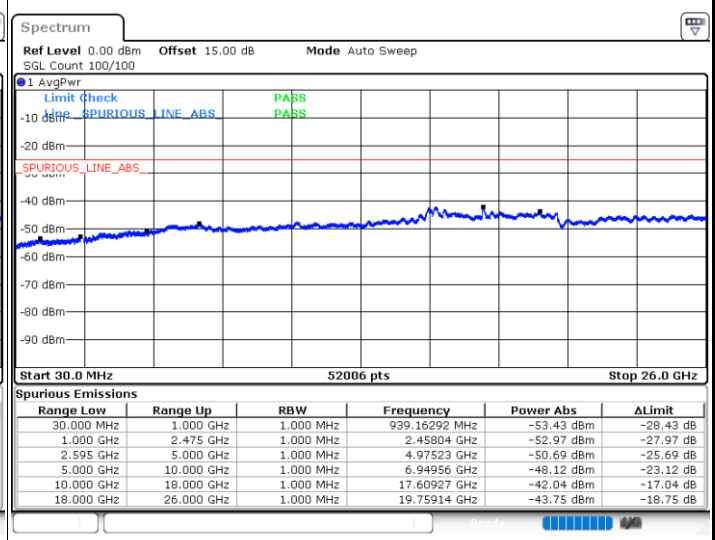
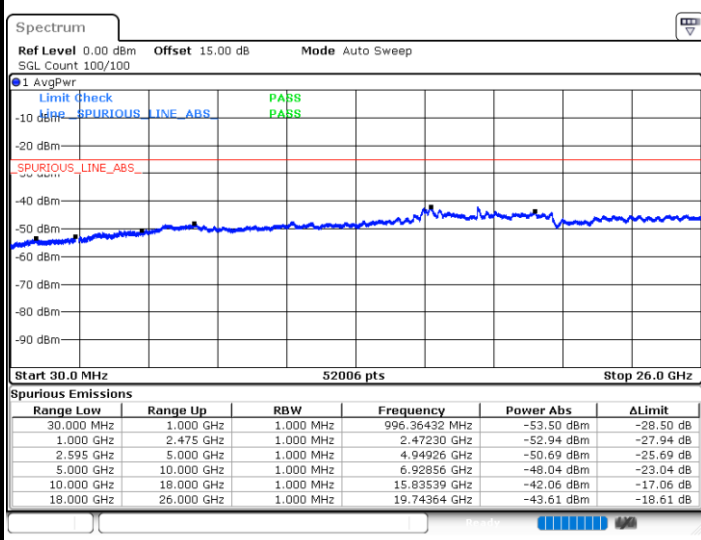




LTE Band 7 / 20MHz

Lowest Channel / QPSK

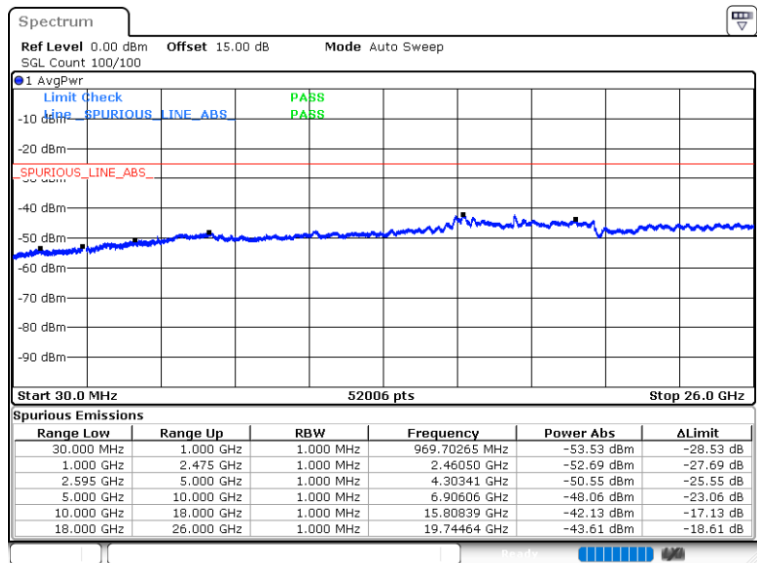
Middle Channel / QPSK



Date: 27.DEC.2023 21:13:14

Date: 27.DEC.2023 21:14:24

Highest Channel / QPSK



Date: 27.DEC.2023 21:24:30



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	0.0000	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0014	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0011	
-20	Normal Voltage	0.0000	
-30	Normal Voltage	0.0013	
20	Maximum Voltage	0.0005	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0015	

Note:

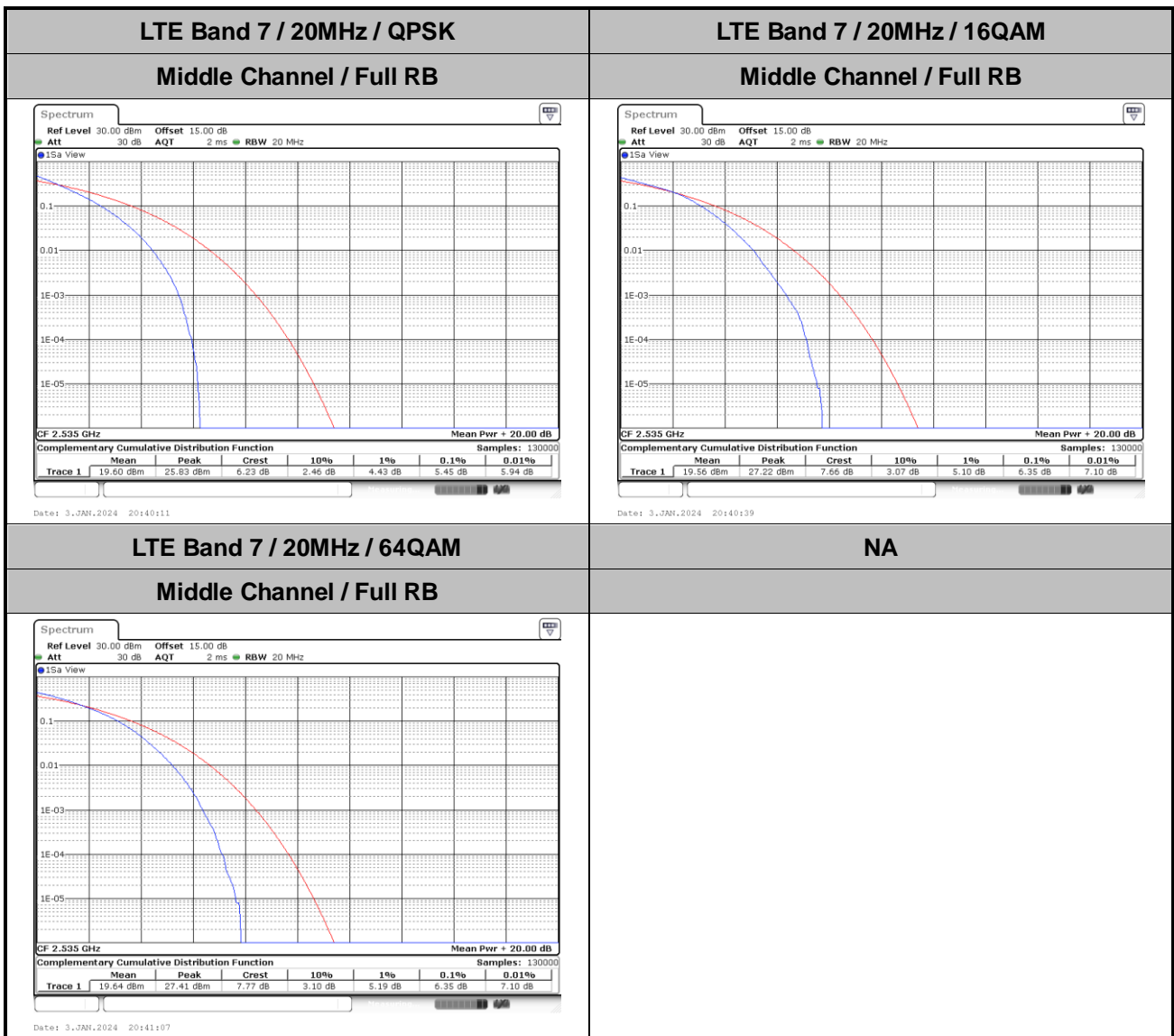
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 7(Other PA)

Peak-to-Average Ratio

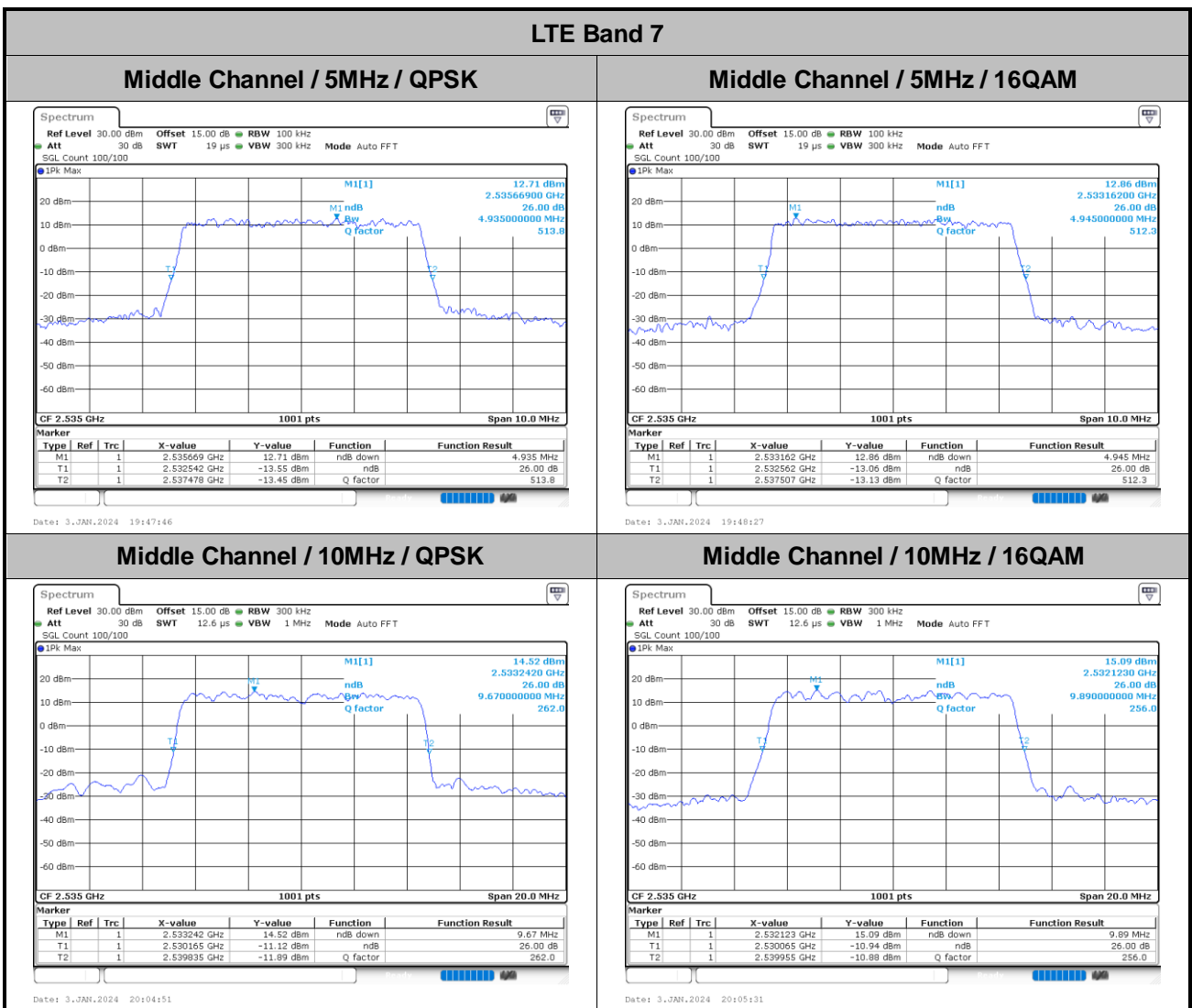
Mode	LTE Band 7 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.45	6.35	6.35	PASS





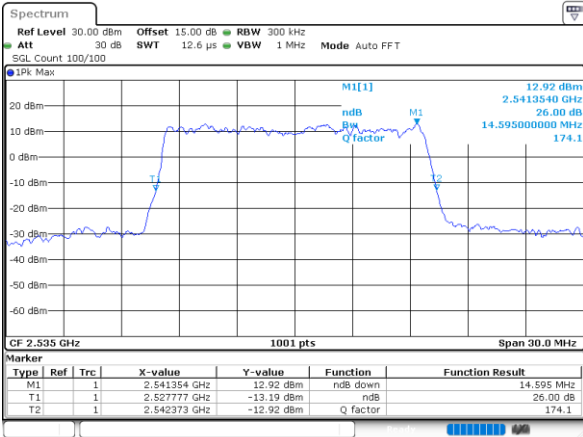
26dB Bandwidth

Mode	LTE Band 7 : 26dB BW(MHz)											
	-				5MHz		10MHz		15MHz		20MHz	
BW	-	-	-	-	5MHz	10MHz	10MHz	10MHz	15MHz	15MHz	20MHz	20MHz
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.94	4.95	9.67	9.89	14.60	14.51	18.98	18.82



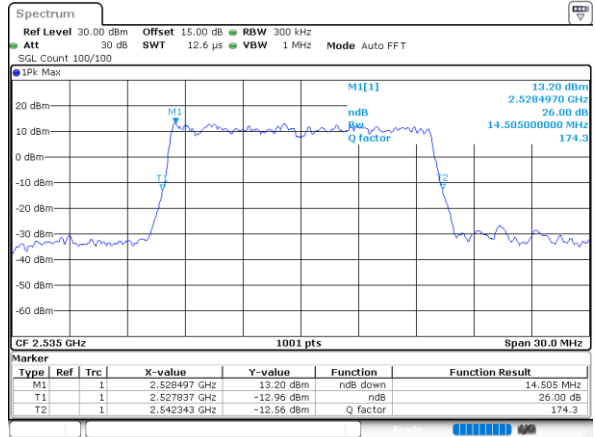


Middle Channel / 15MHz / QPSK



Date: 3, JAN, 2024 20:21:57

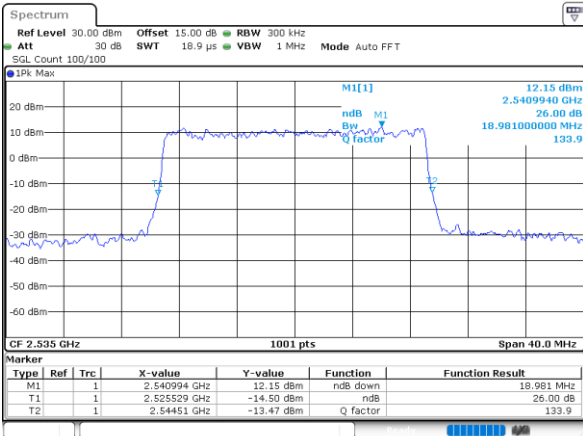
Middle Channel / 15MHz / 16QAM



Date: 3, JAN, 2024 20:22:37

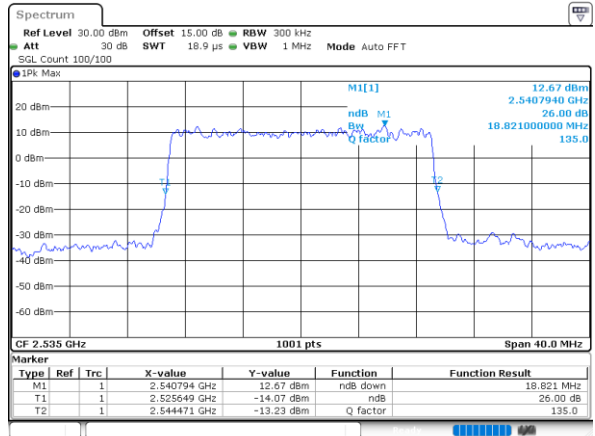
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 3, JAN, 2024 20:39:03

