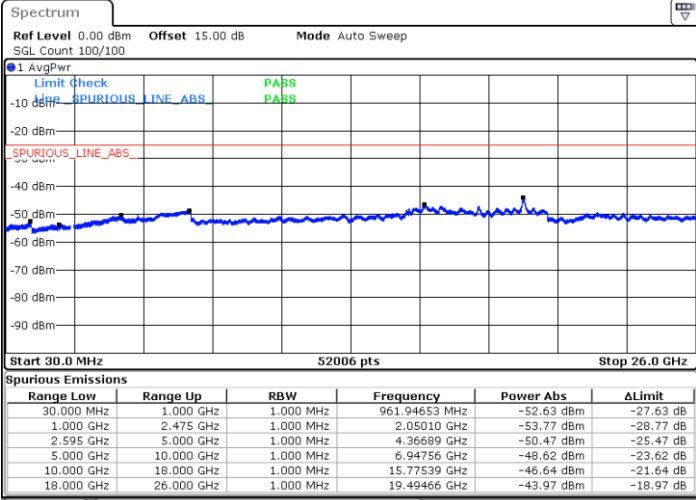




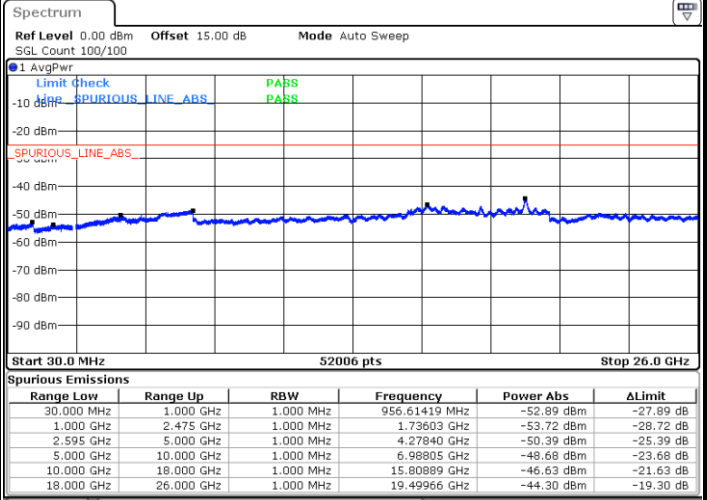
LTE Band 7 / 20MHz

Lowest Channel / QPSK

Middle Channel / QPSK

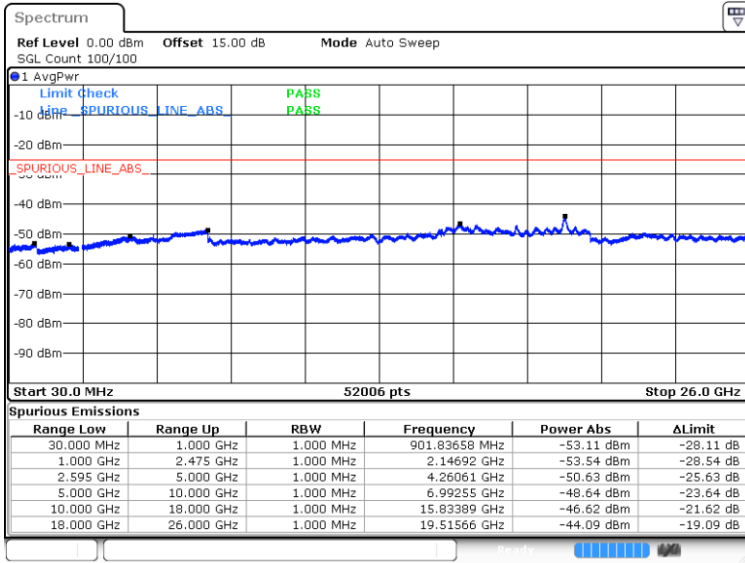


Date: 11.NOV.2024 13:11:25



Date: 11.NOV.2024 13:12:55

Highest Channel / QPSK



Date: 11.NOV.2024 13:20:05



Frequency Stability

Test Conditions		LTE Band 7 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	4.8	PASS
40	Normal Voltage	3.5	
30	Normal Voltage	2	
20(Ref.)	Normal Voltage	2.7	
10	Normal Voltage	2.6	
0	Normal Voltage	1.4	
-10	Normal Voltage	5.3	
-20	Normal Voltage	4.8	
-30	Normal Voltage	5.2	
20	Maximum Voltage	-1.3	
20	Normal Voltage	2.7	
20	Battery End Point	4.9	

Note:

1. Normal Voltage = 3.91 V.; Battery End Point (BEP) = 3.4 V.; Maximum Voltage = 4.5 V.
2. The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block or frequency block group.

$$|\text{MAX}(\Delta f)| = 5.3\text{Hz}$$

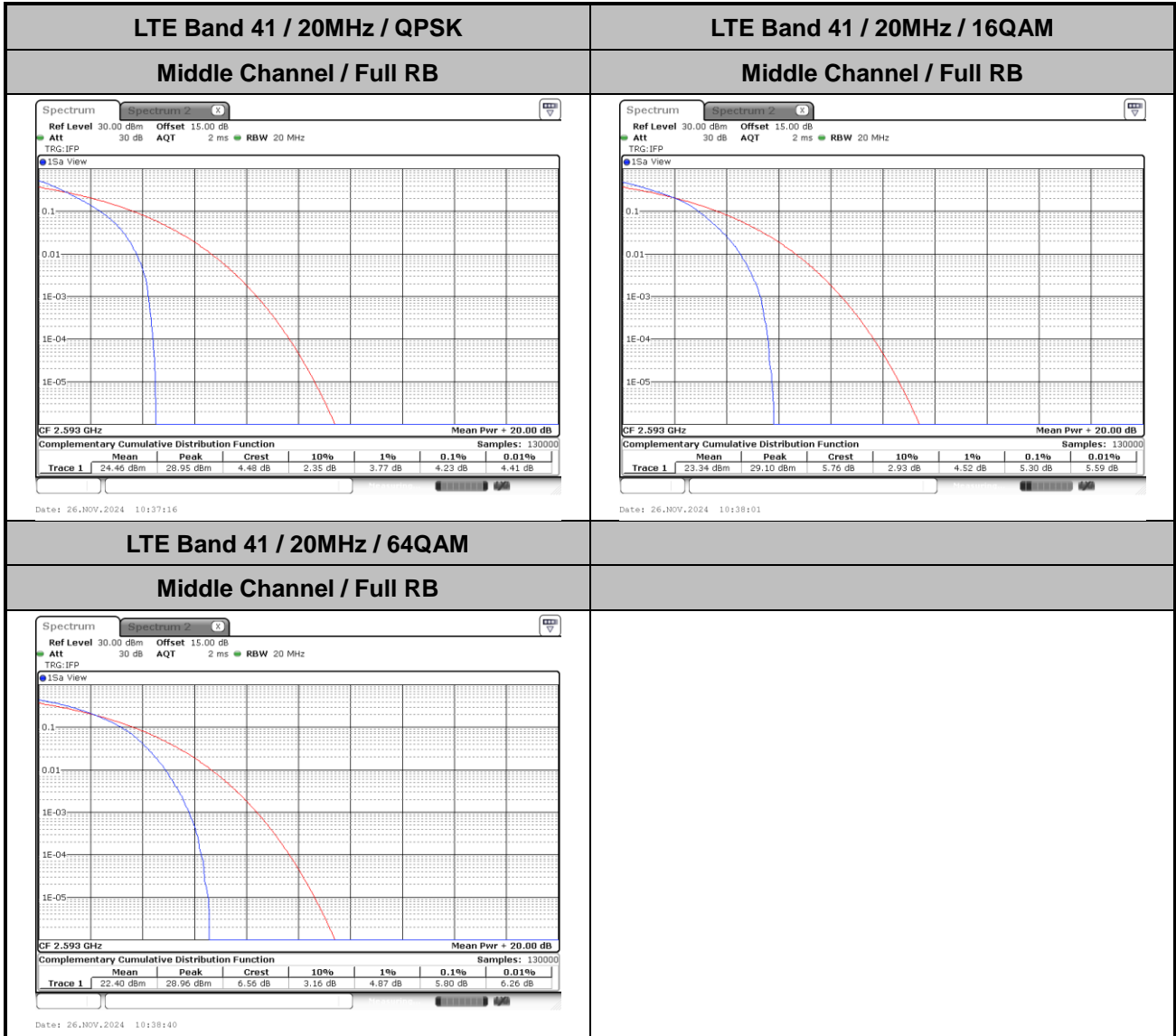
Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	2500.252195	≥ 2500 MHz	PASS
$f_H + \text{MAX}(\Delta f) $	2569.767705	≤ 2570 MHz	



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	4.23	5.30	5.80	PASS





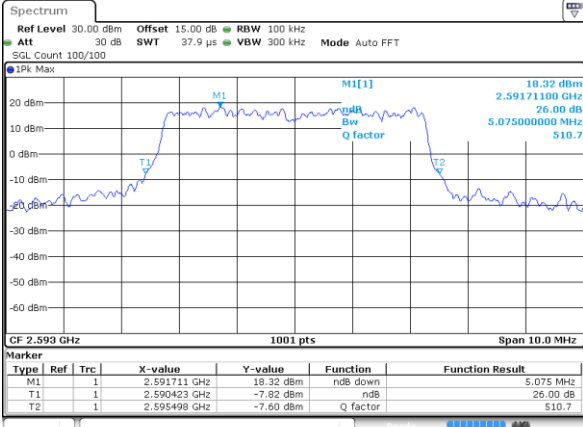
26dB Bandwidth

Mode	LTE Band 41 : 26dB BW(MHz)											
	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	5.08	4.98	9.65	9.81	14.60	14.12	19.22	18.74



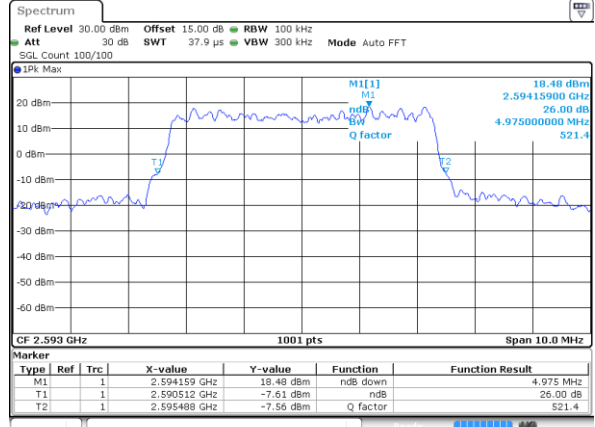
LTE Band 41

Middle Channel / 5MHz / QPSK



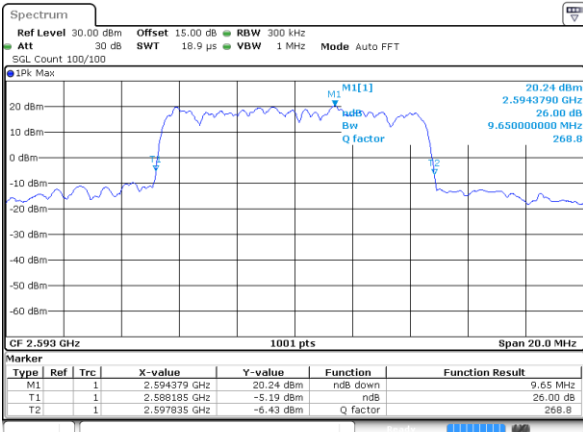
Date: 11 NOV 2024 13:29:47

Middle Channel / 5MHz / 16QAM



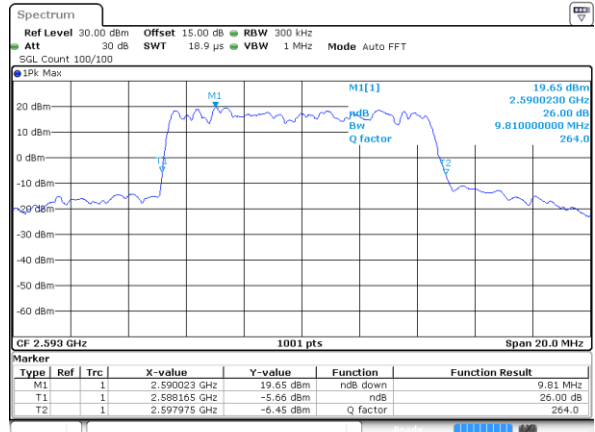
Date: 11 NOV 2024 13:30:27

Middle Channel / 10MHz / QPSK



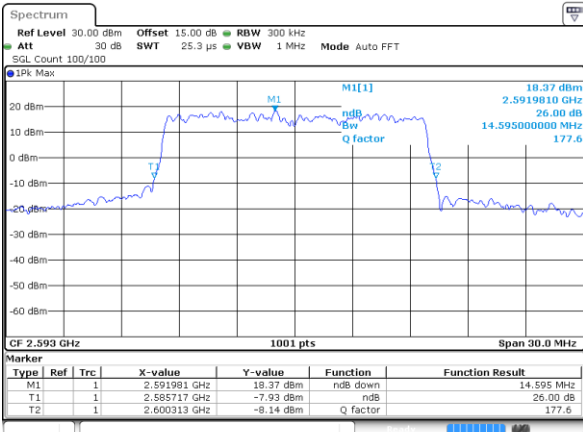
Date: 11 NOV 2024 13:47:14

Middle Channel / 10MHz / 16QAM



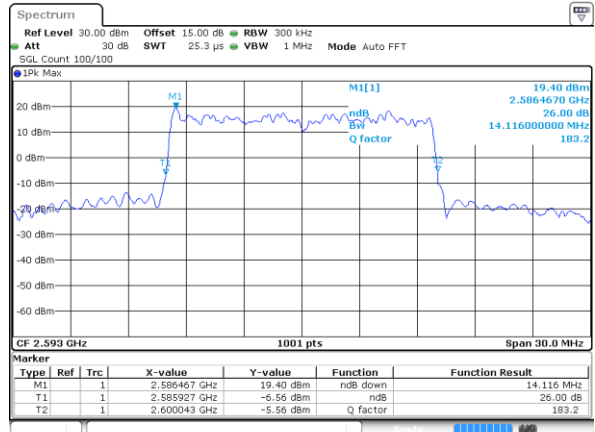
Date: 11 NOV 2024 13:47:54

Middle Channel / 15MHz / QPSK



Date: 11 NOV 2024 14:01:59

Middle Channel / 15MHz / 16QAM

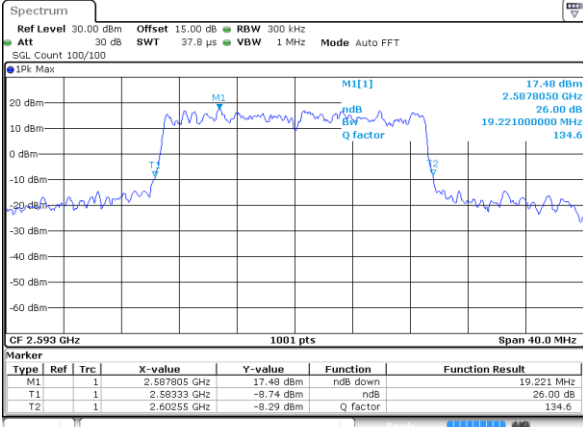


Date: 11 NOV 2024 14:02:38



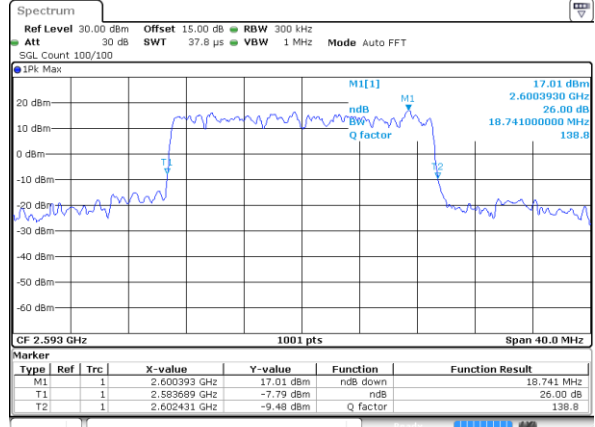
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 11 NOV 2024 14:17:50

