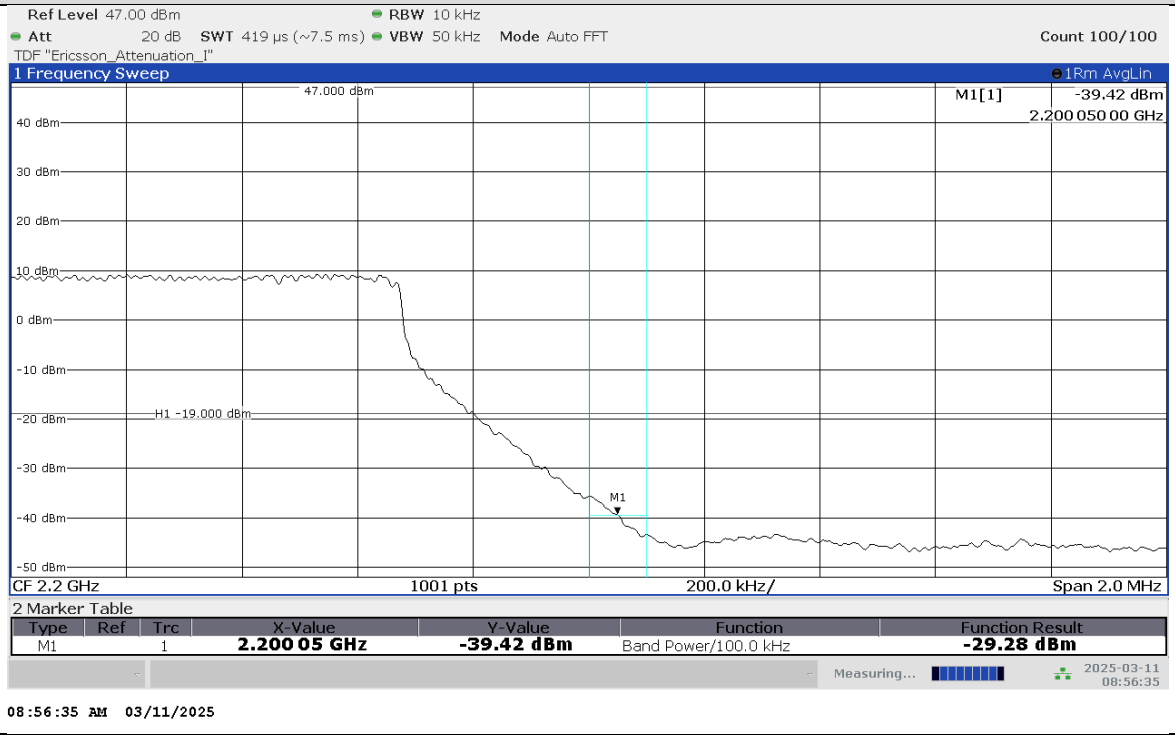
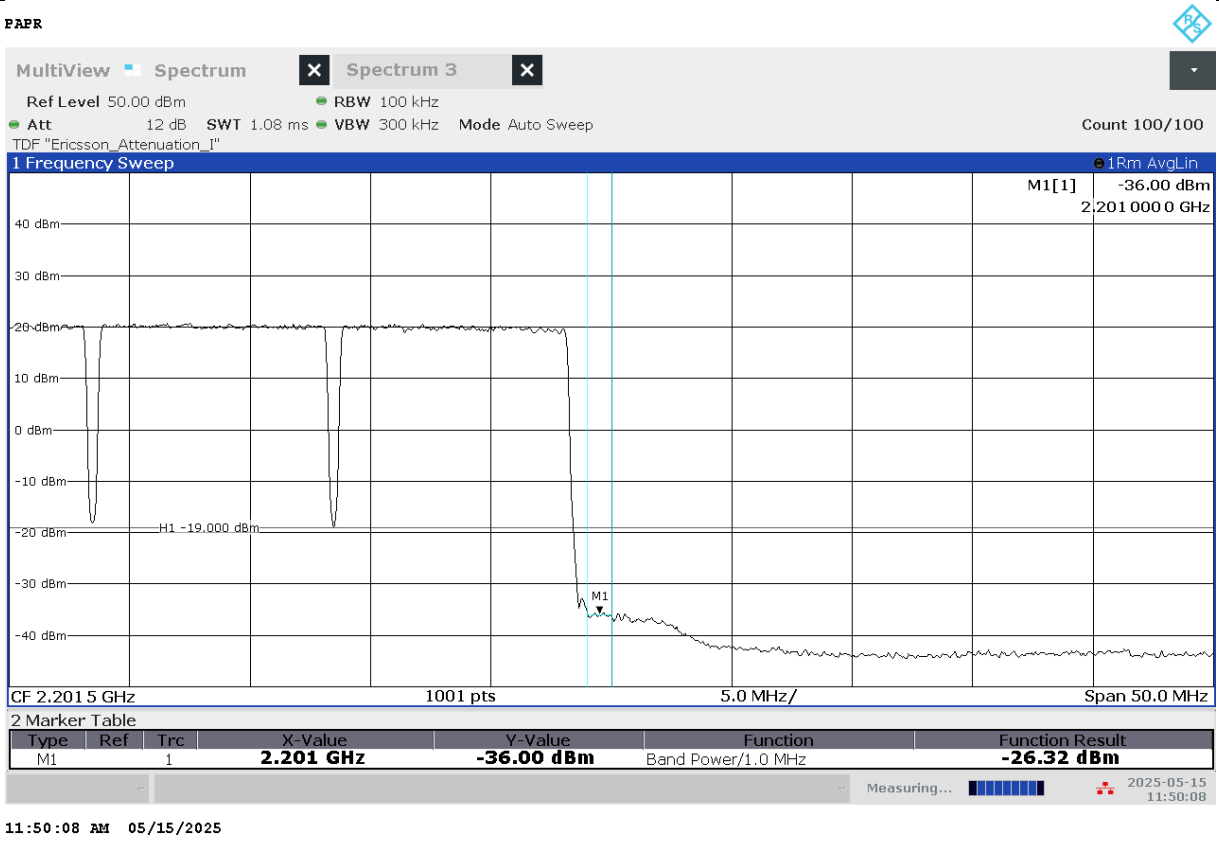
Configuration 29, Upper edge < 1MHz									
RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	10 MHz	Bandwidth 2:	10 MHz	No. carriers:	6
Correct limit line 1% of EBW:	-19.1 dBm								
Plot made with RBW < 1% of EBW.									

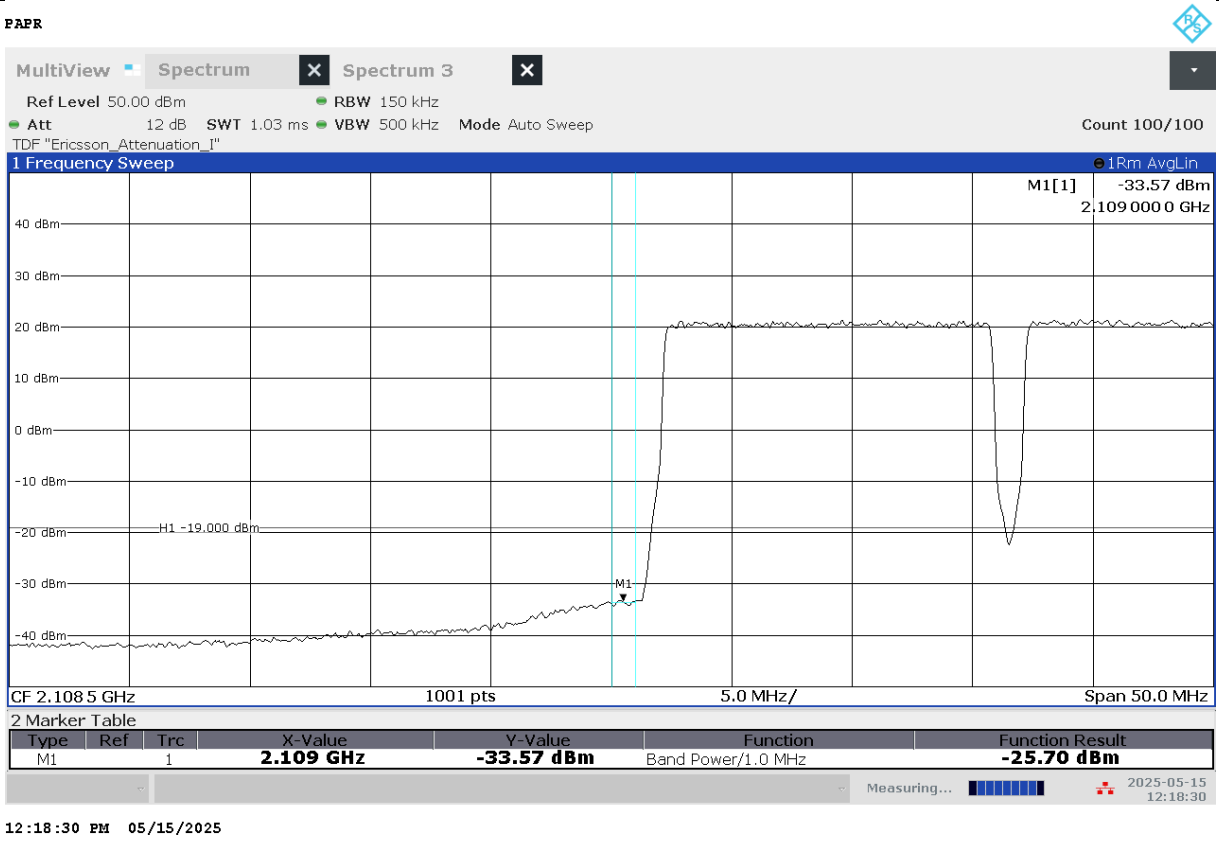


Configuration 29, Upper edge > 1 MHz									
RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	10 MHz	Bandwidth 2:	10 MHz	No. carriers:	6

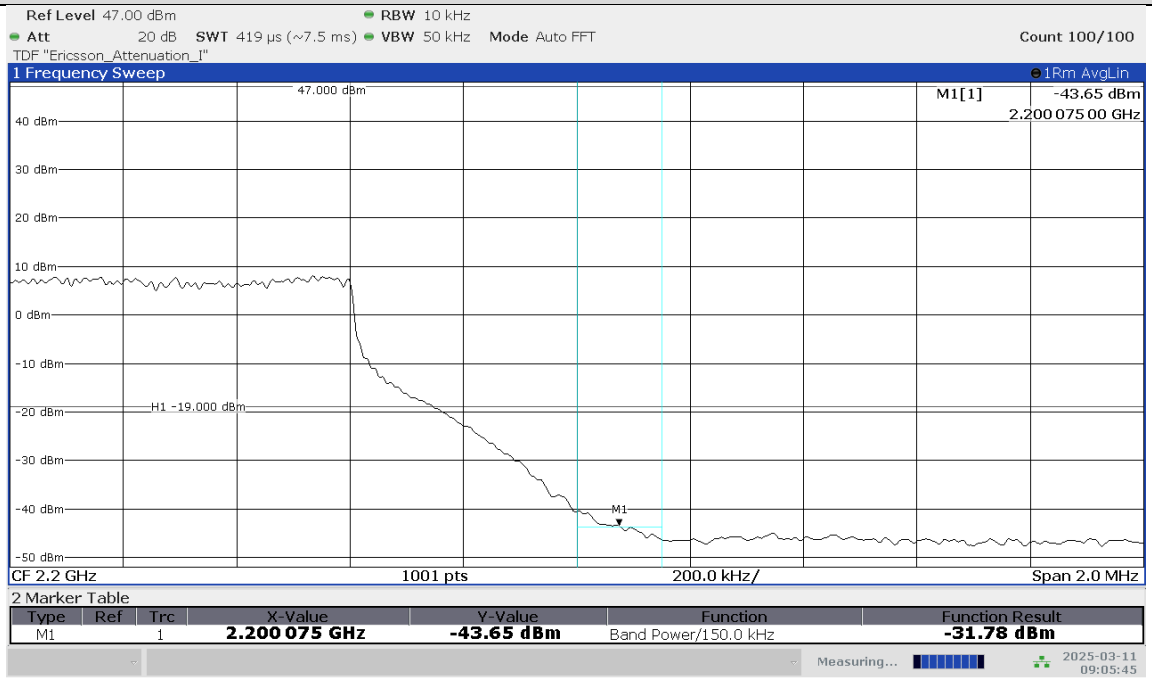


Configuration 29, Lower edge < 1MHz									
RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	15 MHz	Bandwidth 2:	15 MHz	No. carriers:	6
Correct limit line 1% of EBW:	-19.1 dBm								
Plot made with RBW < 1% of EBW.									

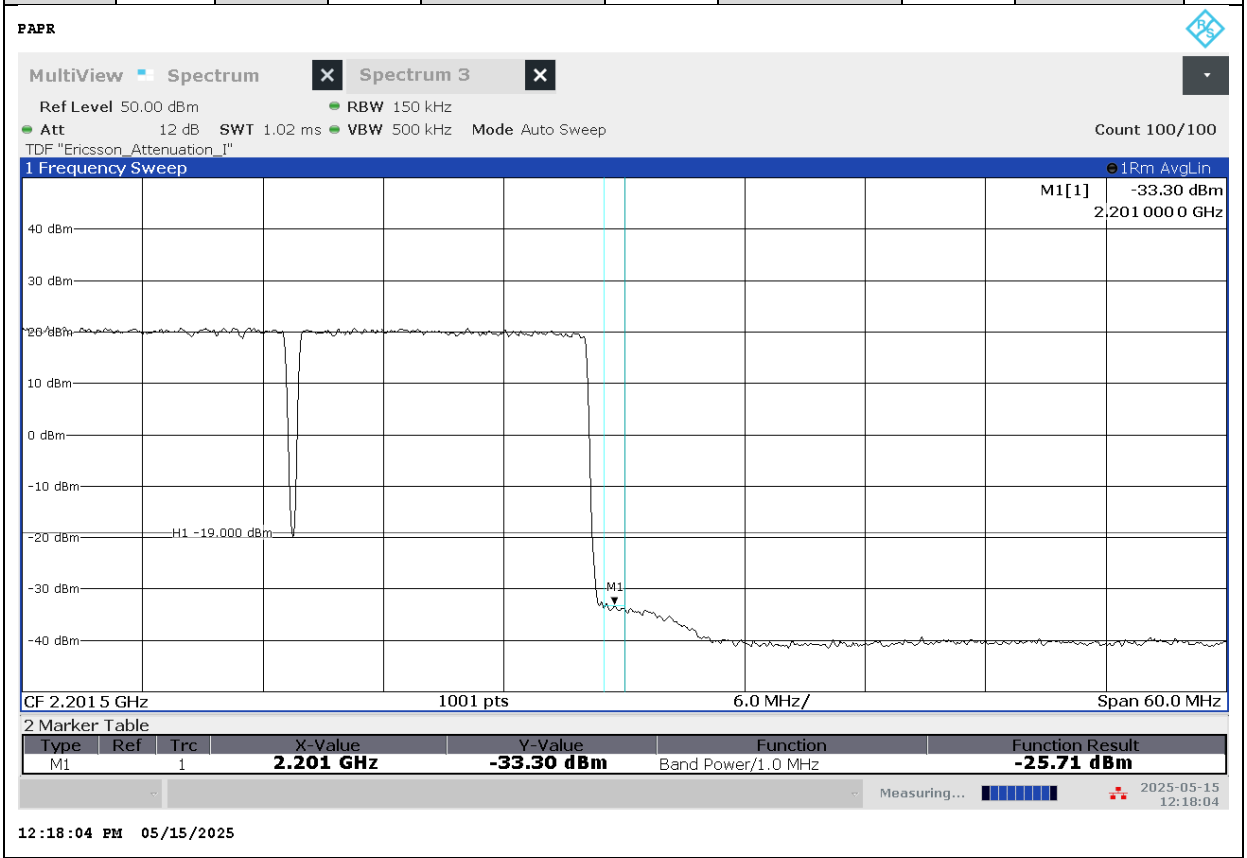
Configuration 29, Lower edge > 1MHz									
RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	15 MHz	Bandwidth 2:	15 MHz	No. carriers:	6



Configuration 29, Upper edge < 1MHz									
RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	15 MHz	Bandwidth 2:	15 MHz	No. carriers:	6
Correct limit line 1% of EBW:				-19.2 dBm					
Plot made with RBW < 1% of EBW.									

