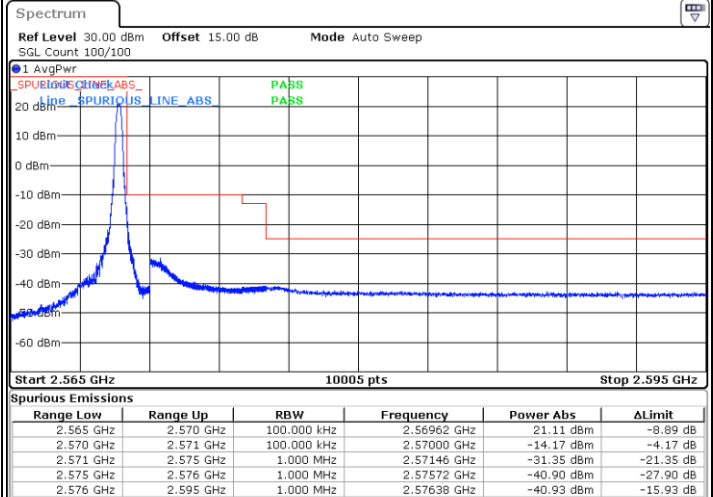
Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

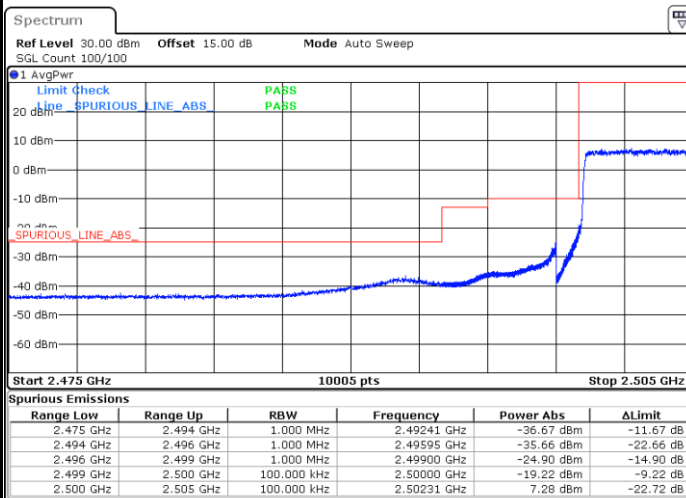
Lowest Band Edge / 1 RB



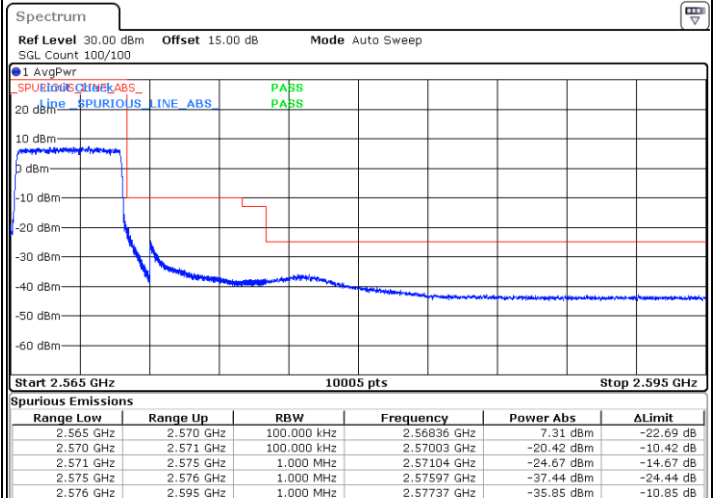
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



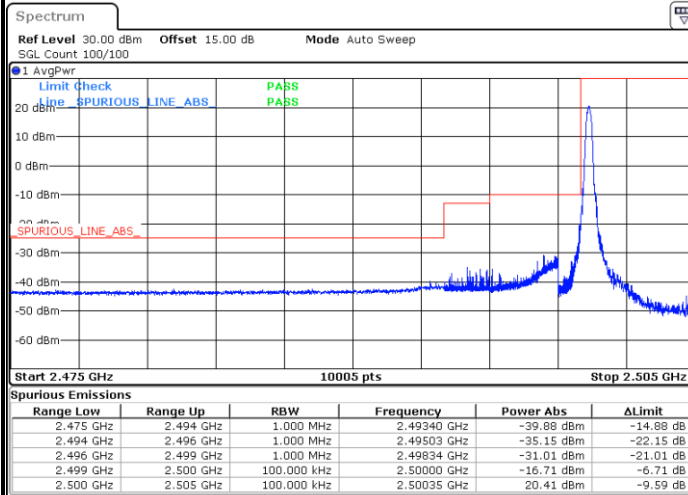
Highest Band Edge / Full RB





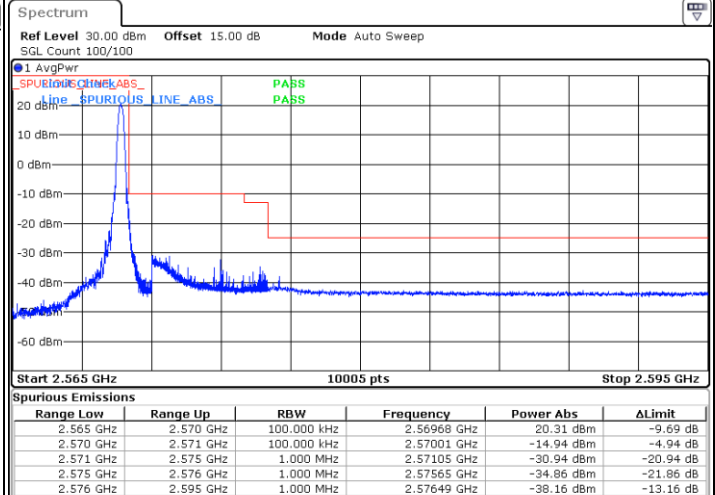
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



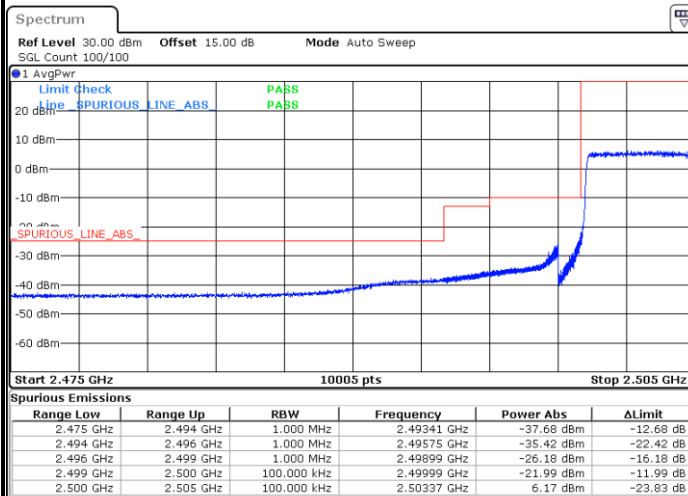
Date: 9.SEP.2023 12:06:55

Highest Band Edge / 1 RB



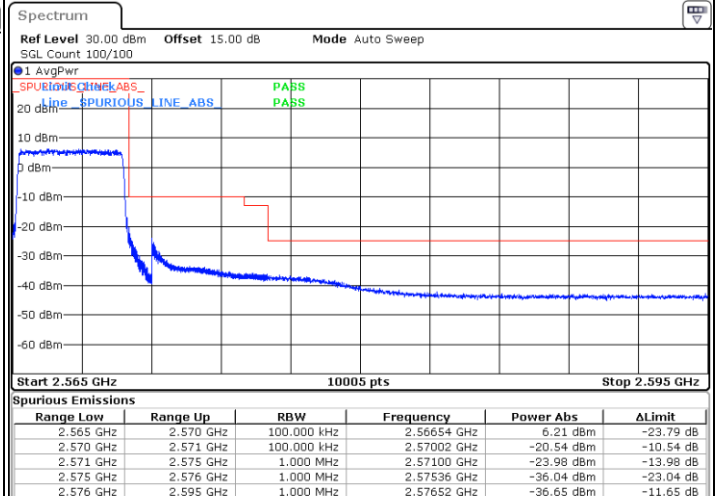
Date: 9.SEP.2023 12:16:58

Lowest Band Edge / Full RB



Date: 9.SEP.2023 12:10:07

Highest Band Edge / Full RB

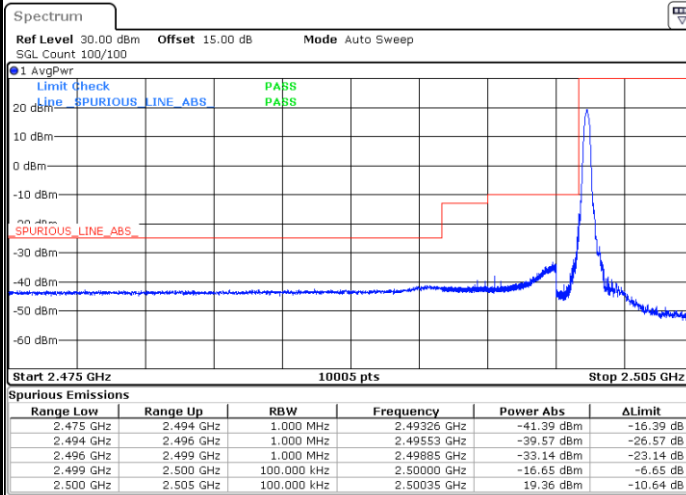


Date: 9.SEP.2023 12:20:09



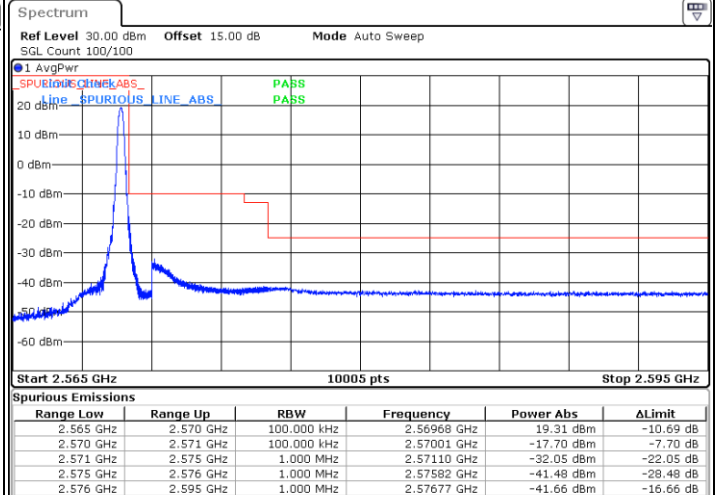
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