Middle Channel / 20MHz / 16QAM

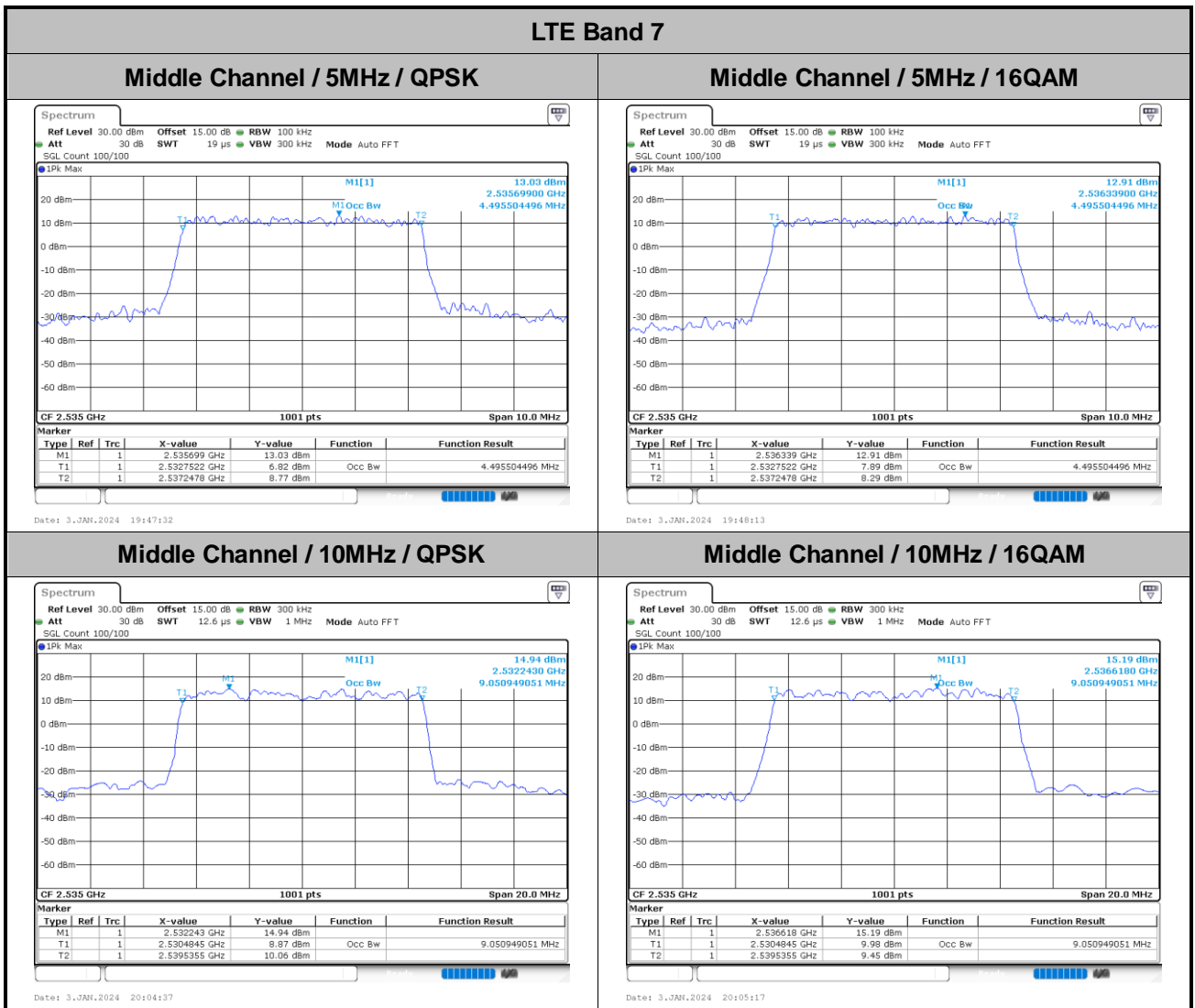


Date: 3, JAN, 2024 20:39:44



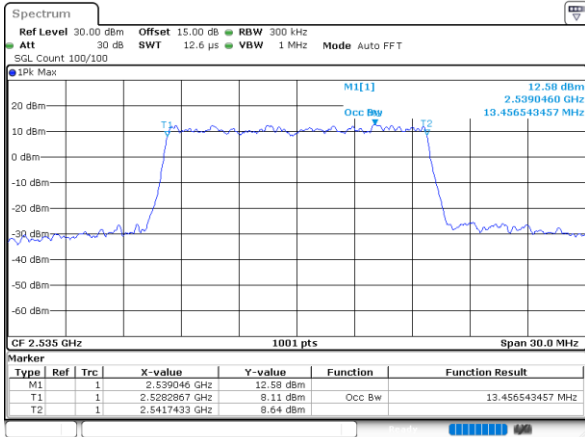
Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)											
	-				5MHz		10MHz		15MHz		20MHz	
BW	-	-	-	-	5MHz	10MHz	10MHz	15MHz	15MHz	20MHz	20MHz	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.50	4.50	9.05	9.05	13.46	13.43	17.90	17.82



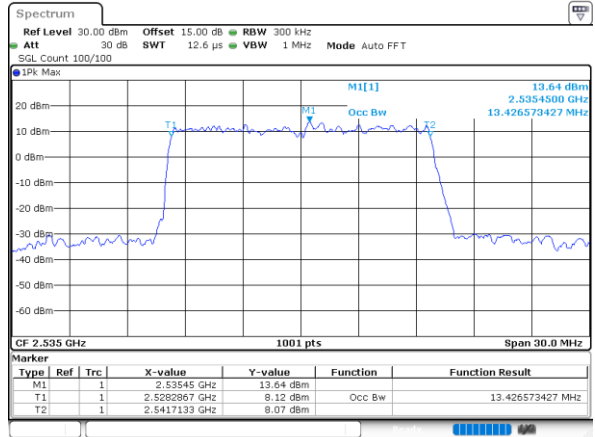


Middle Channel / 15MHz / QPSK



Date: 3, JAN, 2024 20:21:43

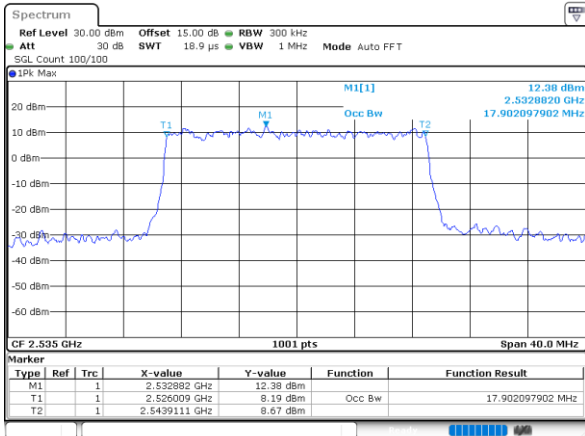
Middle Channel / 15MHz / 16QAM



Date: 3, JAN, 2024 20:22:13

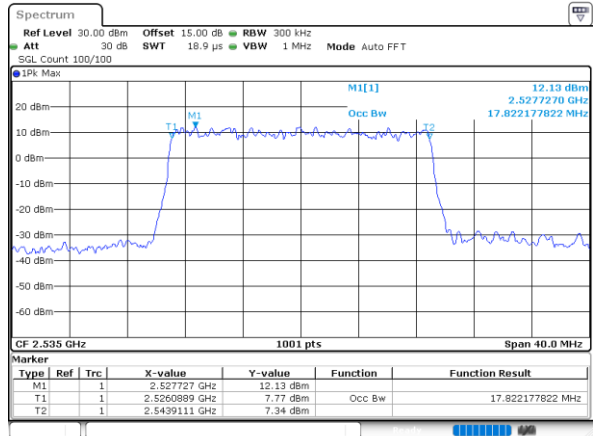
LTE Band 7

Middle Channel / 20MHz / QPSK



Date: 3, JAN, 2024 20:38:49

Middle Channel / 20MHz / 16QAM



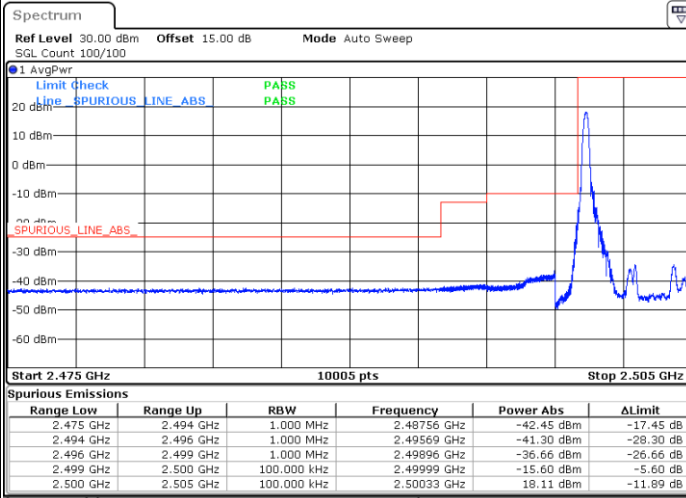
Date: 3, JAN, 2024 20:39:30



Conducted Band Edge

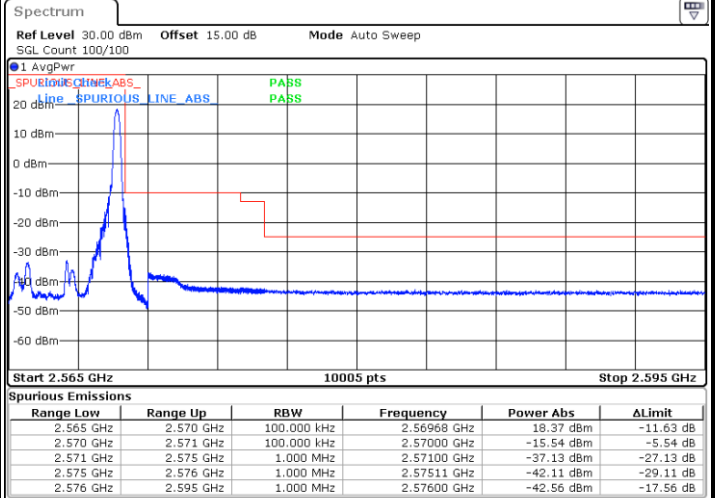
LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB



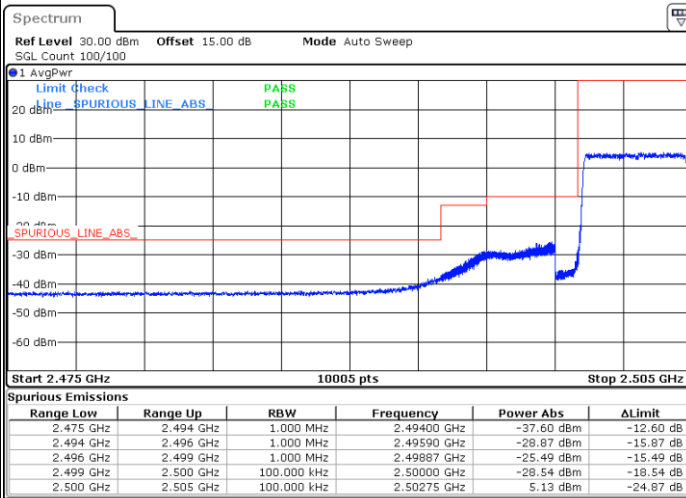
Date: 3.JAN.2024 19:39:57

Highest Band Edge / 1 RB



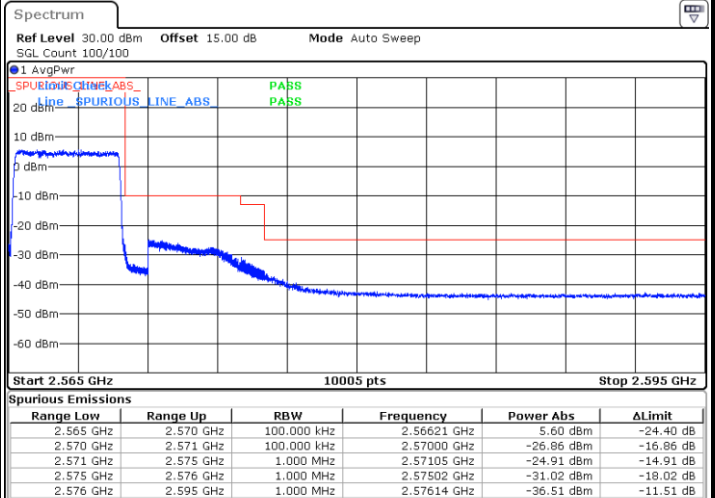
Date: 3.JAN.2024 19:49:22

Lowest Band Edge / Full RB



Date: 3.JAN.2024 19:42:19

Highest Band Edge / Full RB

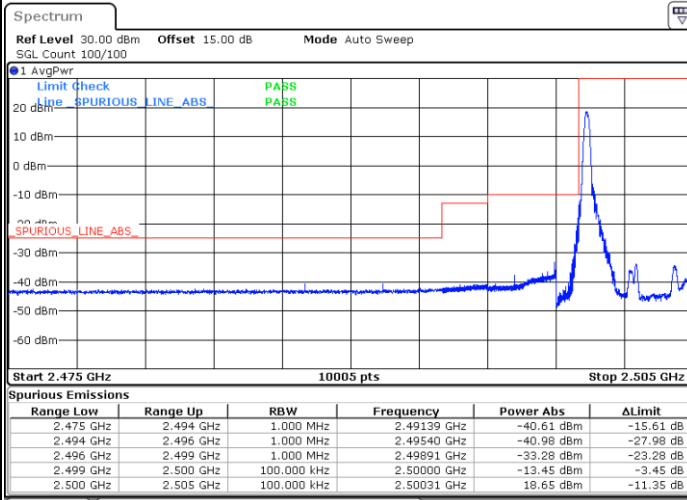


Date: 3.JAN.2024 19:52:14



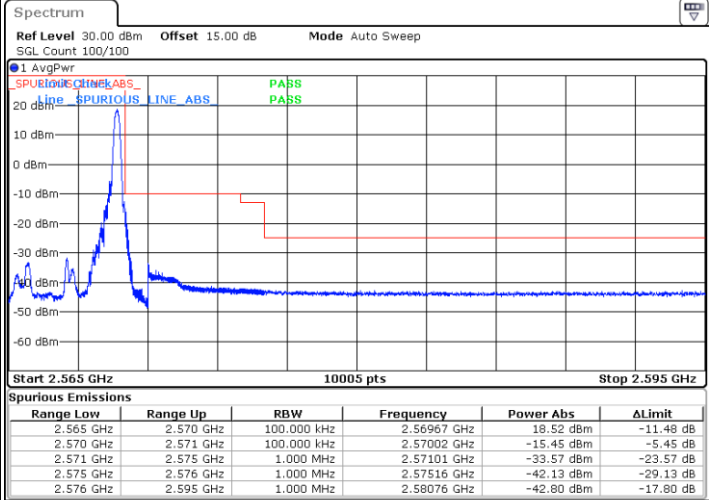
LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1RB