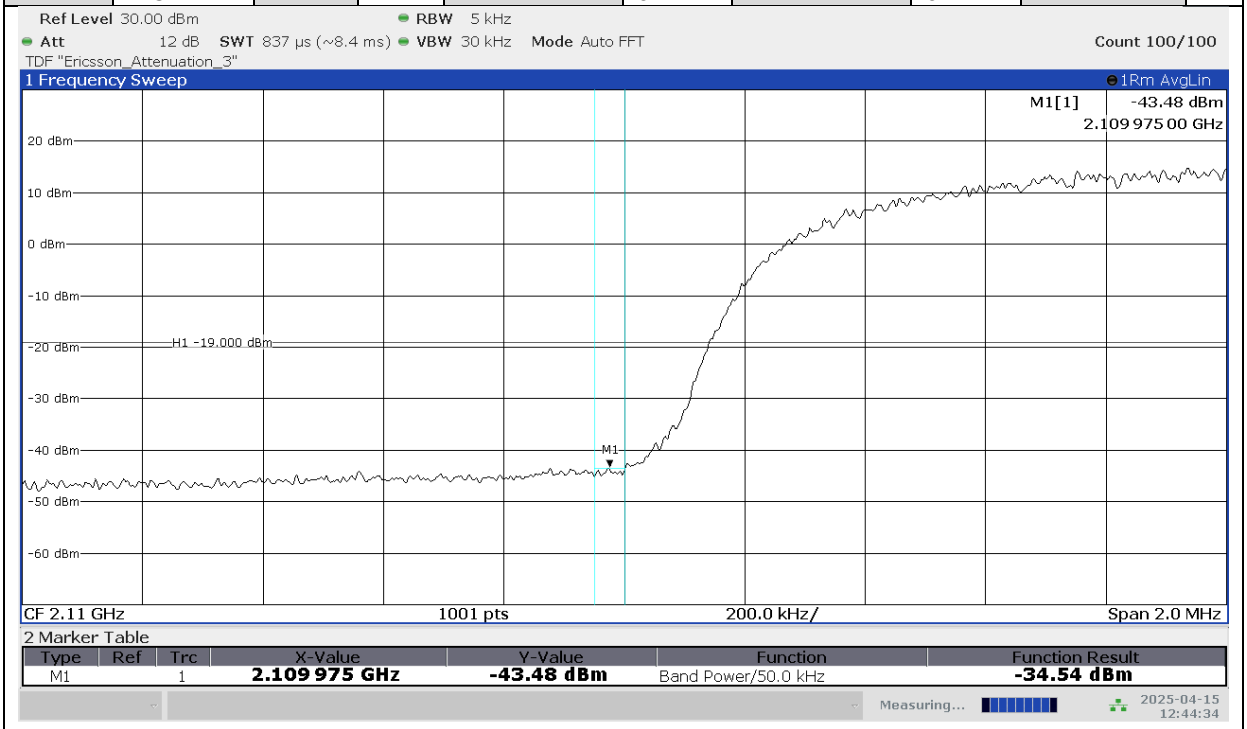


Configuration 29, Upper edge > 1MHz									
RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	15 MHz	Bandwidth 2:	15 MHz	No. carriers:	6



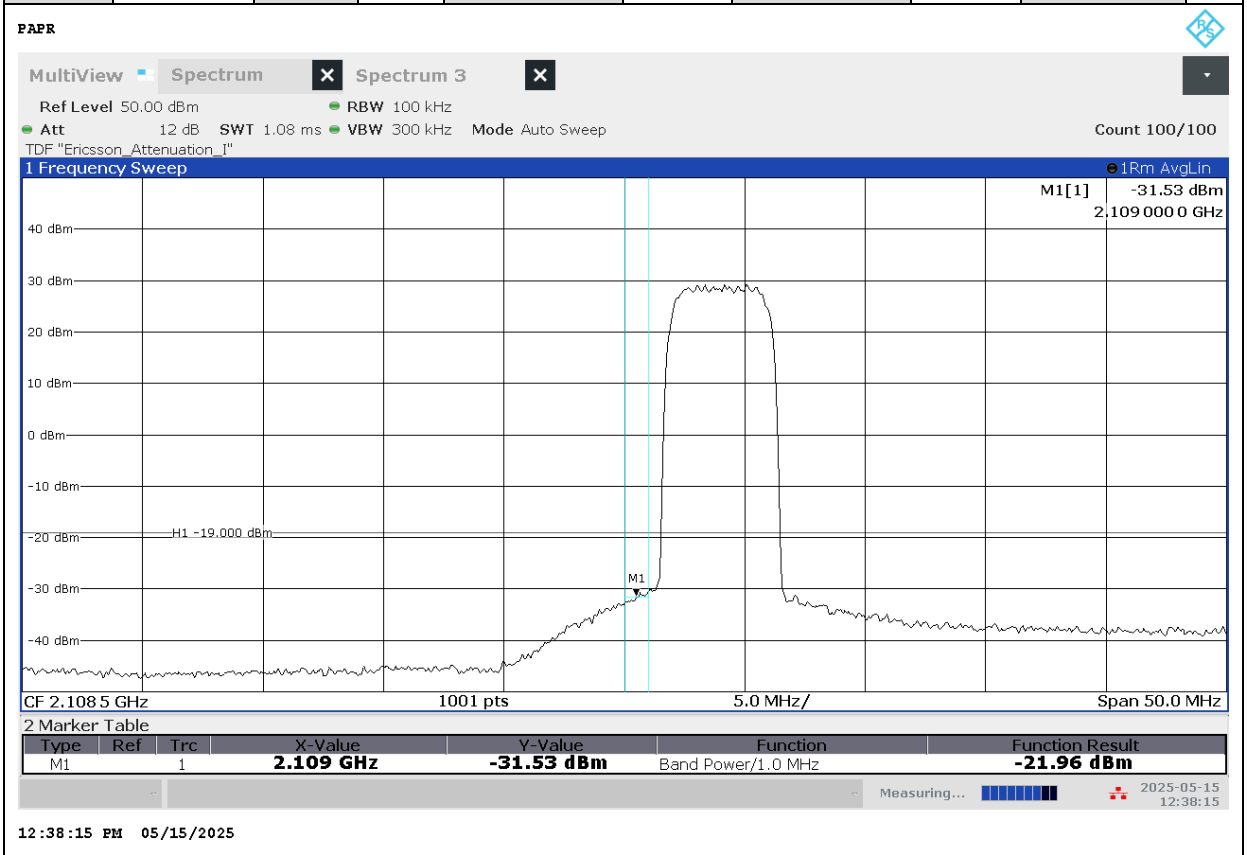
Configuration 30, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2



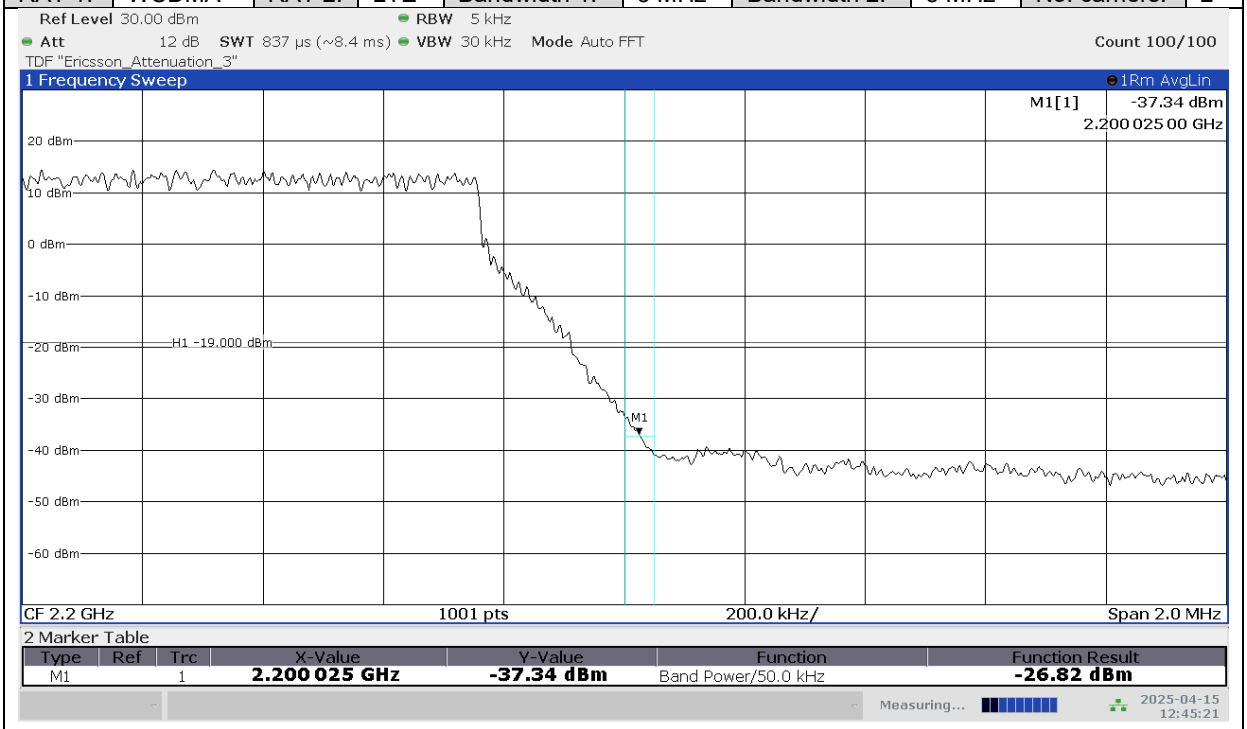
Configuration 30, Lower edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2



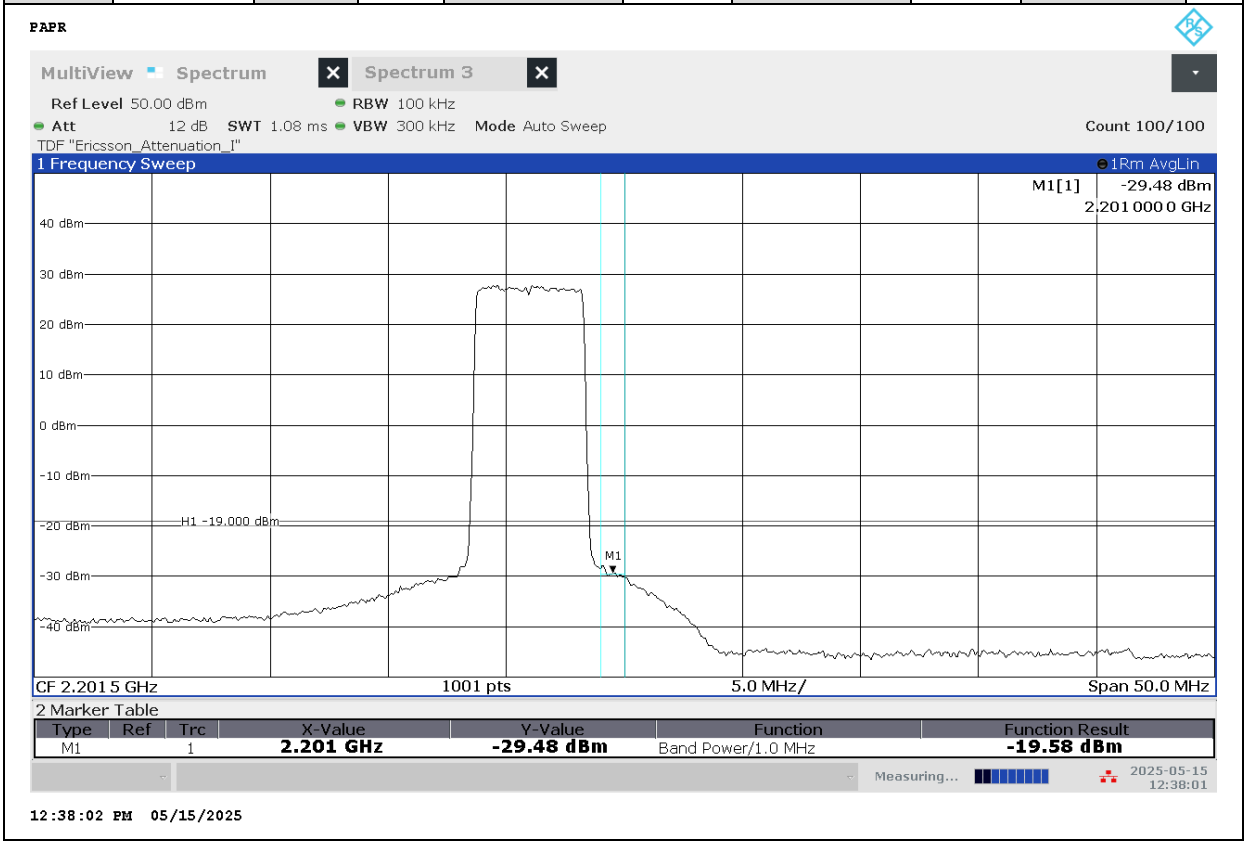
Configuration 30, Upper edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2