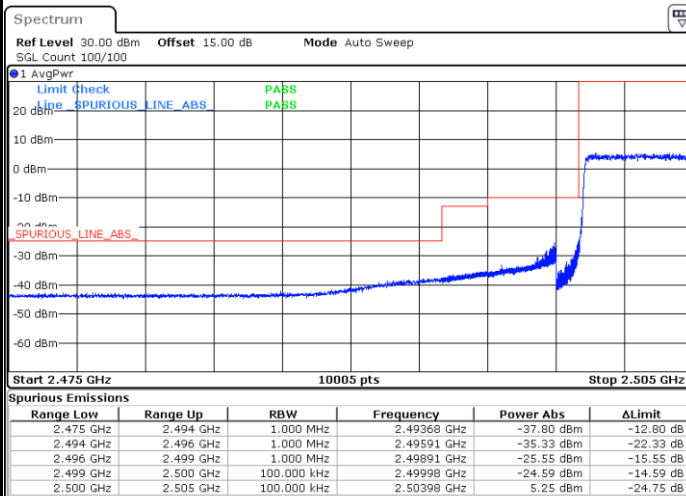
Date: 9.SEP.2023 12:07:59

Highest Band Edge / 1 RB



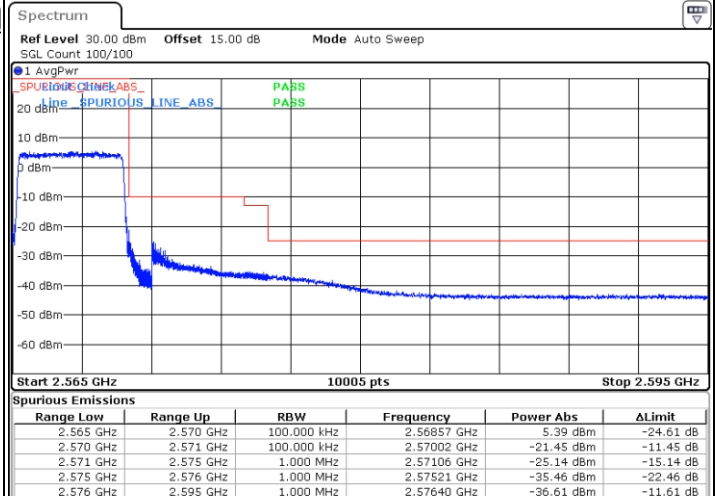
Date: 9.SEP.2023 12:18:01

Lowest Band Edge / Full RB



Date: 9.SEP.2023 12:11:11

Highest Band Edge / Full RB

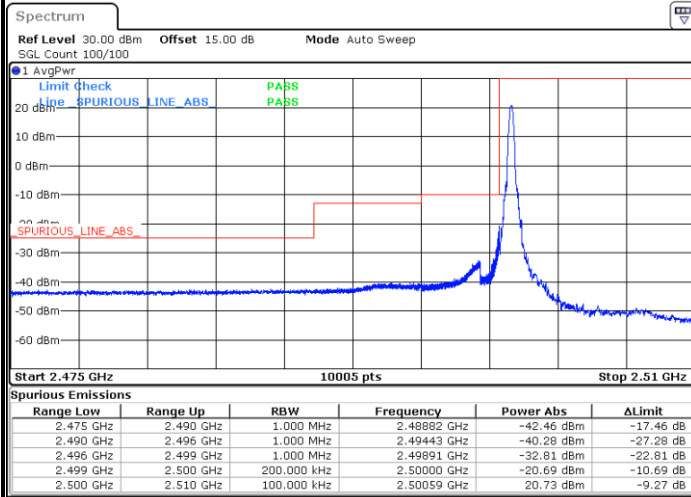


Date: 9.SEP.2023 12:21:13

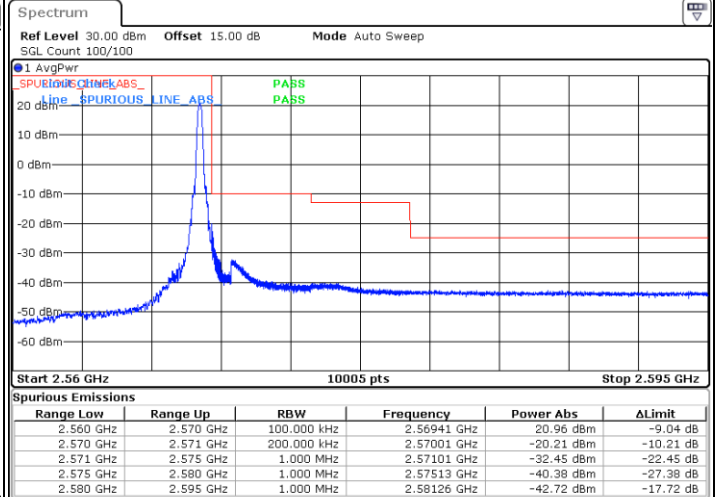


LTE Band 7 / 10MHz / QPSK

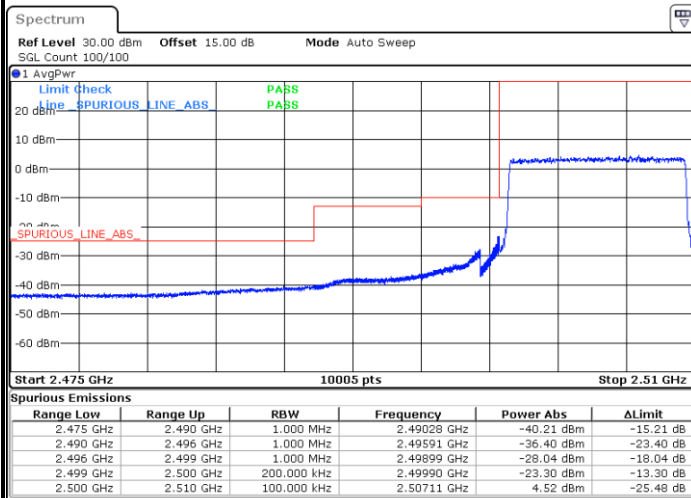
Lowest Band Edge / 1 RB



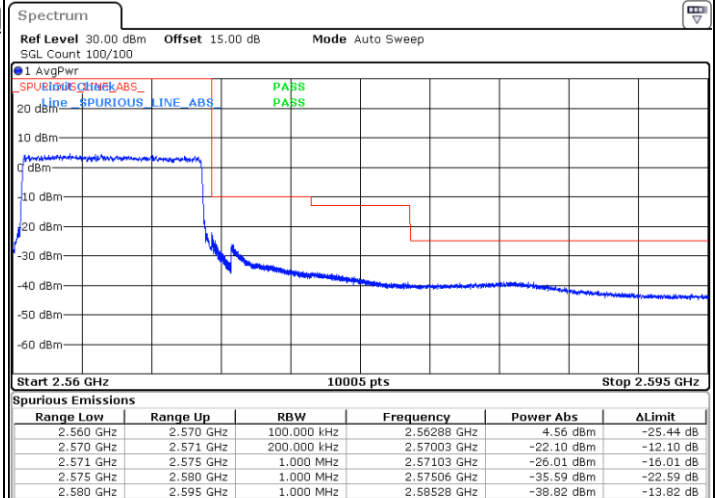
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



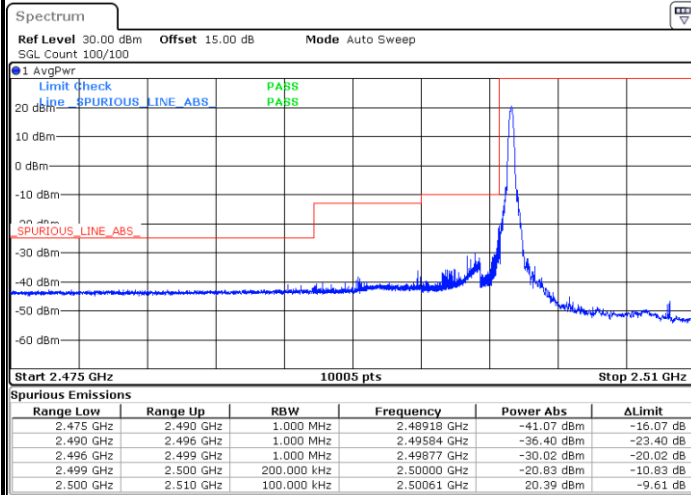
Highest Band Edge / Full RB



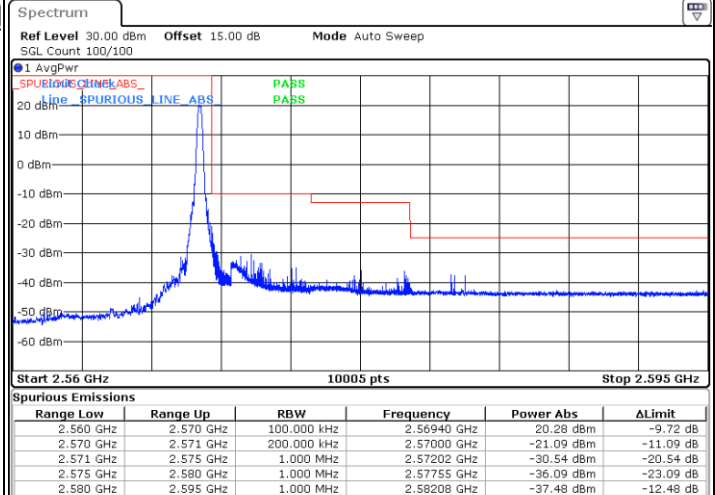


LTE Band 7 / 10MHz / 16QAM

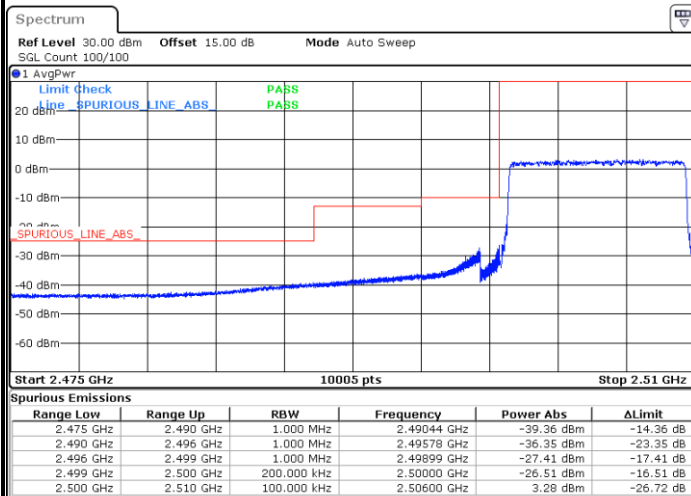
Lowest Band Edge / 1RB



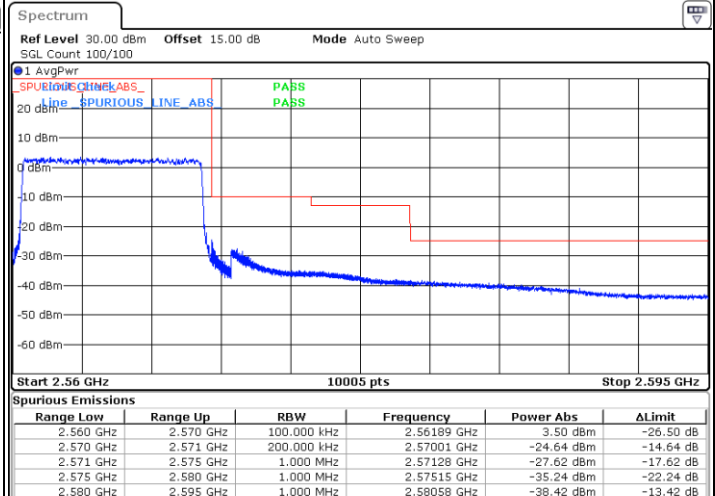
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



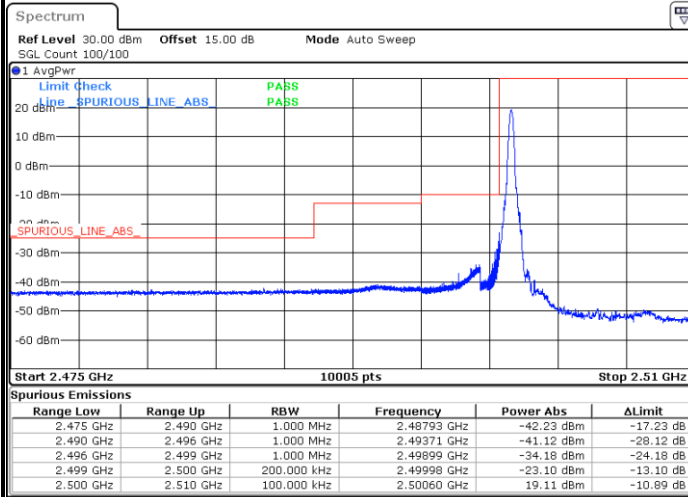
Highest Band Edge / Full RB





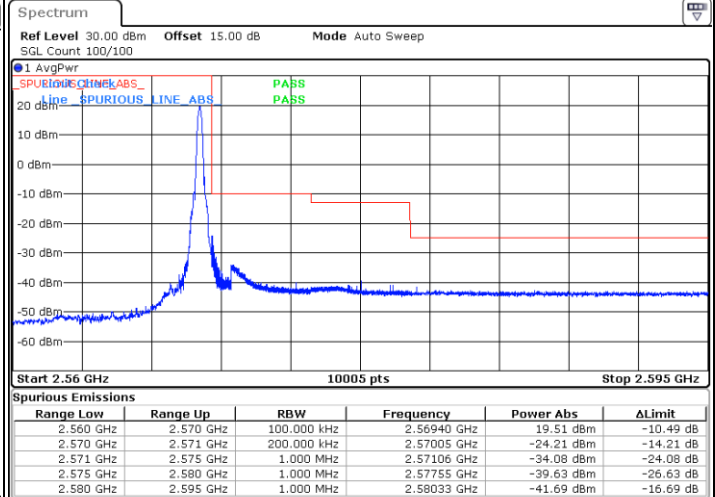
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1RB