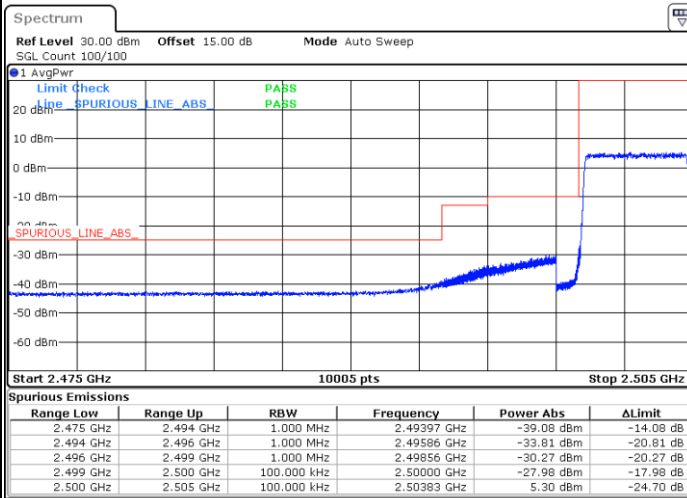
Date: 3.JAN.2024 19:40:55

Highest Band Edge / 1 RB



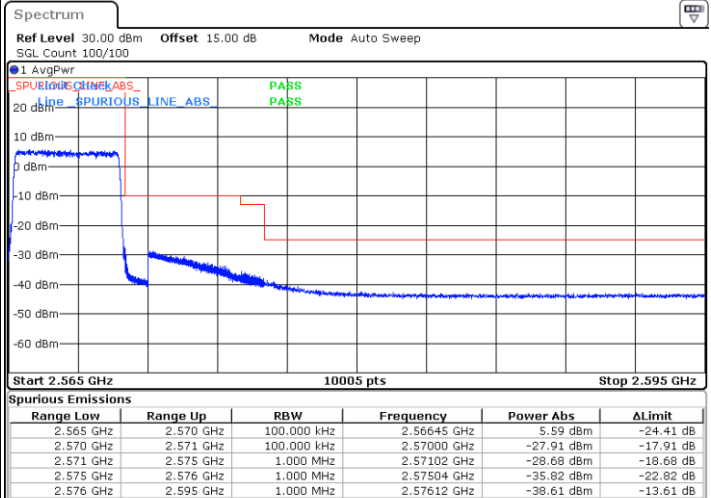
Date: 3.JAN.2024 19:50:20

Lowest Band Edge / Full RB



Date: 3.JAN.2024 19:43:47

Highest Band Edge / Full RB

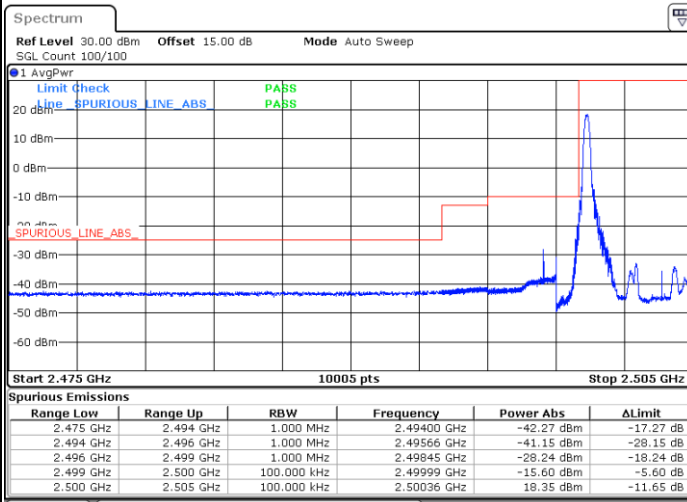


Date: 3.JAN.2024 19:53:11



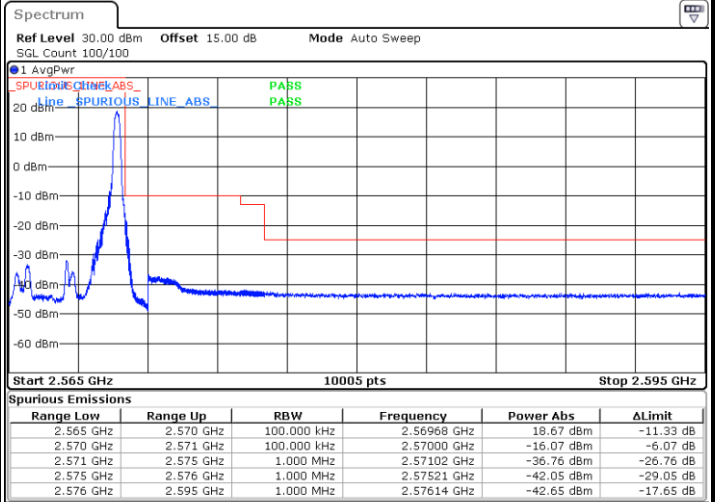
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



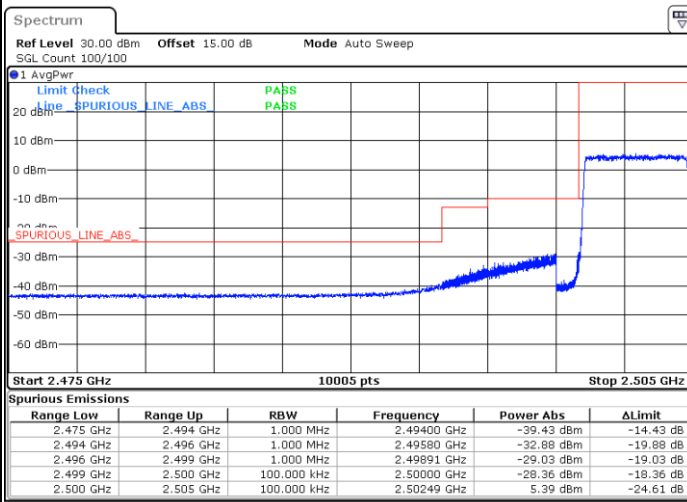
Date: 3.JAN.2024 19:41:52

Highest Band Edge / 1 RB



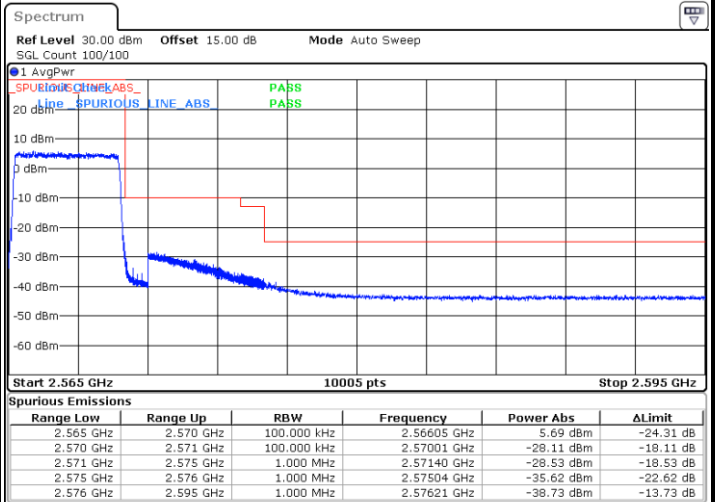
Date: 3.JAN.2024 19:51:17

Lowest Band Edge / Full RB



Date: 3.JAN.2024 19:44:44

Highest Band Edge / Full RB

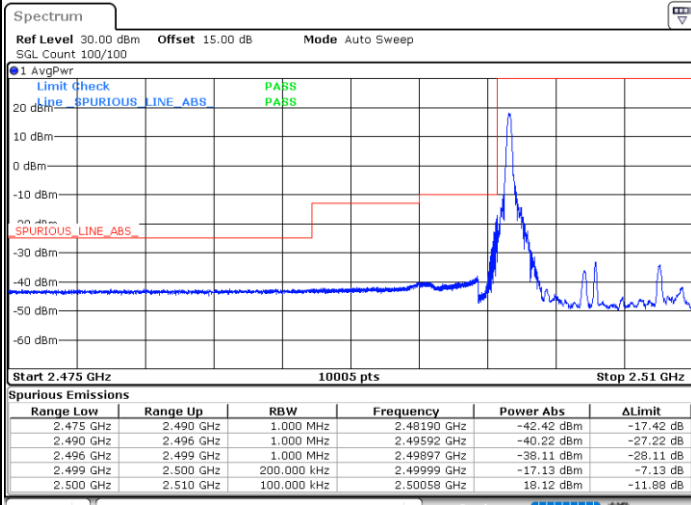


Date: 3.JAN.2024 19:54:08

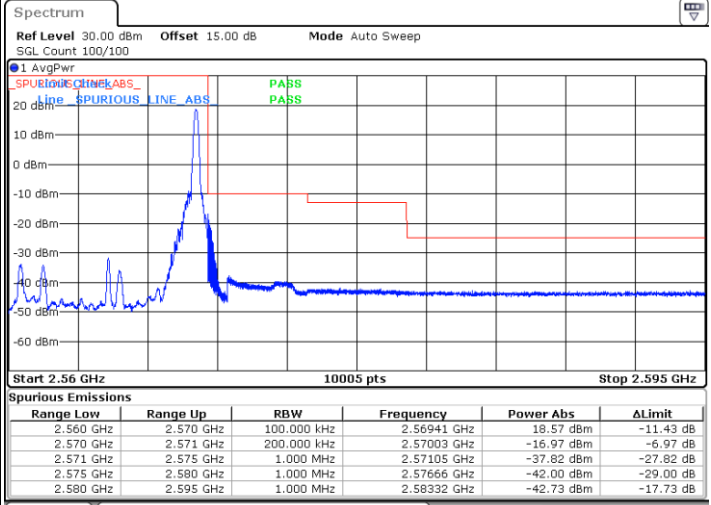


LTE Band 7 / 10MHz / QPSK

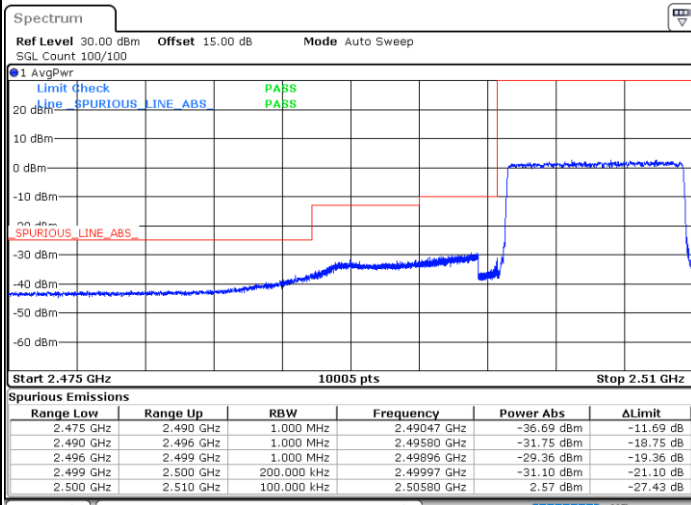
Lowest Band Edge / 1 RB



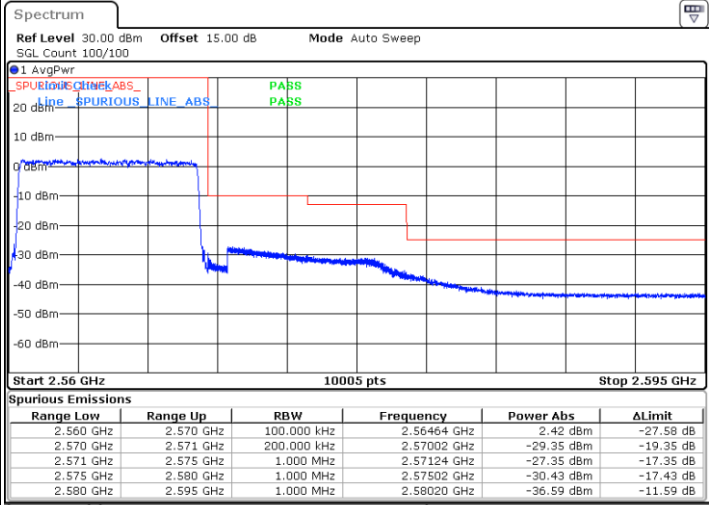
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



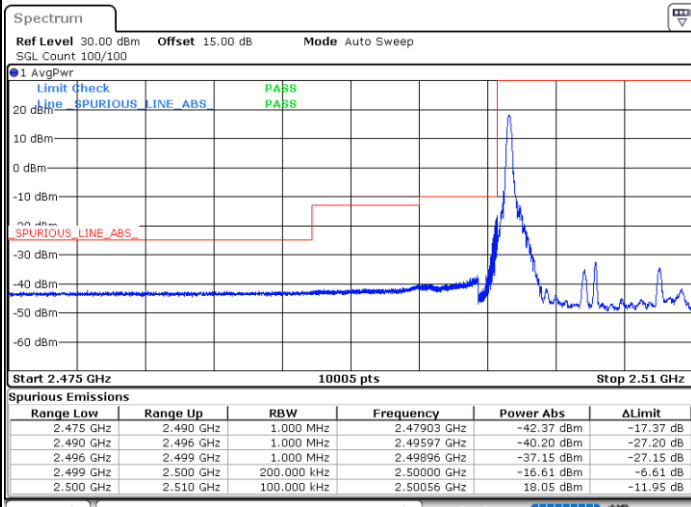
Highest Band Edge / Full RB





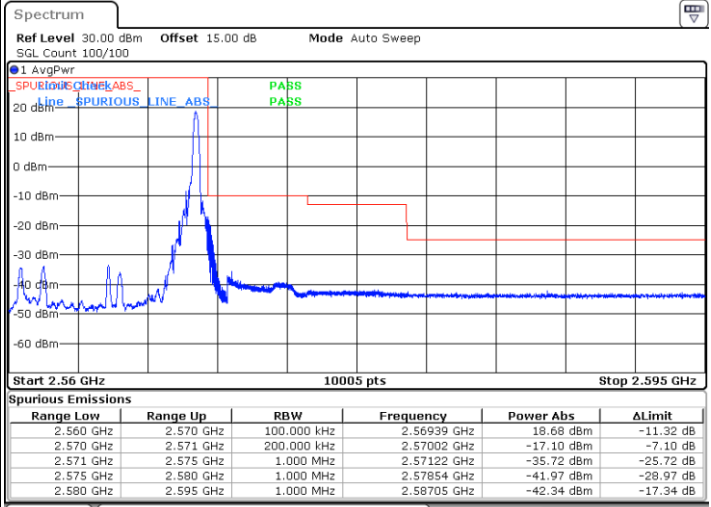
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1RB