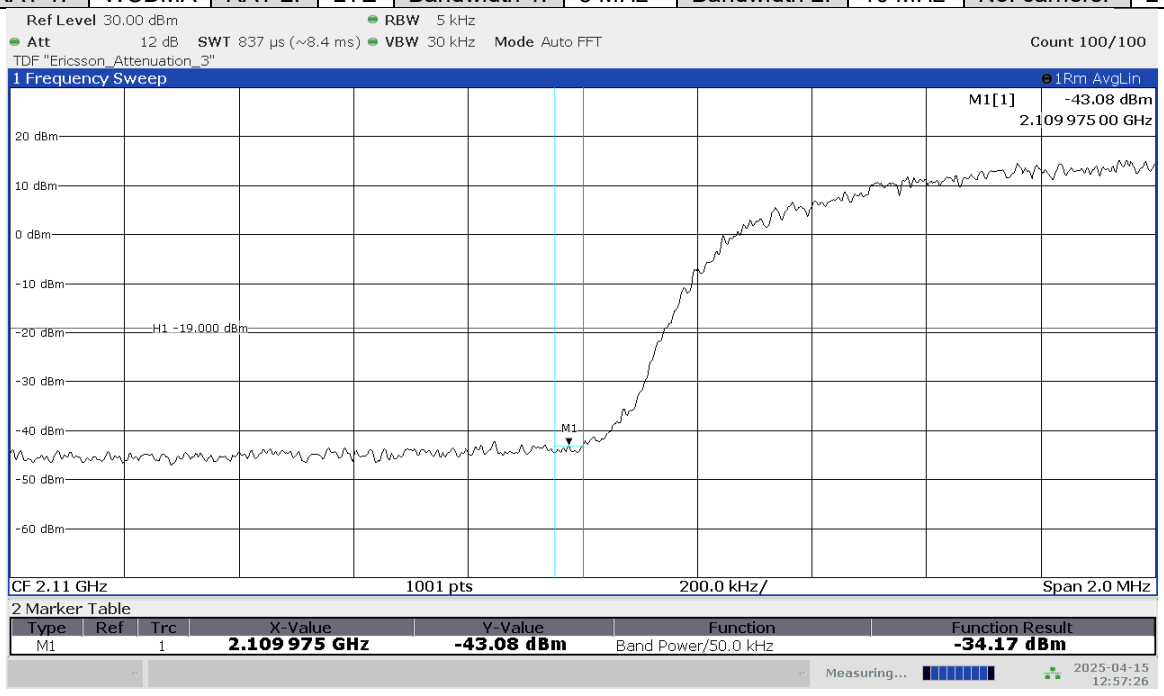


Configuration 30, Upper edge > 1MHz

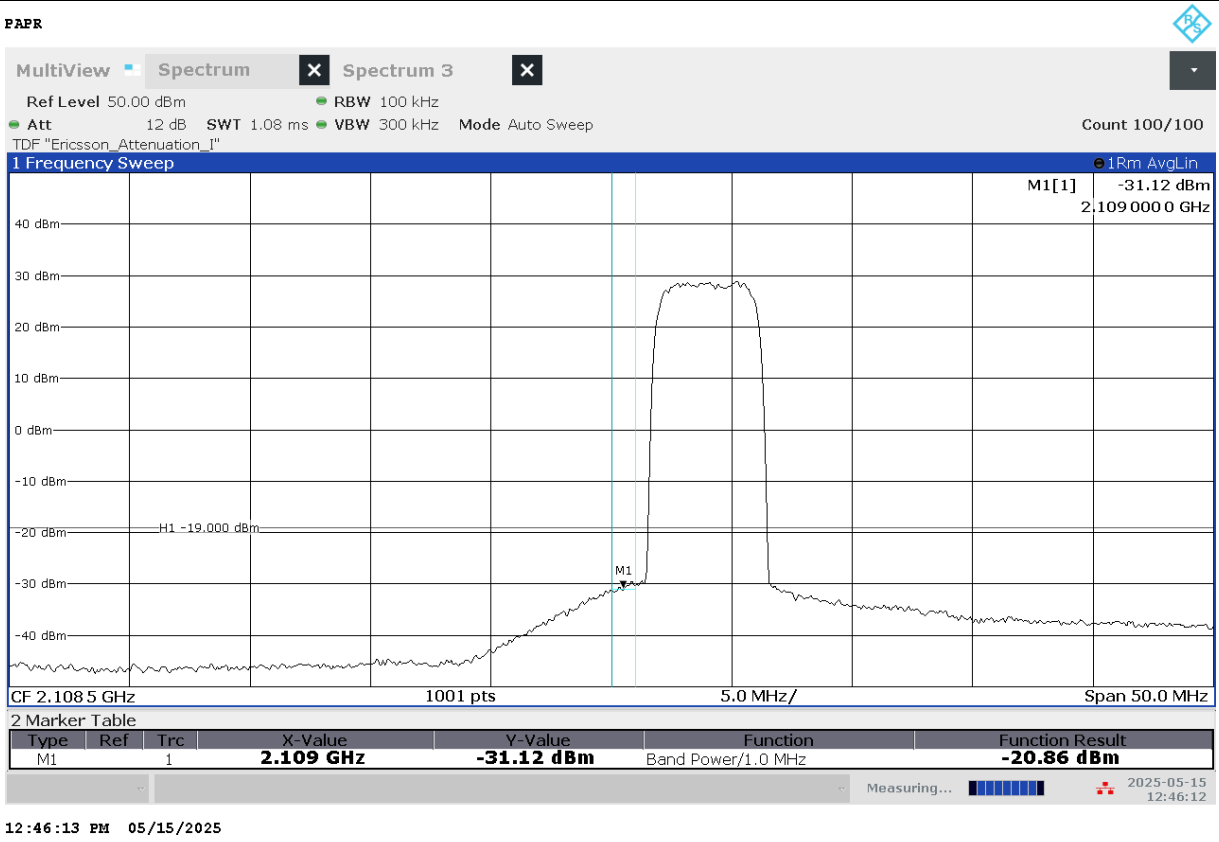
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2



Configuration 30, Lower edge < 1MHz									
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2



Configuration 30, Lower edge > 1MHz									
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2

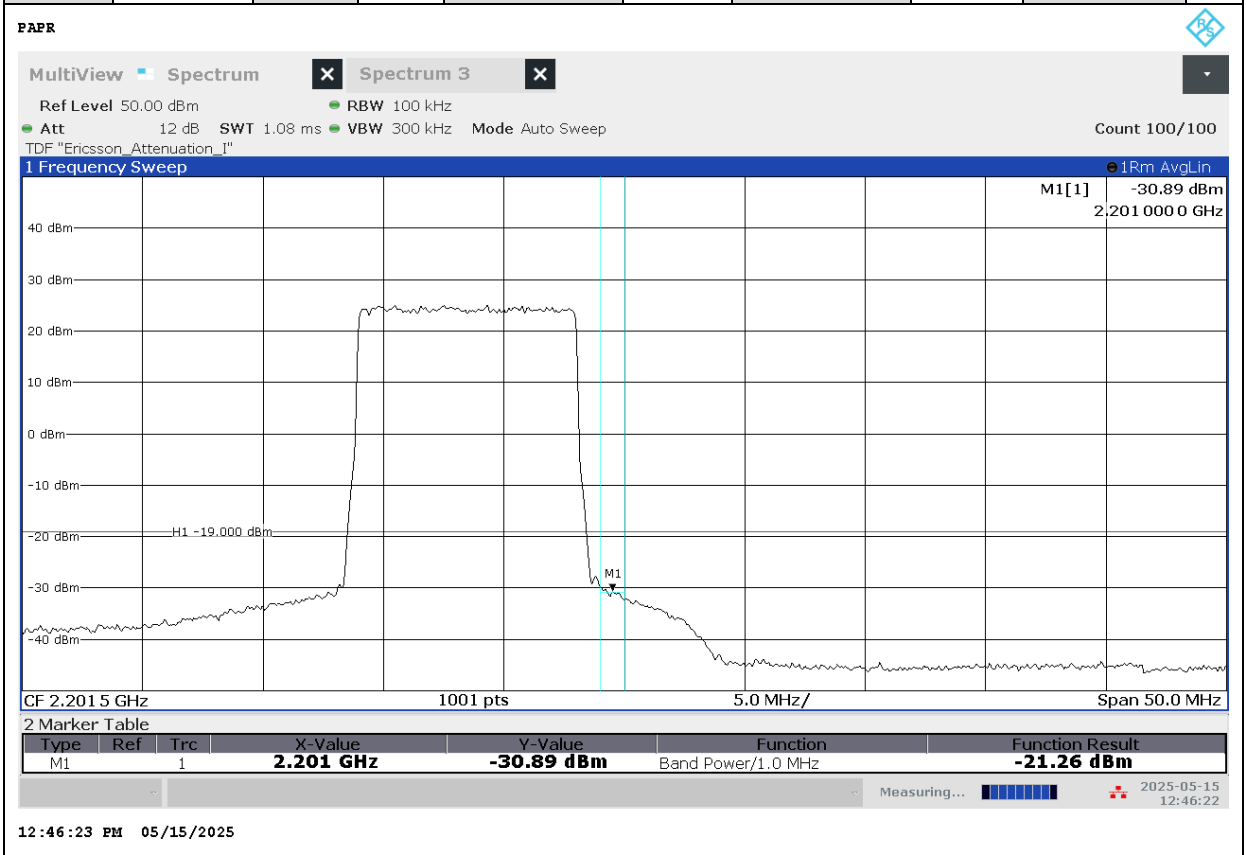


Configuration 30, Upper edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2

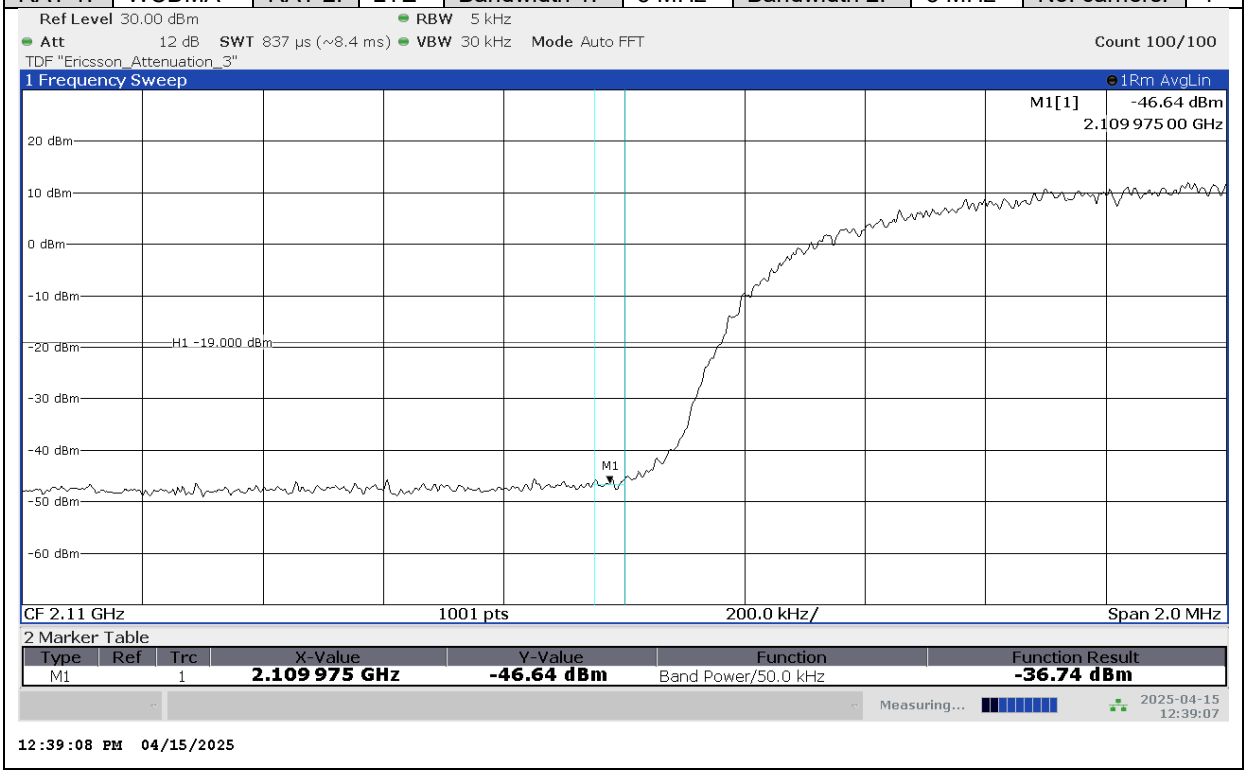
Configuration 30, Upper edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2



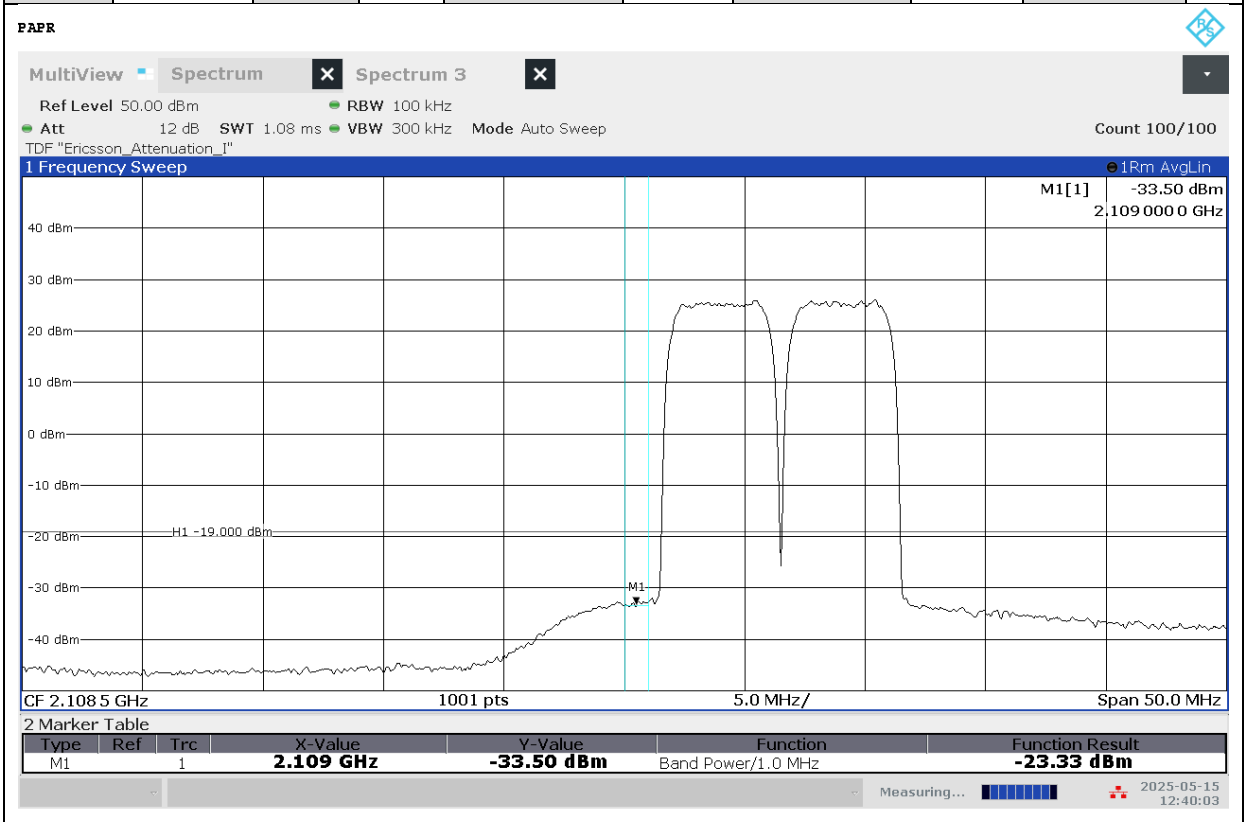
Configuration 31, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4

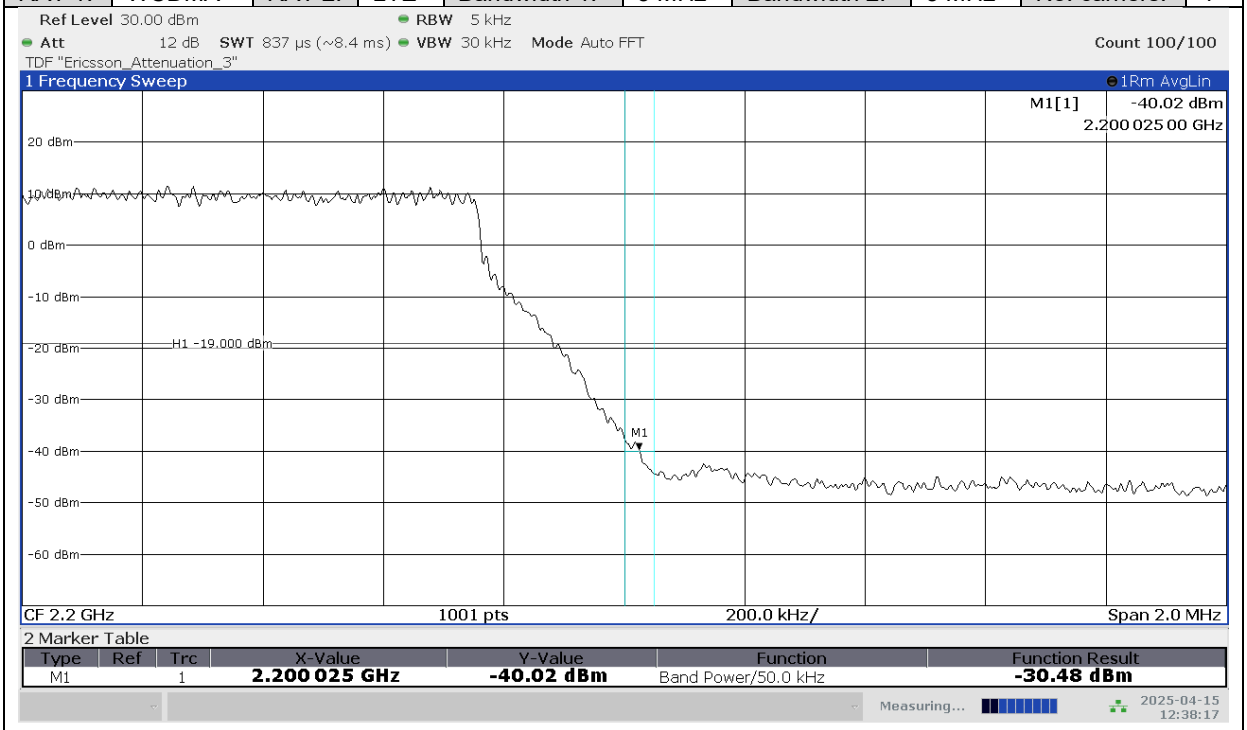


Configuration 31, Lower edge > 1 MHz

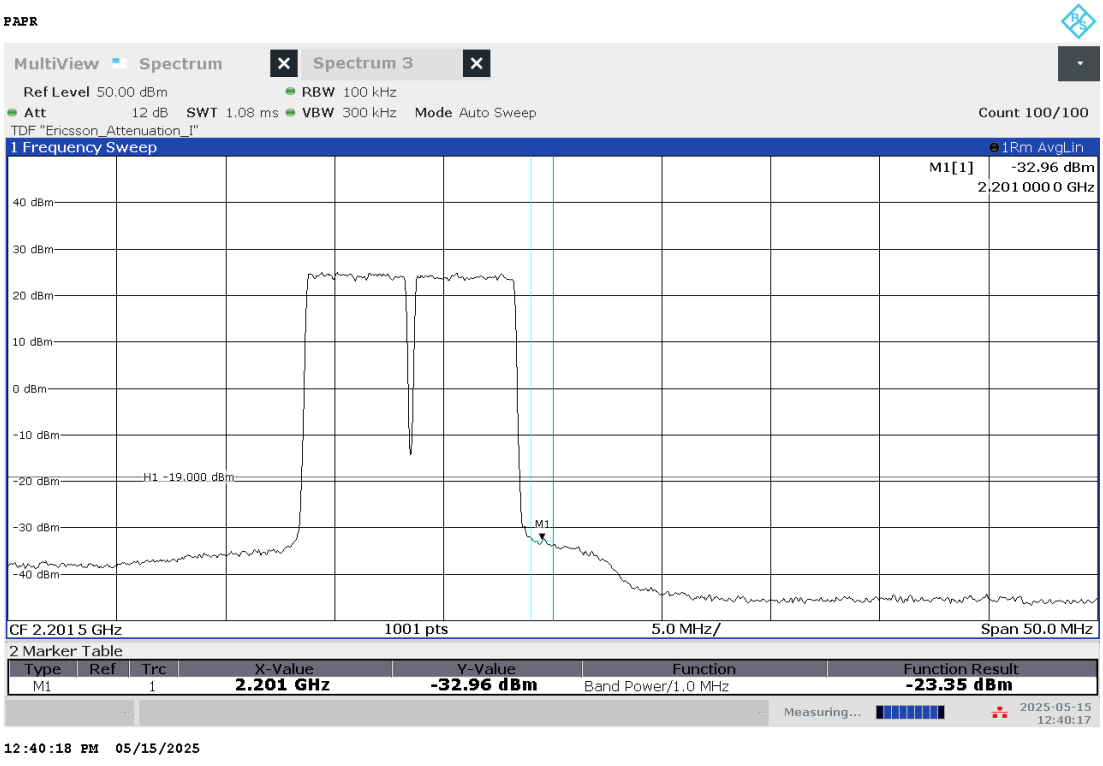
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4