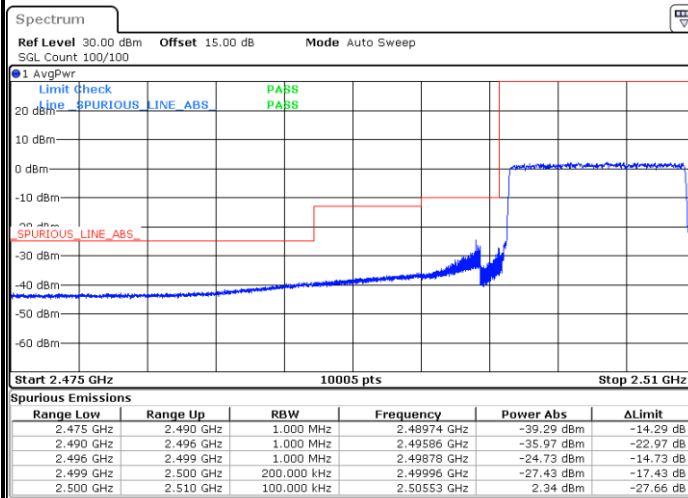
Date: 9.SEP.2023 13:04:38

Highest Band Edge / 1 RB



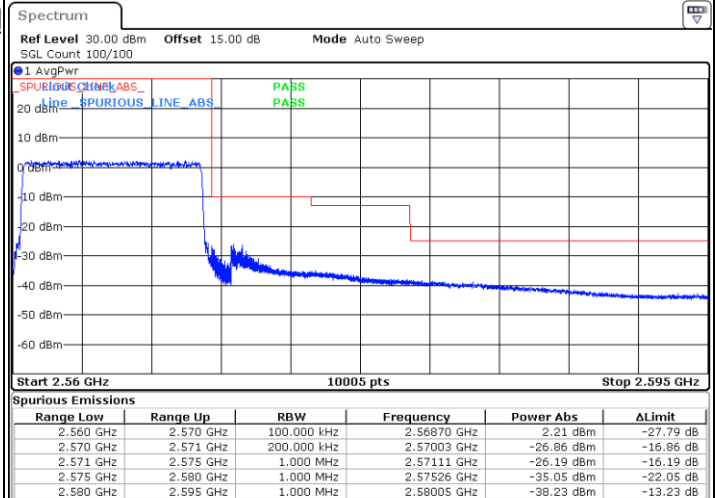
Date: 9.SEP.2023 13:28:55

Lowest Band Edge / Full RB



Date: 9.SEP.2023 13:21:16

Highest Band Edge / Full RB

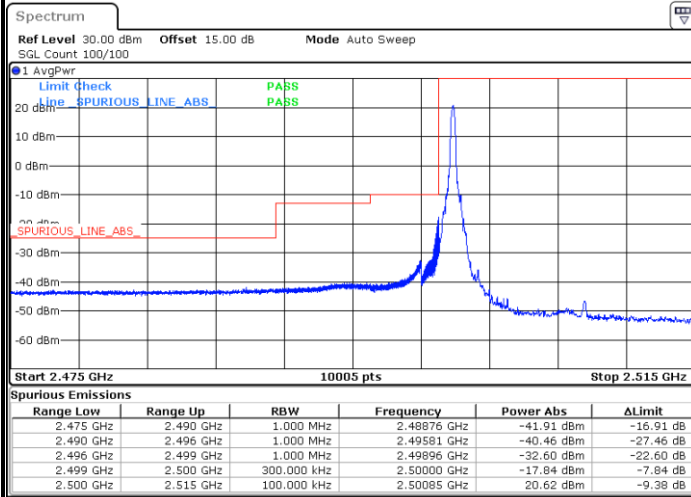


Date: 9.SEP.2023 13:32:06

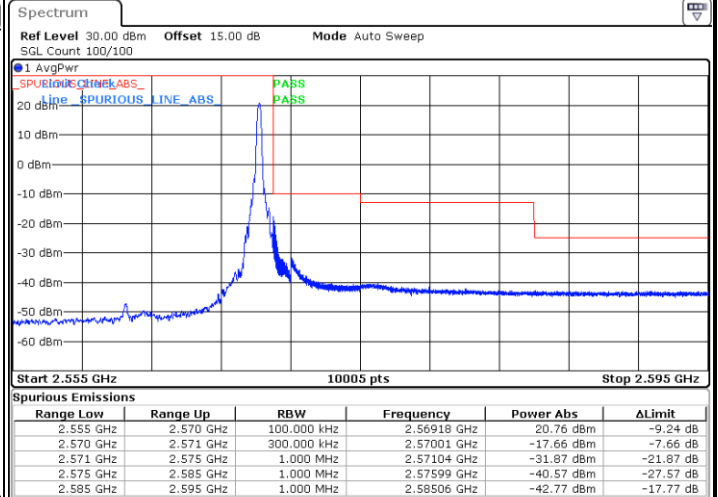


LTE Band 7 / 15MHz / QPSK

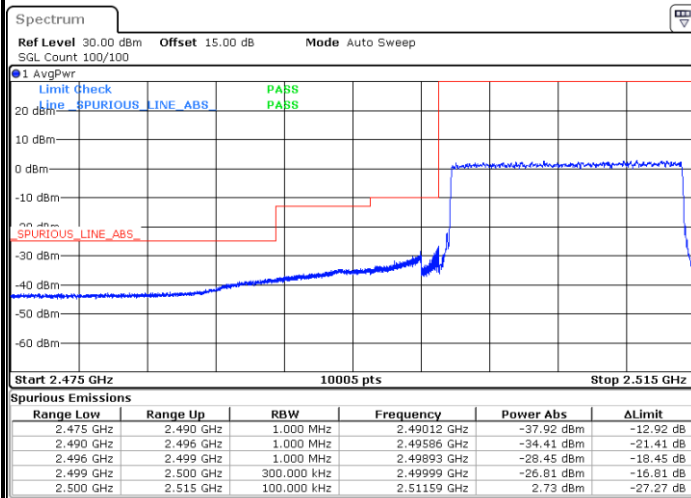
Lowest Band Edge / 1 RB



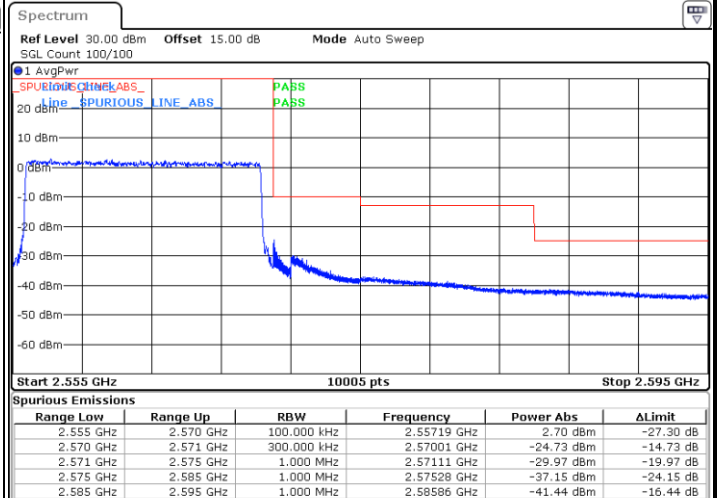
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



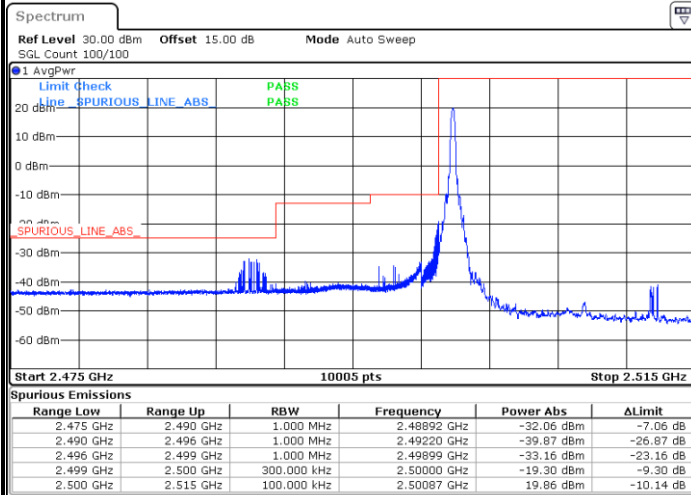
Highest Band Edge / Full RB





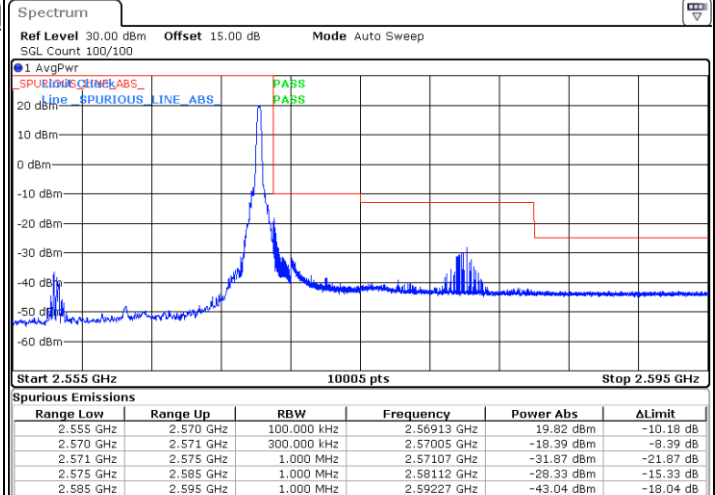
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1RB