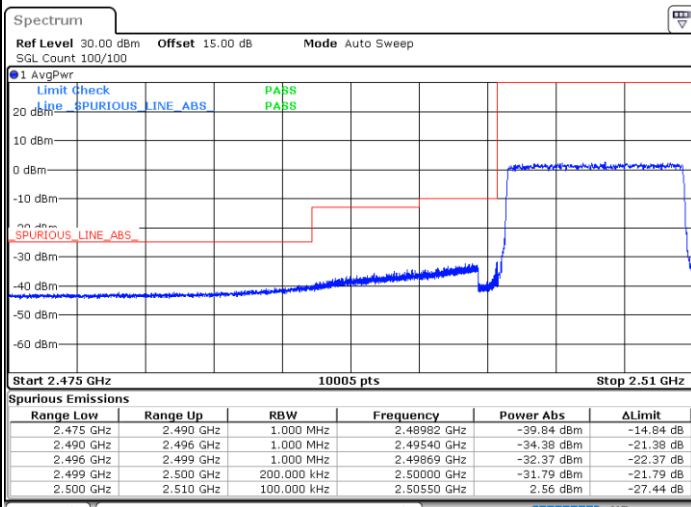
Date: 3.JAN.2024 19:58:01

Highest Band Edge / 1 RB



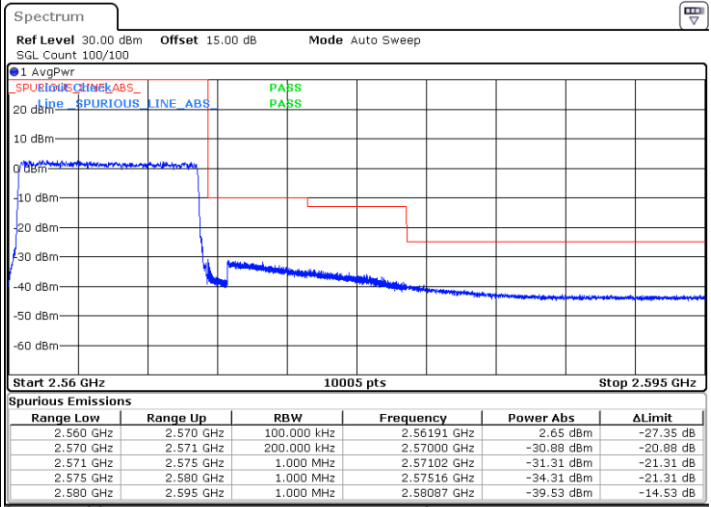
Date: 3.JAN.2024 20:07:24

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:00:52

Highest Band Edge / Full RB

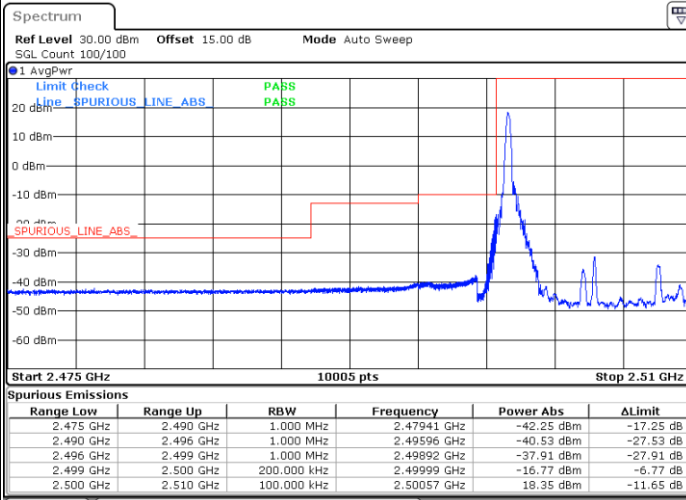


Date: 3.JAN.2024 20:10:15



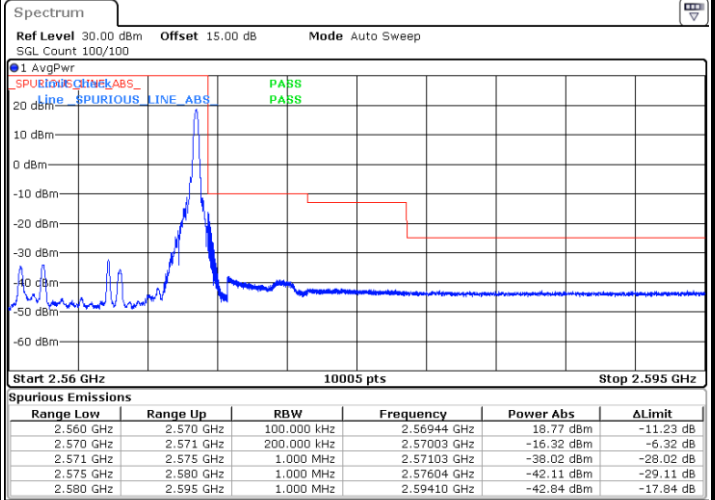
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1RB



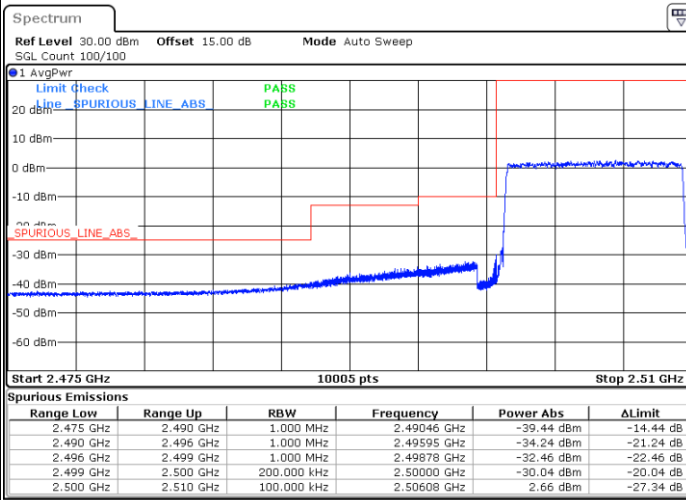
Date: 3.JAN.2024 19:58:58

Highest Band Edge / 1 RB



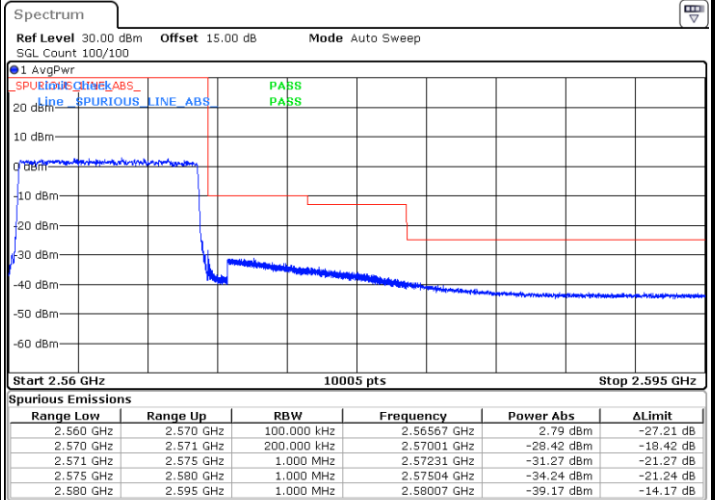
Date: 3.JAN.2024 20:08:21

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:01:49

Highest Band Edge / Full RB

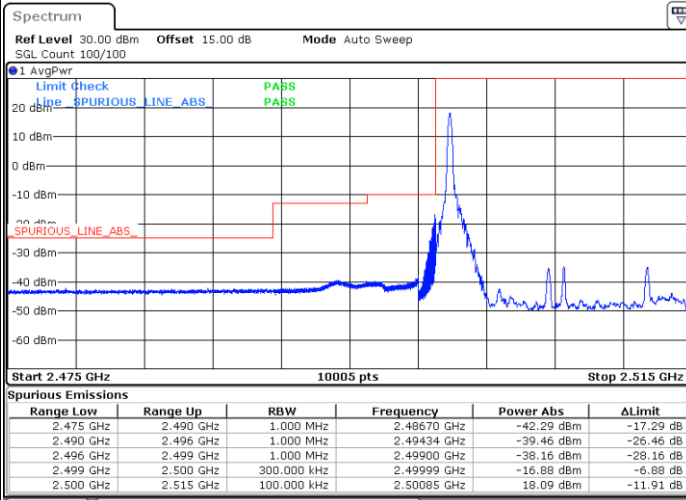


Date: 3.JAN.2024 20:11:12



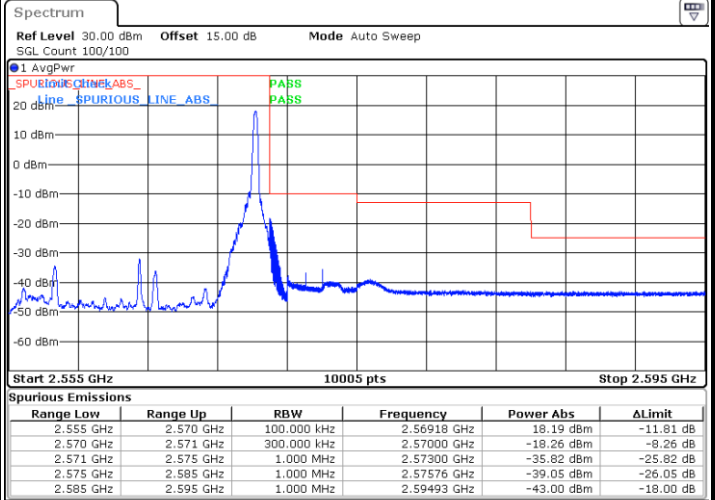
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