Middle Channel / 20MHz / 16QAM



Date: 11 NOV 2024 14:18:30



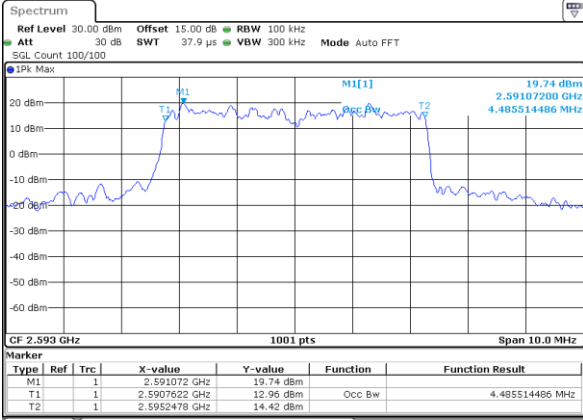
Occupied Bandwidth

Mode	LTE Band 41 : 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	-	-	-	-	4.49	4.48	9.09	9.05	13.43	13.46	17.94	17.98



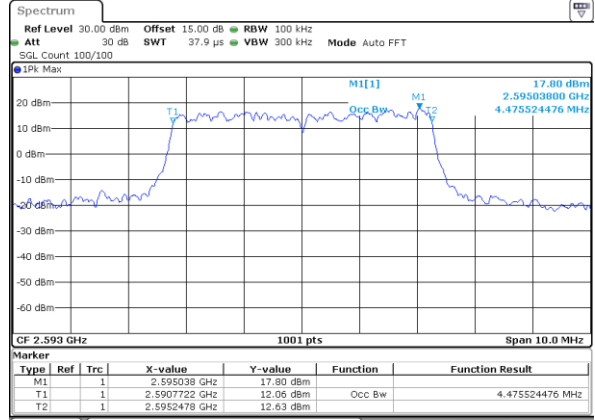
LTE Band 41

Middle Channel / 5MHz / QPSK



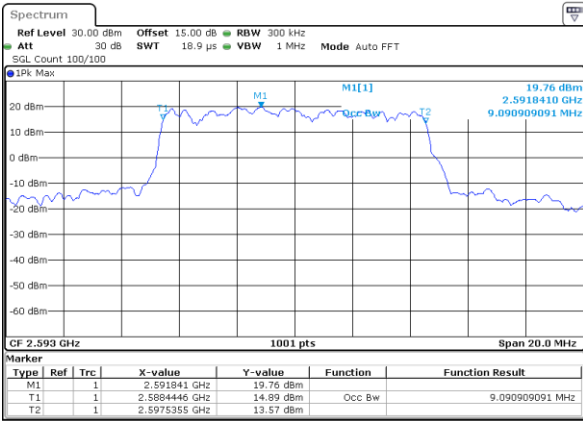
Date: 11 NOV 2024 14:43:52

Middle Channel / 5MHz / 16QAM



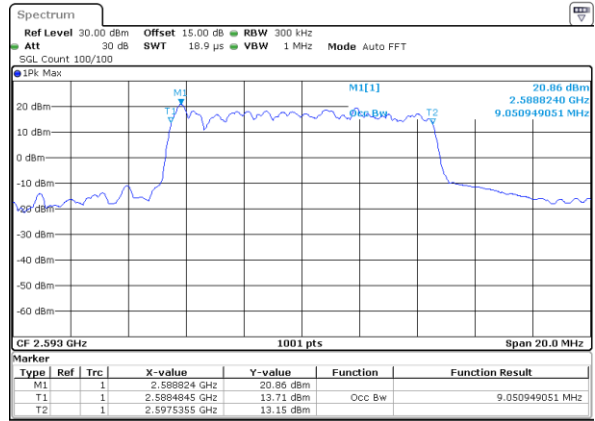
Date: 11 NOV 2024 13:30:13

Middle Channel / 10MHz / QPSK



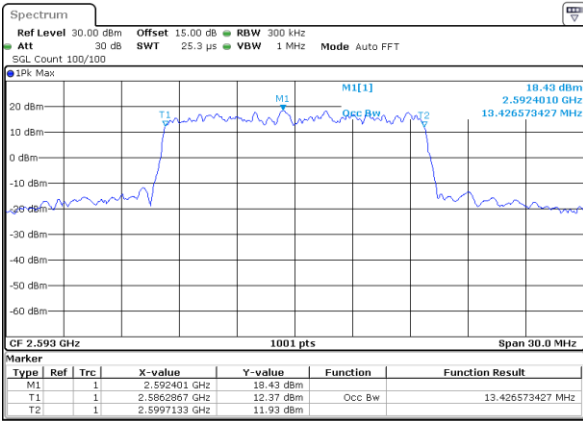
Date: 11 NOV 2024 13:47:00

Middle Channel / 10MHz / 16QAM



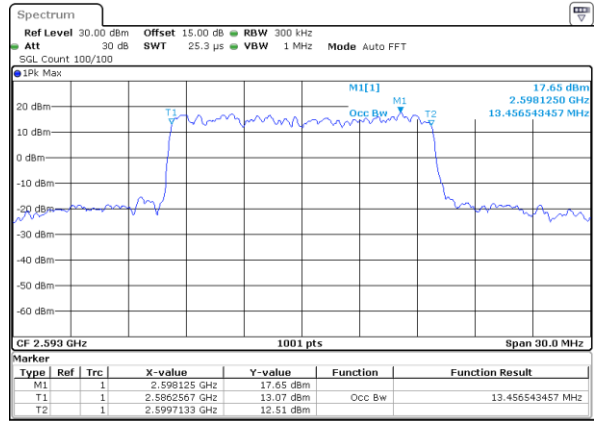
Date: 11 NOV 2024 13:47:40

Middle Channel / 15MHz / QPSK



Date: 11 NOV 2024 14:01:45

Middle Channel / 15MHz / 16QAM

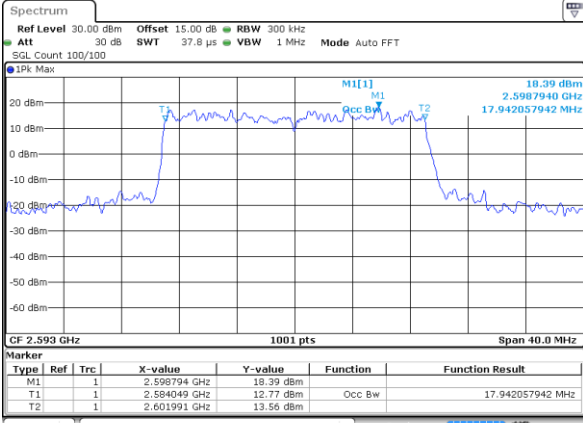


Date: 11 NOV 2024 14:02:24



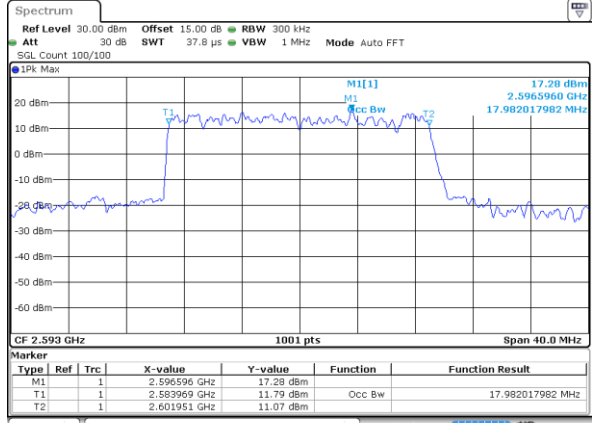
LTE Band 41

Middle Channel / 20MHz / QPSK



Date: 11 NOV 2024 14:17:36

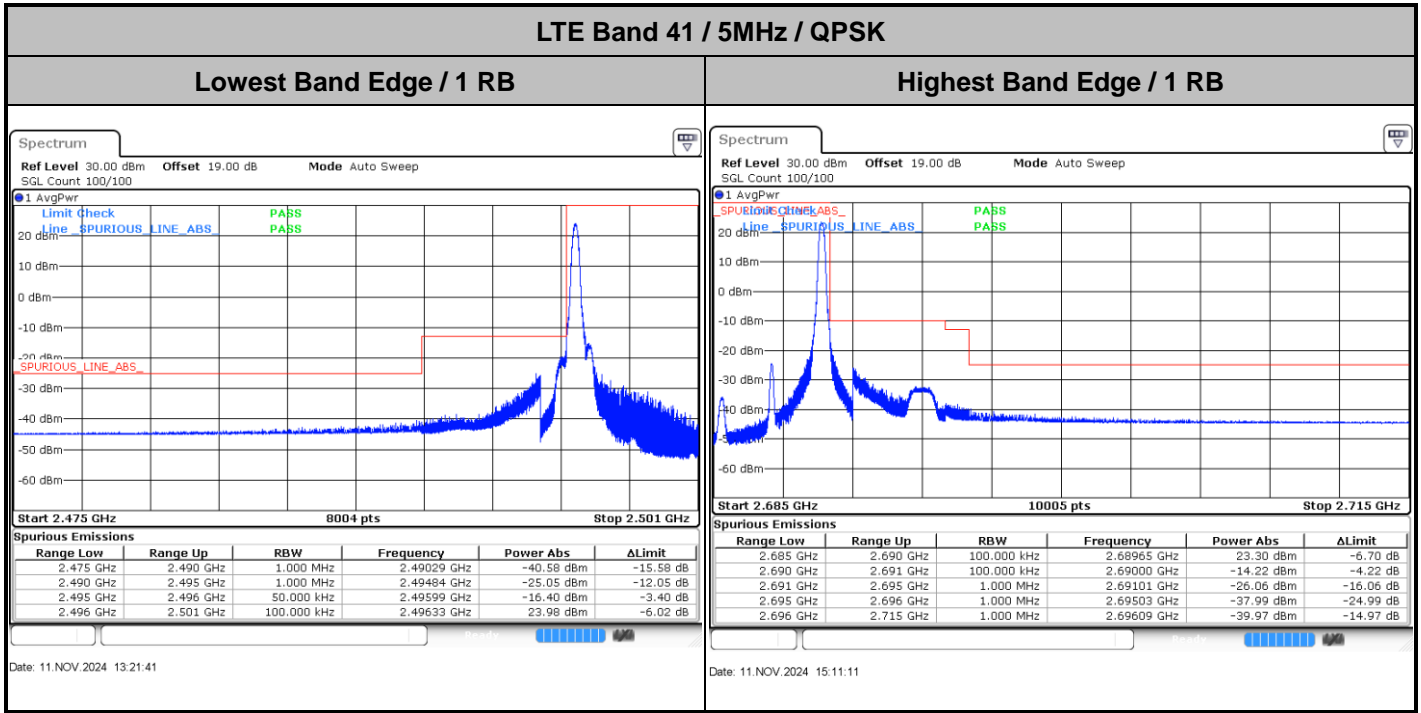
Middle Channel / 20MHz / 16QAM

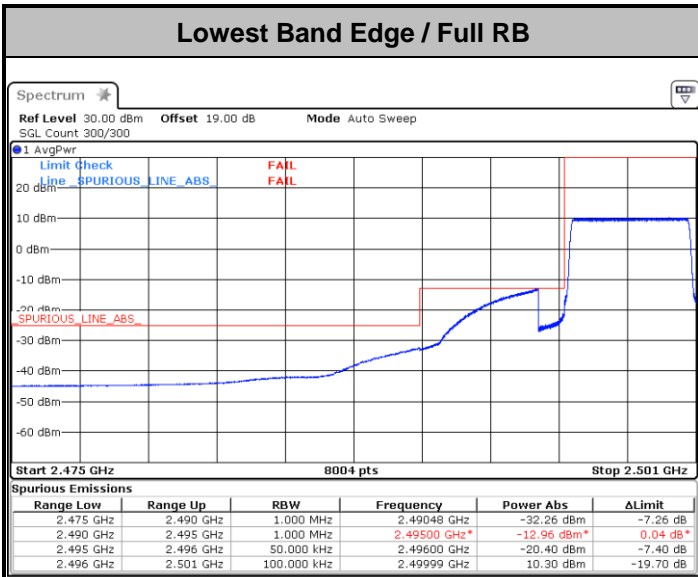


Date: 11 NOV 2024 14:18:16

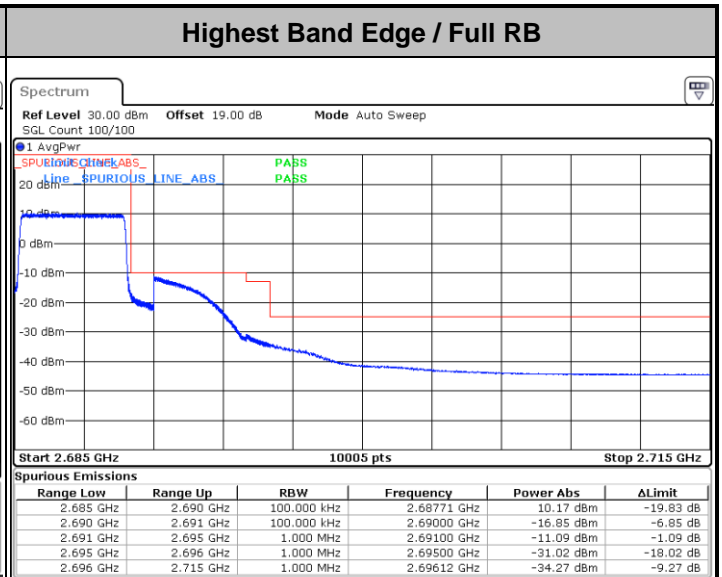


Conducted Band Edge

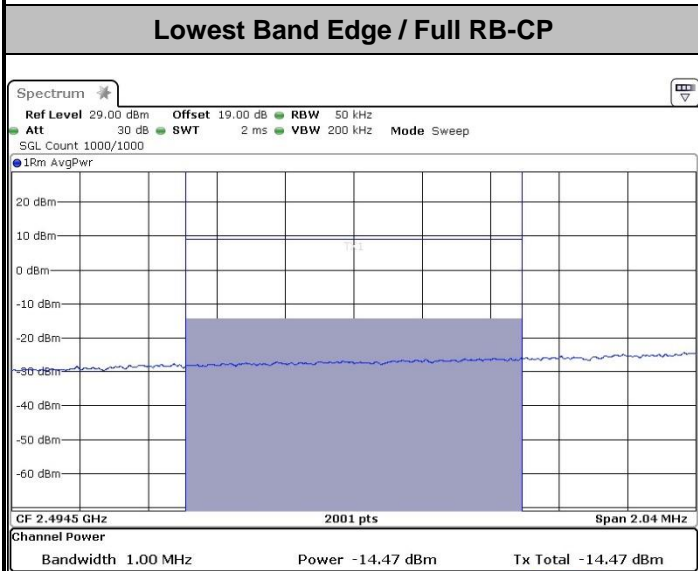




Date: 11.NOV.2024 14:41:11



Date: 11.NOV.2024 15:16:34

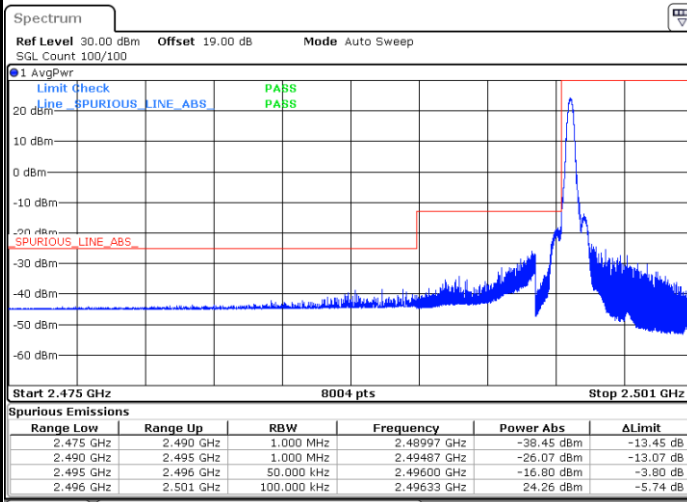


Date: 11.NOV.2024 14:42:49



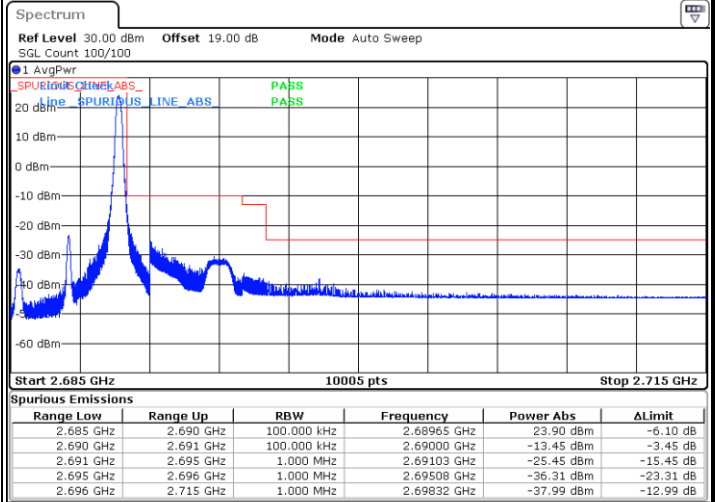
LTE Band 41 / 5MHz / 16QAM