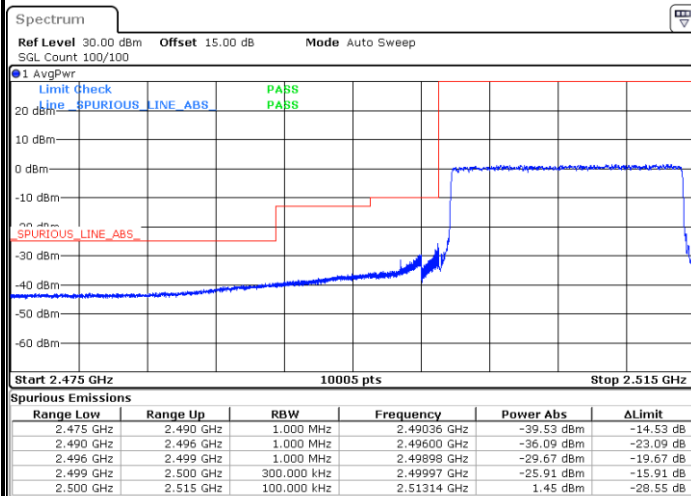
Date: 9.SEP.2023 13:38:14

Highest Band Edge / 1 RB



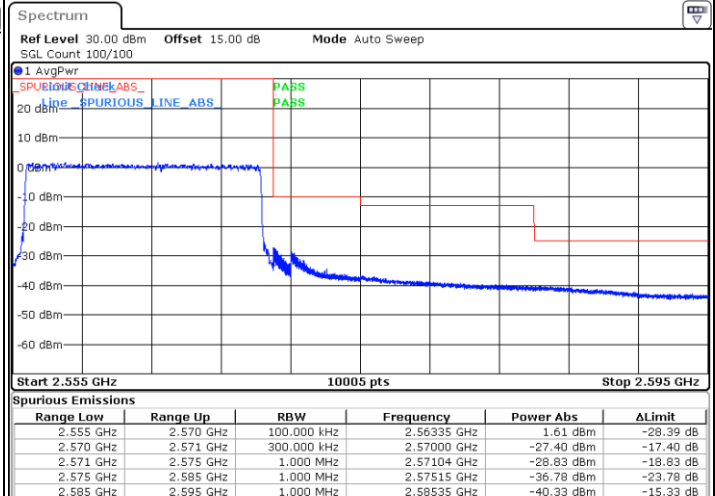
Date: 9.SEP.2023 13:48:16

Lowest Band Edge / Full RB



Date: 9.SEP.2023 13:41:26

Highest Band Edge / Full RB

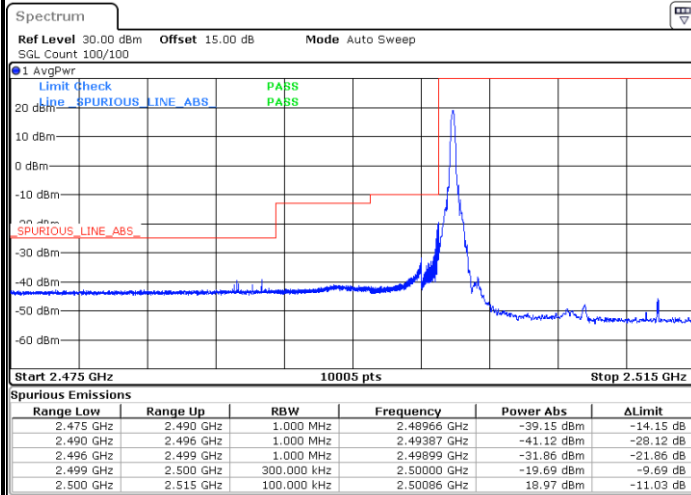


Date: 9.SEP.2023 13:51:27

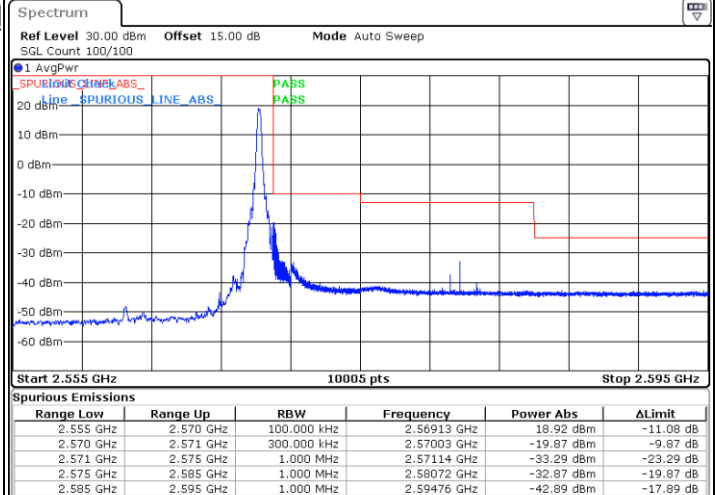


LTE Band 7 / 15MHz / 64QAM

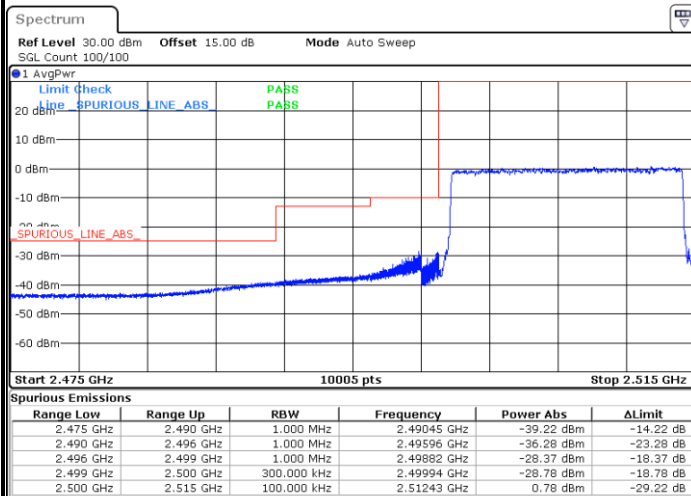
Lowest Band Edge / 1RB



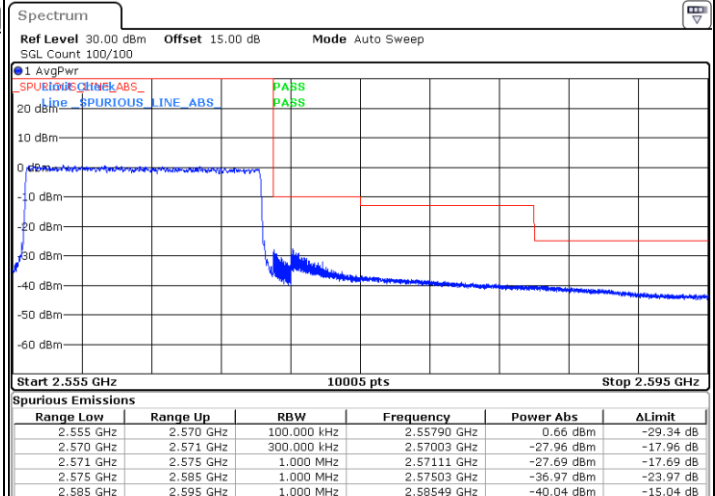
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



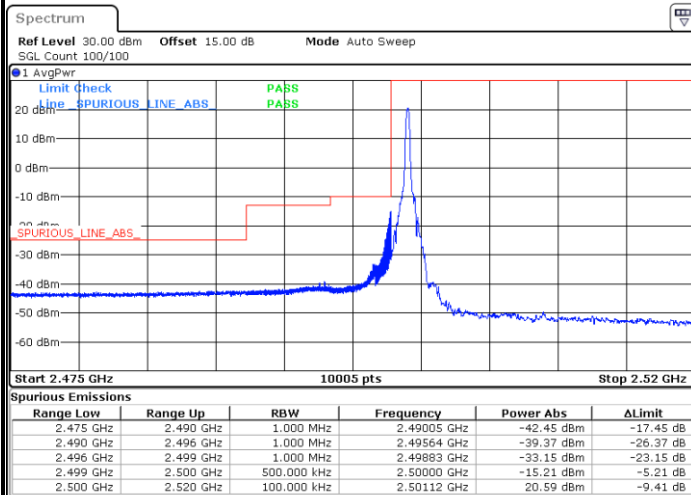
Highest Band Edge / Full RB





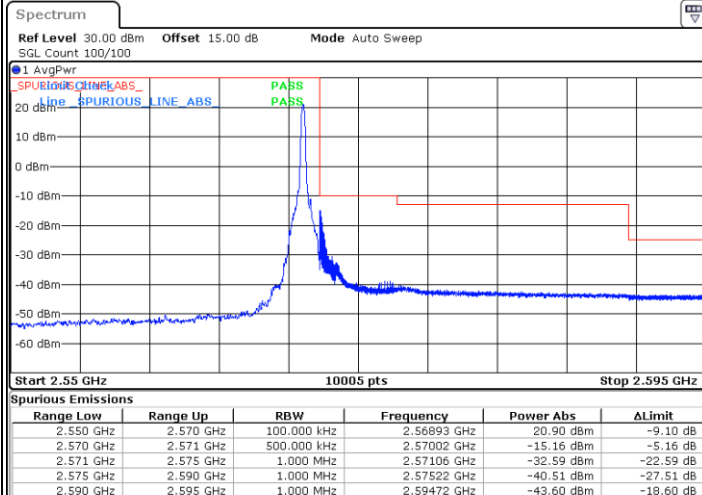
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