Configuration 31, Upper edge < 1MHz									
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4

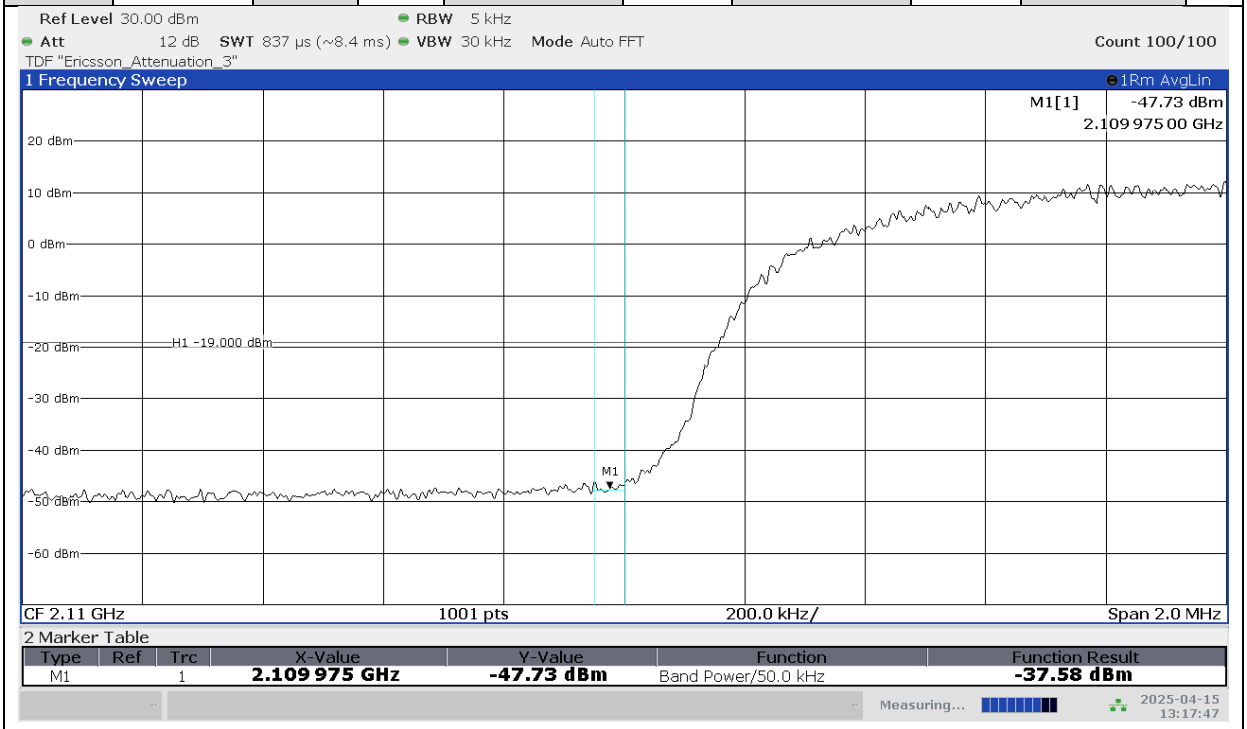


Configuration 31, Upper edge > 1MHz									
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4



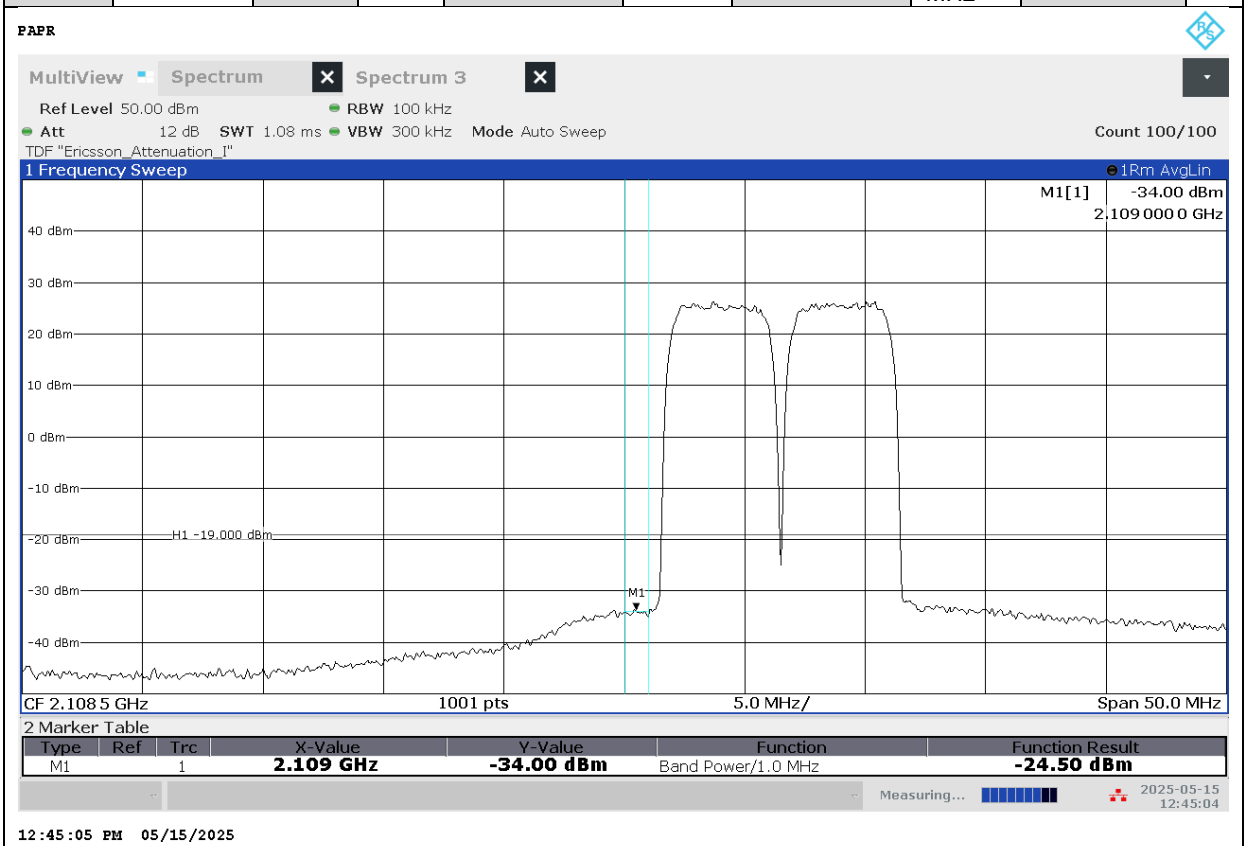
Configuration 31, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4



Configuration 31, Lower edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4

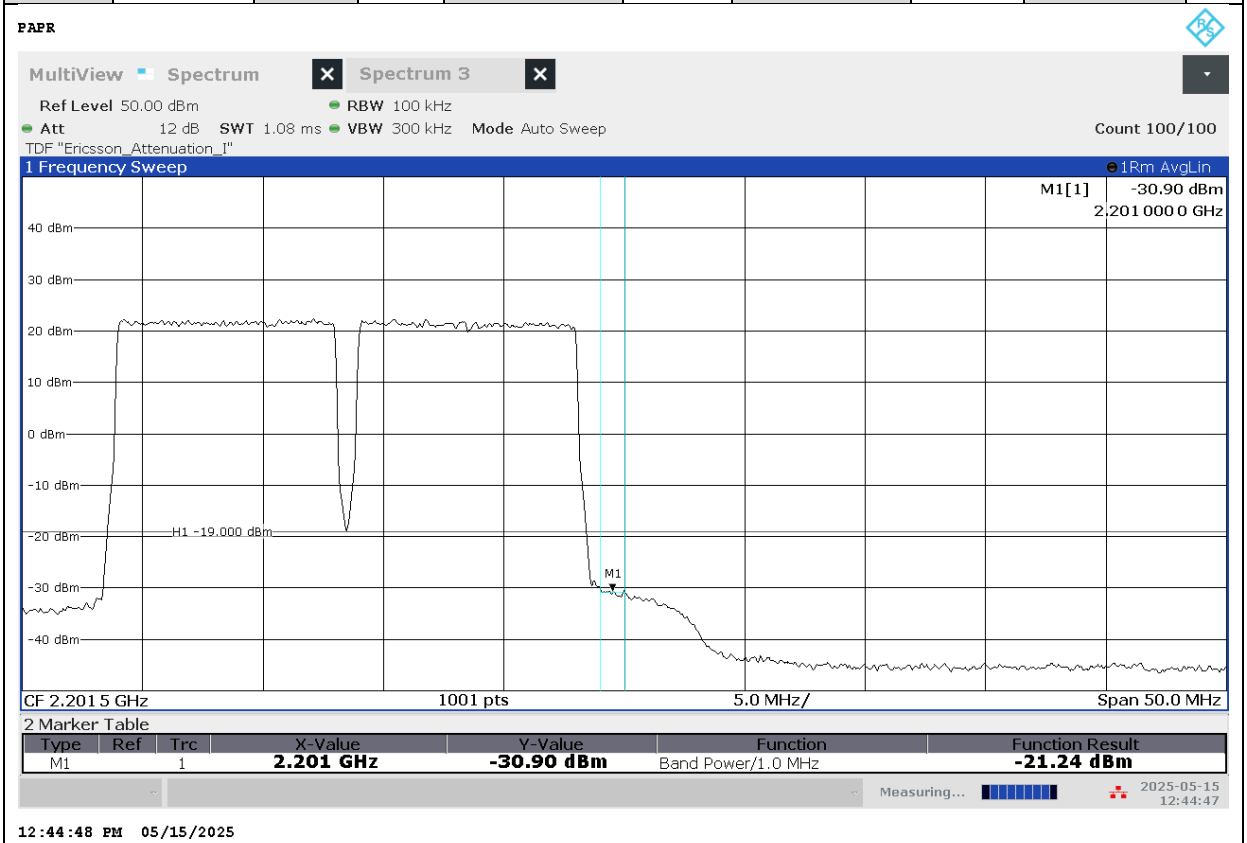


Configuration 31, Upper edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4

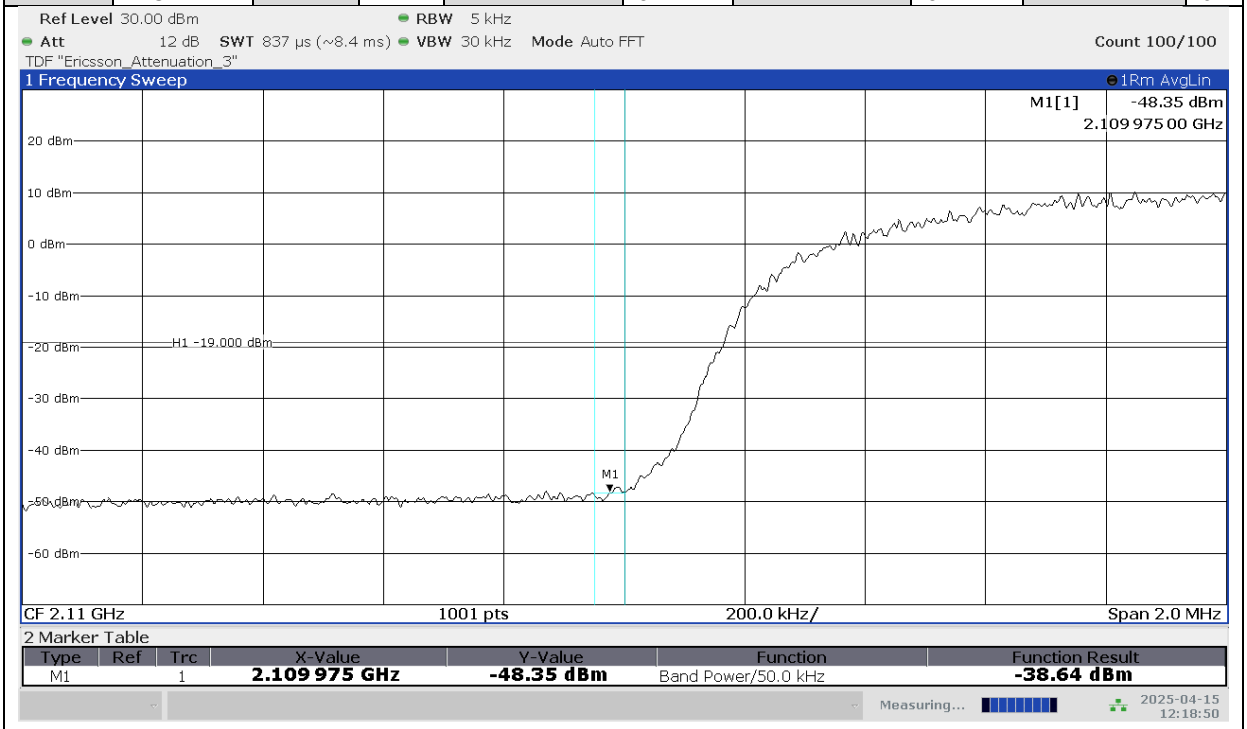
Configuration 31, Upper edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4