Lowest Band Edge / 1RB



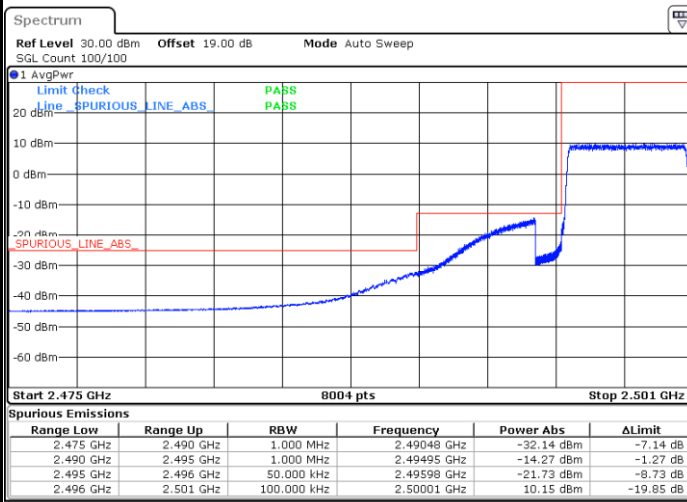
Date: 11.NOV.2024 13:22:34

Highest Band Edge / 1 RB



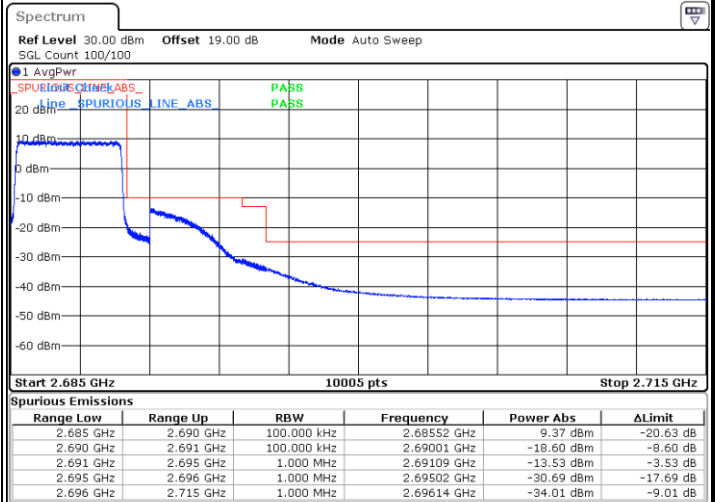
Date: 11.NOV.2024 15:12:18

Lowest Band Edge / Full RB



Date: 11.NOV.2024 13:25:17

Highest Band Edge / Full RB

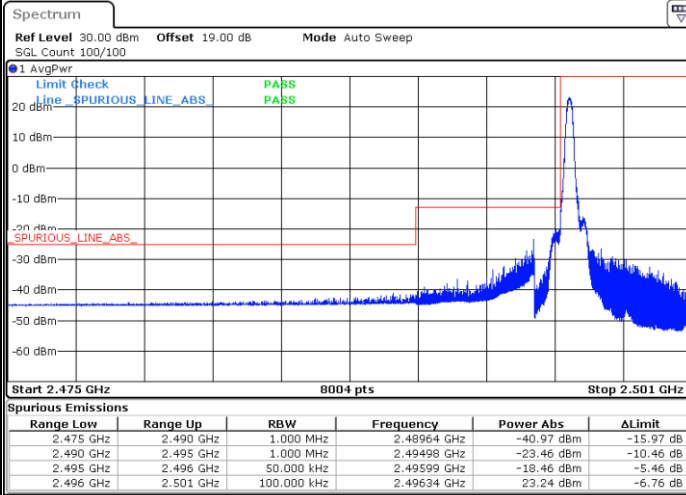


Date: 11.NOV.2024 15:15:30



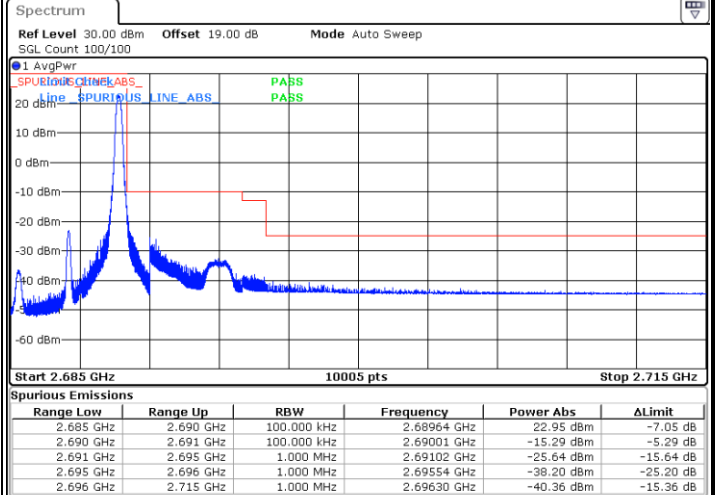
LTE Band 41 / 5MHz / 64QAM

Lowest Band Edge / 1RB



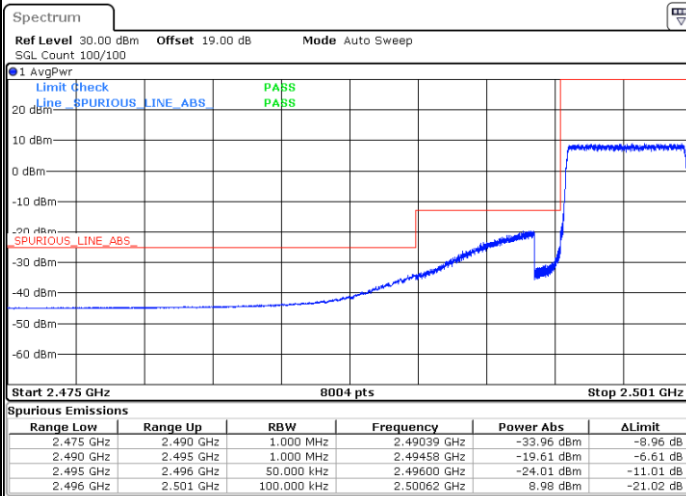
Date: 11.NOV.2024 13:23:31

Highest Band Edge / 1 RB



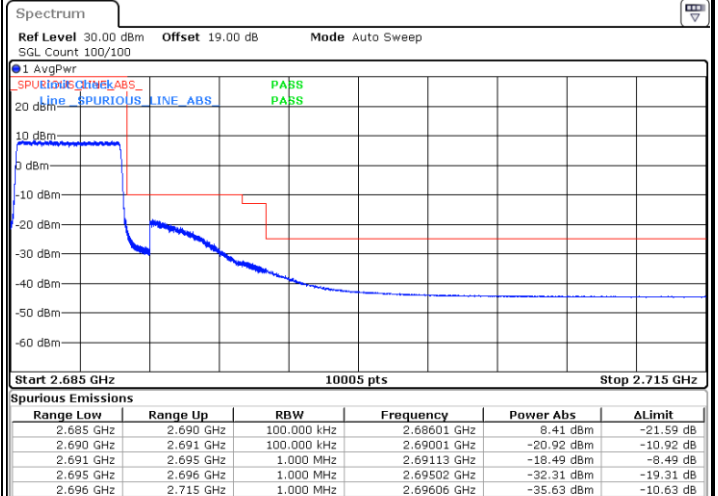
Date: 11.NOV.2024 15:13:22

Lowest Band Edge / Full RB



Date: 11.NOV.2024 13:24:23

Highest Band Edge / Full RB

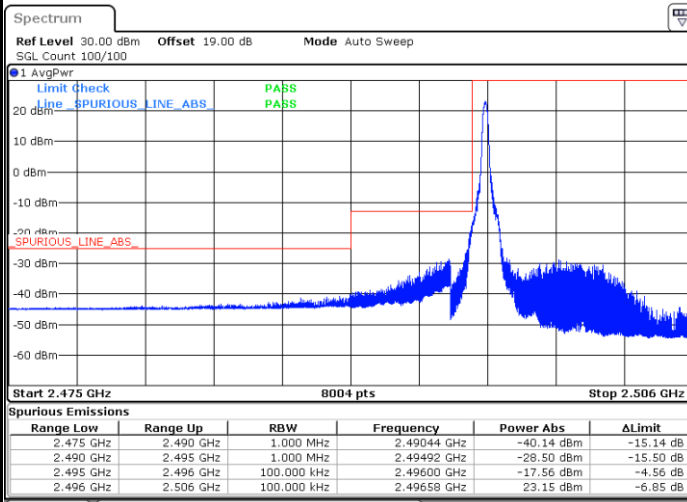


Date: 11.NOV.2024 15:14:26



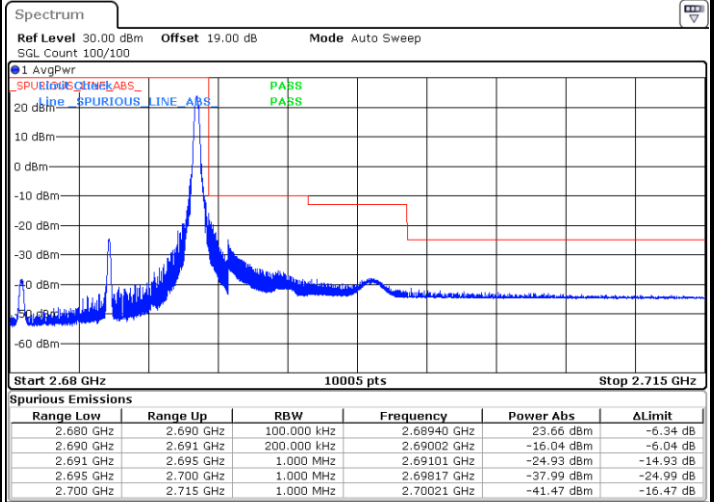
LTE Band 41 / 10MHz / QPSK

Lowest Band Edge / 1 RB



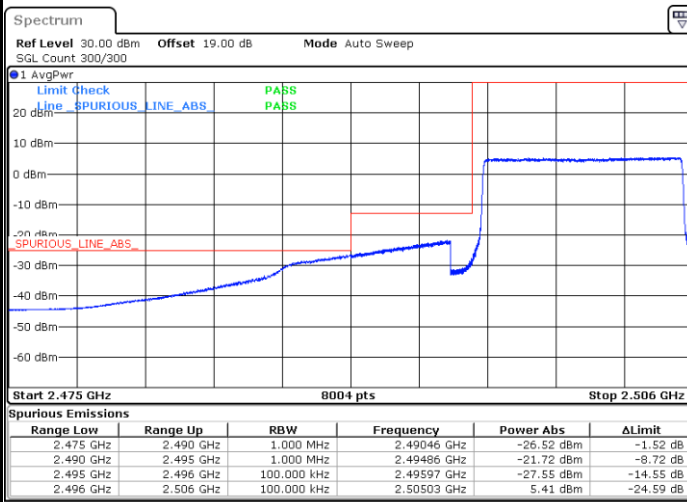
Date: 11.NOV.2024 13:40:12

Highest Band Edge / 1 RB



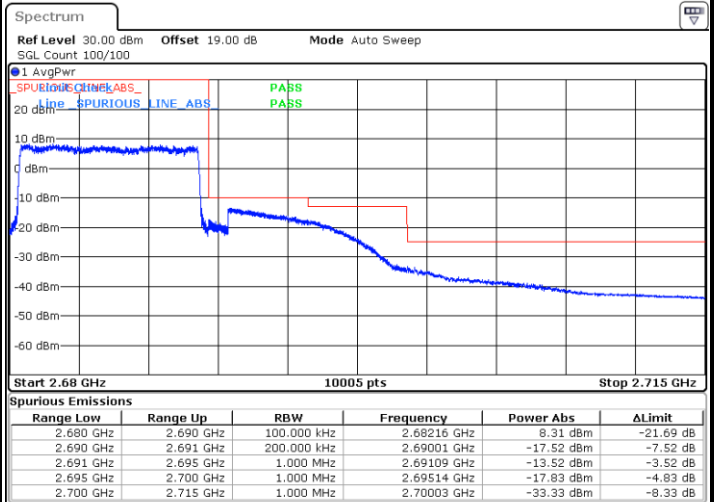
Date: 11.NOV.2024 13:48:39

Lowest Band Edge / Full RB



Date: 19.NOV.2024 09:00:40

Highest Band Edge / Full RB



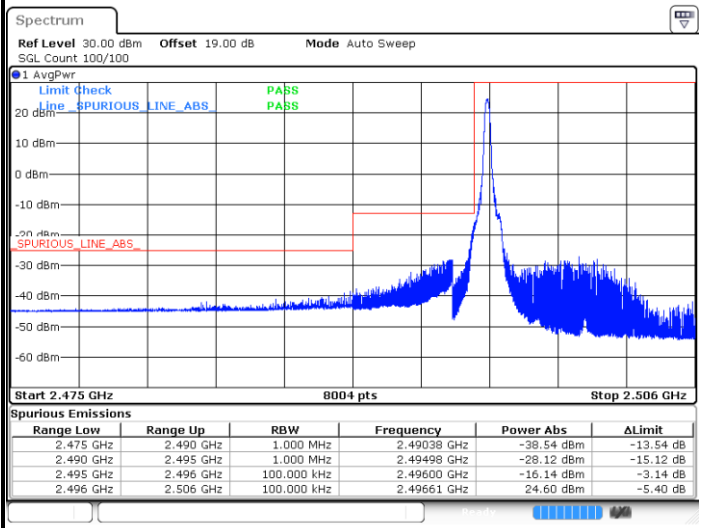
Date: 11.NOV.2024 13:52:29



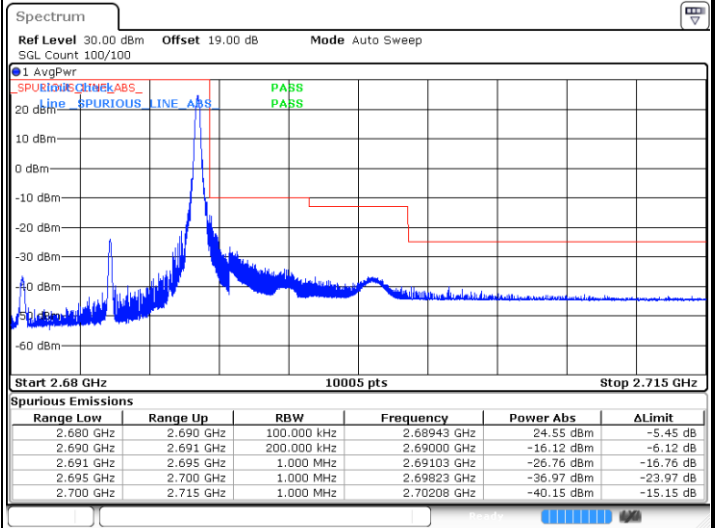
LTE Band 41 / 10MHz / 16QAM

Lowest Band Edge / 1RB

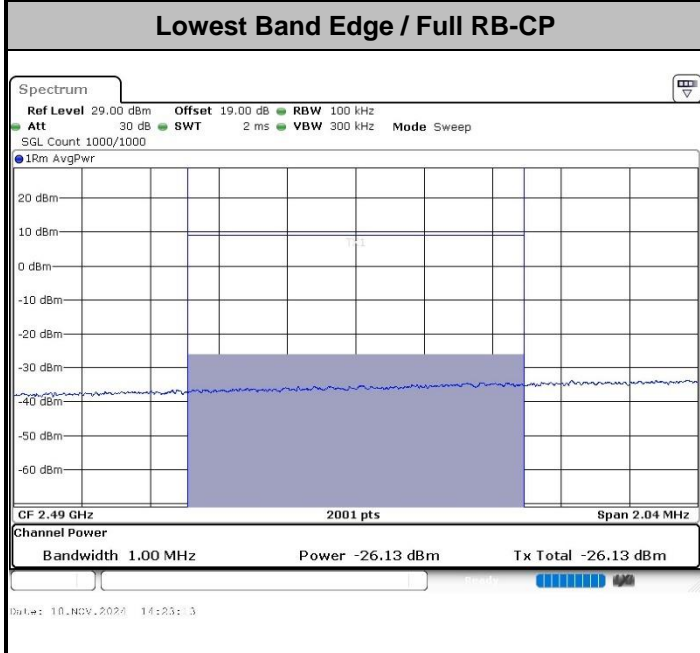
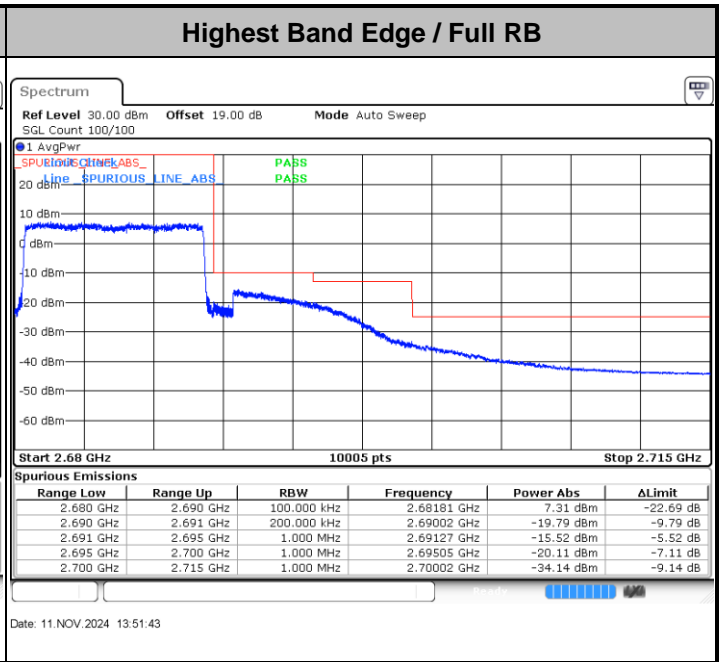
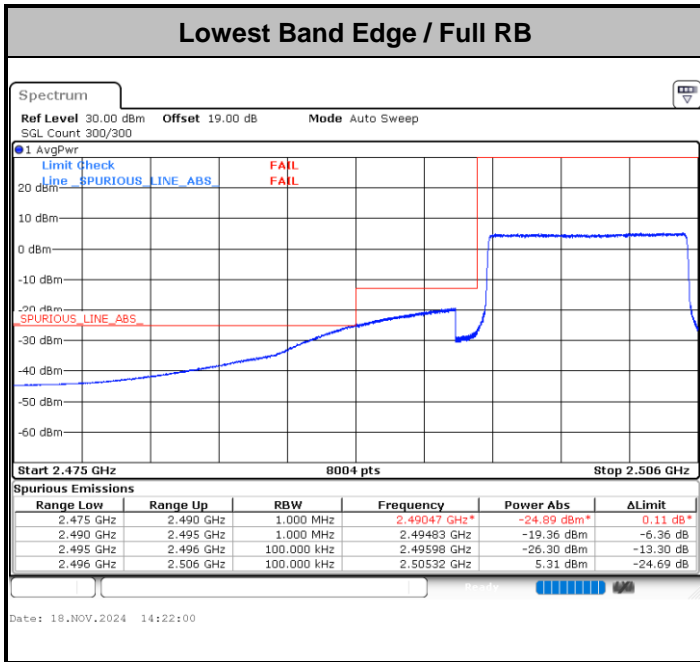
Highest Band Edge / 1 RB