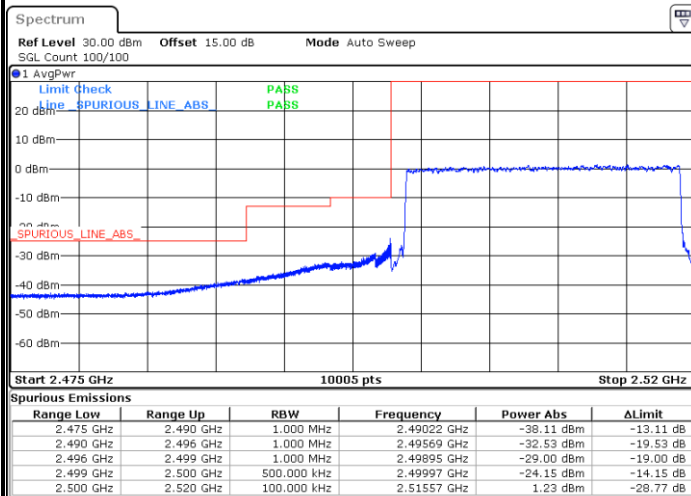
Date: 9.SEP.2023 13:55:39

Highest Band Edge / 1 RB



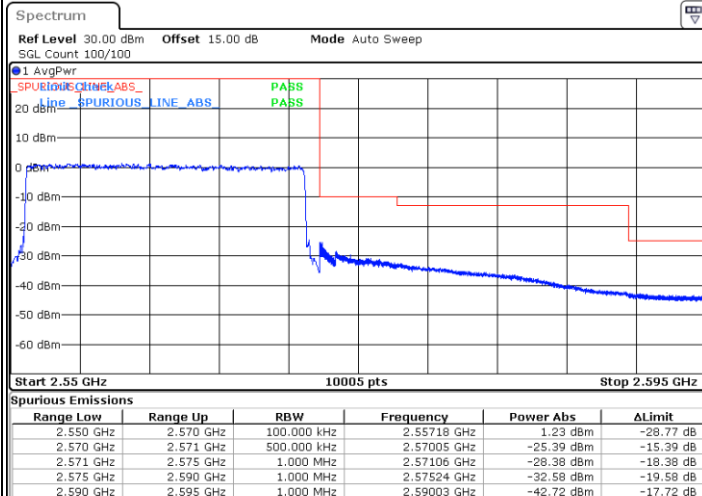
Date: 9.SEP.2023 14:07:10

Lowest Band Edge / Full RB



Date: 9.SEP.2023 13:58:51

Highest Band Edge / Full RB

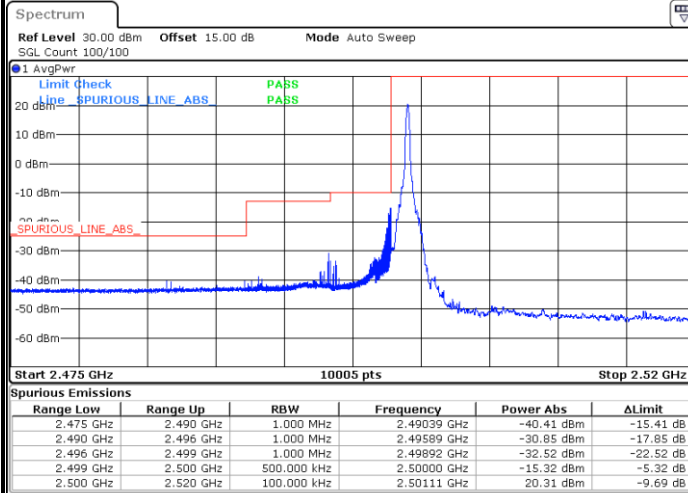


Date: 9.SEP.2023 14:10:21

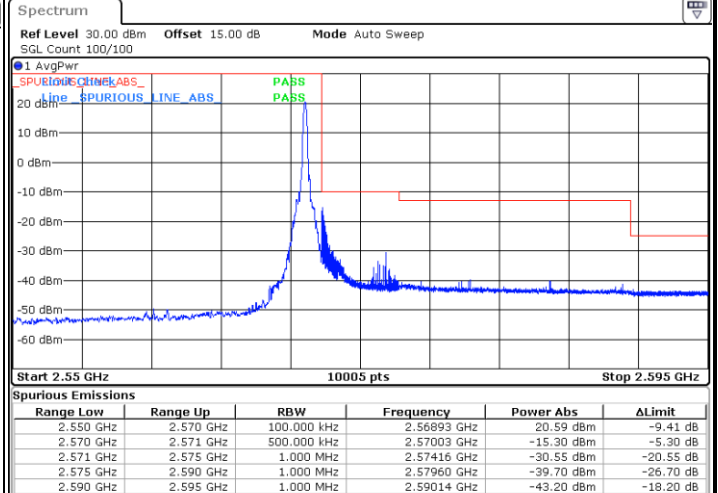


LTE Band 7 / 20MHz / 16QAM

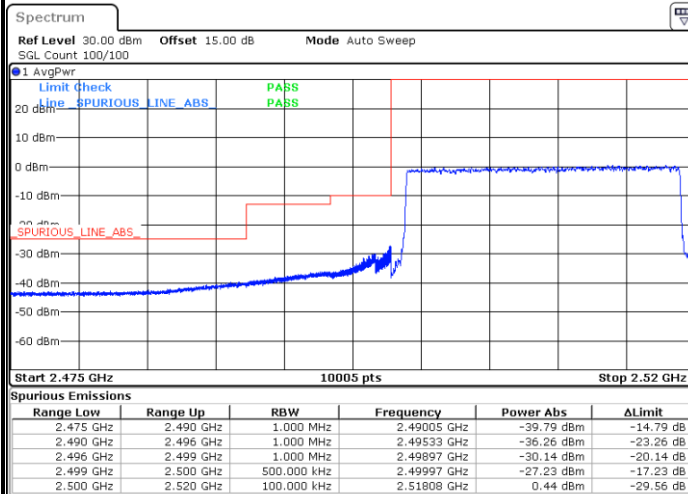
Lowest Band Edge / 1RB



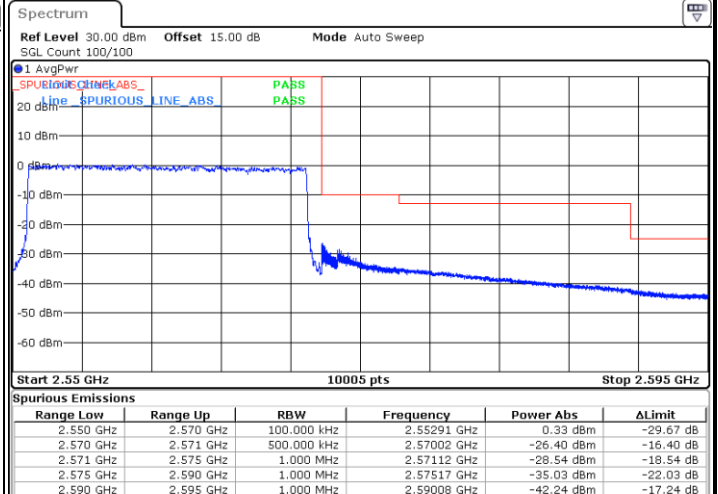
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



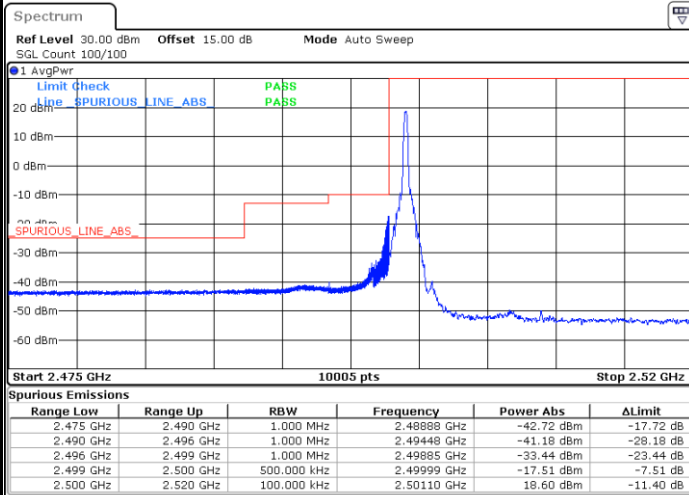
Highest Band Edge / Full RB





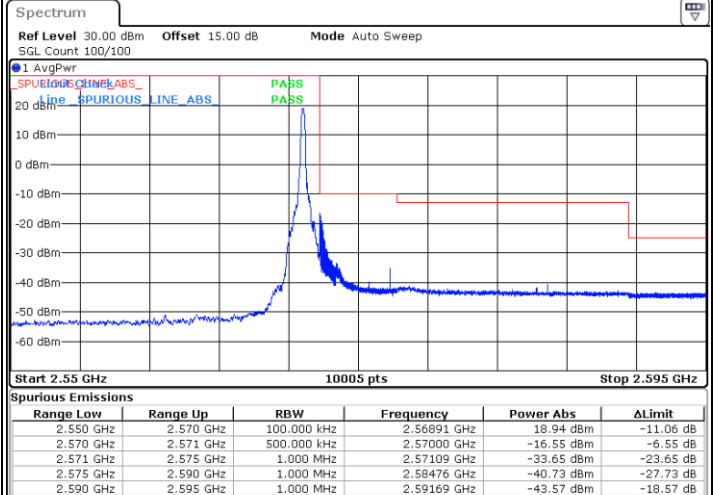
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1RB