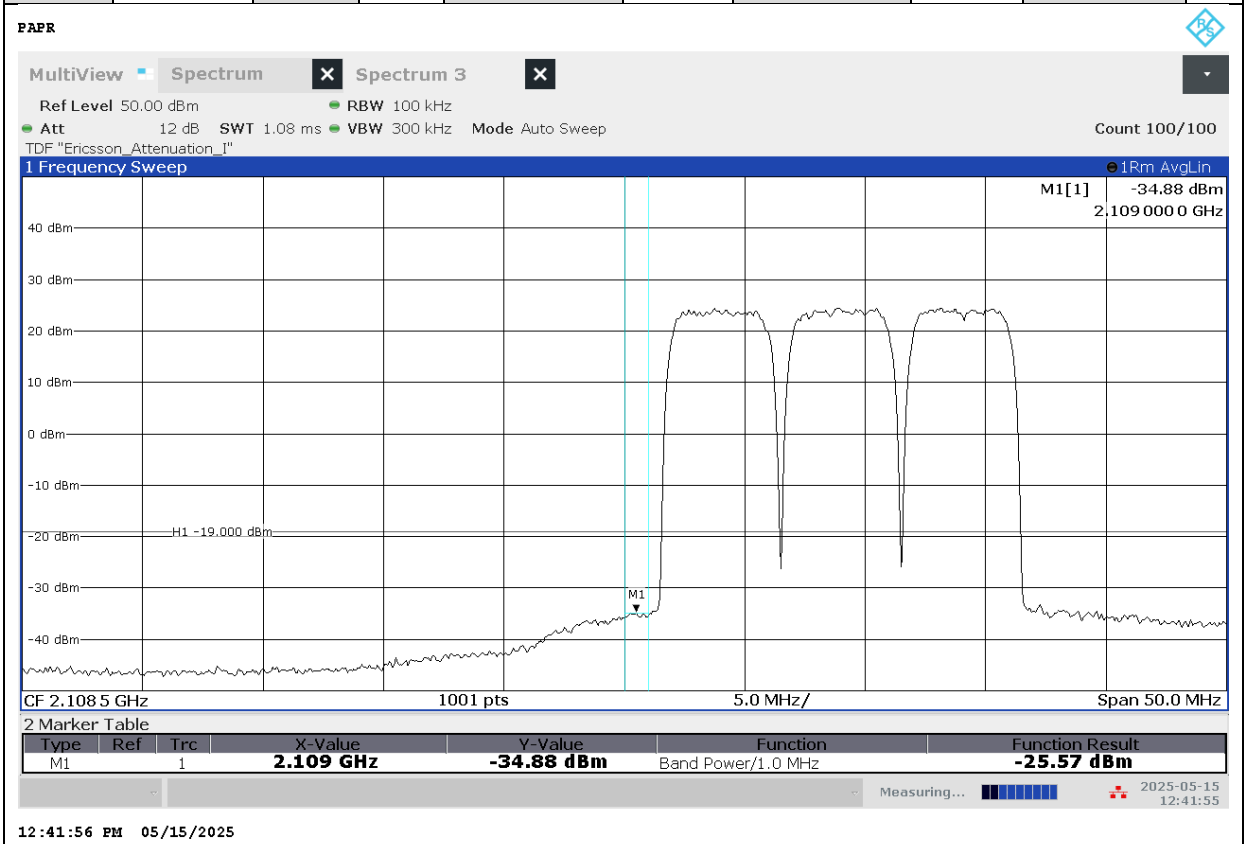
Configuration 32, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



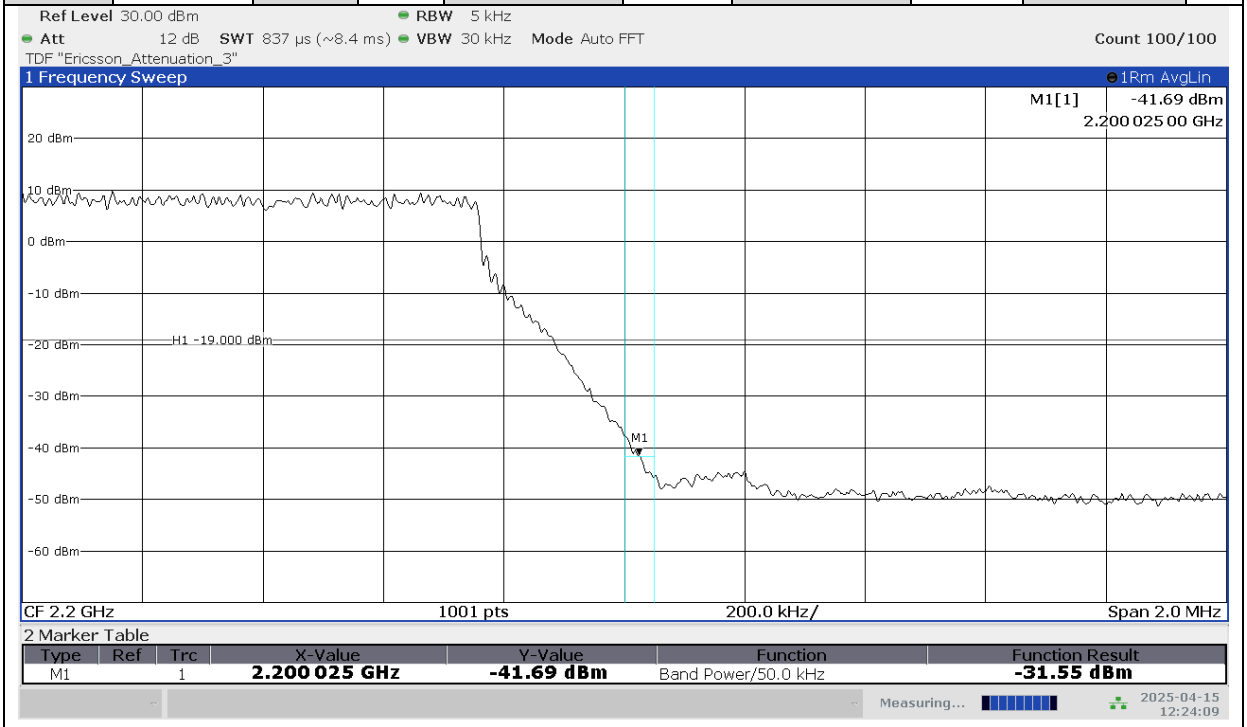
Configuration 32, Lower edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



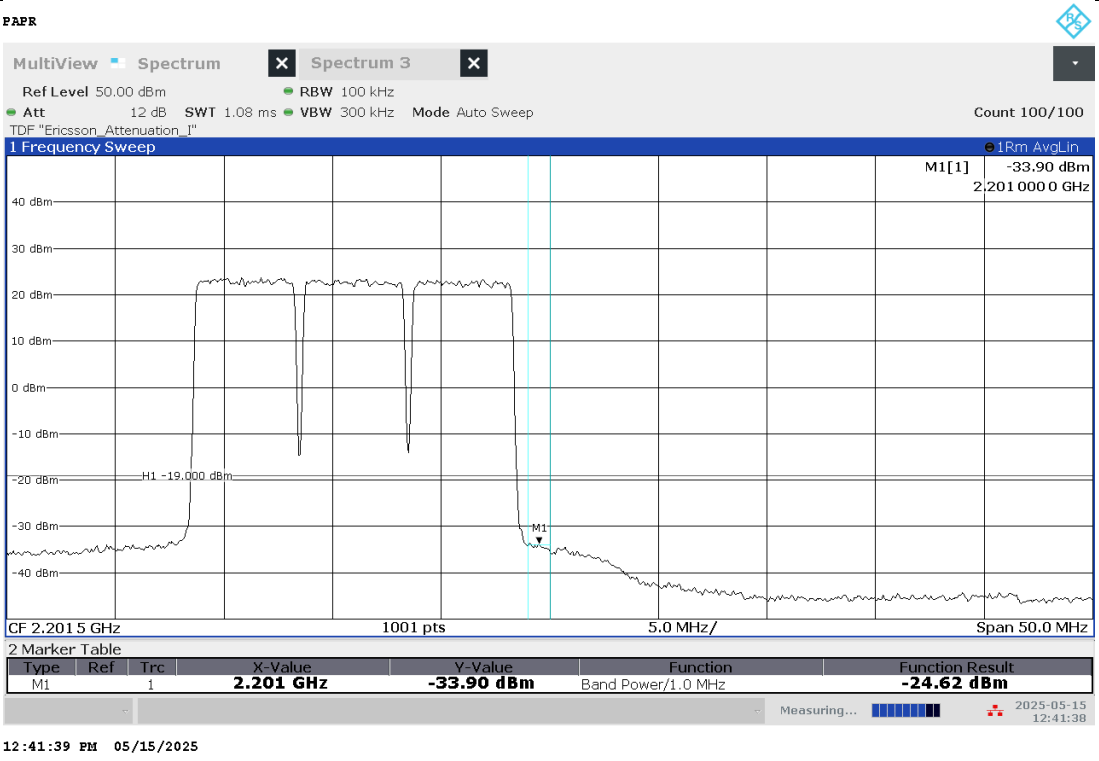
Configuration 32, Upper edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



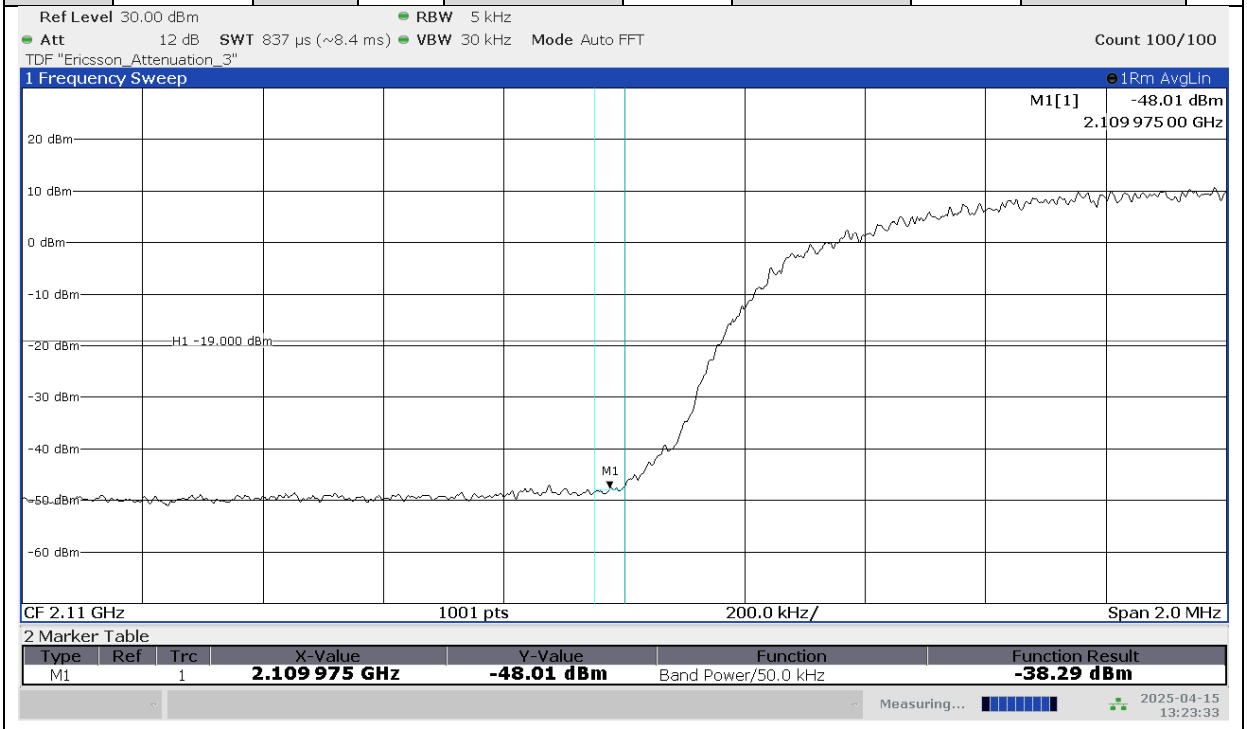
Configuration 32, Upper edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



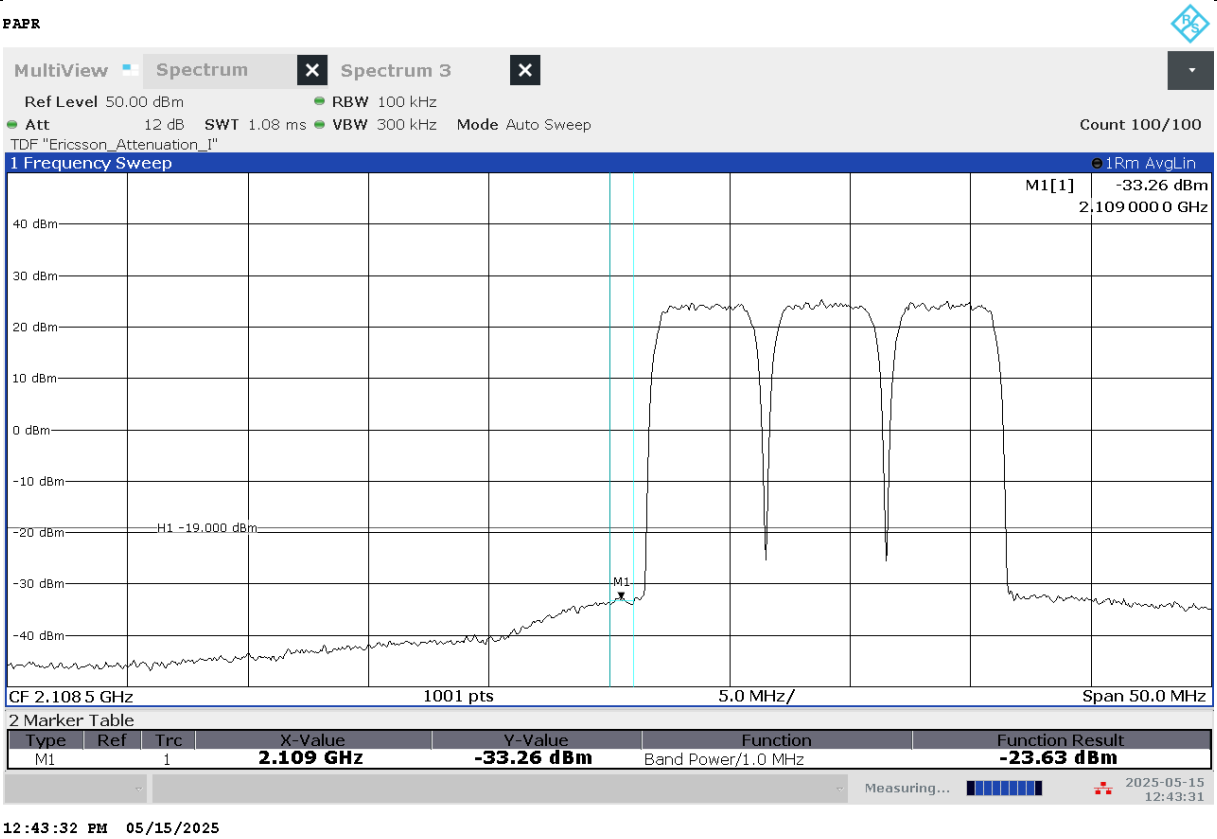
Configuration 32, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6



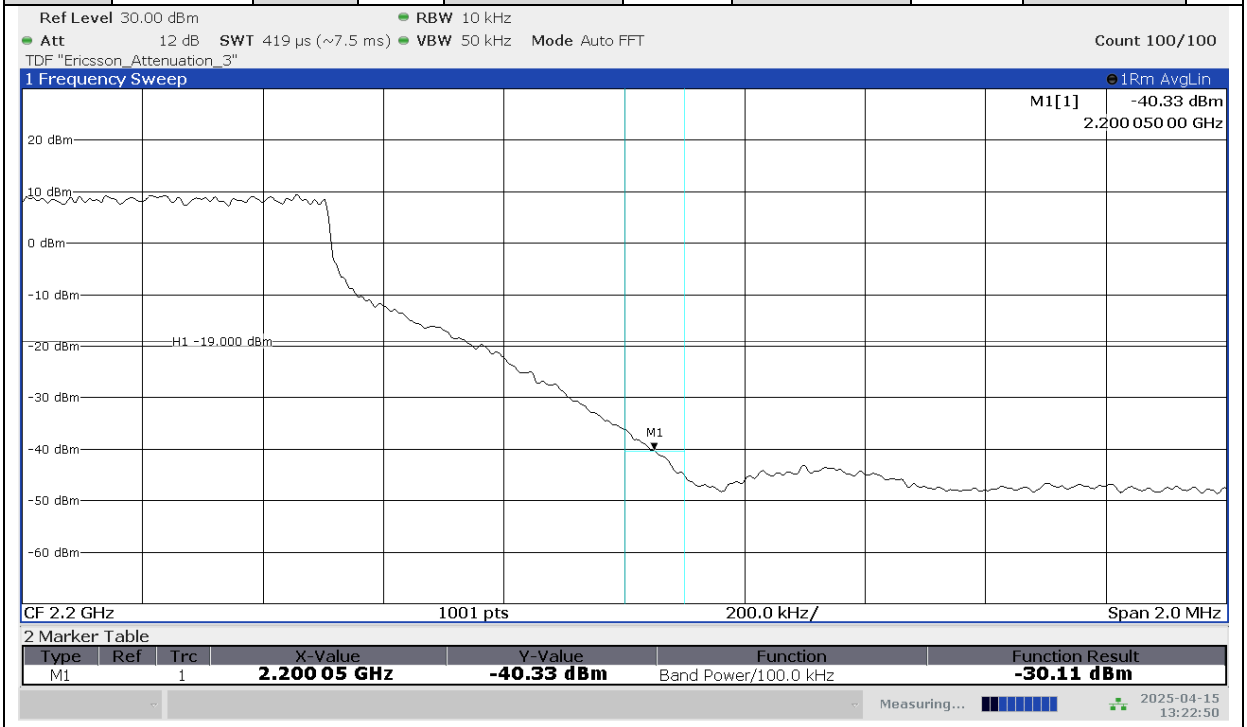
Configuration 32, Lower edge > 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6