Date: 11.NOV.2024 13:41:00



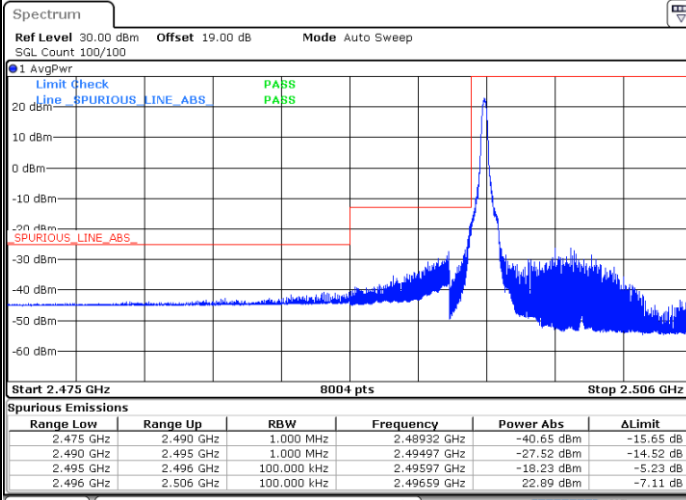
Date: 11.NOV.2024 13:49:25





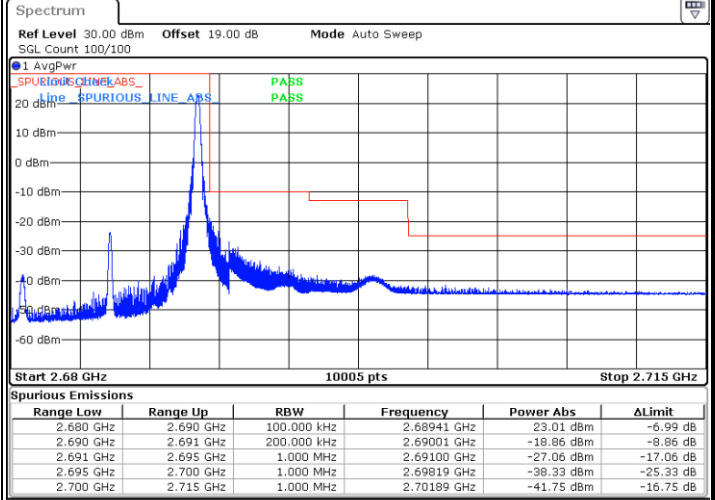
LTE Band 41 / 10MHz / 64QAM

Lowest Band Edge / 1RB



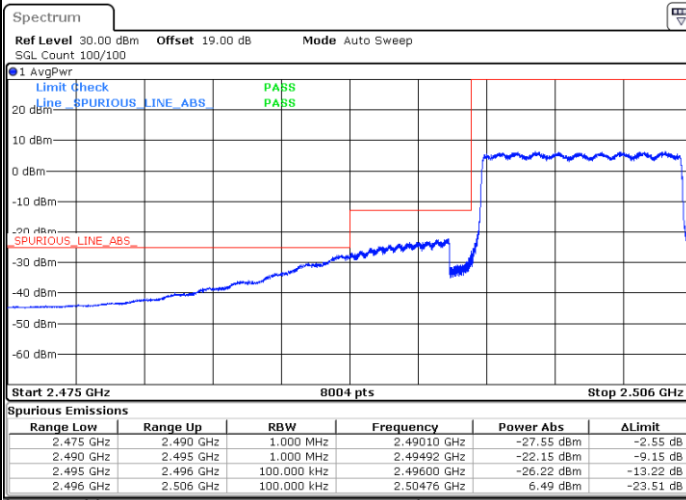
Date: 11.NOV.2024 13:41:49

Highest Band Edge / 1 RB



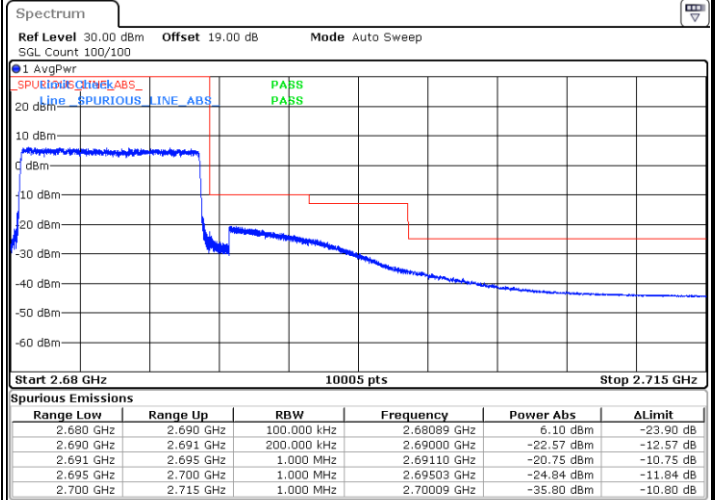
Date: 11.NOV.2024 13:50:11

Lowest Band Edge / Full RB



Date: 11.NOV.2024 13:42:37

Highest Band Edge / Full RB

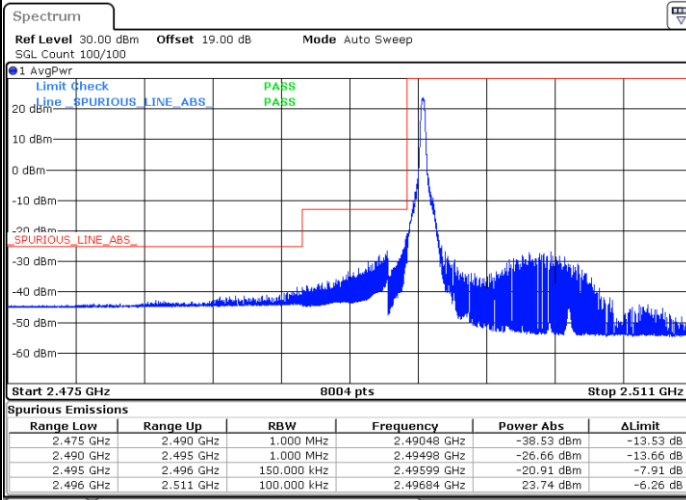


Date: 11.NOV.2024 13:50:57



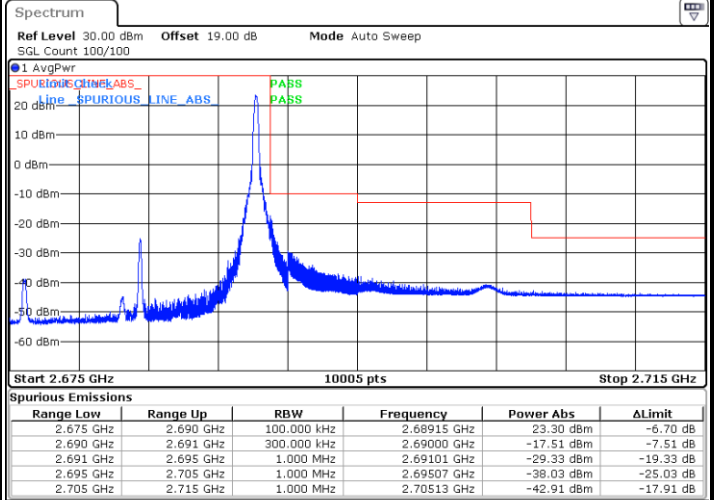
LTE Band 41 / 15MHz / QPSK

Lowest Band Edge / 1 RB



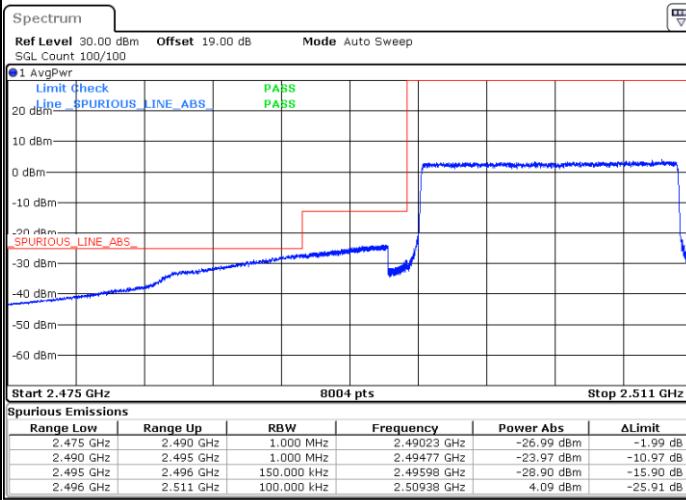
Date: 11.NOV.2024 13:55:08

Highest Band Edge / 1 RB



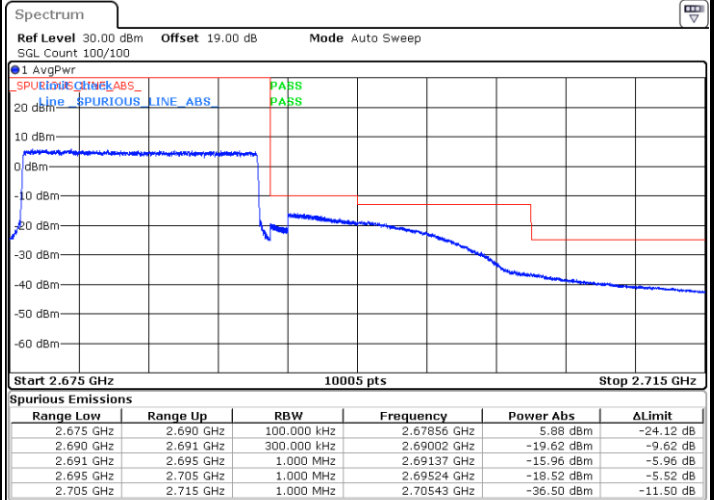
Date: 11.NOV.2024 14:03:31

Lowest Band Edge / Full RB



Date: 18.NOV.2024 14:13:41

Highest Band Edge / Full RB

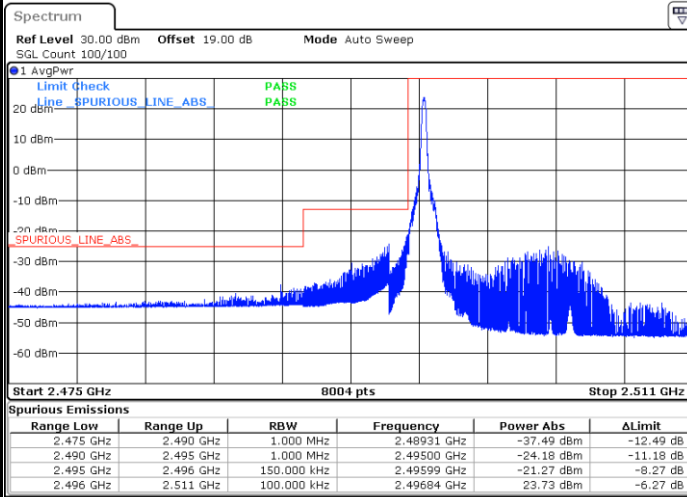


Date: 11.NOV.2024 14:08:00