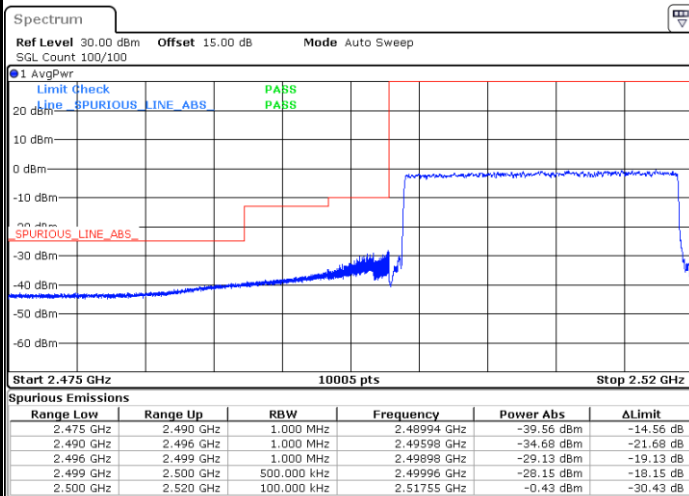
Date: 9.SEP.2023 13:57:47

Highest Band Edge / 1 RB



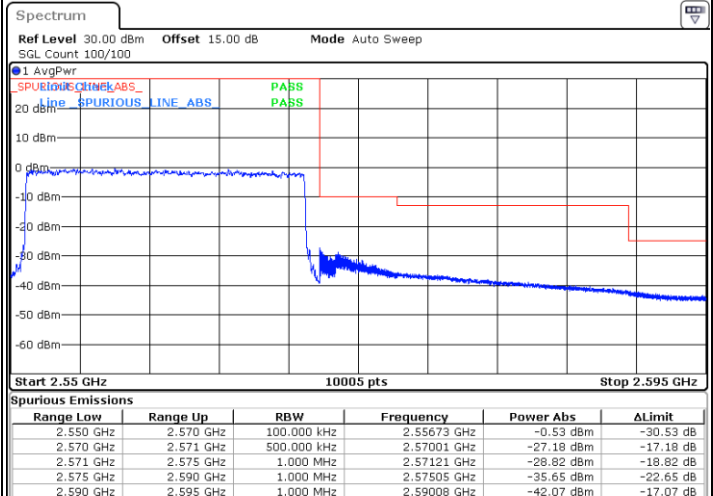
Date: 9.SEP.2023 14:09:17

Lowest Band Edge / Full RB



Date: 9.SEP.2023 14:00:59

Highest Band Edge / Full RB



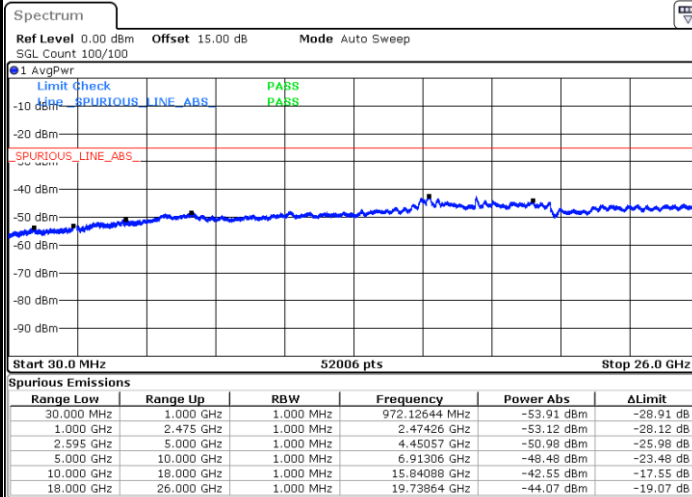
Date: 9.SEP.2023 14:12:28



Conducted Spurious Emission

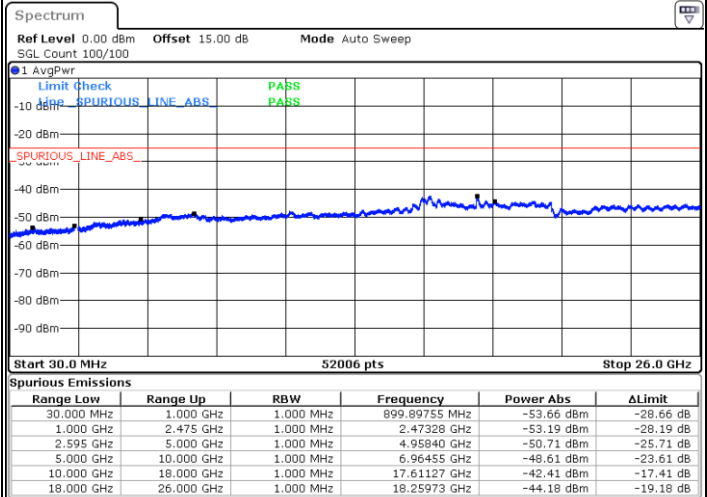
LTE Band 7 / 5MHz

Lowest Channel / QPSK



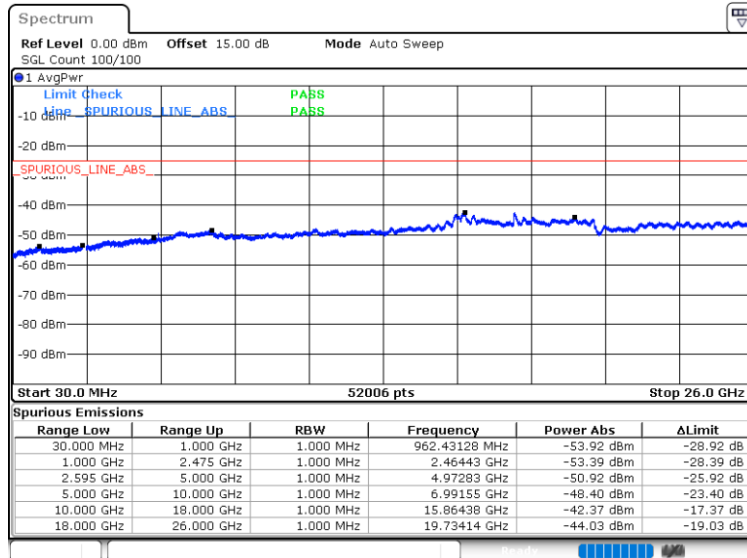
Date: 9.SEP.2023 12:12:19

Middle Channel / QPSK



Date: 9.SEP.2023 12:13:26

Highest Channel / QPSK

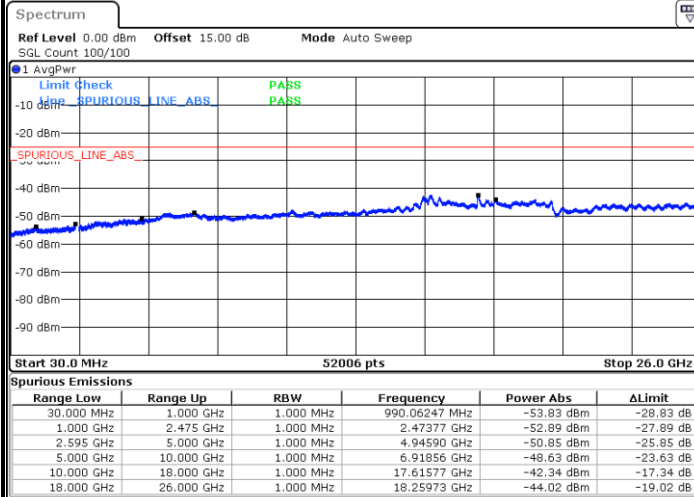


Date: 9.SEP.2023 12:22:20



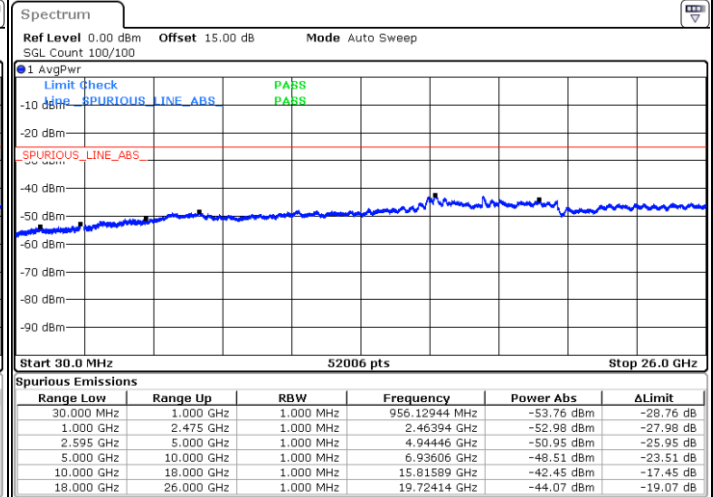
LTE Band 7 / 10MHz

Lowest Channel / QPSK



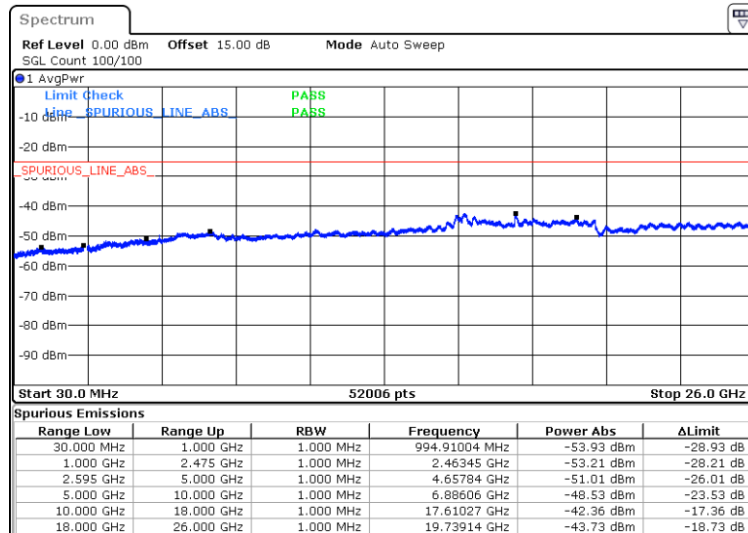
Date: 9.SEP.2023 13:22:24

Middle Channel / QPSK



Date: 9.SEP.2023 13:23:50

Highest Channel / QPSK

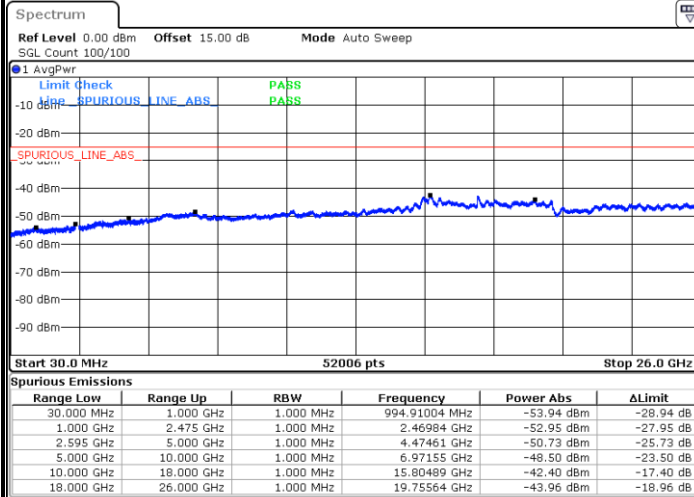


Date: 9.SEP.2023 13:33:13



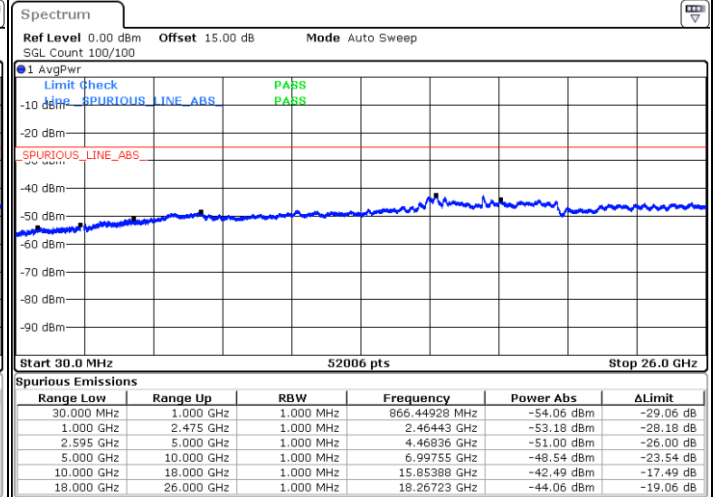
LTE Band 7 / 15MHz

Lowest Channel / QPSK



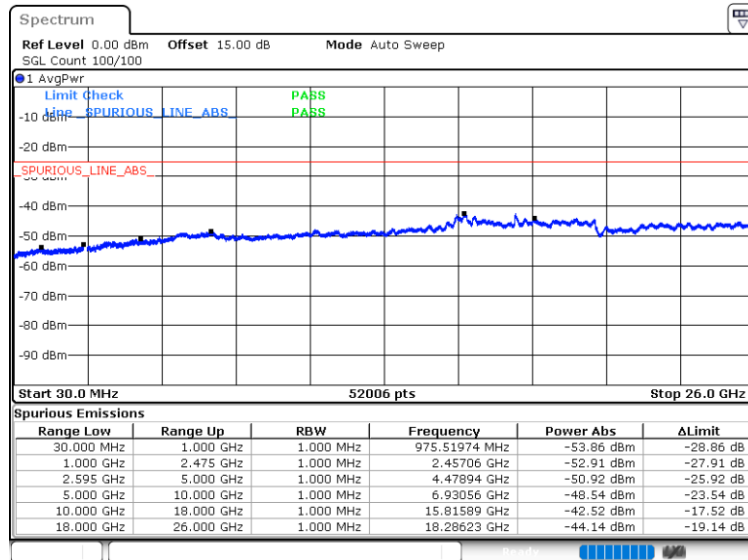
Date: 9.SEP.2023 13:43:37

Middle Channel / QPSK



Date: 9.SEP.2023 13:44:44

Highest Channel / QPSK

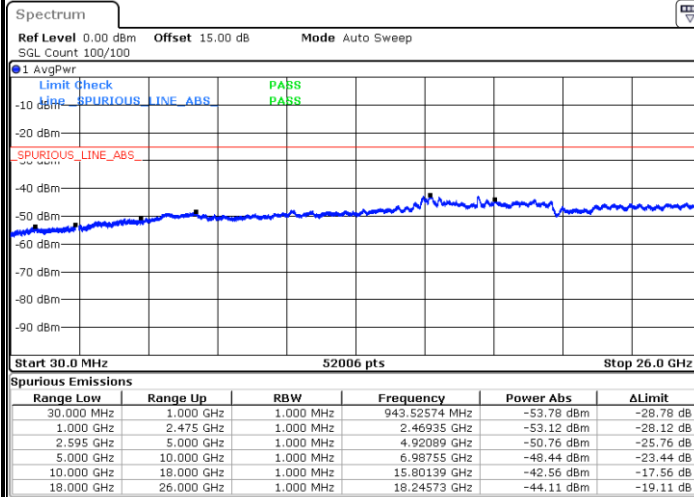


Date: 9.SEP.2023 13:53:38



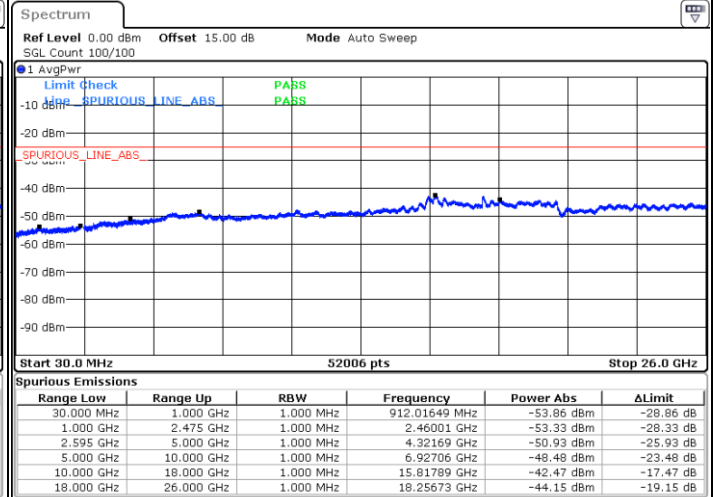
LTE Band 7 / 20MHz

Lowest Channel / QPSK



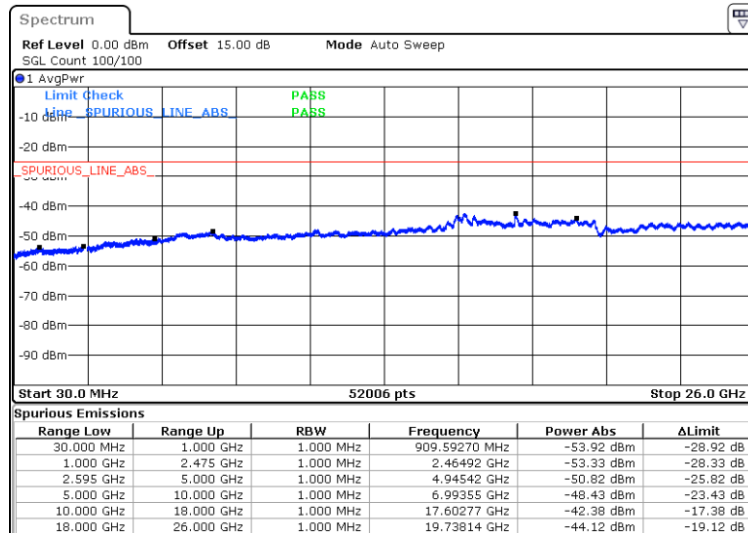
Date: 9.SEP.2023 14:02:06

Middle Channel / QPSK



Date: 9.SEP.2023 14:03:13

Highest Channel / QPSK



Date: 9.SEP.2023 14:13:36

Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0004	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0001	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0007	
-30	Normal Voltage	0.0006	
20	Maximum Voltage	0.0001	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

Note:

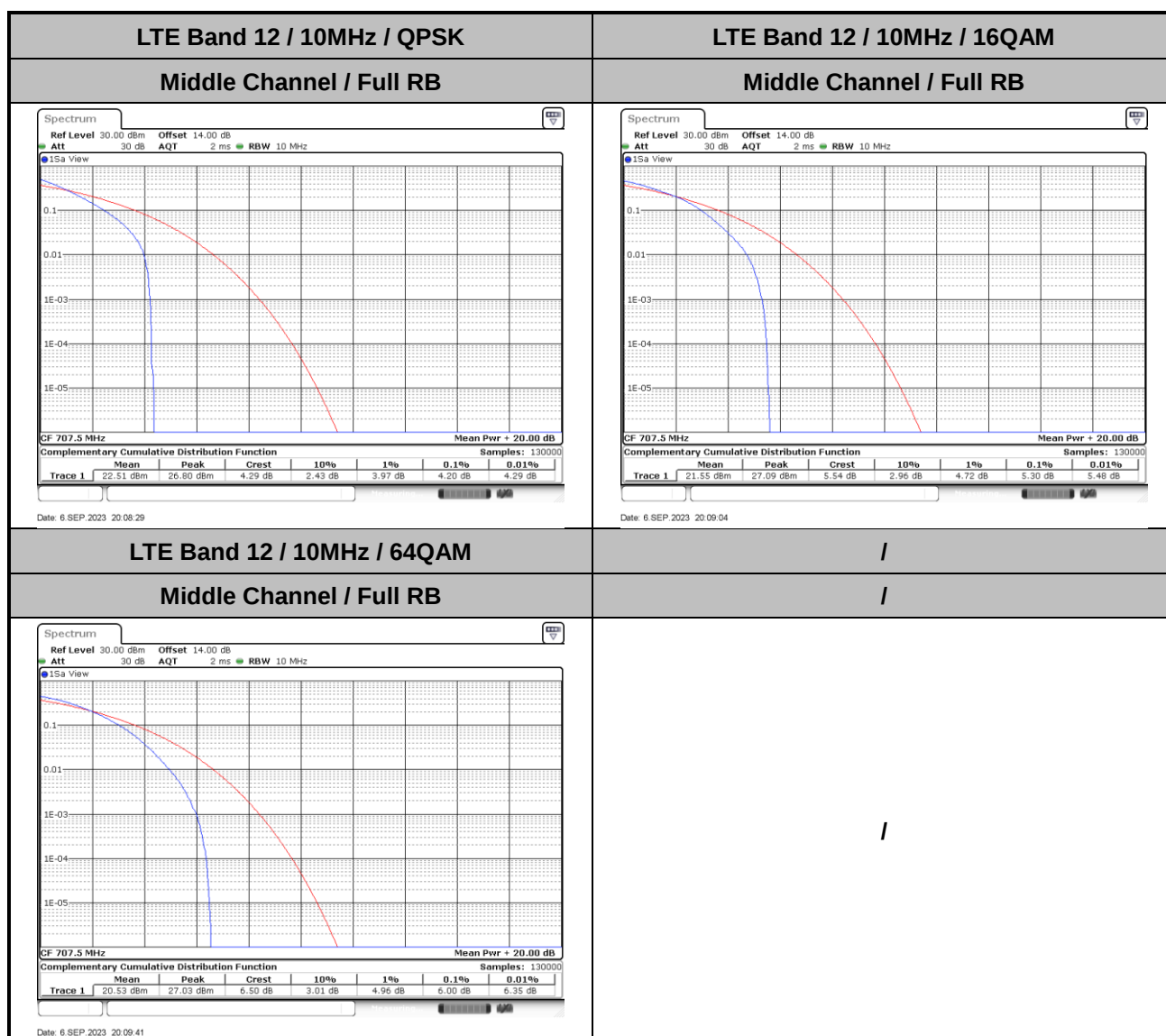
1. Normal Voltage = 7.82 V. ; Battery End Point (BEP) = 6.8 V. ; Maximum Voltage = 9 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 12

Peak-to-Average Ratio

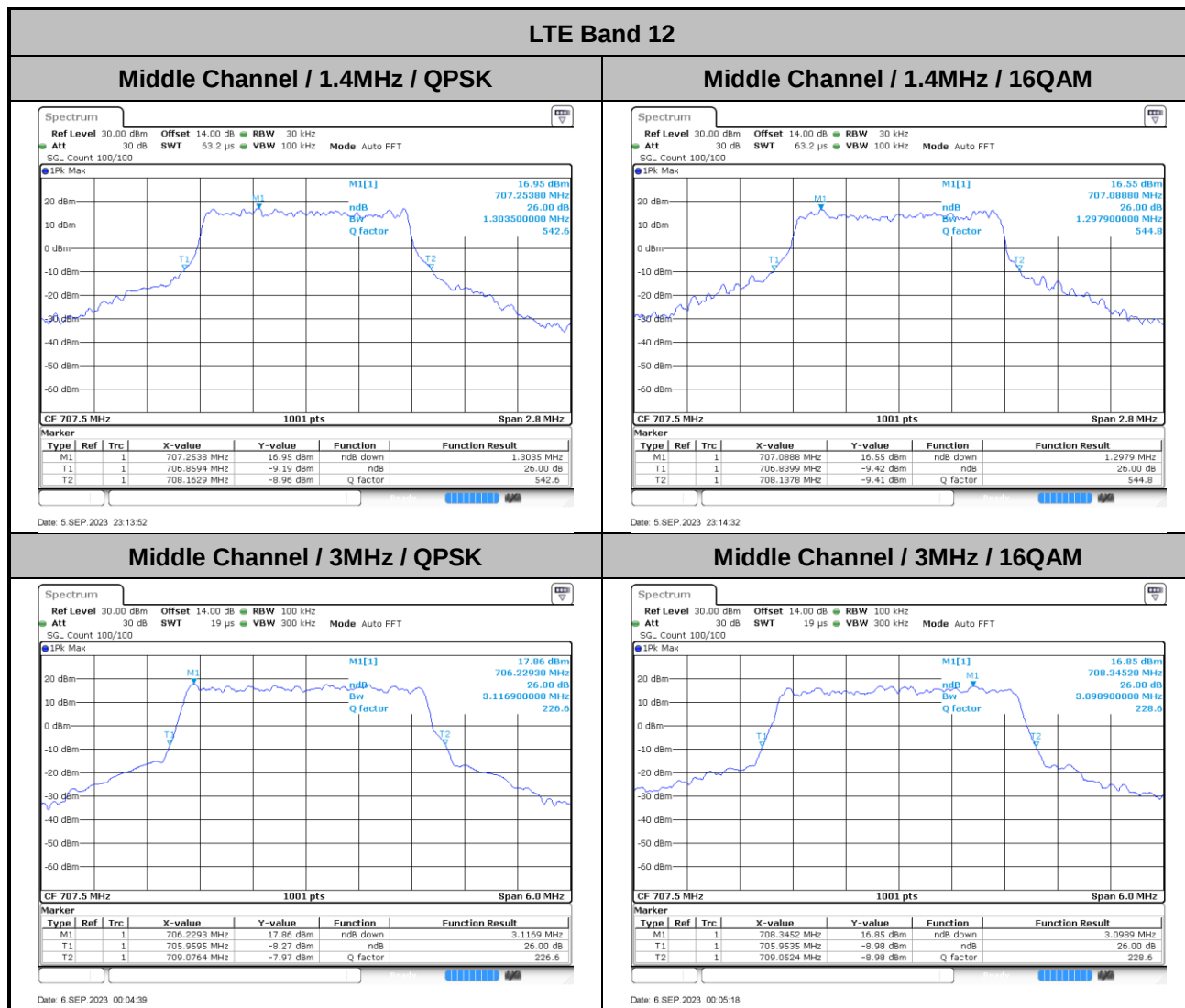
Mode	LTE Band 12 / 10MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	4.20	5.30	6.00	PASS





26dB Bandwidth

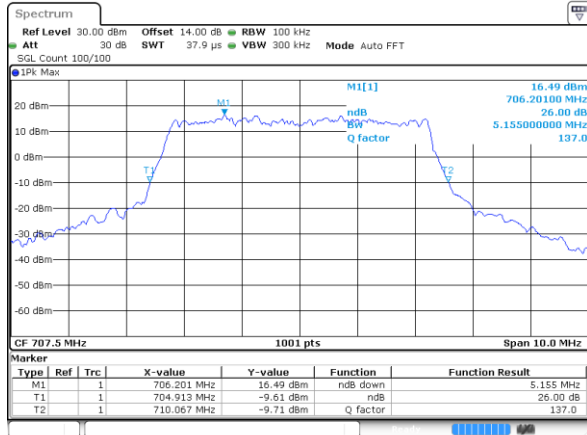
Mode	LTE Band 12 : 26dB BW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.30	1.30	3.12	3.10	5.16	5.03	9.95	9.89



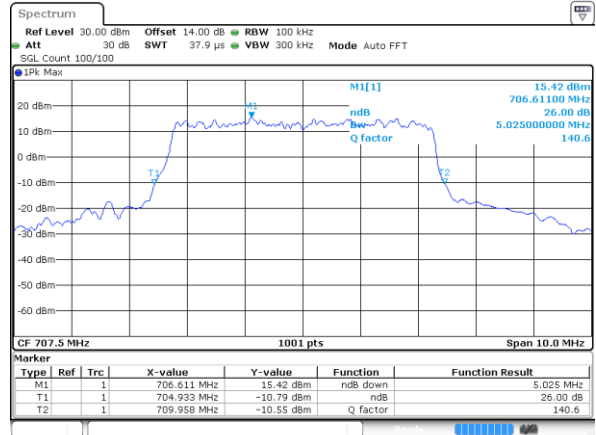


LTE Band 12

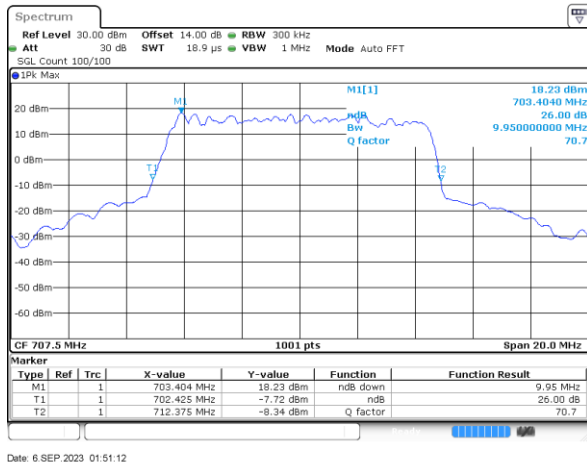
Middle Channel / 5MHz / QPSK



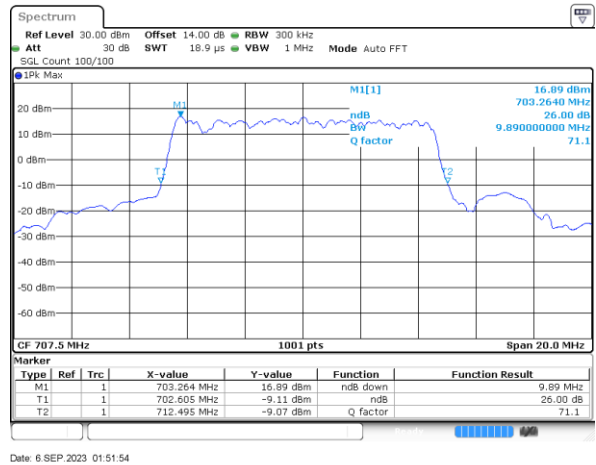
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