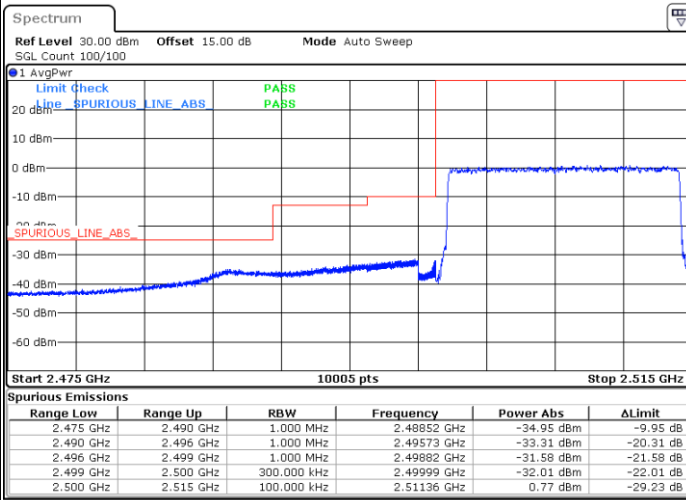
Date: 3.JAN.2024 20:14:08

Highest Band Edge / 1 RB



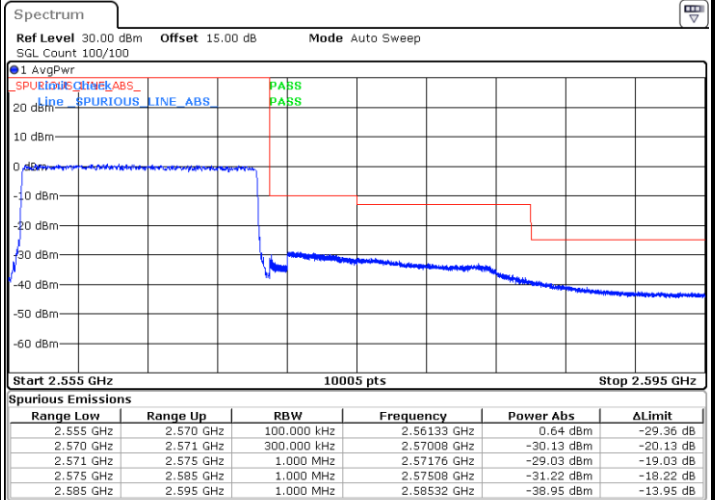
Date: 3.JAN.2024 20:23:33

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:17:01

Highest Band Edge / Full RB

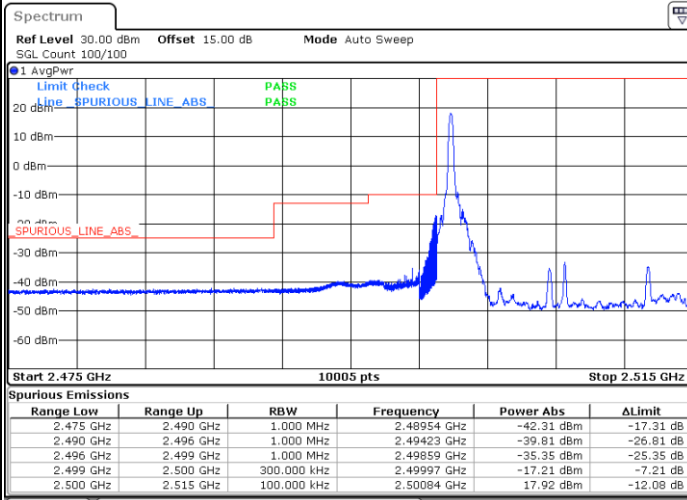


Date: 3.JAN.2024 20:26:25



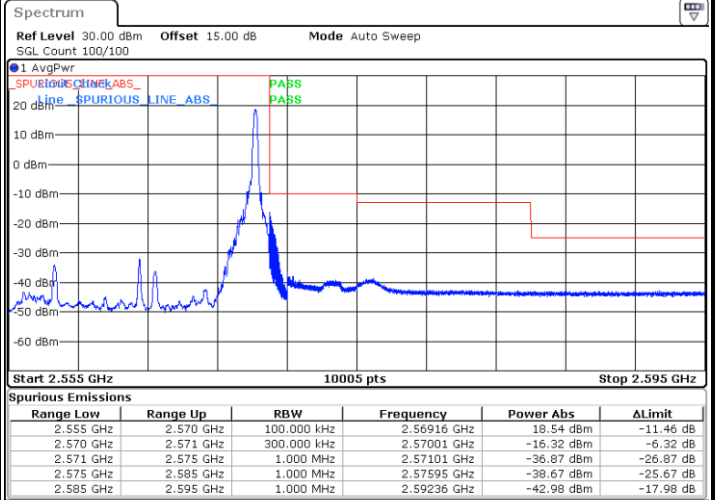
LTE Band 7 / 15MHz / 16QAM

Lowest Band Edge / 1RB



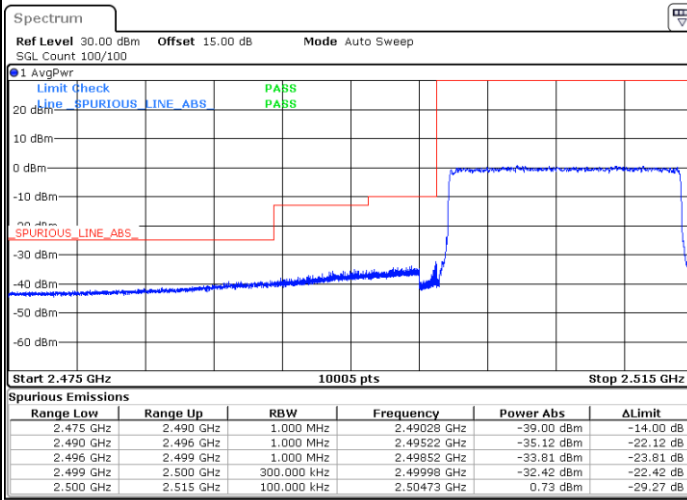
Date: 3.JAN.2024 20:15:06

Highest Band Edge / 1 RB



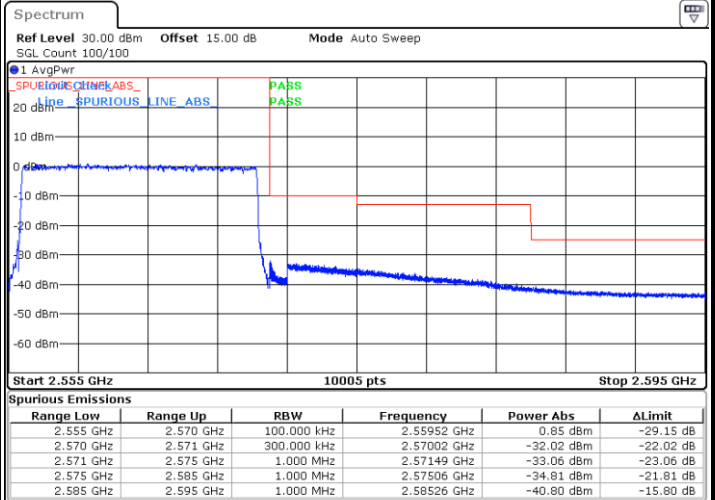
Date: 3.JAN.2024 20:24:31

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:17:58

Highest Band Edge / Full RB

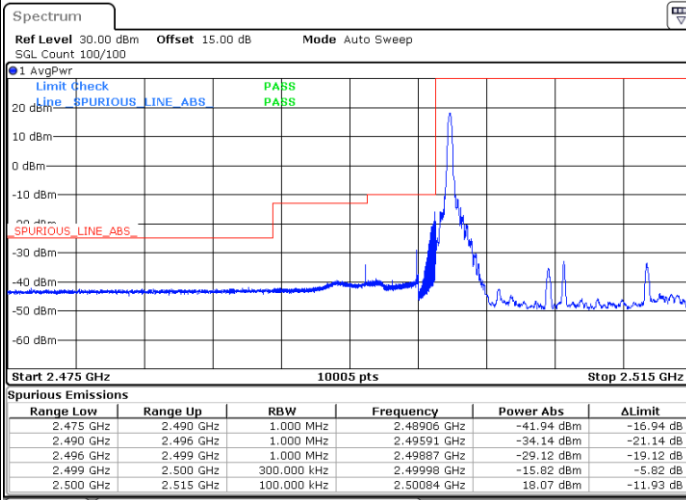


Date: 3.JAN.2024 20:27:22



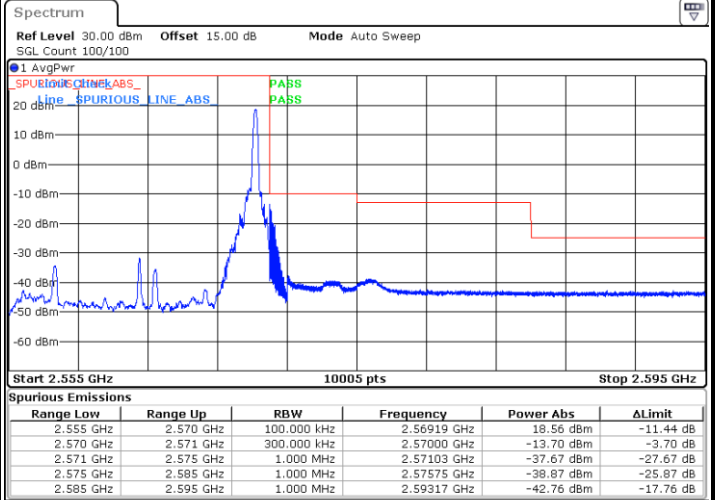
LTE Band 7 / 15MHz / 64QAM

Lowest Band Edge / 1RB



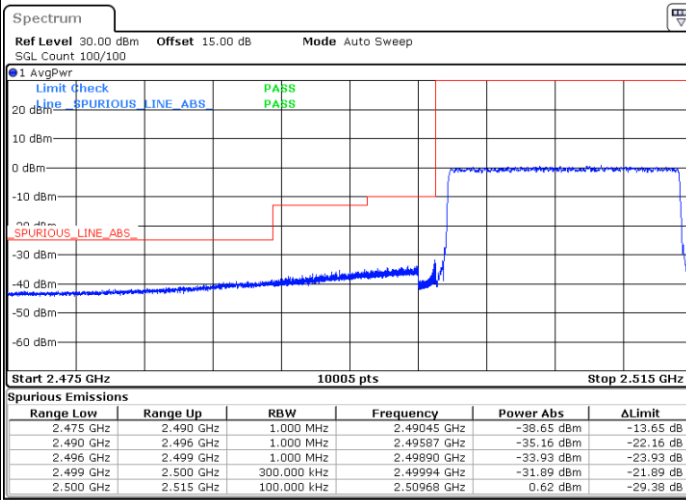
Date: 3.JAN.2024 20:16:03

Highest Band Edge / 1 RB



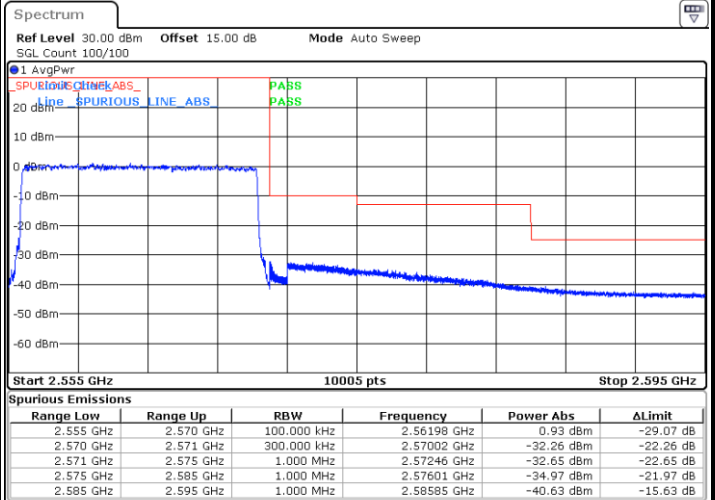
Date: 3.JAN.2024 20:25:28

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:18:55

Highest Band Edge / Full RB

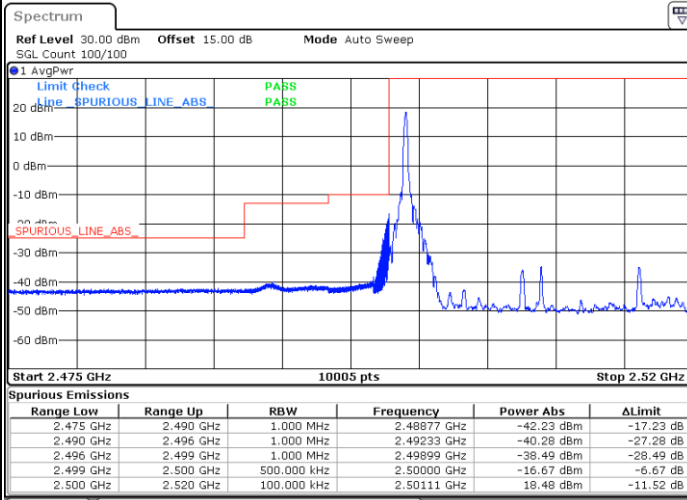


Date: 3.JAN.2024 20:28:19



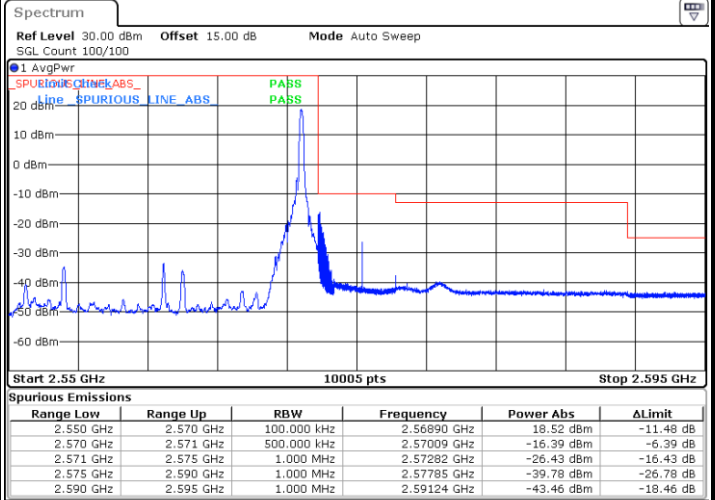
LTE Band 7 / 20MHz / QPSK

Lowest Band Edge / 1 RB



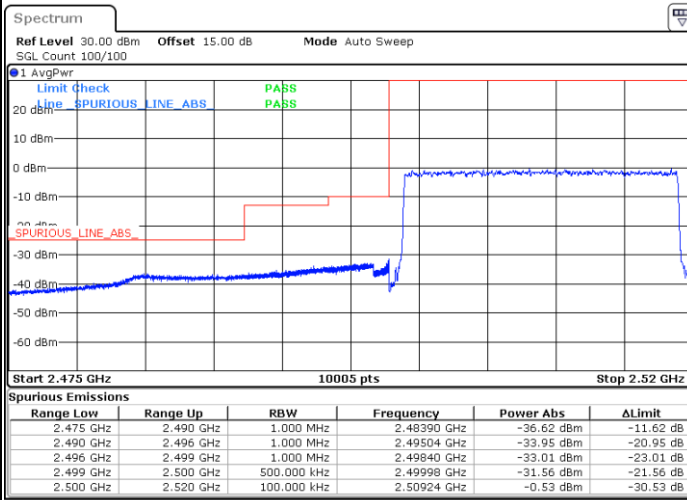
Date: 3.JAN.2024 20:31:15

Highest Band Edge / 1 RB



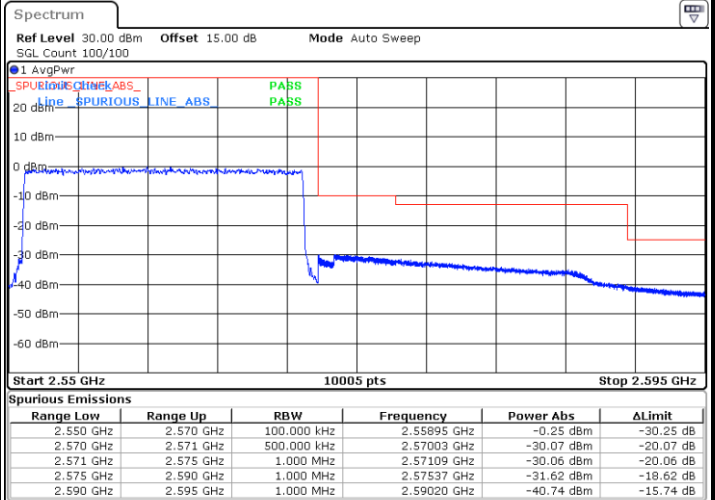
Date: 3.JAN.2024 20:42:03

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:34:06

Highest Band Edge / Full RB