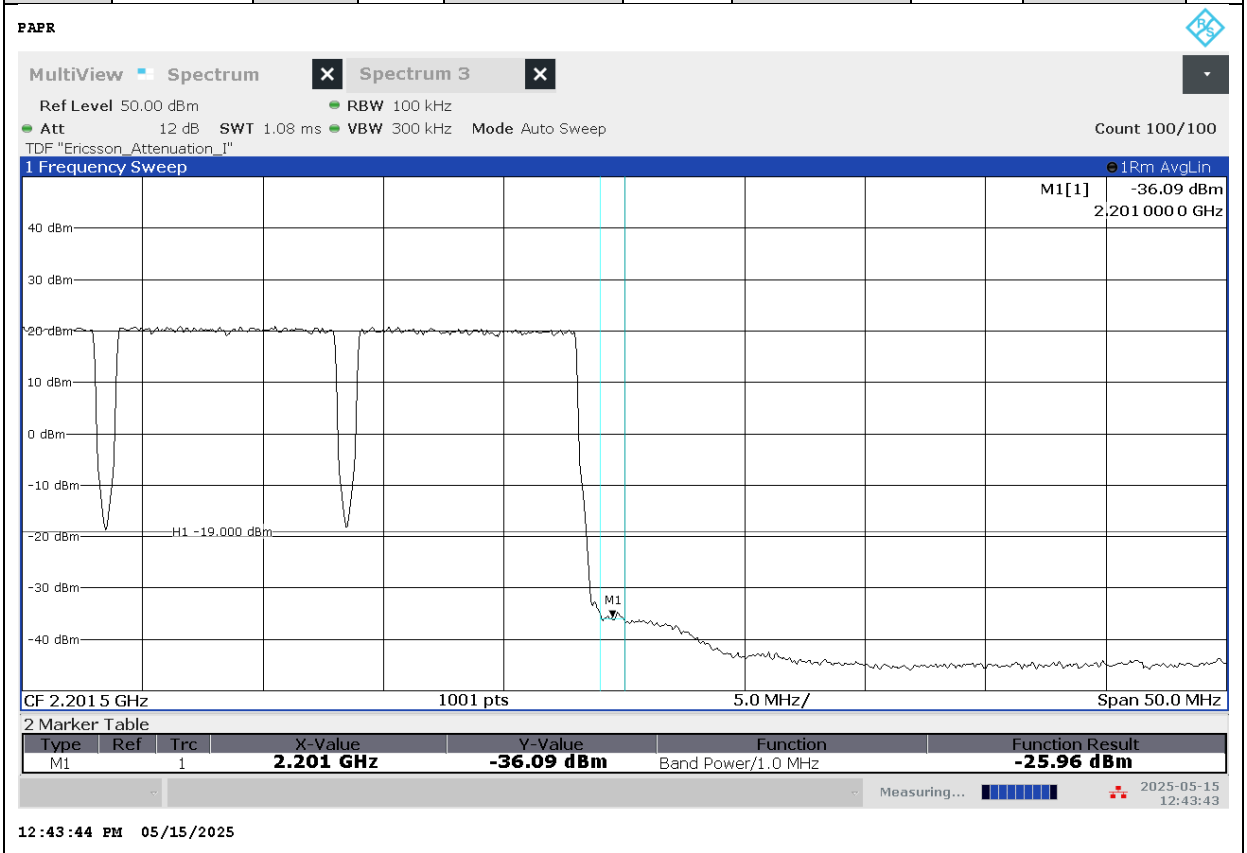
Configuration 32, Upper edge < 1MHz

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6

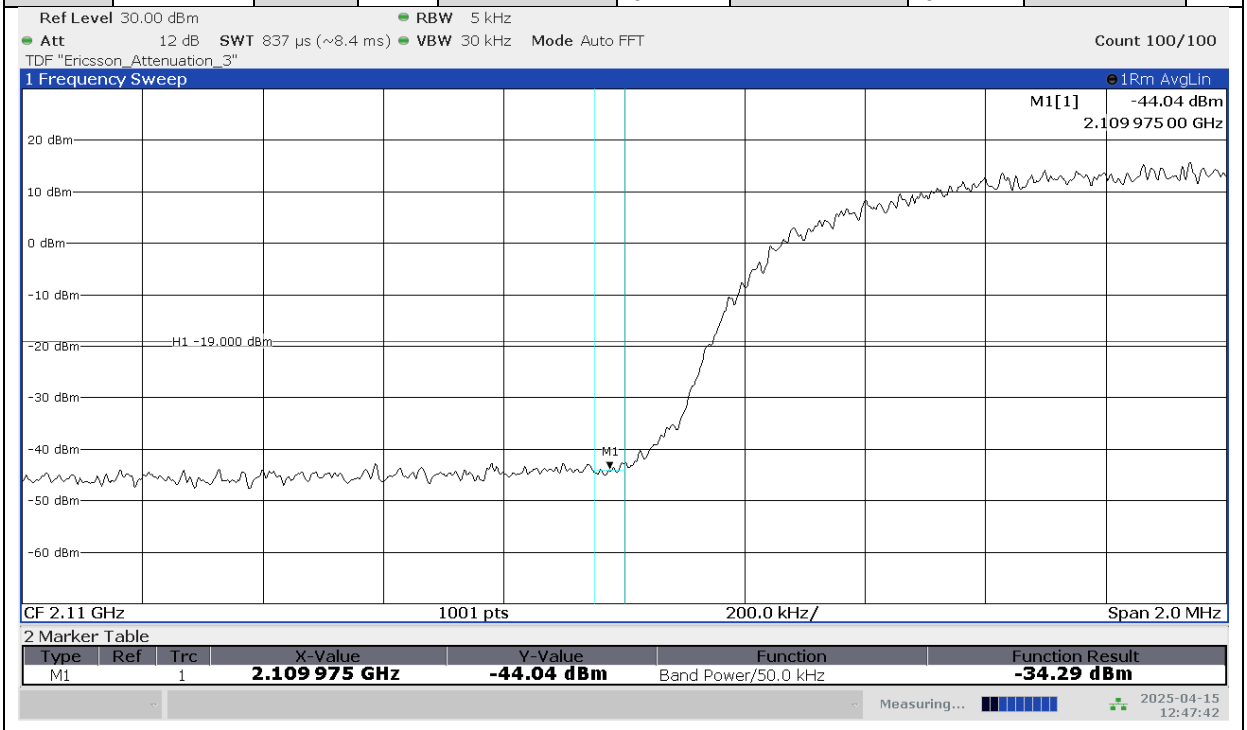


Configuration 32, Upper edge > 1MHz

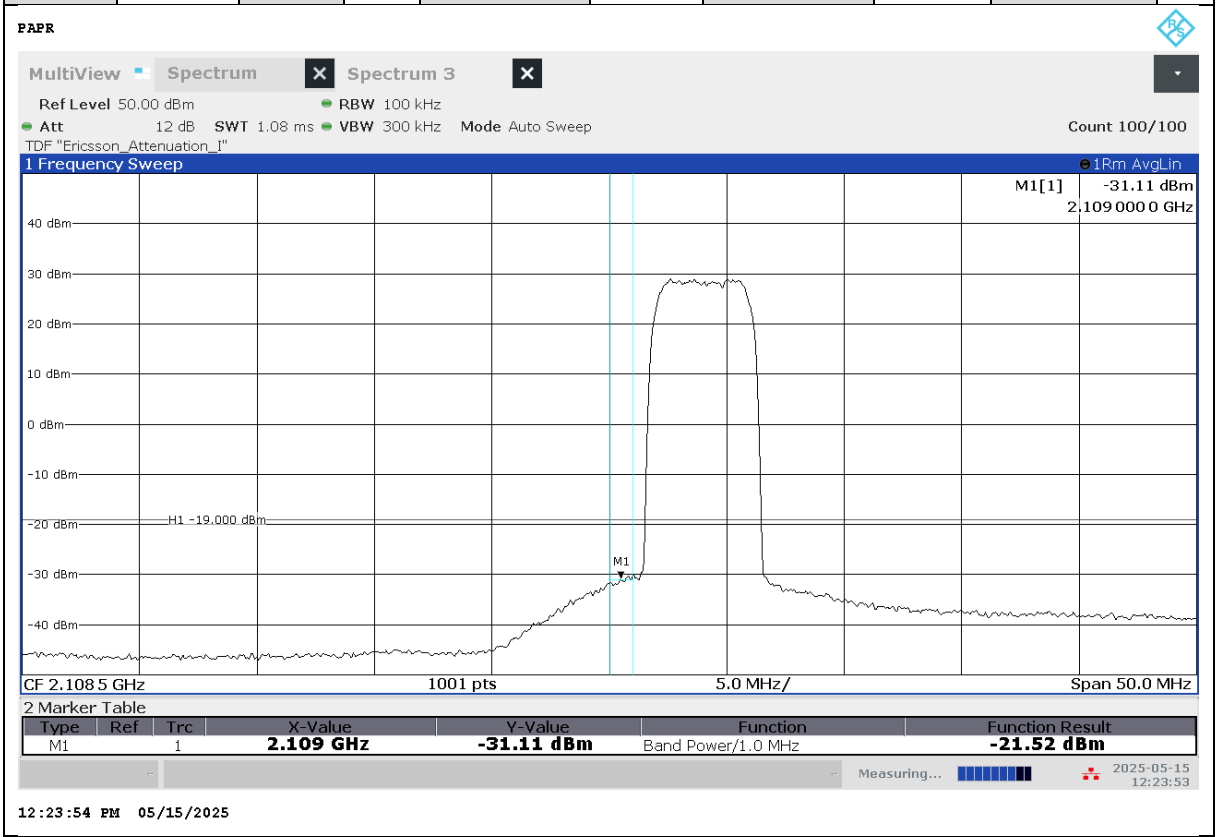
RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6



Configuration 33, Lower edge < 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2

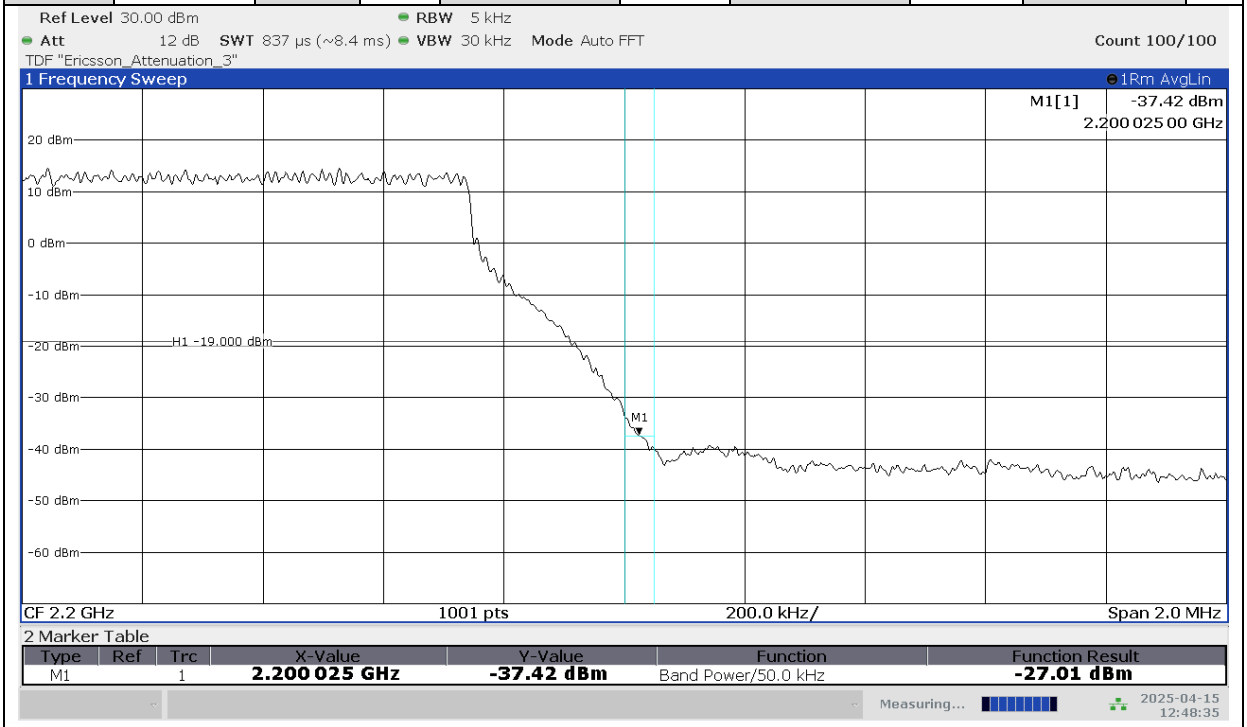


Configuration 33, Lower edge > 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2



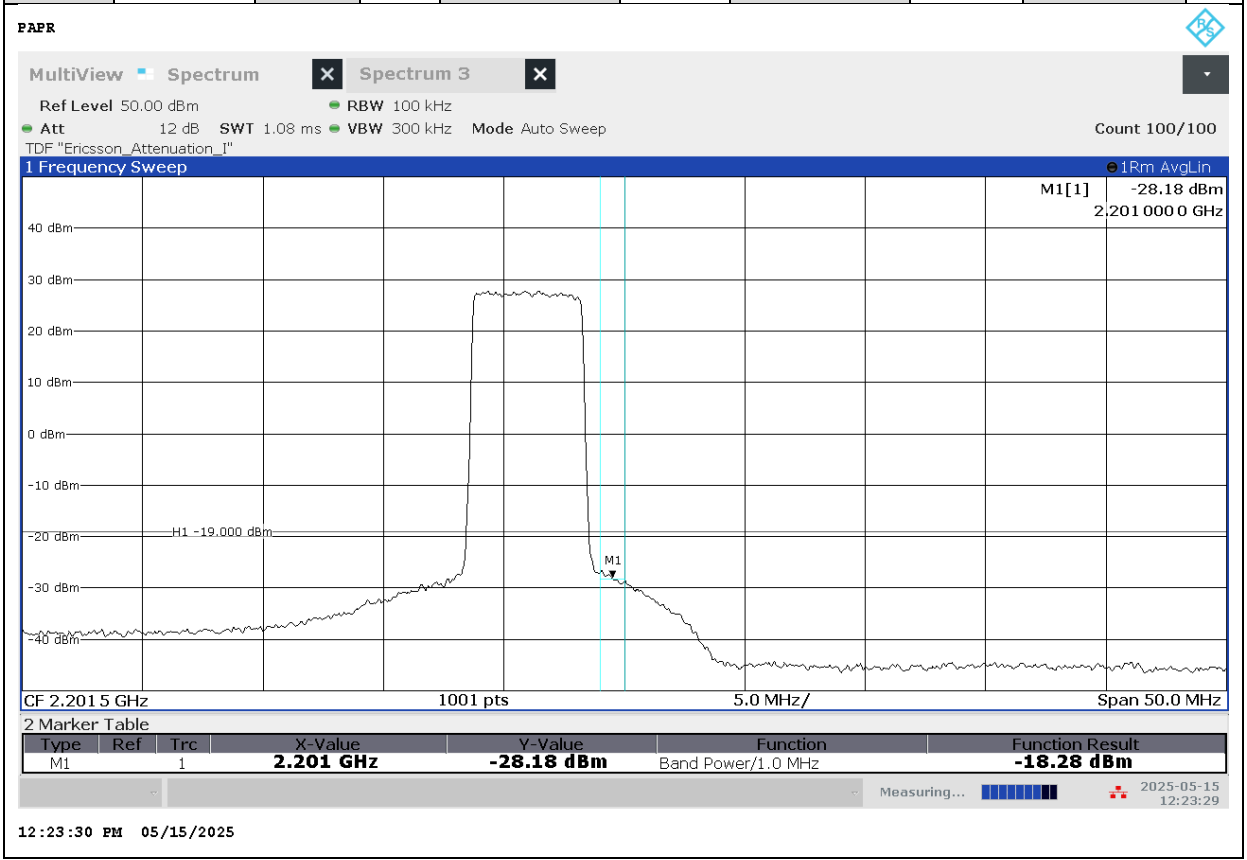
Configuration 33, Upper edge < 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2