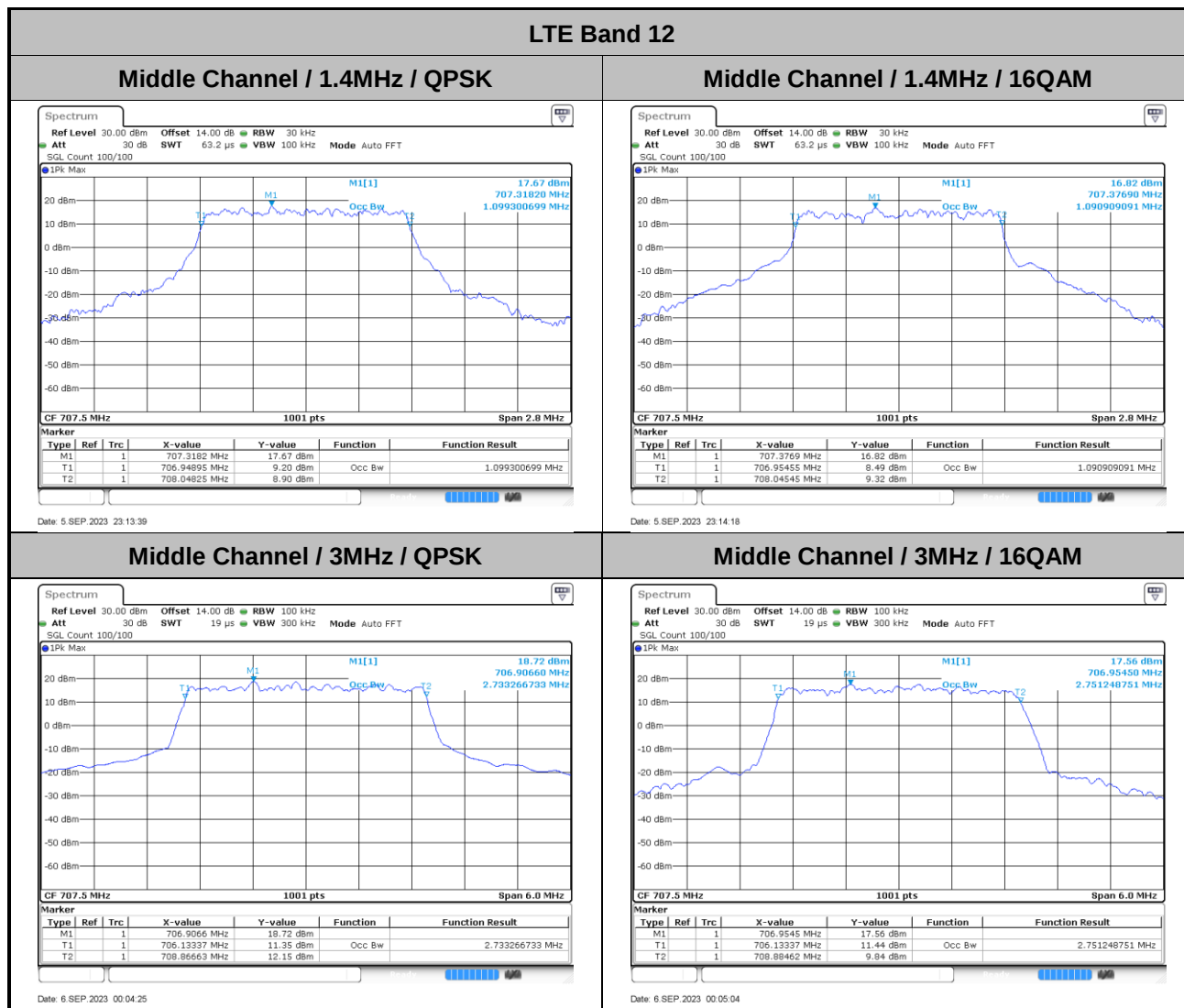
Middle Channel / 10MHz / 16QAM





Occupied Bandwidth

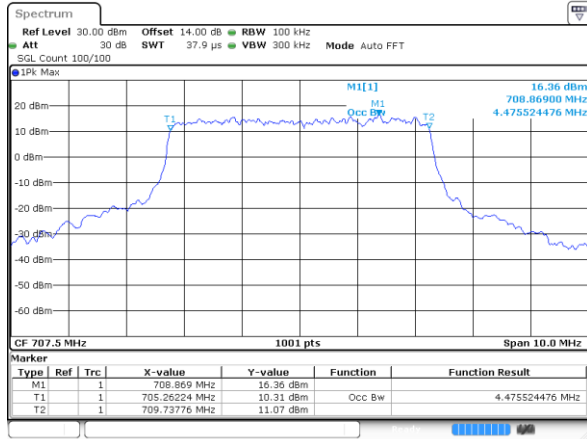
Mode	LTE Band 12 : 99%OBW(MHz)							
BW	1.4MHz		3MHz		5MHz		10MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	1.10	1.09	2.73	2.75	4.48	4.49	9.05	9.07



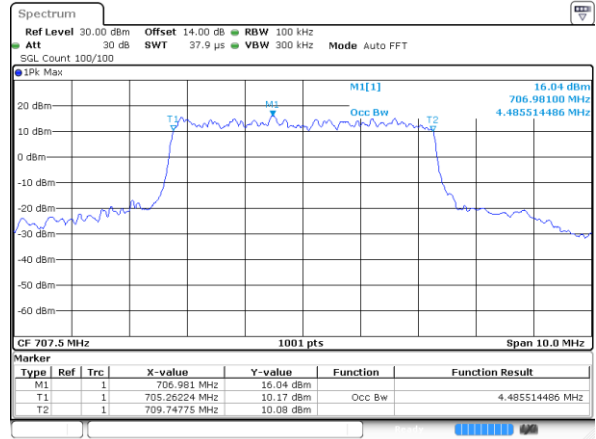


LTE Band 12

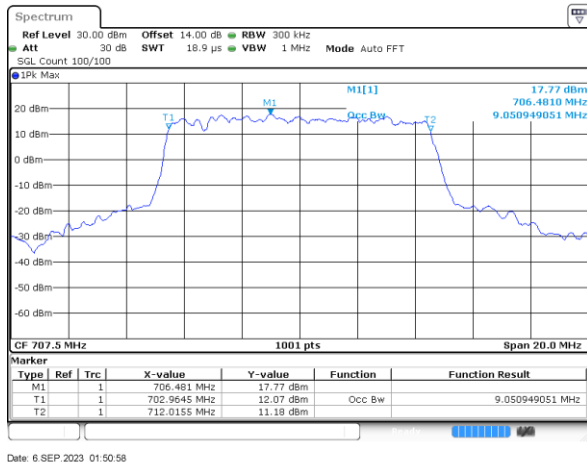
Middle Channel / 5MHz / QPSK



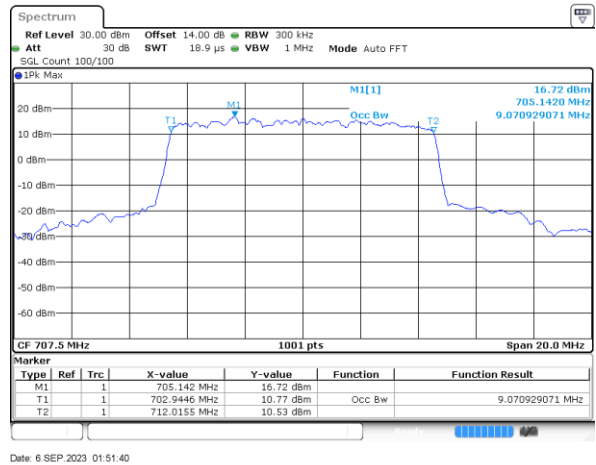
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

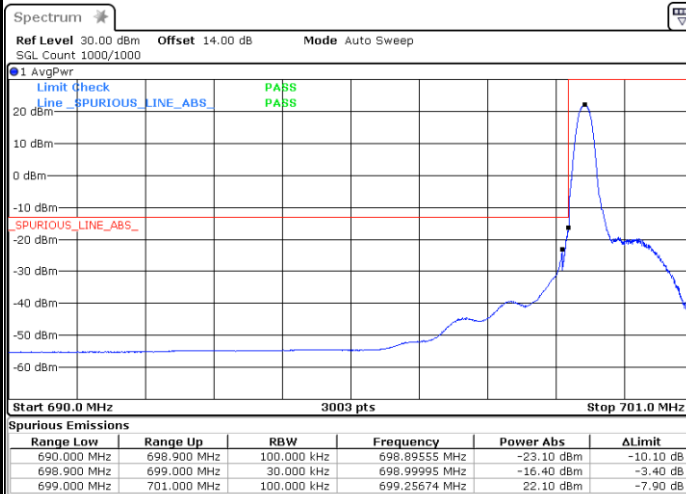




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

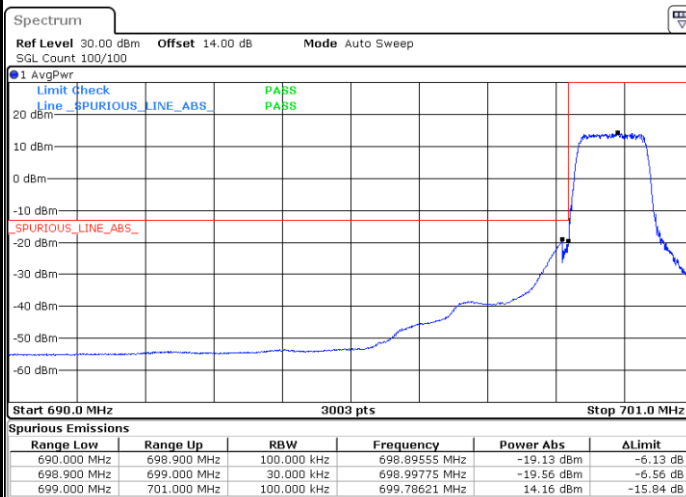
Lowest Band Edge / 1RB



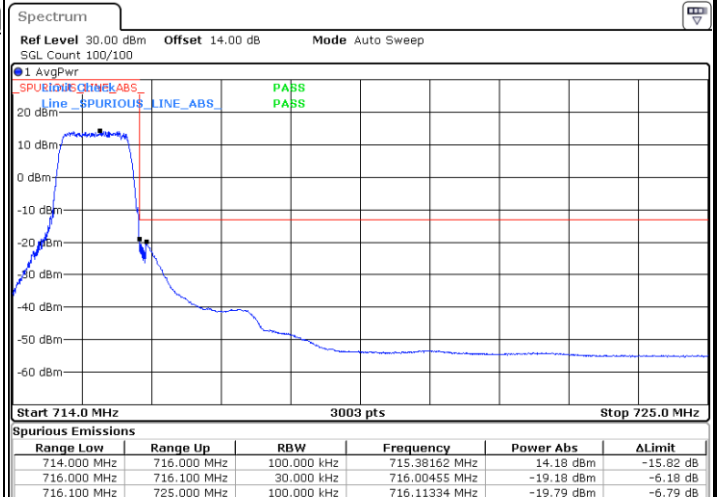
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



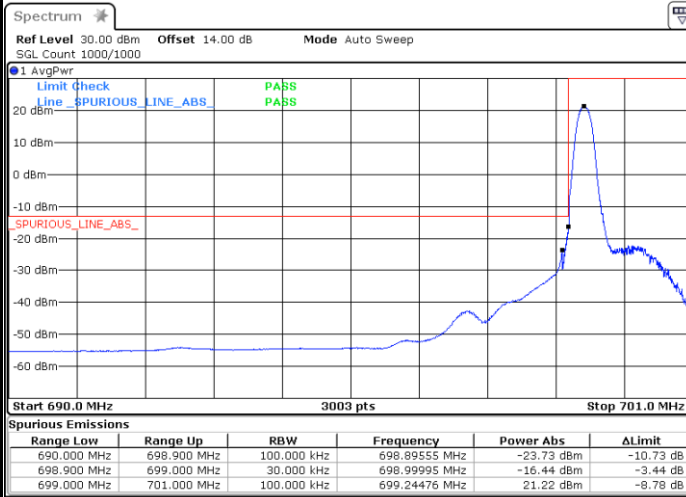
Highest Band Edge / Full RB





LTE Band 12 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



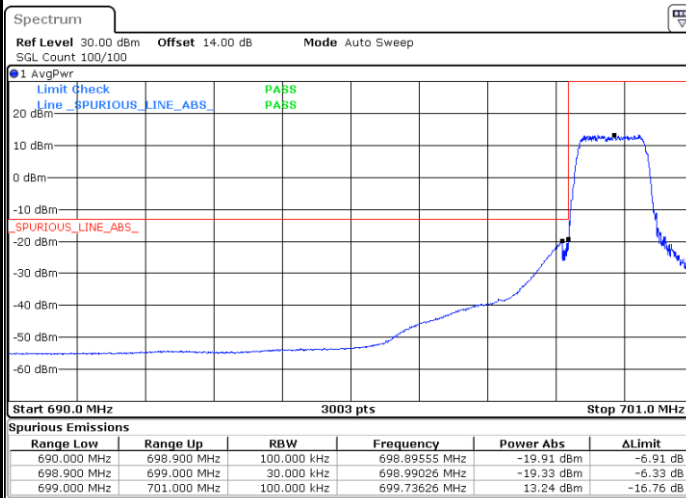
Date: 6 SEP 2023 19:40:16

Highest Band Edge / 1 RB



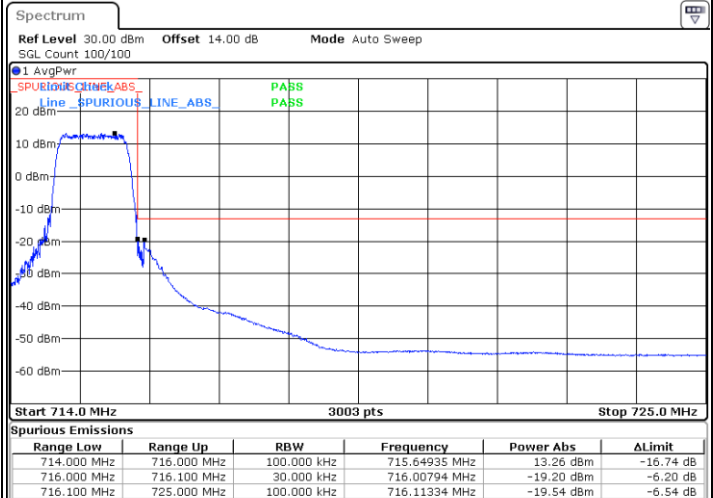
Date: 5 SEP 2023 23:16:42

Lowest Band Edge / Full RB



Date: 5 SEP 2023 23:09:38

Highest Band Edge / Full RB



Date: 5 SEP 2023 23:19:59