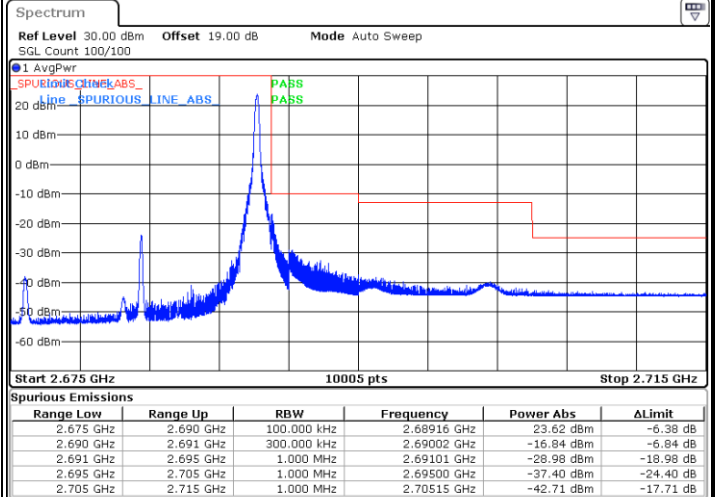
LTE Band 41 / 15MHz / 16QAM

Lowest Band Edge / 1RB



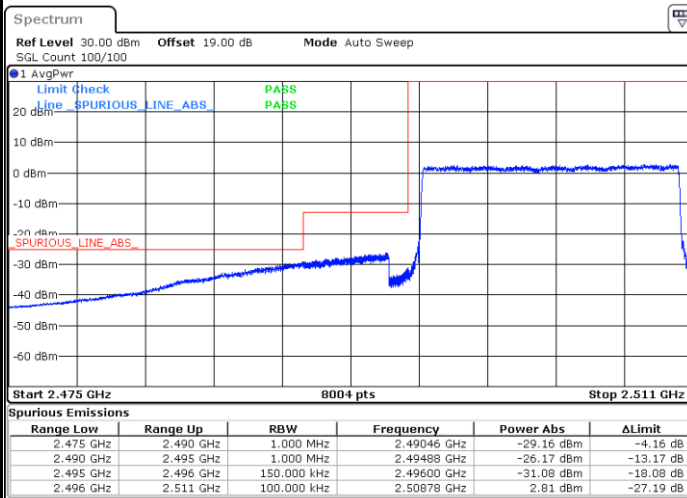
Date: 11.NOV.2024 13:55:54

Highest Band Edge / 1 RB



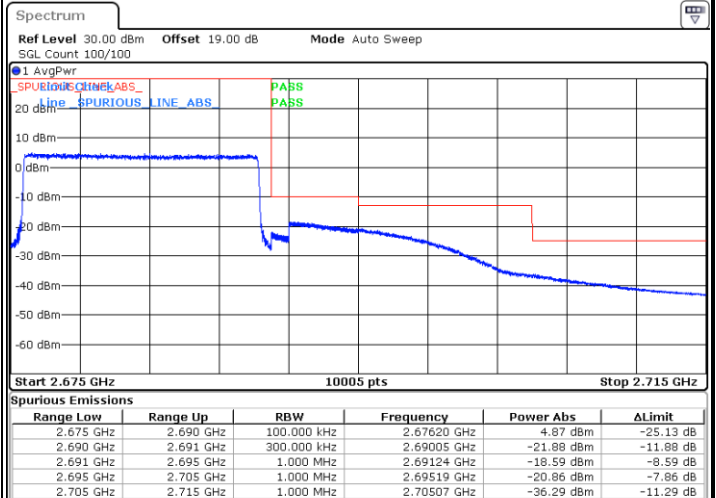
Date: 11.NOV.2024 14:04:24

Lowest Band Edge / Full RB



Date: 18.NOV.2024 14:14:59

Highest Band Edge / Full RB

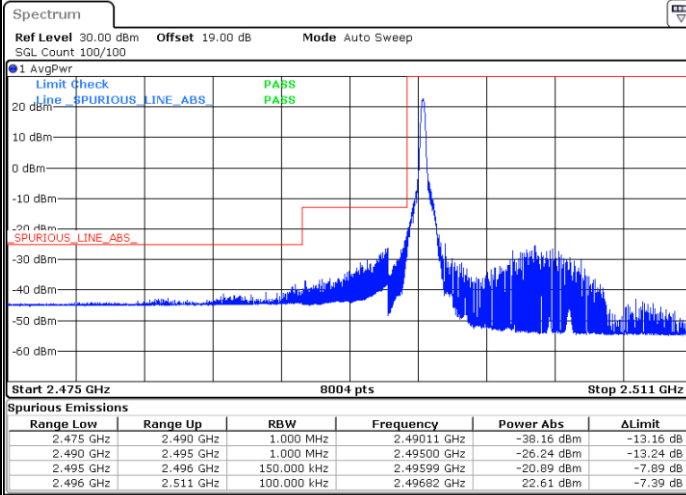


Date: 11.NOV.2024 14:07:06



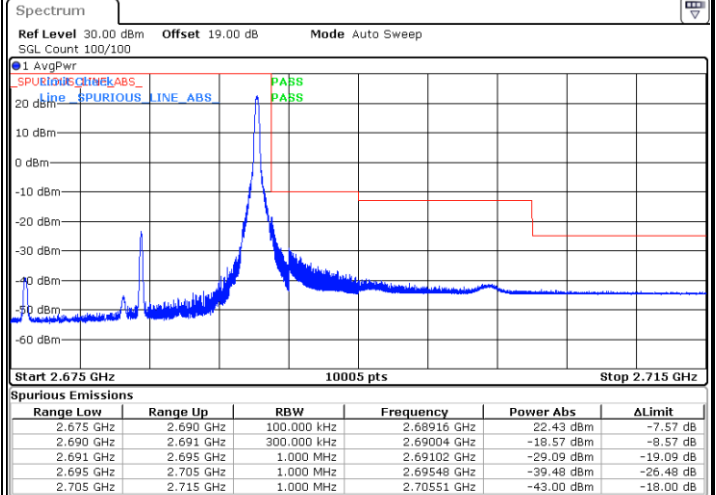
LTE Band 41 / 15MHz / 64QAM

Lowest Band Edge / 1RB



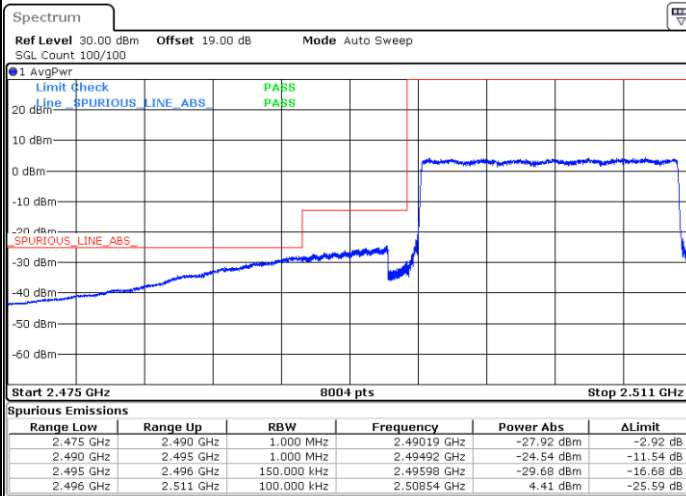
Date: 11.NOV.2024 13:56:40

Highest Band Edge / 1 RB



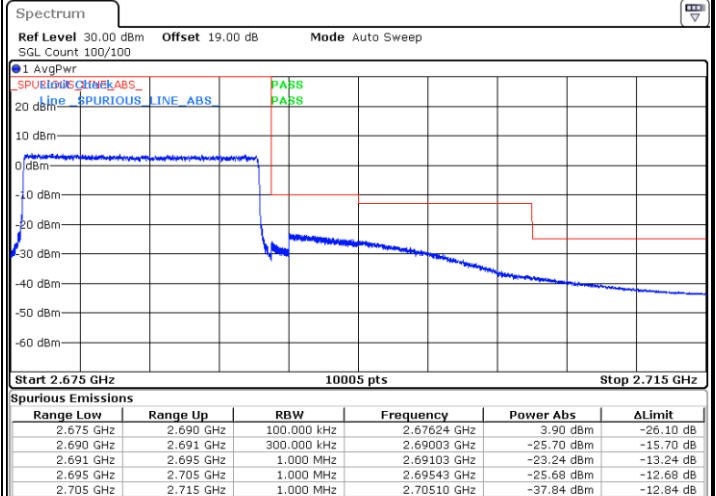
Date: 11.NOV.2024 14:05:18

Lowest Band Edge / Full RB



Date: 11.NOV.2024 13:57:26

Highest Band Edge / Full RB

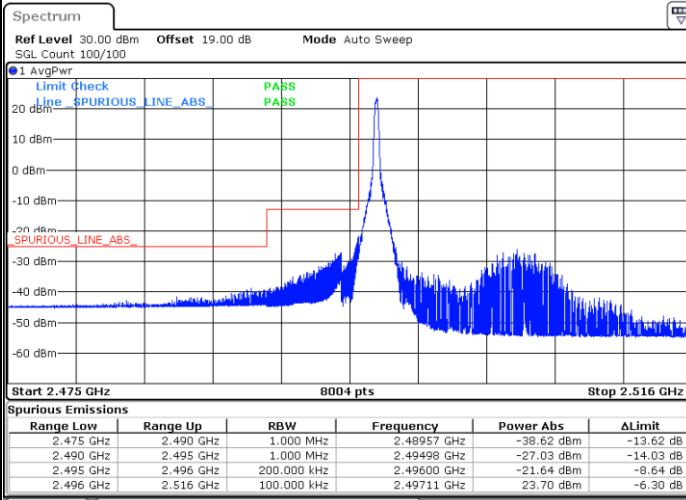


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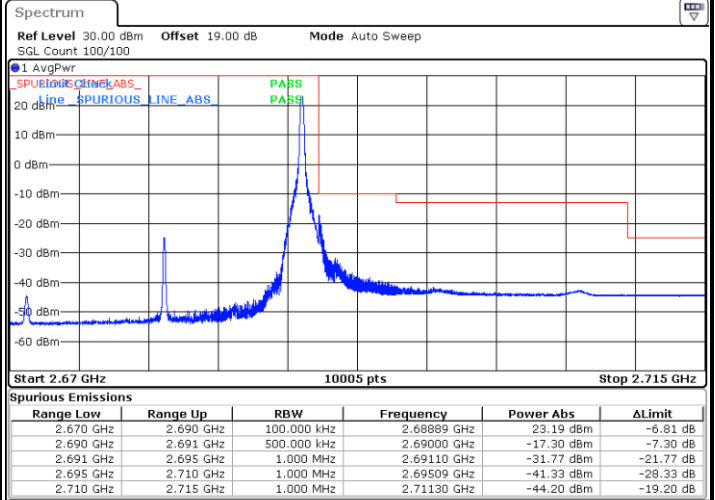
LTE Band 41 / 20MHz / QPSK