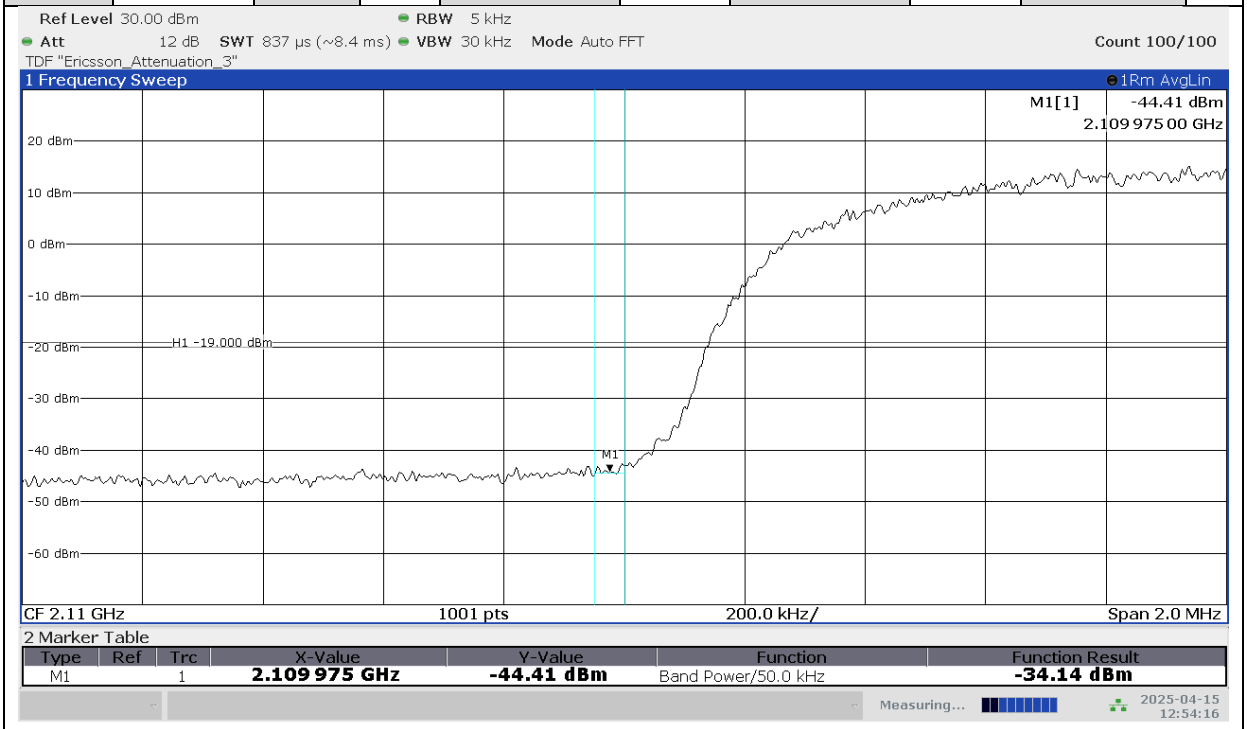
Configuration 33, Upper edge > 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2



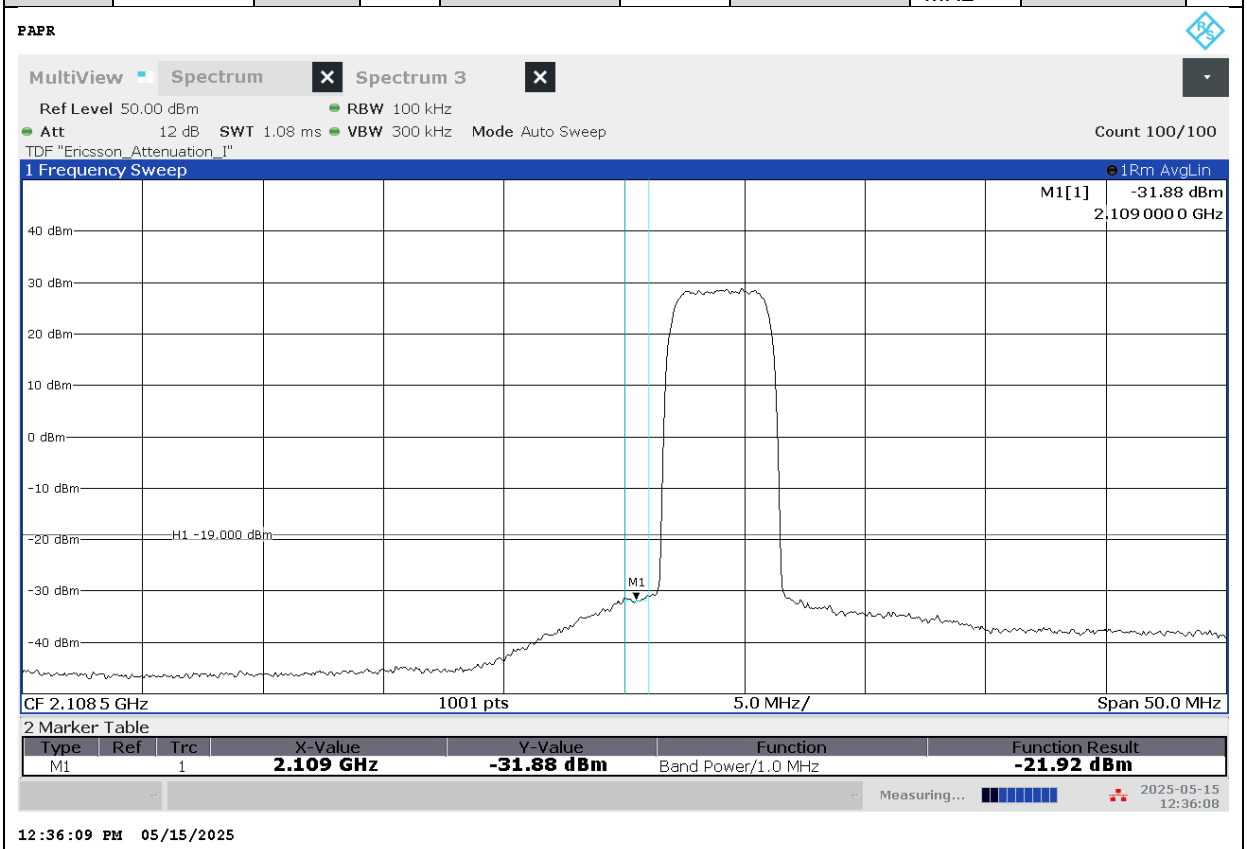
Configuration 33, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2

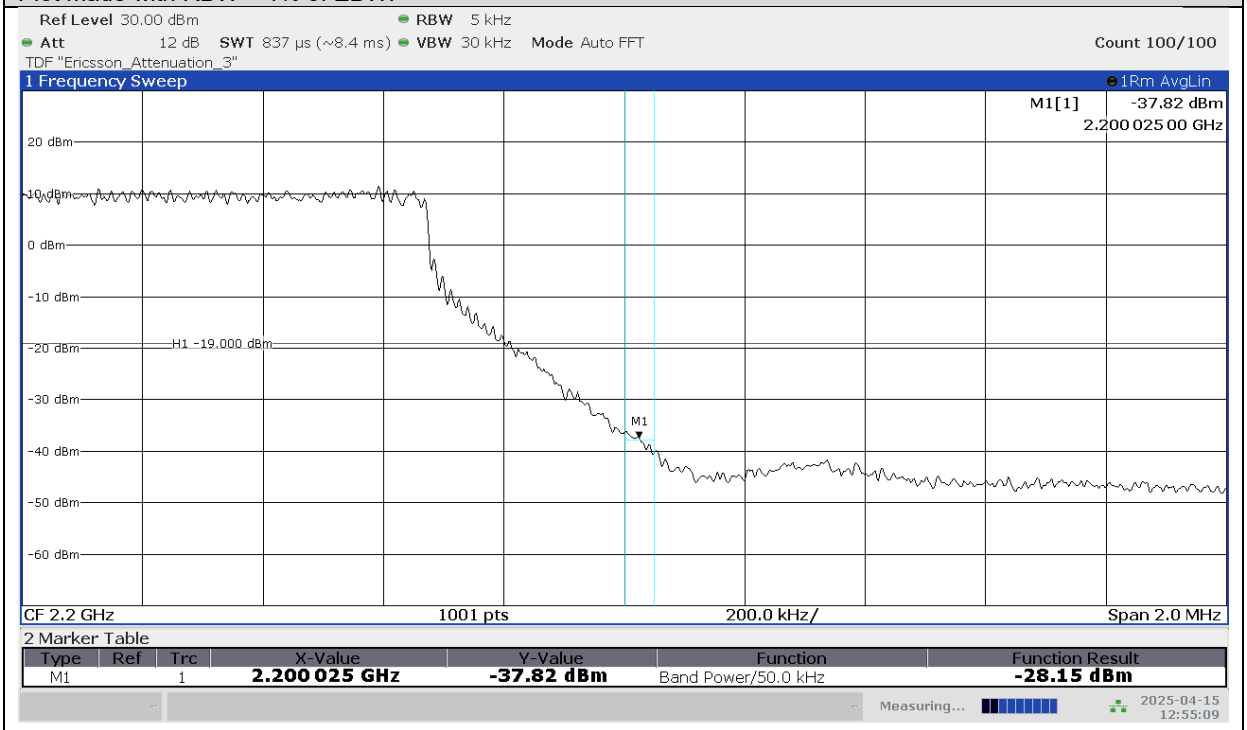


Configuration 33, Lower edge > 1MHz

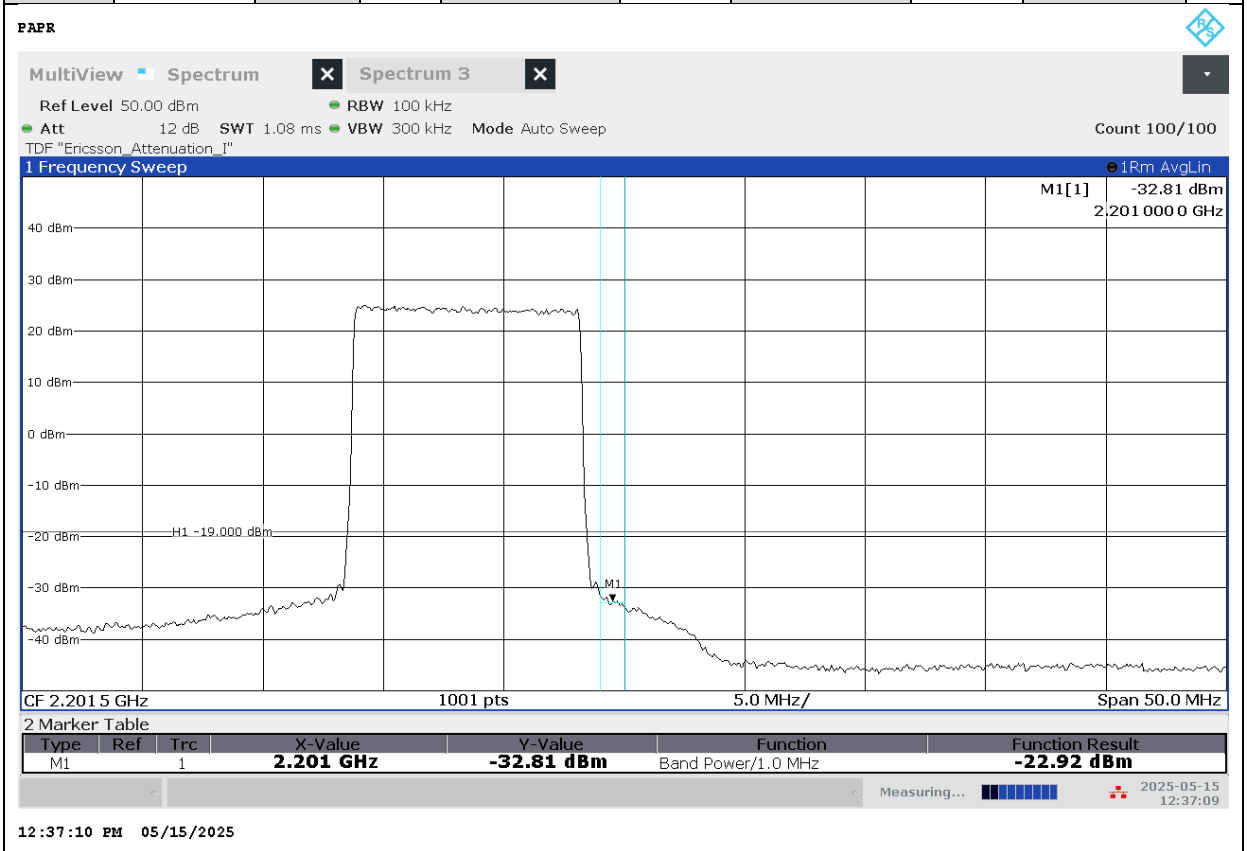
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2



Configuration 33, Upper edge < 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2
Correct limit line 1% of EBW:				-19.1 dBm					
Plot made with RBW < 1% of EBW.									

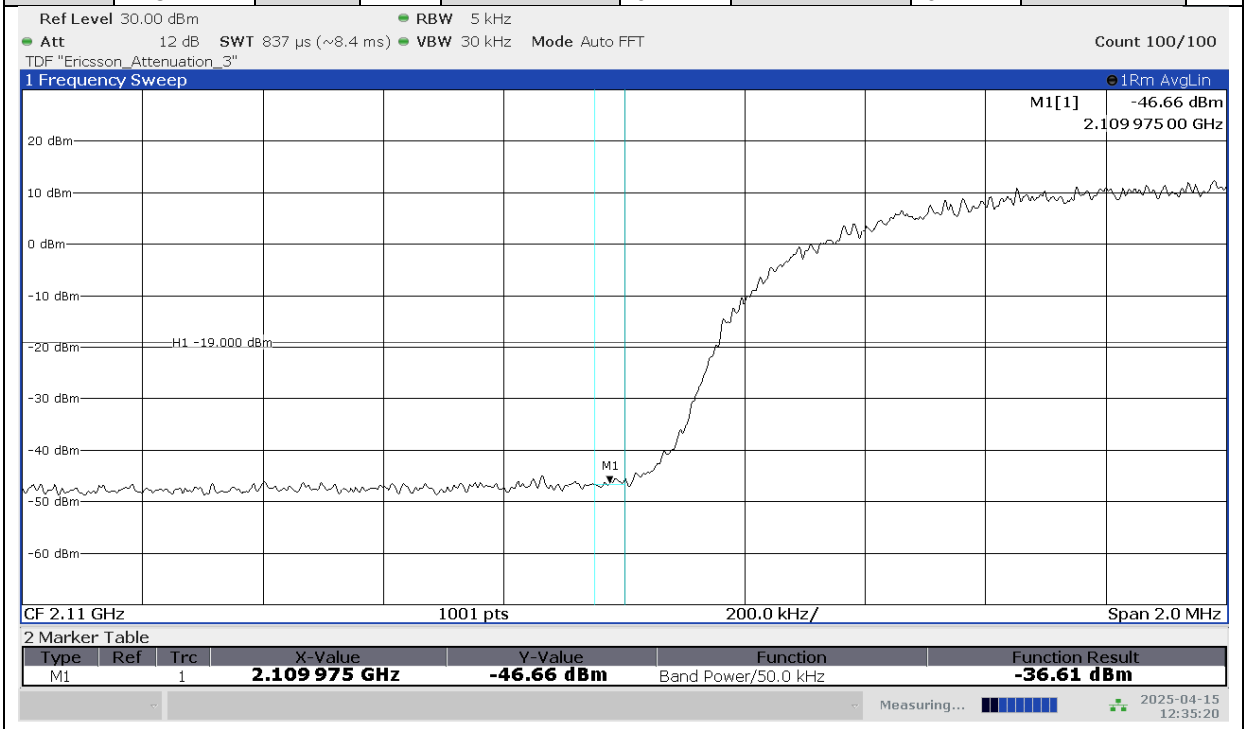


Configuration 33, Upper edge > 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2