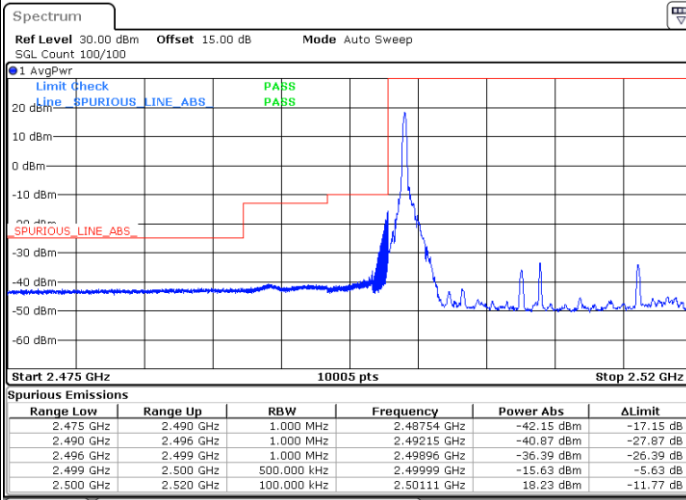


Date: 3.JAN.2024 20:44:54



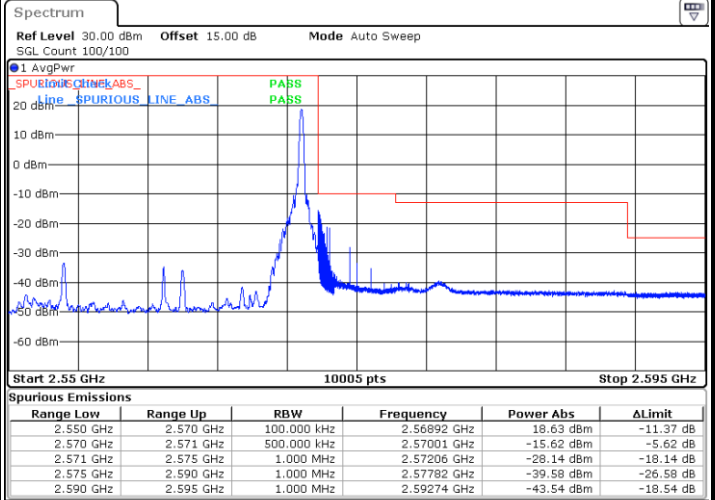
LTE Band 7 / 20MHz / 16QAM

Lowest Band Edge / 1RB



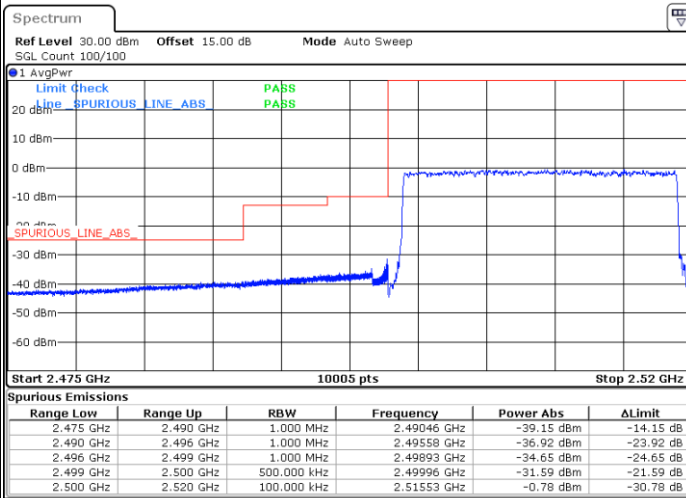
Date: 3.JAN.2024 20:32:12

Highest Band Edge / 1 RB



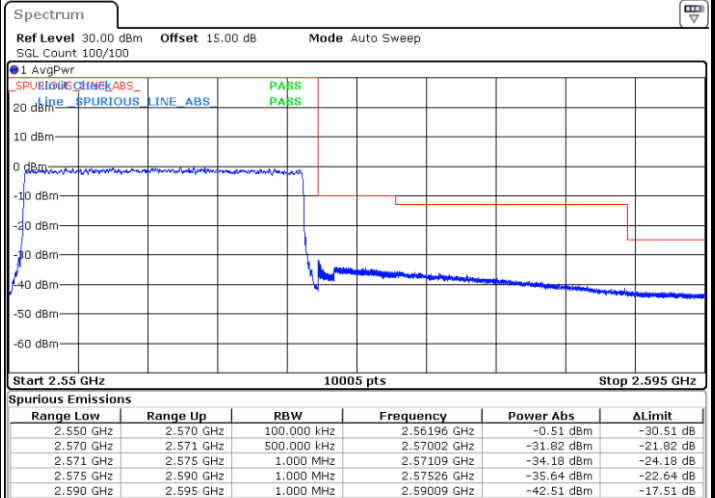
Date: 3.JAN.2024 20:43:00

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:35:04

Highest Band Edge / Full RB

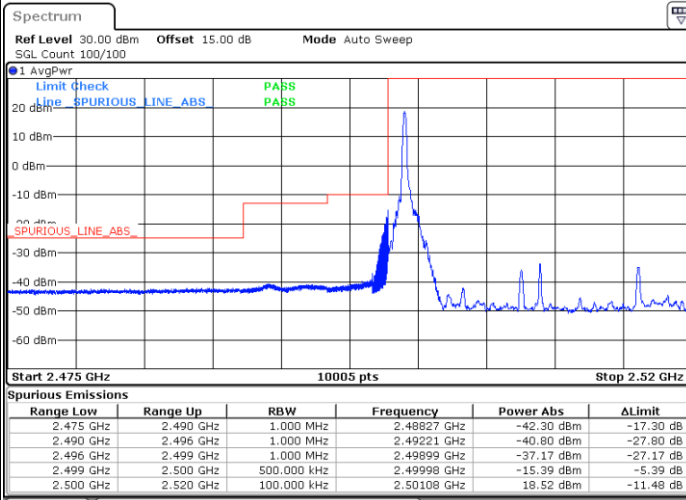


Date: 3.JAN.2024 20:45:51



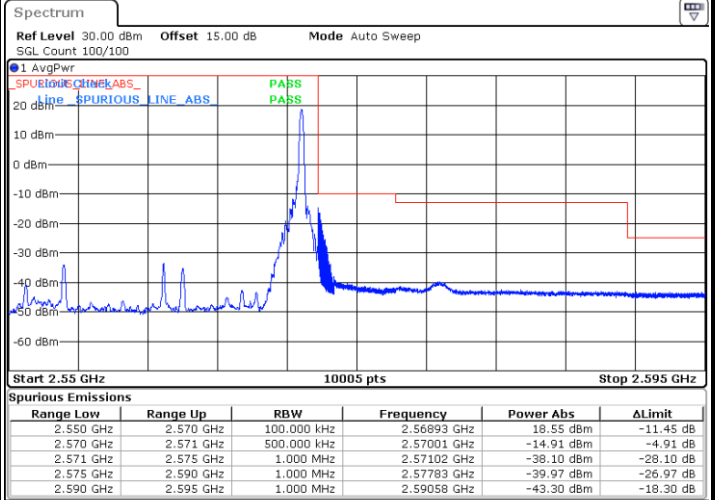
LTE Band 7 / 20MHz / 64QAM

Lowest Band Edge / 1RB



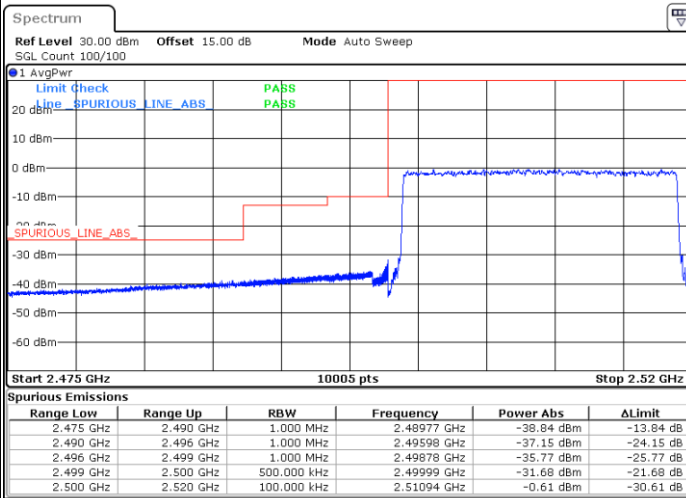
Date: 3.JAN.2024 20:33:09

Highest Band Edge / 1 RB



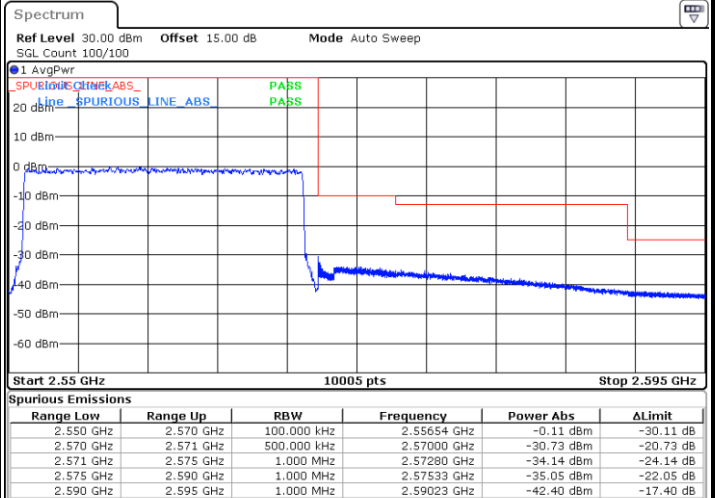
Date: 3.JAN.2024 20:43:57

Lowest Band Edge / Full RB



Date: 3.JAN.2024 20:36:01

Highest Band Edge / Full RB



Date: 3.JAN.2024 20:46:48

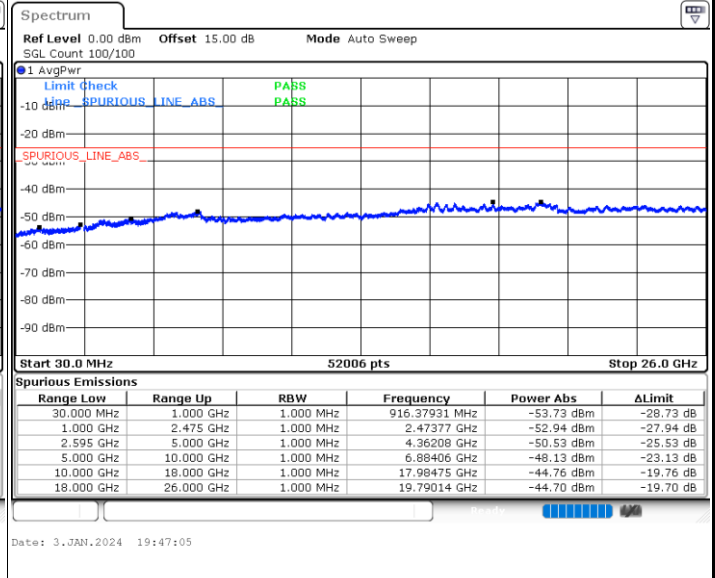
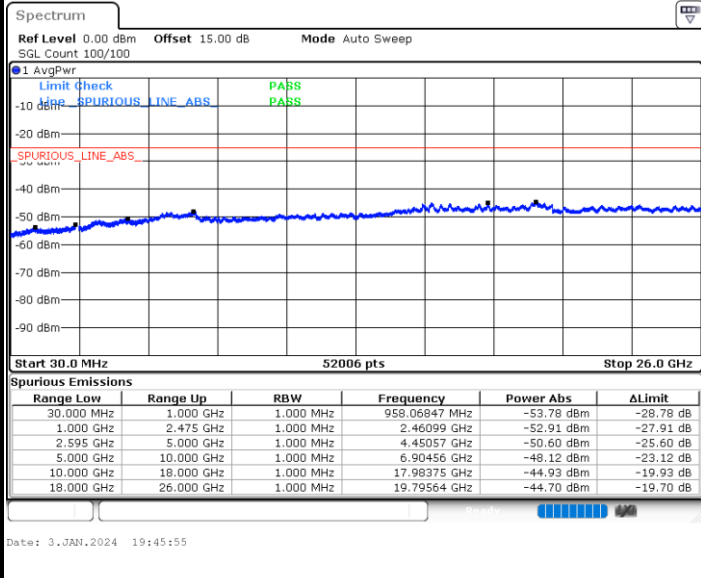


Conducted Spurious Emission

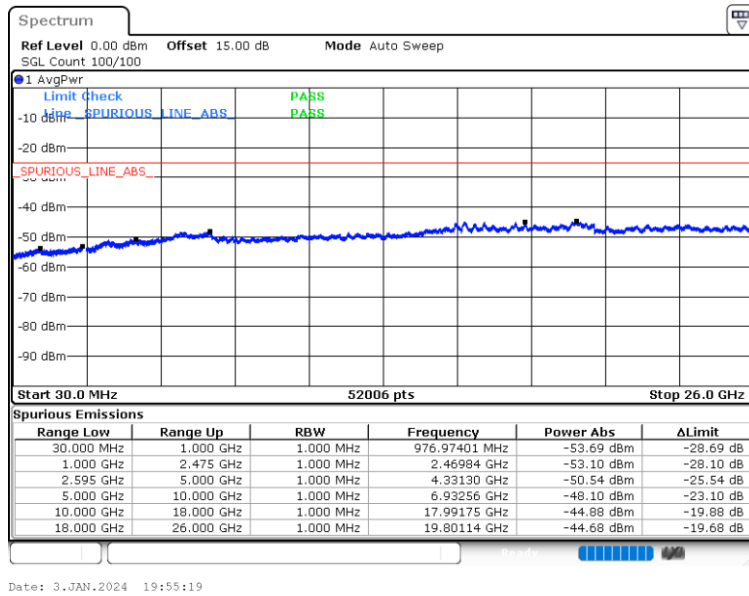
LTE Band 7 / 5MHz

Lowest Channel / QPSK

Middle Channel / QPSK



Highest Channel / QPSK

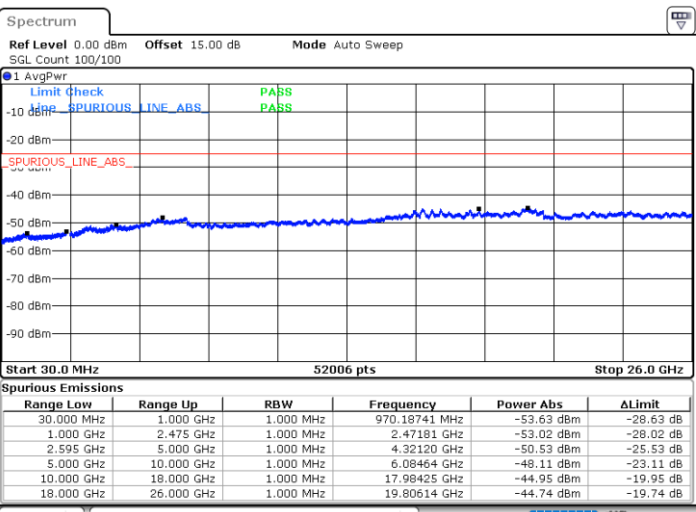
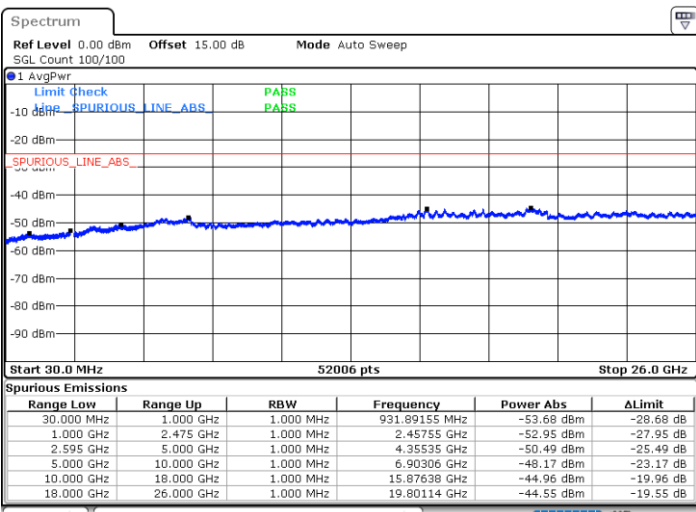




LTE Band 7 / 10MHz

Lowest Channel / QPSK

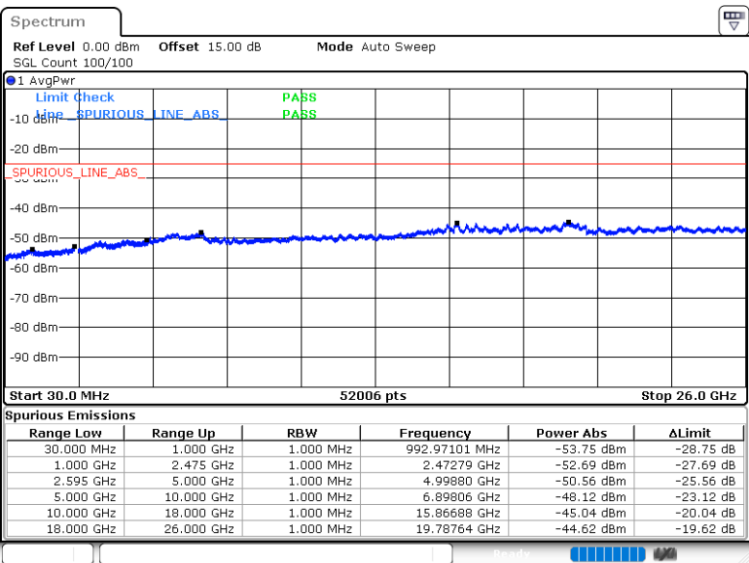
Middle Channel / QPSK



Date: 3.JAN.2024 20:03:00

Date: 3.JAN.2024 20:04:10

Highest Channel / QPSK



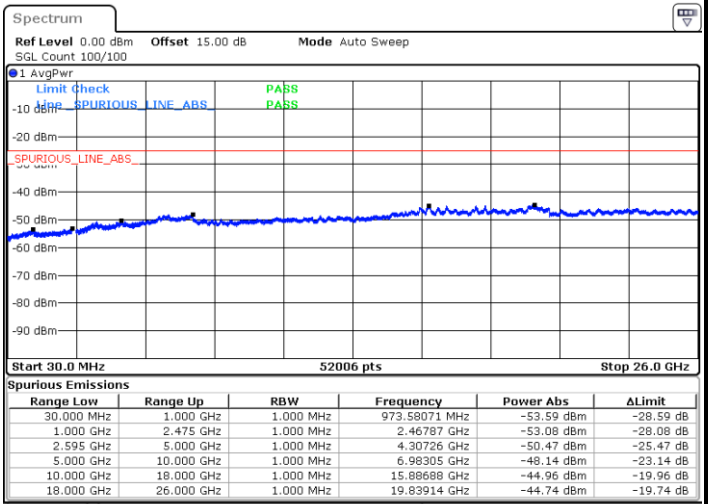
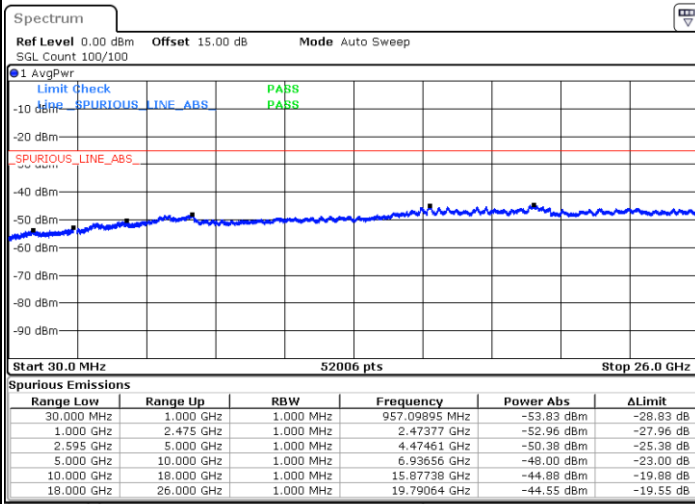
Date: 3.JAN.2024 20:12:22