Lowest Band Edge / 1 RB



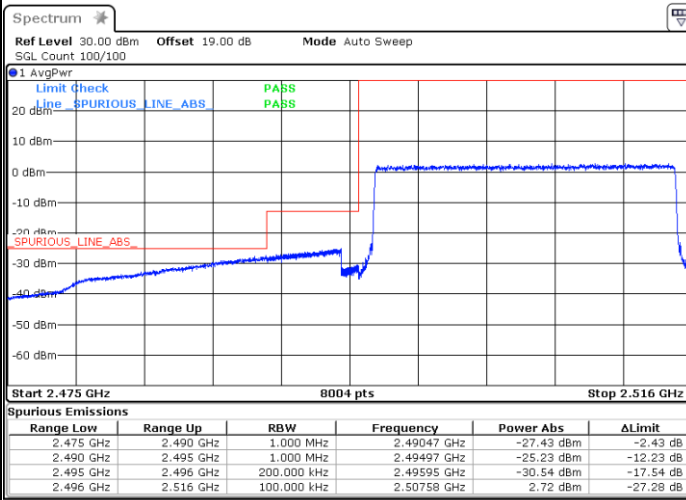
Date: 11.NOV.2024 14:10:41

Highest Band Edge / 1 RB



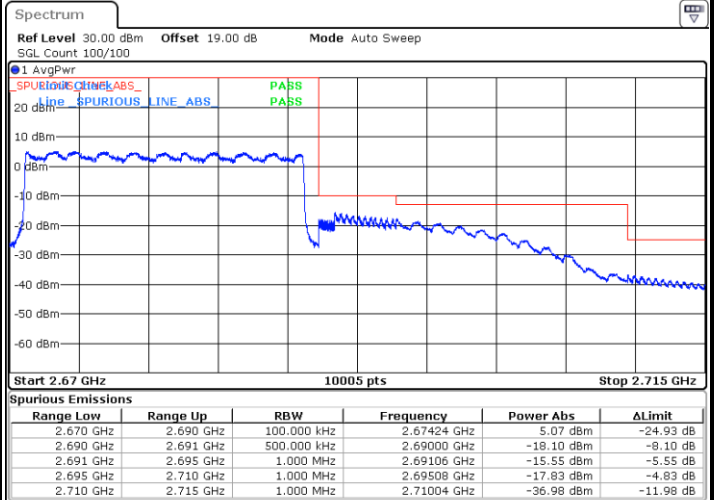
Date: 11.NOV.2024 14:19:23

Lowest Band Edge / Full RB



Date: 19.NOV.2024 09:03:41

Highest Band Edge / Full RB



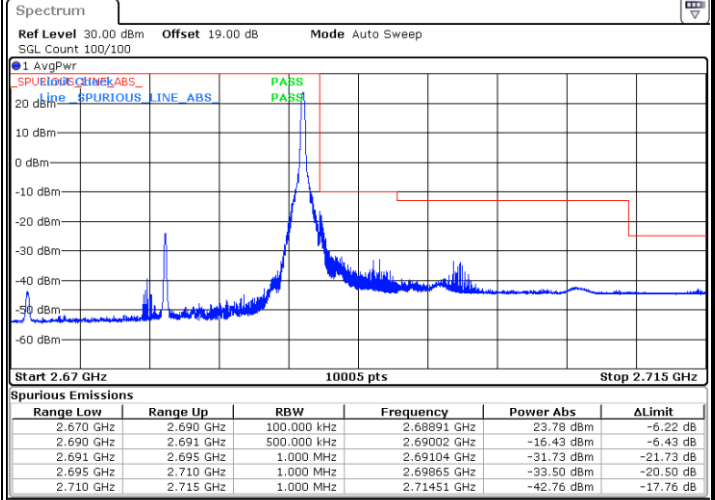
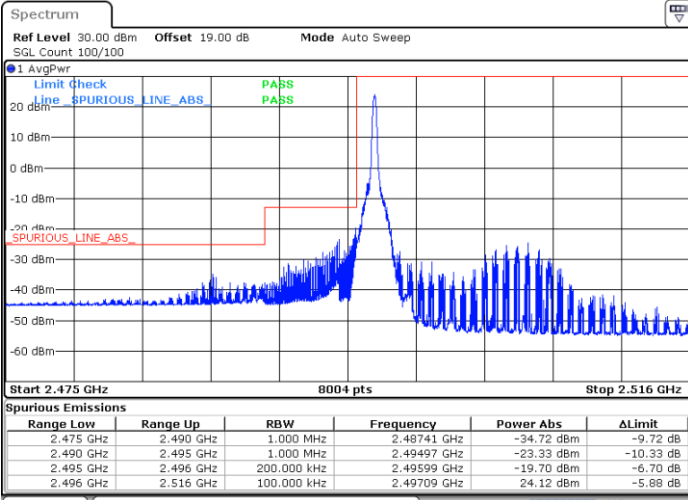
Date: 11.NOV.2024 14:23:53



LTE Band 41 / 20MHz / 16QAM

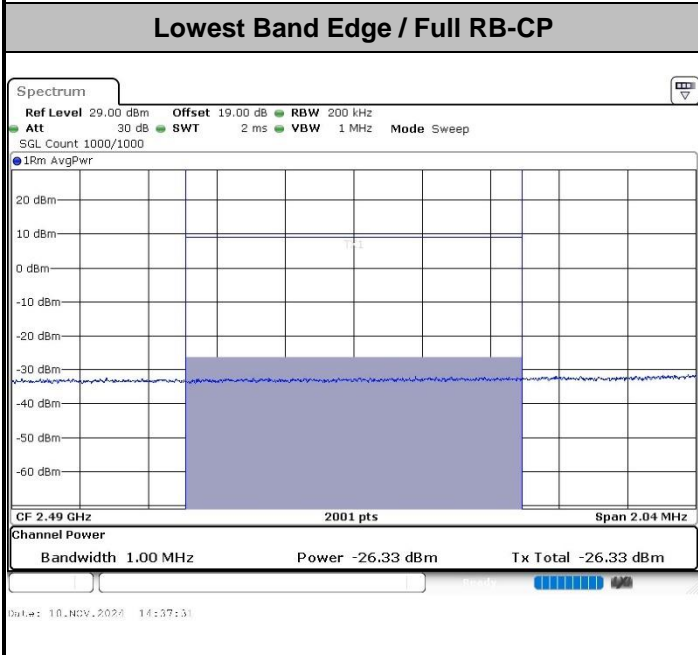
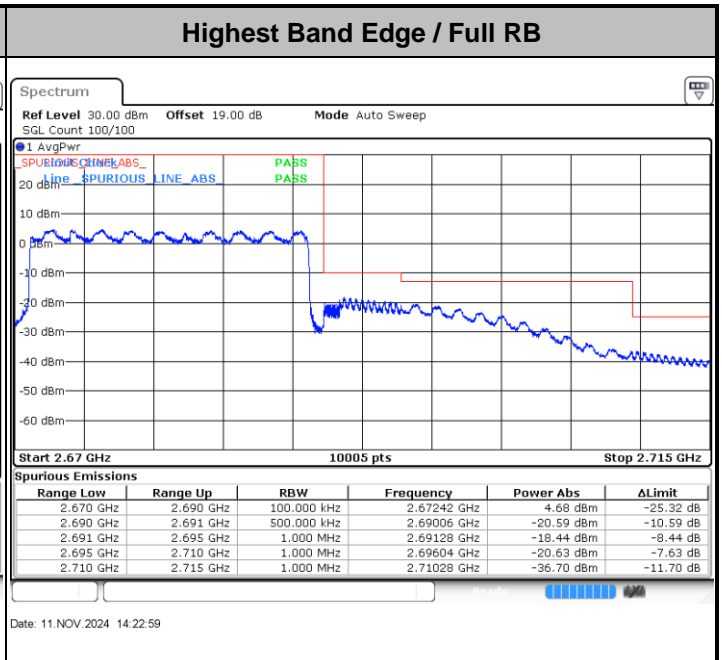
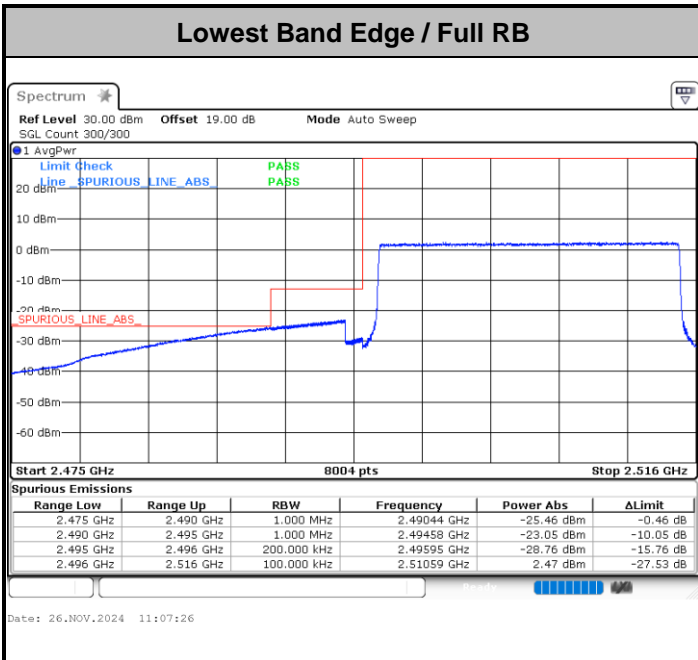
Lowest Band Edge / 1RB

Highest Band Edge / 1 RB



Date: 11.NOV.2024 14:11:29

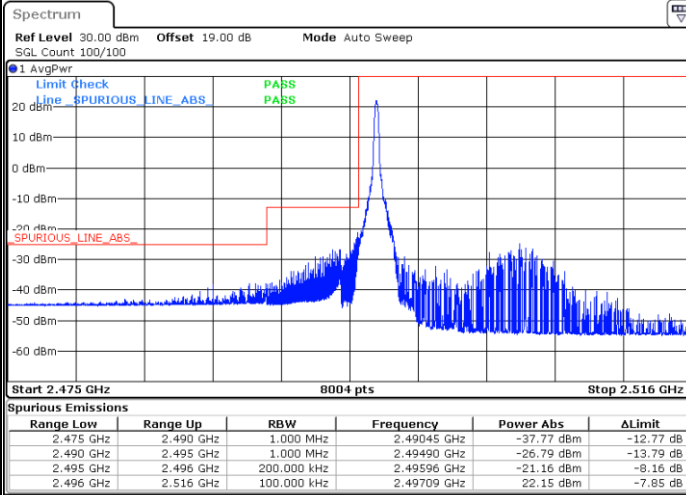
Date: 11.NOV.2024 14:20:17





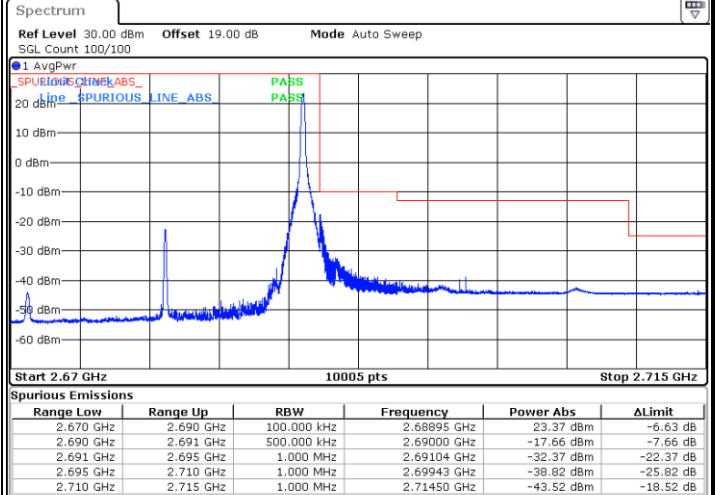
LTE Band 41 / 20MHz / 64QAM

Lowest Band Edge / 1RB



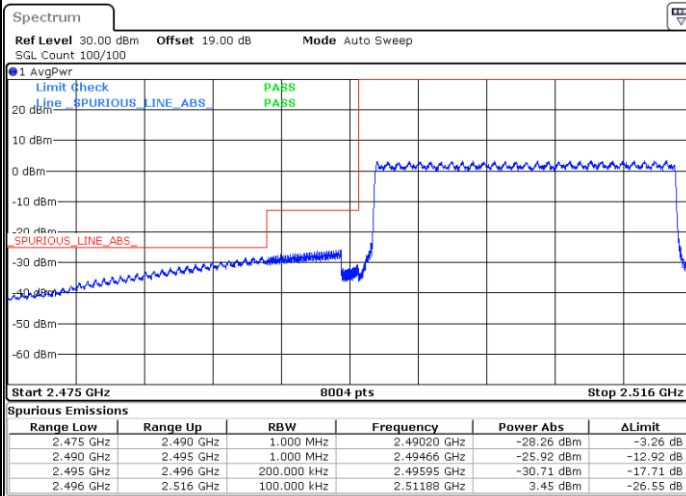
Date: 11.NOV.2024 14:12:18

Highest Band Edge / 1 RB



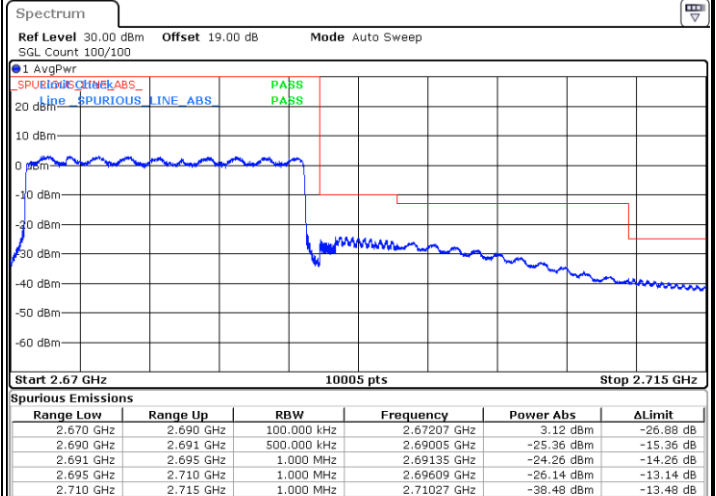
Date: 11.NOV.2024 14:21:11

Lowest Band Edge / Full RB



Date: 11.NOV.2024 14:13:06

Highest Band Edge / Full RB



Date: 11.NOV.2024 14:22:05

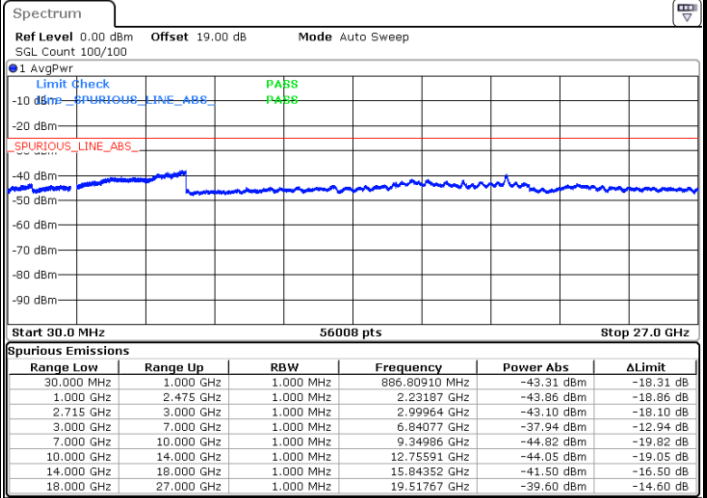
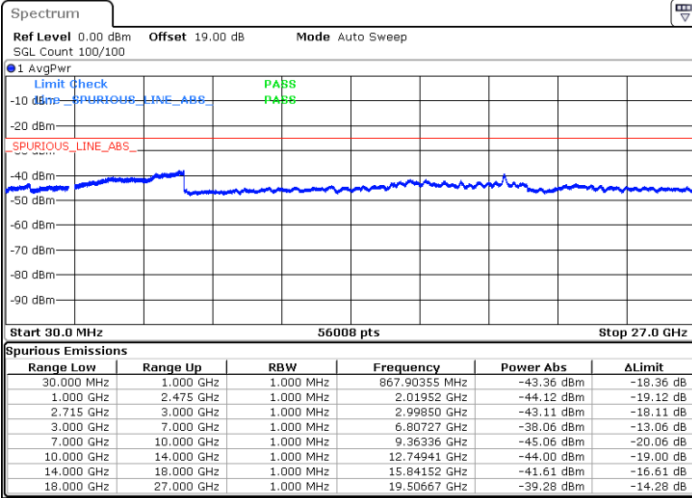


Conducted Spurious Emission

LTE Band 41 / 5MHz

Lowest Channel / QPSK

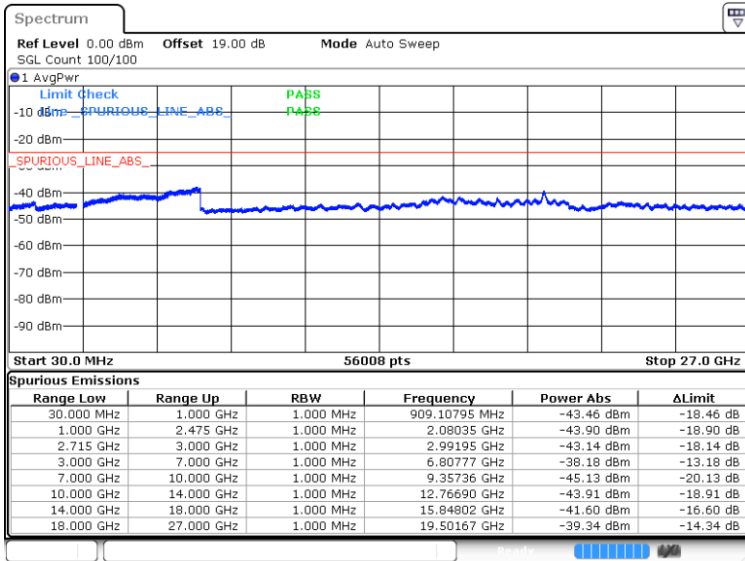
Middle Channel / QPSK



Date: 11.NOV.2024 13:27:26

Date: 11.NOV.2024 13:28:37

Highest Channel / QPSK



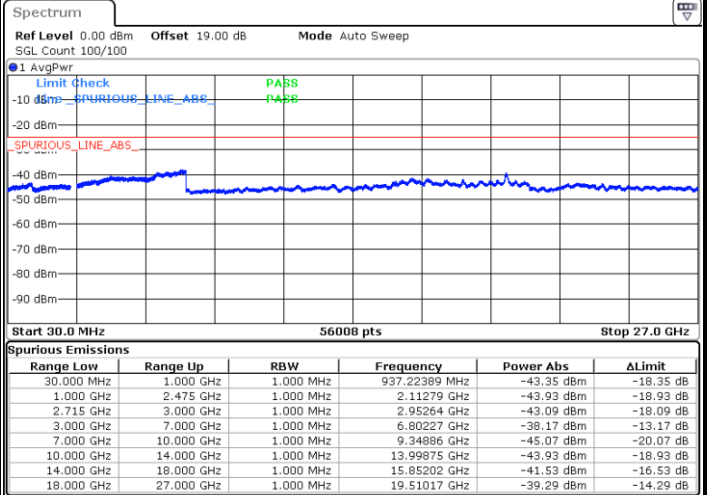
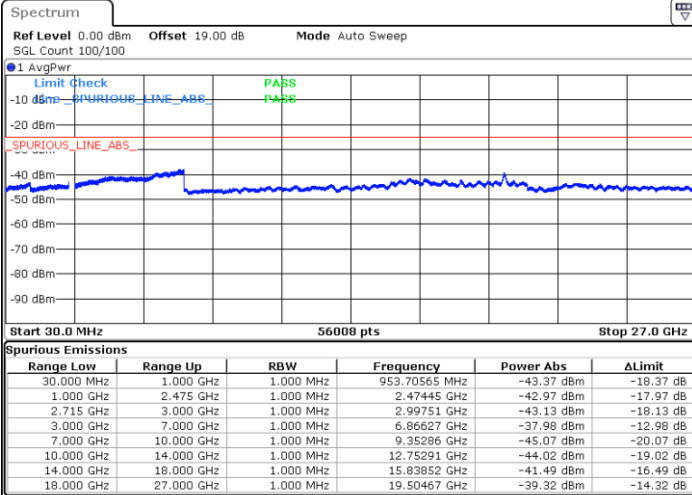
Date: 11.NOV.2024 13:38:41



LTE Band 41 / 10MHz

Lowest Channel / QPSK

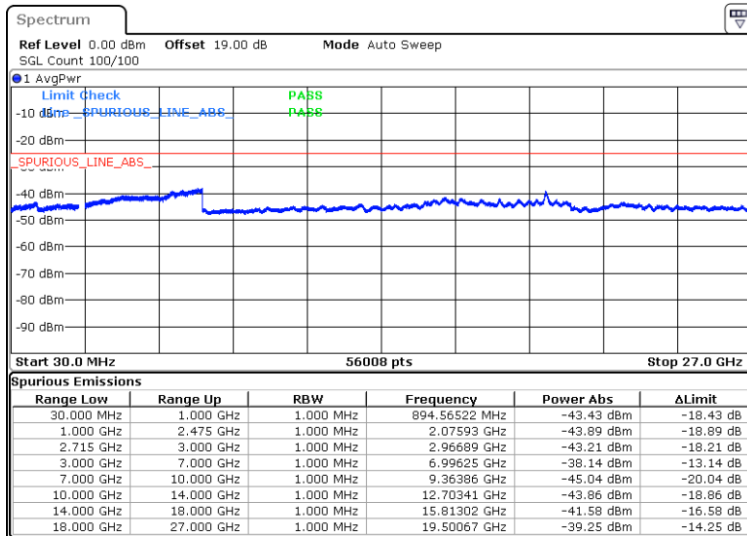
Middle Channel / QPSK



Date: 11.NOV.2024 13:45:24

Date: 11.NOV.2024 13:46:34

Highest Channel / QPSK



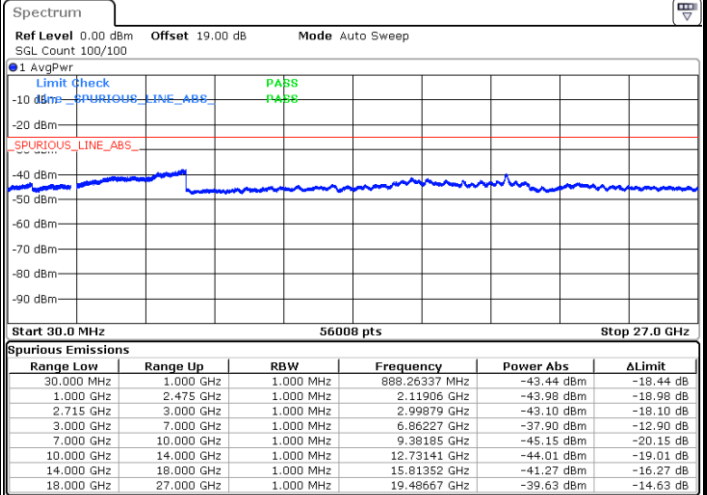
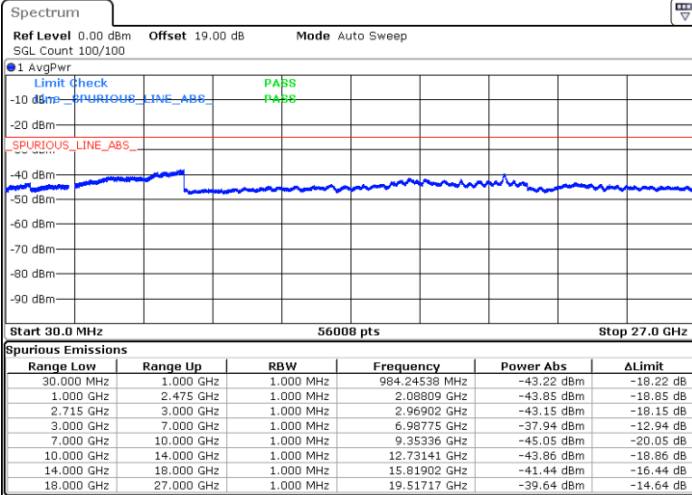
Date: 11.NOV.2024 13:53:39



LTE Band 41 / 15MHz

Lowest Channel / QPSK

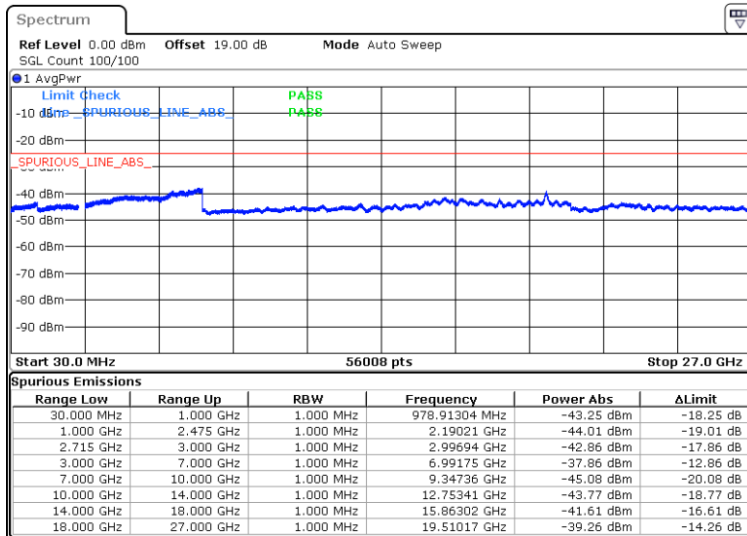
Middle Channel / QPSK



Date: 11.NOV.2024 14:00:09

Date: 11.NOV.2024 14:01:18

Highest Channel / QPSK



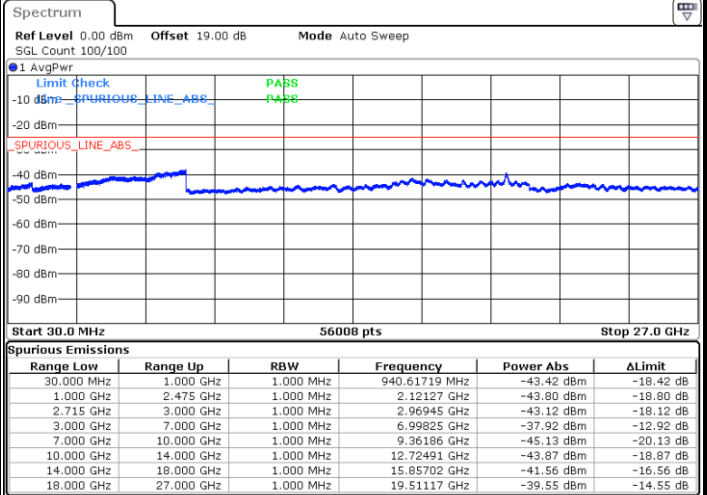
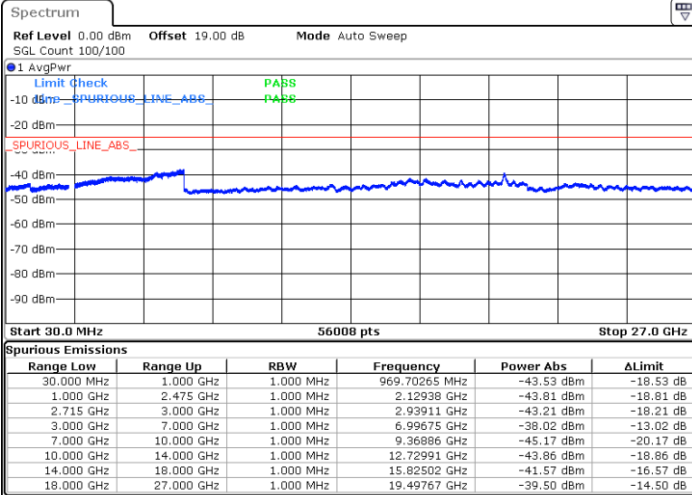
Date: 11.NOV.2024 14:09:10



LTE Band 41 / 20MHz

Lowest Channel / QPSK

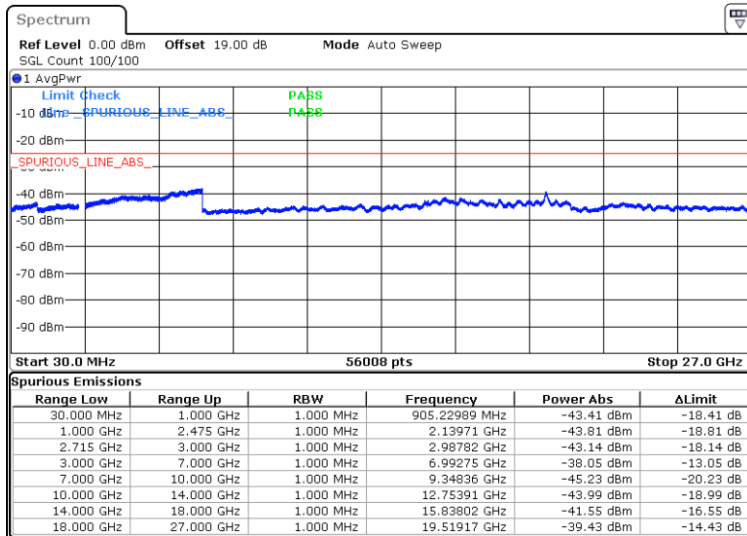
Middle Channel / QPSK



Date: 11.NOV.2024 14:16:01

Date: 11.NOV.2024 14:17:10

Highest Channel / QPSK



Date: 11.NOV.2024 14:25:03



Frequency Stability

Test Conditions		LTE Band 41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Frequency Offset (Δf) (Hz)	Result
50	Normal Voltage	2.5	PASS
40	Normal Voltage	-3.2	
30	Normal Voltage	4	
20(Ref.)	Normal Voltage	3.3	
10	Normal Voltage	1.3	
0	Normal Voltage	3.4	
-10	Normal Voltage	1.6	
-20	Normal Voltage	1.8	
-30	Normal Voltage	2.4	
20	Maximum Voltage	2.6	
20	Normal Voltage	3.3	
20	Battery End Point	2.2	

Note:

1. Normal Voltage = 3.91 V.; Battery End Point (BEP) = 3.4 V.; Maximum Voltage = 4.5 V.
2. The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block or frequency block group.