LTE Band 7 / 15MHz

Lowest Channel / QPSK

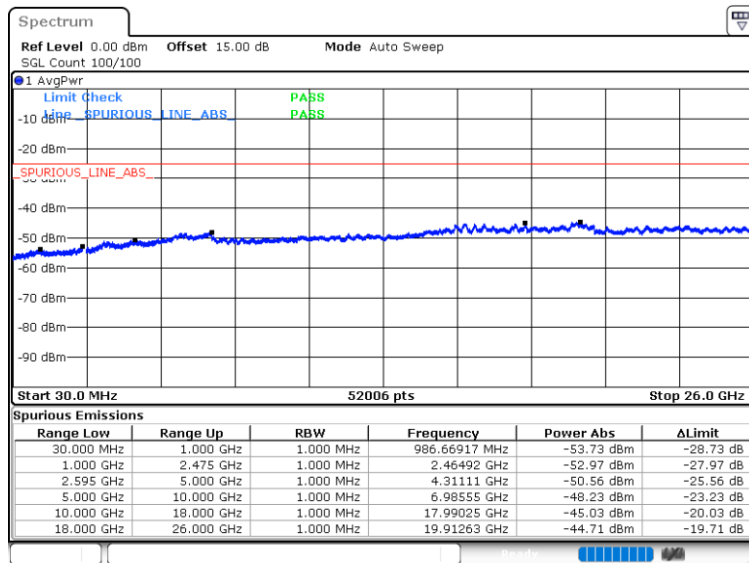
Middle Channel / QPSK



Date: 3.JAN.2024 20:20:06

Date: 3.JAN.2024 20:21:15

Highest Channel / QPSK



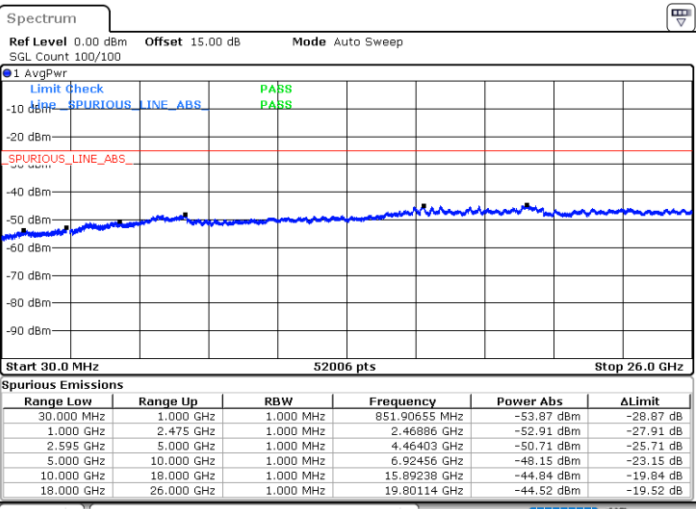
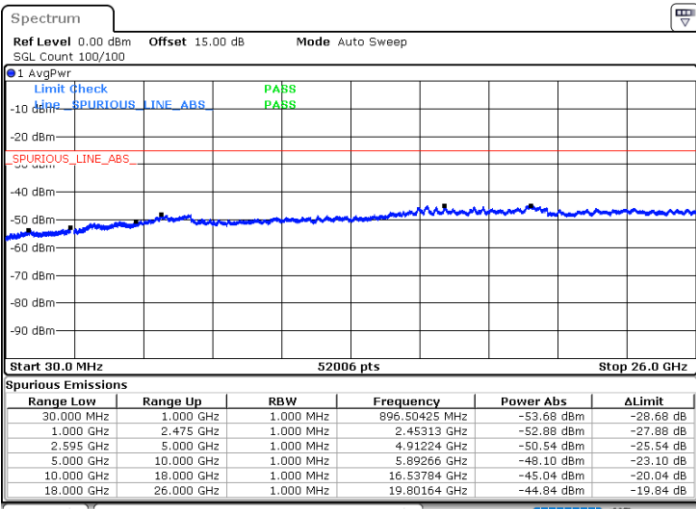
Date: 3.JAN.2024 20:29:30



LTE Band 7 / 20MHz

Lowest Channel / QPSK

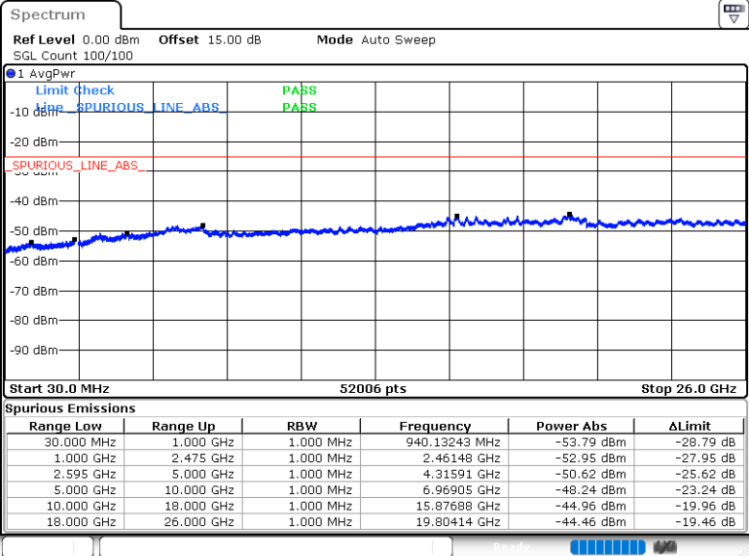
Middle Channel / QPSK



Date: 3.JAN.2024 20:37:12

Date: 3.JAN.2024 20:38:22

Highest Channel / QPSK



Date: 3.JAN.2024 20:47:59



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	0.0006	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0001	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	2.0000	
-30	Normal Voltage	0.0018	
20	Maximum Voltage	0.0017	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

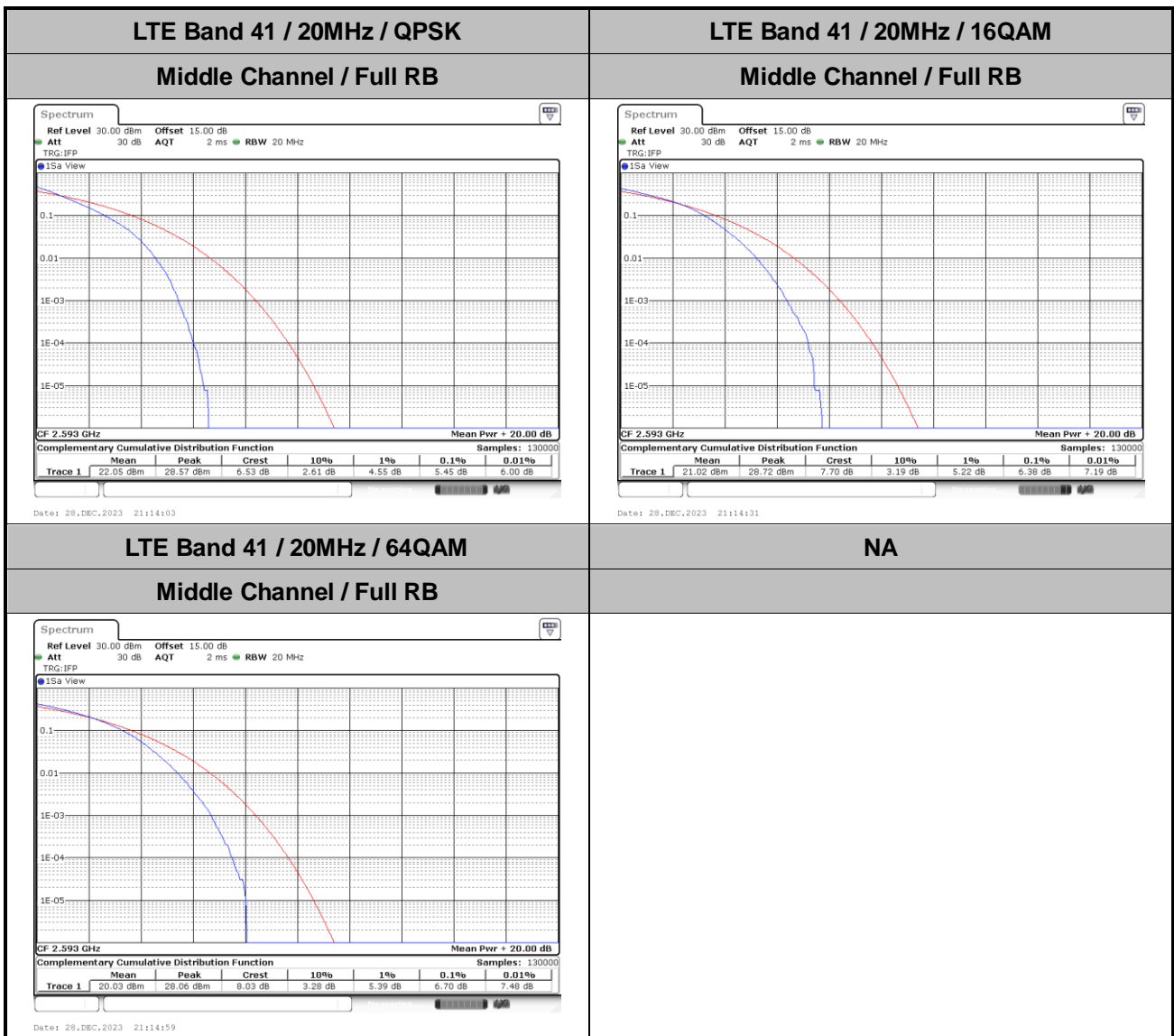
1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.48 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



LTE Band 41 (Main PA)

Peak-to-Average Ratio

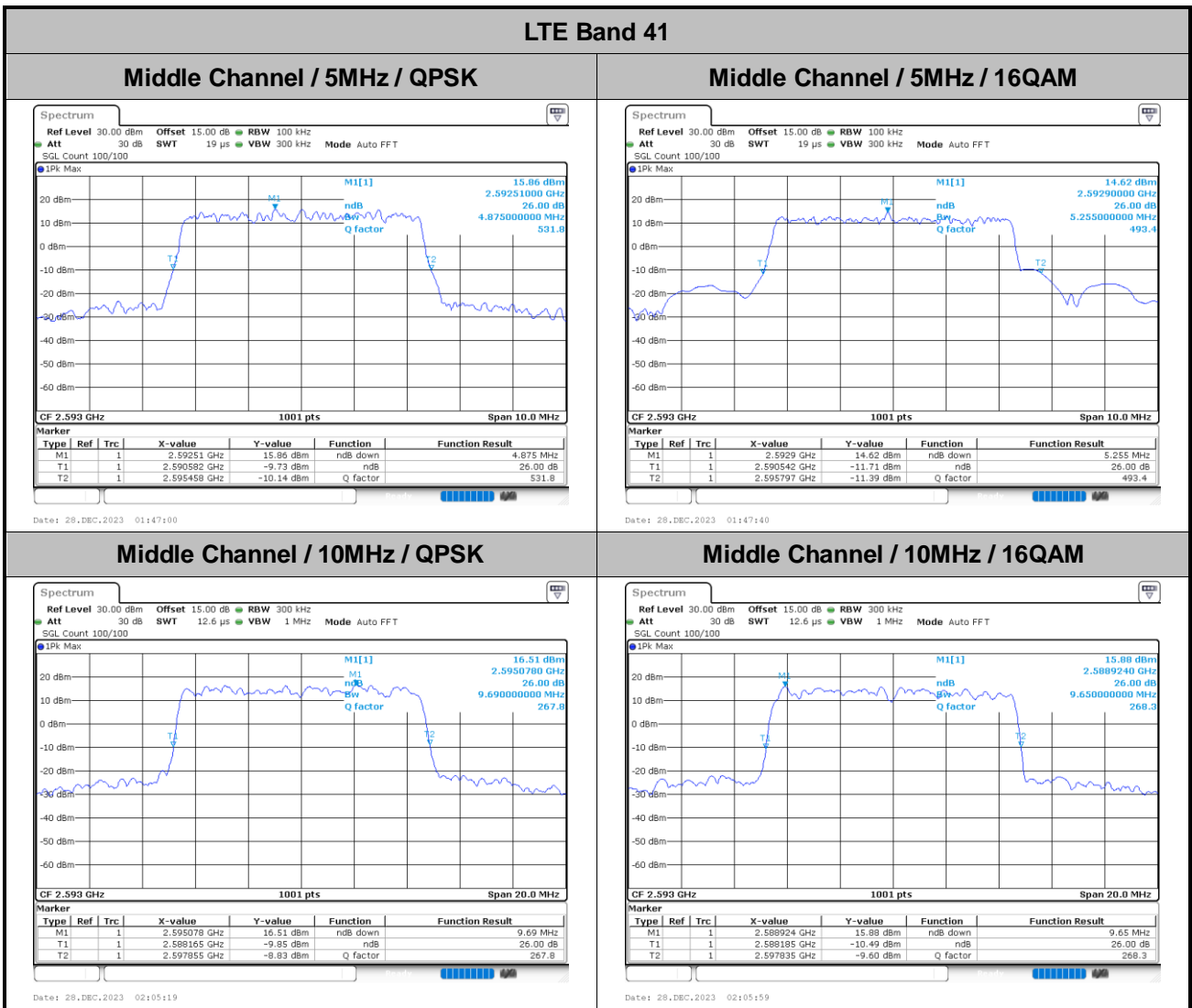
Mode	LTE Band 41 / 20MHz			
Mod.	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Result
Middle CH	5.45	6.38	6.70	PASS





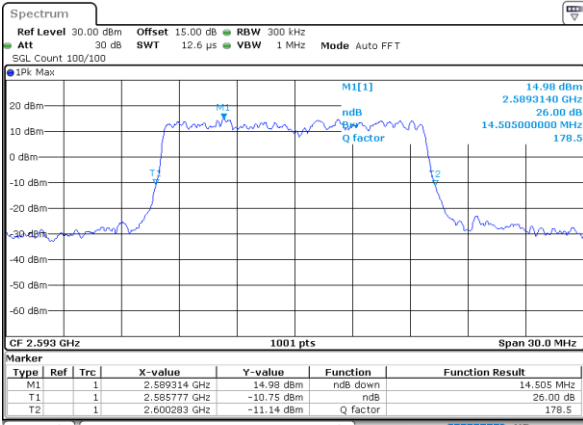
26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)											
	-				5MHz		10MHz		15MHz		20MHz	
BW	-	-	-	-	5MHz	10MHz	10MHz	10MHz	15MHz	15MHz	20MHz	20MHz
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.88	5.26	9.69	9.65	14.51	14.36	18.82	18.82

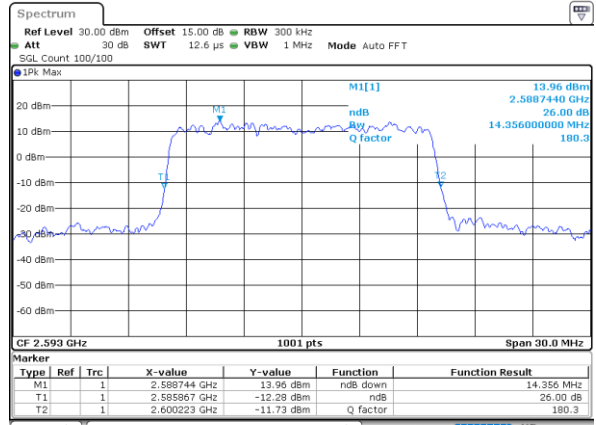




Middle Channel / 15MHz / QPSK

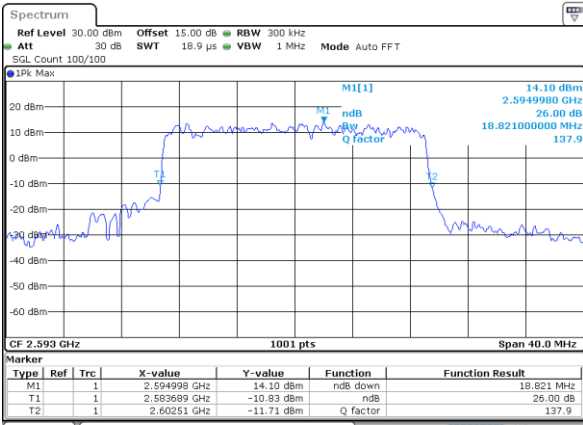


Middle Channel / 15MHz / 16QAM

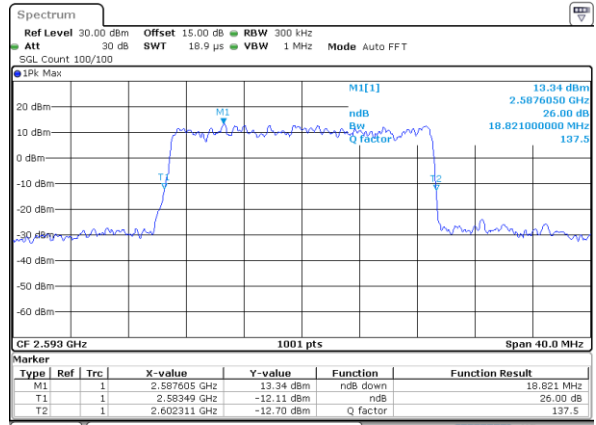


LTE Band 41

Middle Channel / 20MHz / QPSK



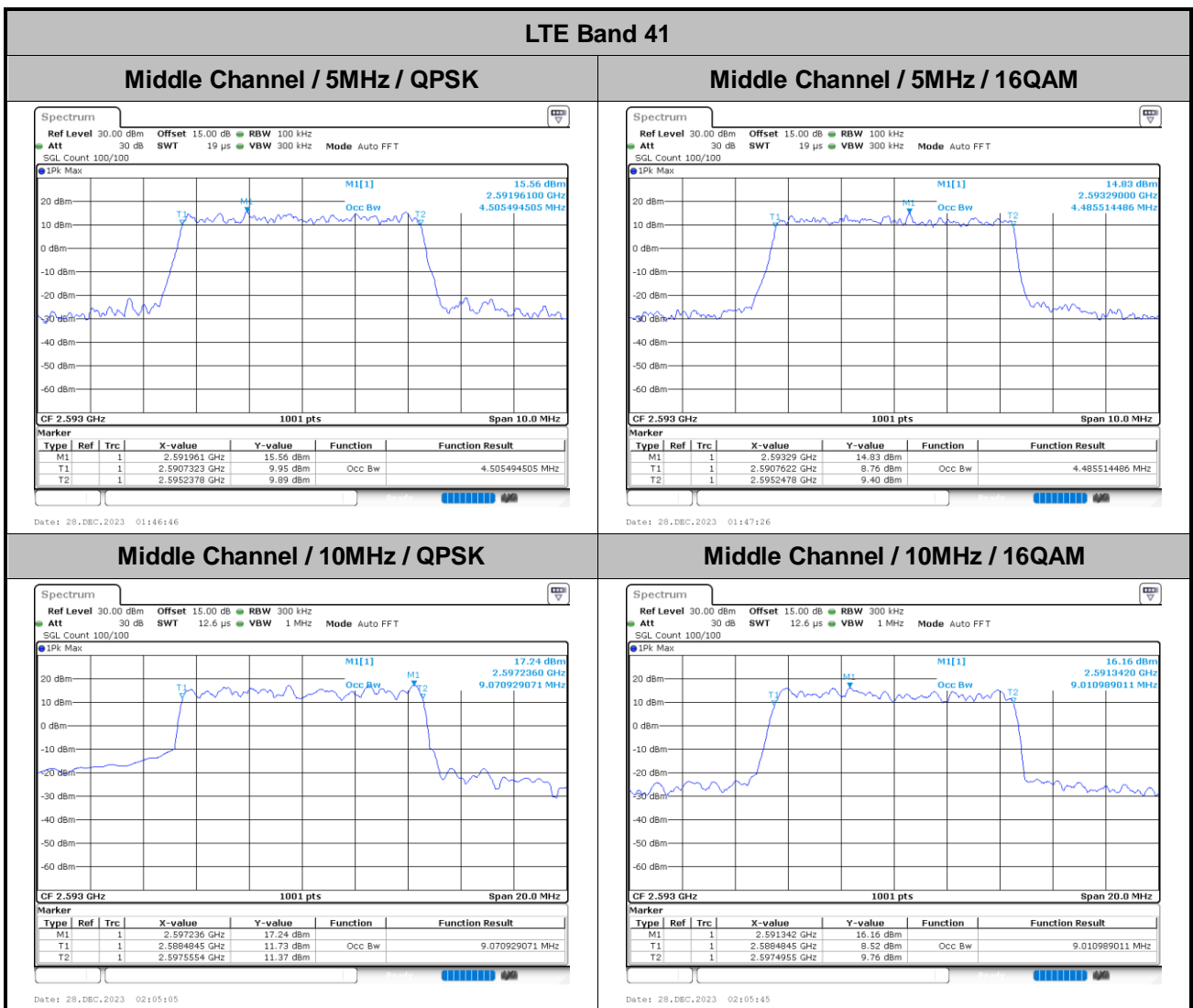
Middle Channel / 20MHz / 16QAM





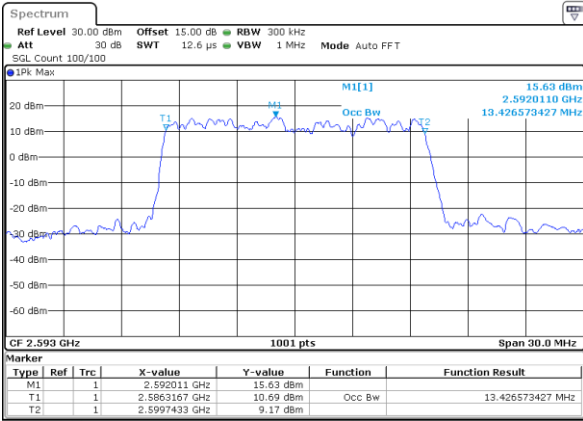
Occupied Bandwidth

Mode	LTE Band 41 : 99%OBW(MHz)											
	BW		-		5MHz		10MHz		15MHz		20MHz	
Mod.	-	-	-	-	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.51	4.49	9.07	9.01	13.43	13.43	17.82	17.86



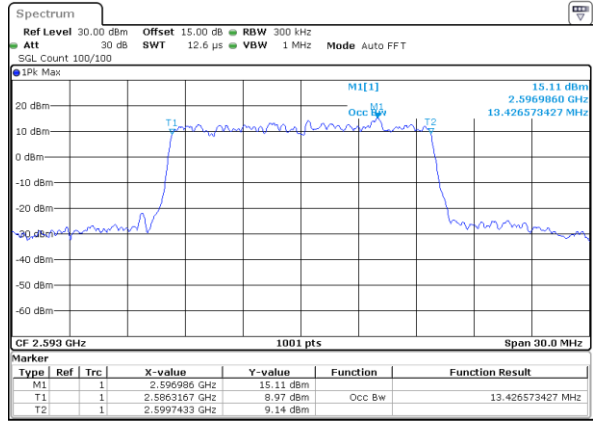


Middle Channel / 15MHz / QPSK



Date: 28.Dec.2023 20:53:30

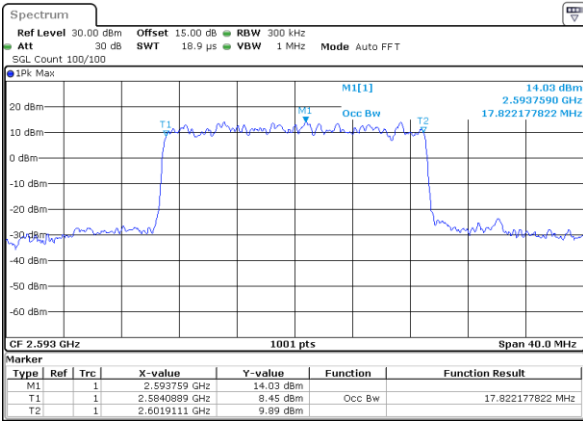
Middle Channel / 15MHz / 16QAM



Date: 28.Dec.2023 20:54:11

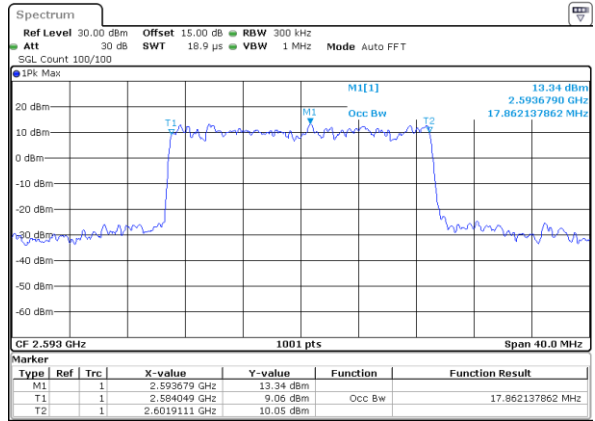
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 28.Dec.2023 21:12:41

Middle Channel / 20MHz / 16QAM



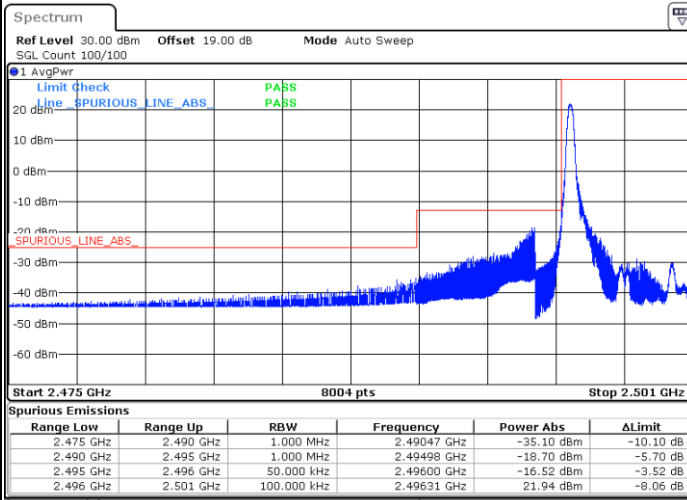
Date: 28.Dec.2023 21:13:22



Conducted Band Edge

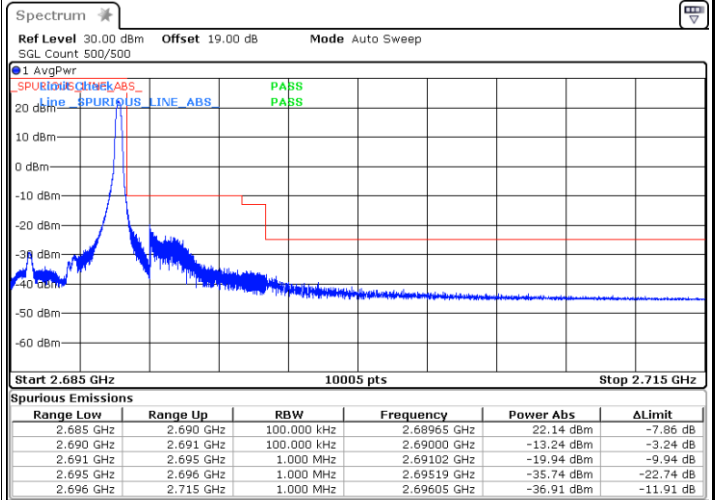
LTE Band 41 / 5MHz / QPSK

Lowest Band Edge / 1 RB



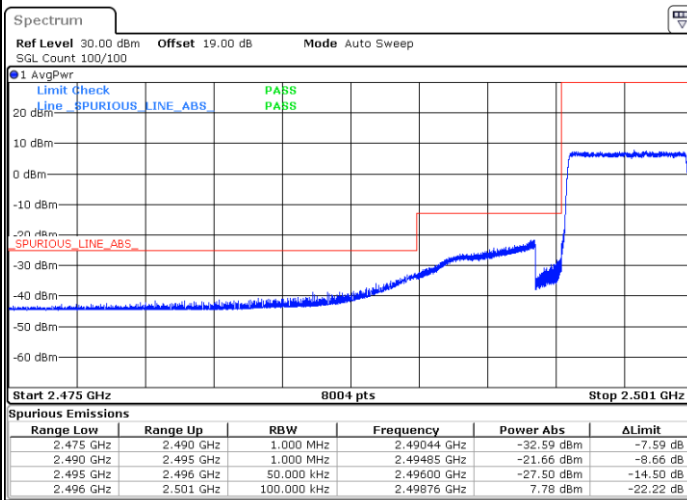
Date: 28.DEC.2023 01:38:45

Highest Band Edge / 1 RB



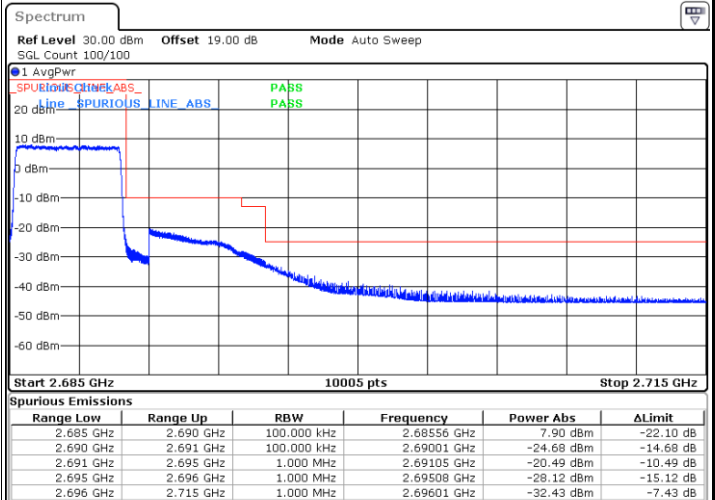
Date: 4.JAN.2024 21:07:47

Lowest Band Edge / Full RB



Date: 28.DEC.2023 01:43:56

Highest Band Edge / Full RB



Date: 28.DEC.2023 01:54:06