$|\text{MAX}(\Delta f)| = 4\text{Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	2496.232296	$\geq 2496 \text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	2689.757704	$\leq 2690 \text{ MHz}$	



LTE Band 41C

26dB Bandwidth

Mode	LTE Band 41C : 26dB BW(MHz)				
QPSK					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Middle CH	24.88	25.18	29.85	25.23	30.99
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Middle CH	35.04	24.88	30.15	34.97	39.80

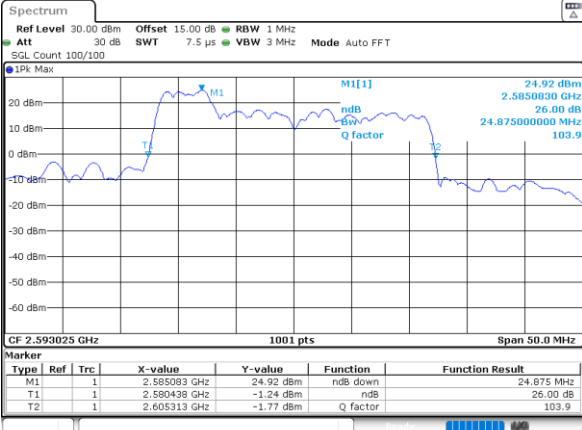
Mode	LTE Band 41C : 26dB BW(MHz)				
16QAM					
BW	5MHz+20MHz	10MHz+15MHz	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz
Middle CH	24.63	25.18	29.91	25.33	30.51
BW	15MHz+20MHz	20MHz+5MHz	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz
Middle CH	34.97	24.88	30.09	34.83	39.88



LTE Band 41C

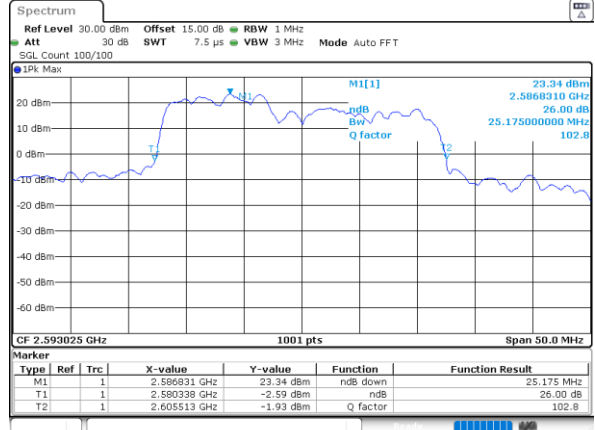
QPSK

Middle Channel / 5MHz+20MHz



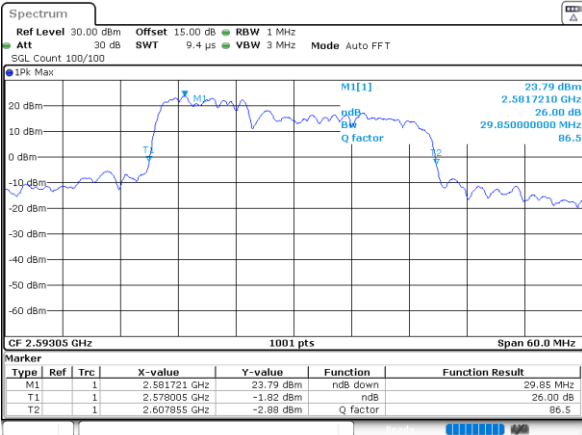
Date: 19_NOV.2024 13:54:03

Middle Channel / 10MHz+15MHz



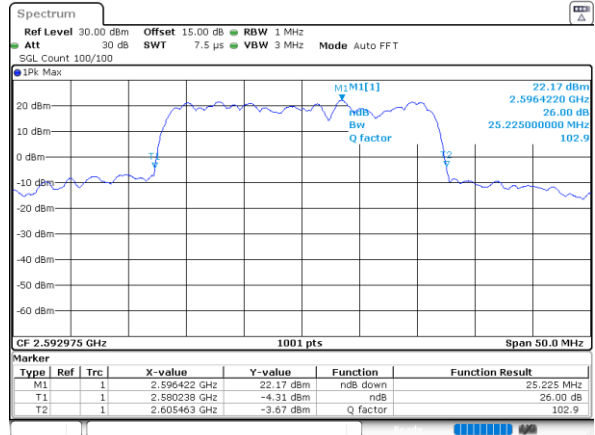
Date: 19_NOV.2024 14:32:00

Middle Channel / 10MHz+20MHz



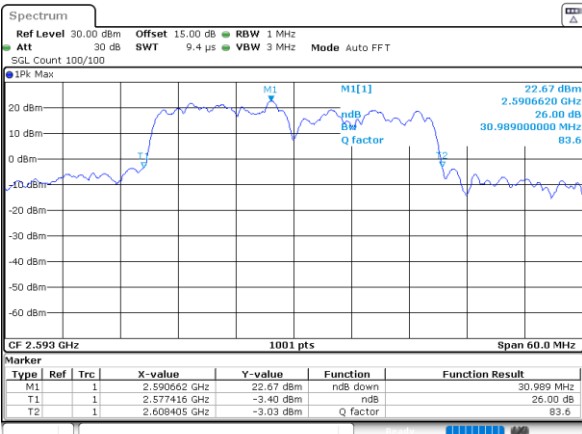
Date: 19_NOV.2024 17:52:01

Middle Channel / 15MHz+10MHz



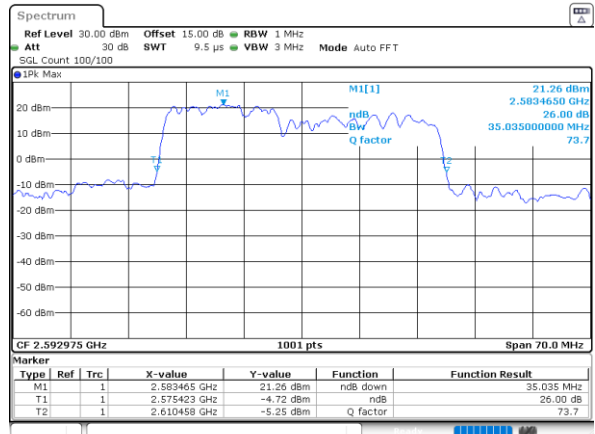
Date: 19_NOV.2024 17:28:19

Middle Channel / 15MHz+15MHz



Date: 19_NOV.2024 18:27:23

Middle Channel / 15MHz+20MHz



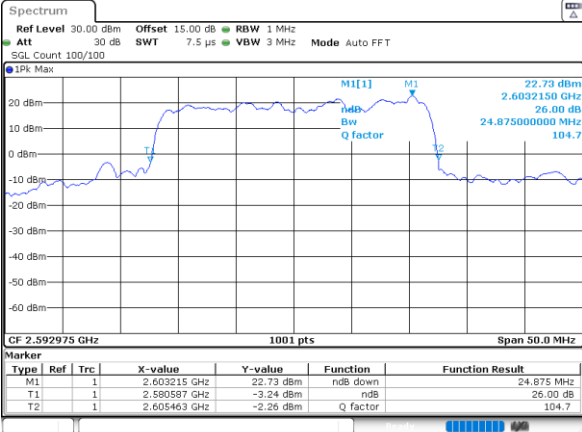
Date: 19_NOV.2024 18:44:28



LTE Band 41C

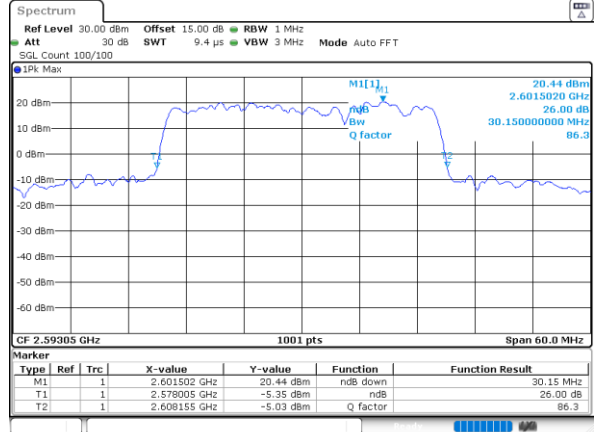
QPSK

Middle Channel / 20MHz+5MHz



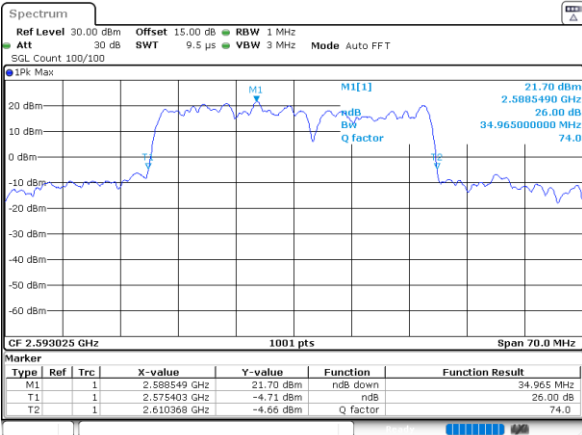
Date: 19.NOV.2024 14:13:01

Middle Channel / 20MHz+10MHz



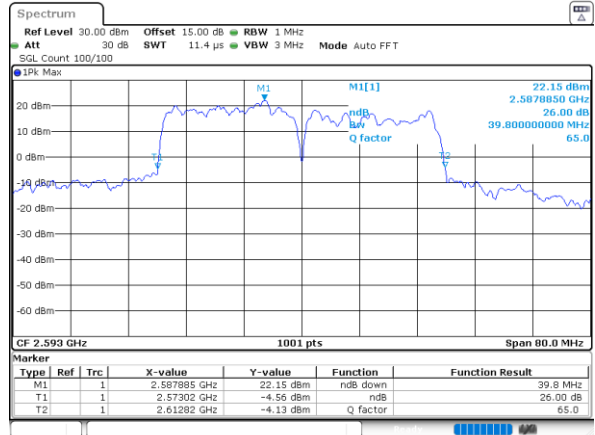
Date: 19.NOV.2024 18:09:52

Middle Channel / 20MHz+15MHz



Date: 19.NOV.2024 19:01:59

Middle Channel / 20MHz+20MHz



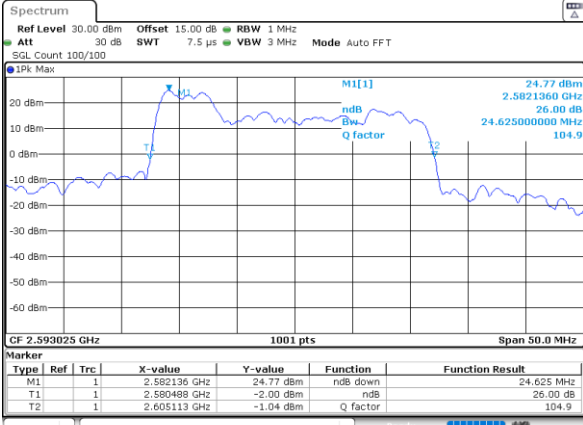
Date: 19.NOV.2024 19:19:28



LTE Band 41C

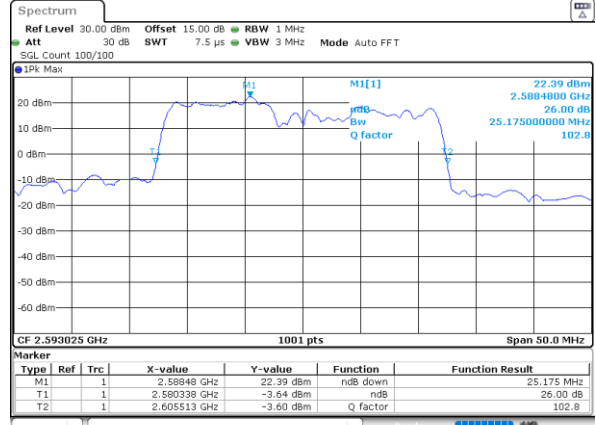
16QAM

Middle Channel / 5MHz+20MHz



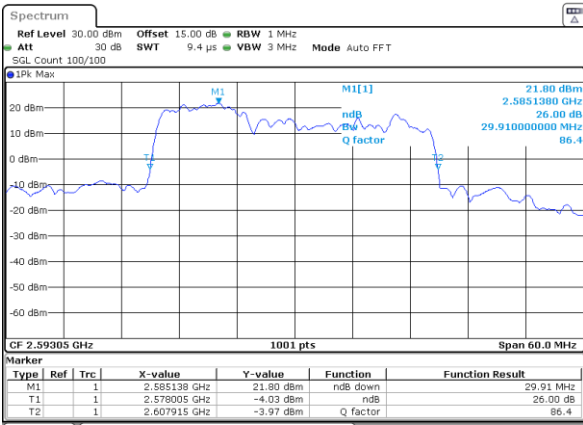
Date: 19.NOV.2024 13:54:33

Middle Channel / 10MHz+15MHz



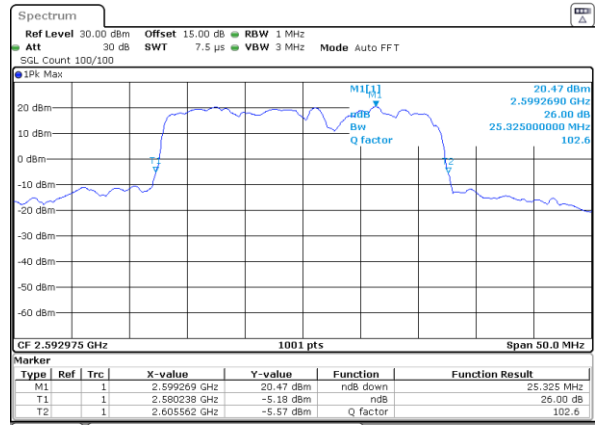
Date: 19.NOV.2024 14:32:30

Middle Channel / 10MHz+20MHz



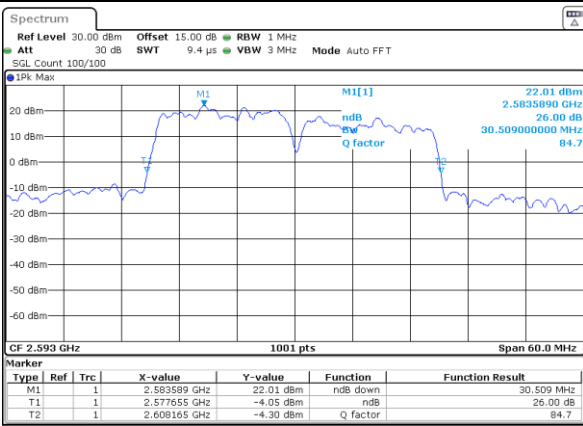
Date: 19.NOV.2024 17:52:31

Middle Channel / 15MHz+10MHz



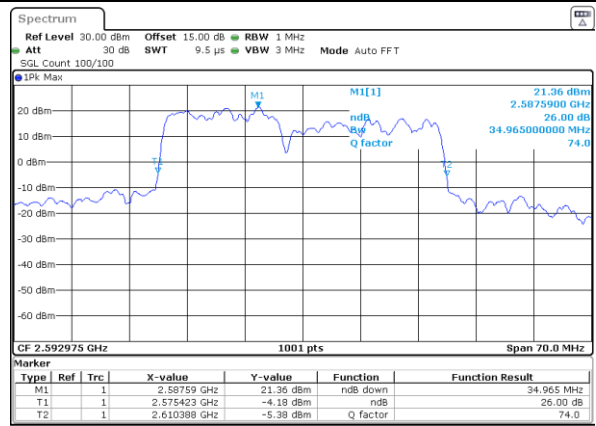
Date: 19.NOV.2024 17:28:48

Middle Channel / 15MHz+15MHz



Date: 19.NOV.2024 18:27:48

Middle Channel / 15MHz+20MHz



Date: 19.NOV.2024 18:44:58