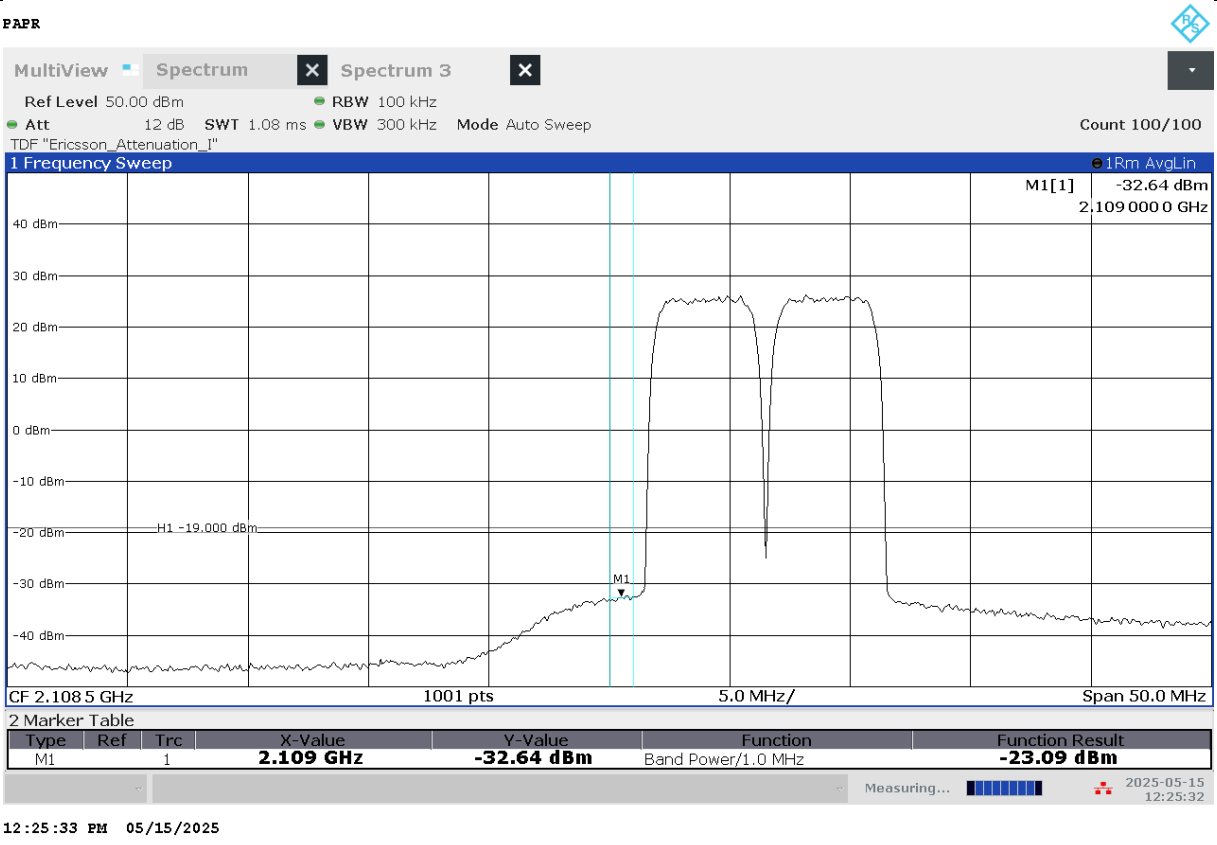
Configuration 34, Lower edge < 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4



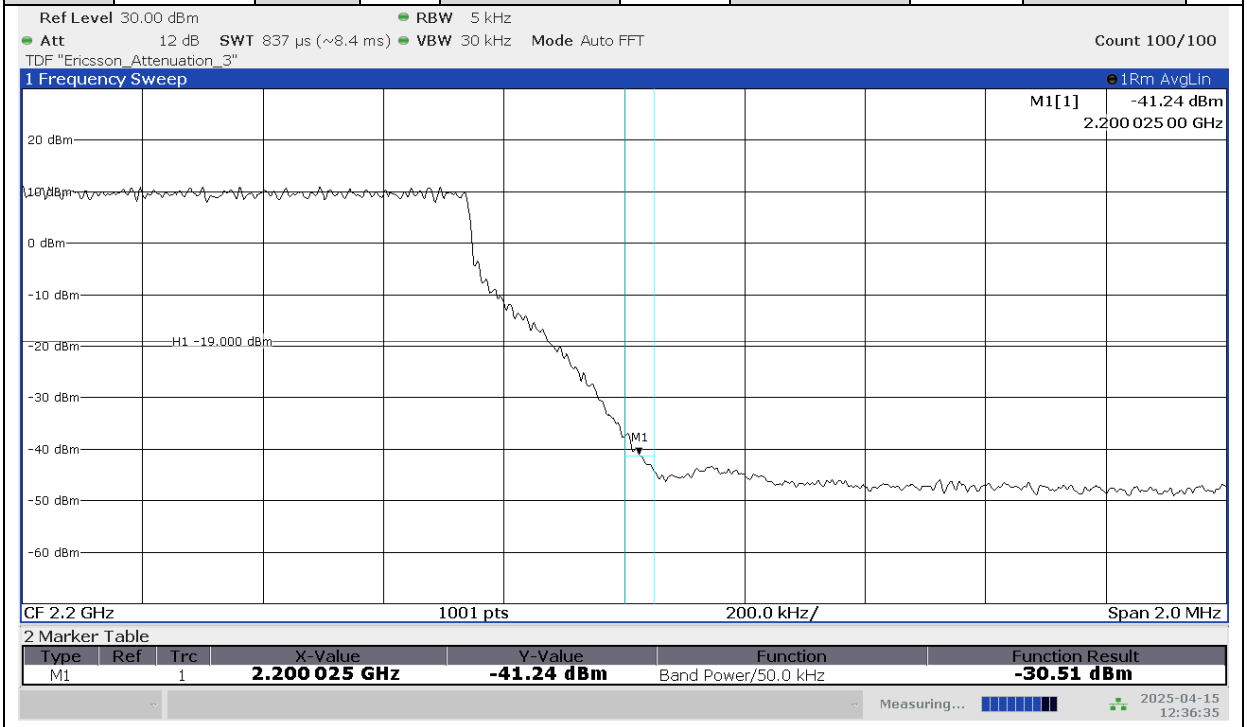
Configuration 34, Lower edge> 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4



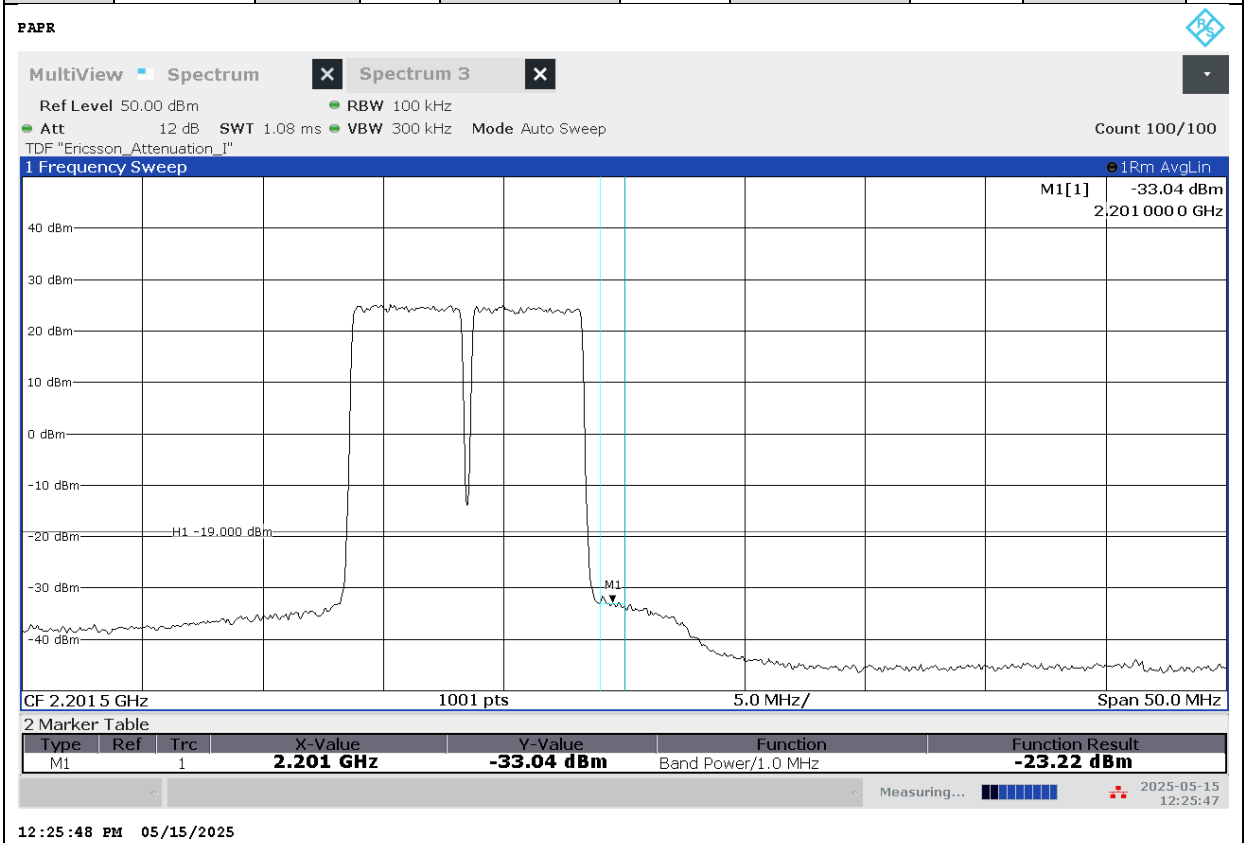
Configuration 34, Upper edge< 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4



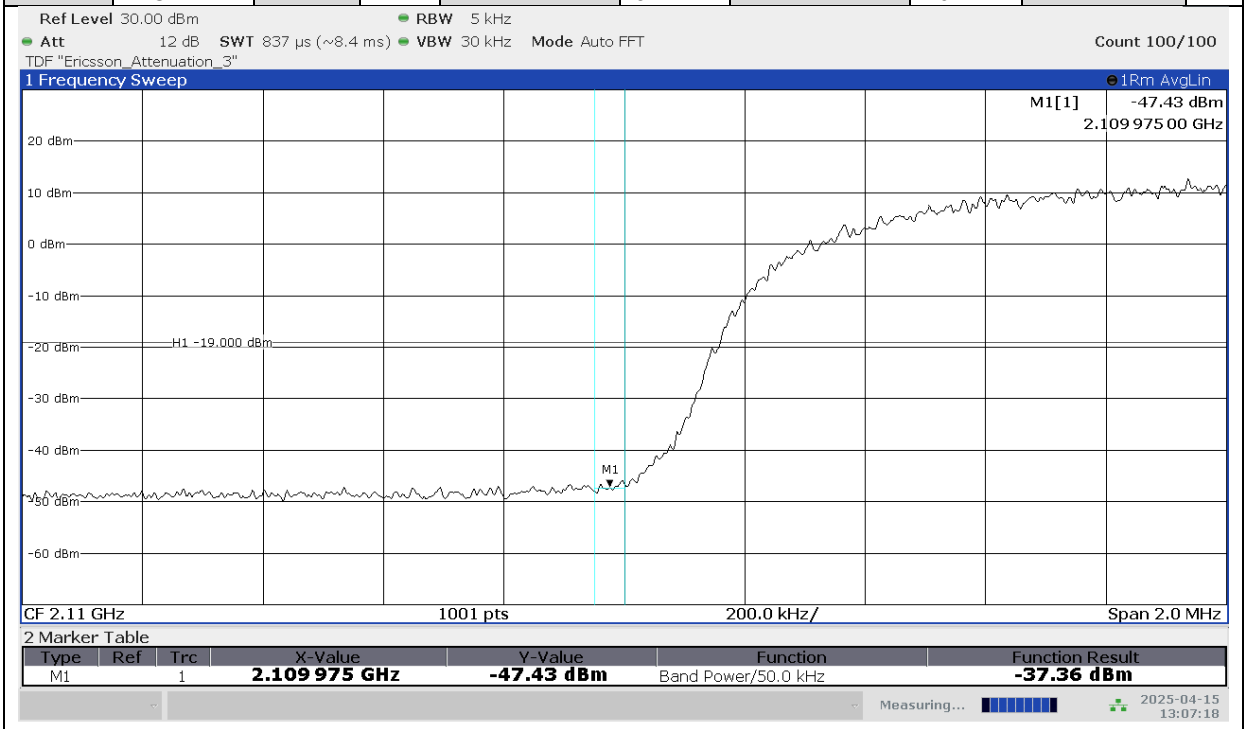
Configuration 34, Upper edge> 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4



Configuration 34, Lower edge< 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4



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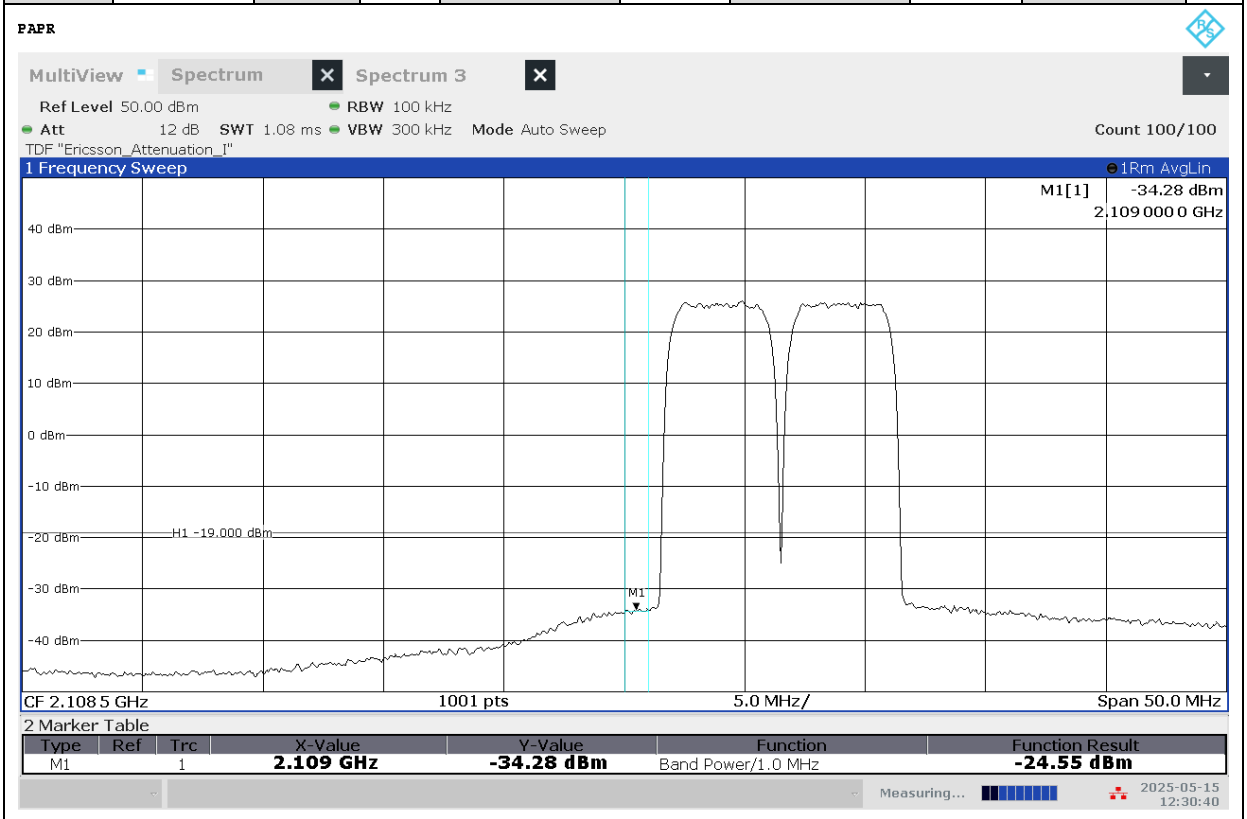
Configuration 34, Lower edge > 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4



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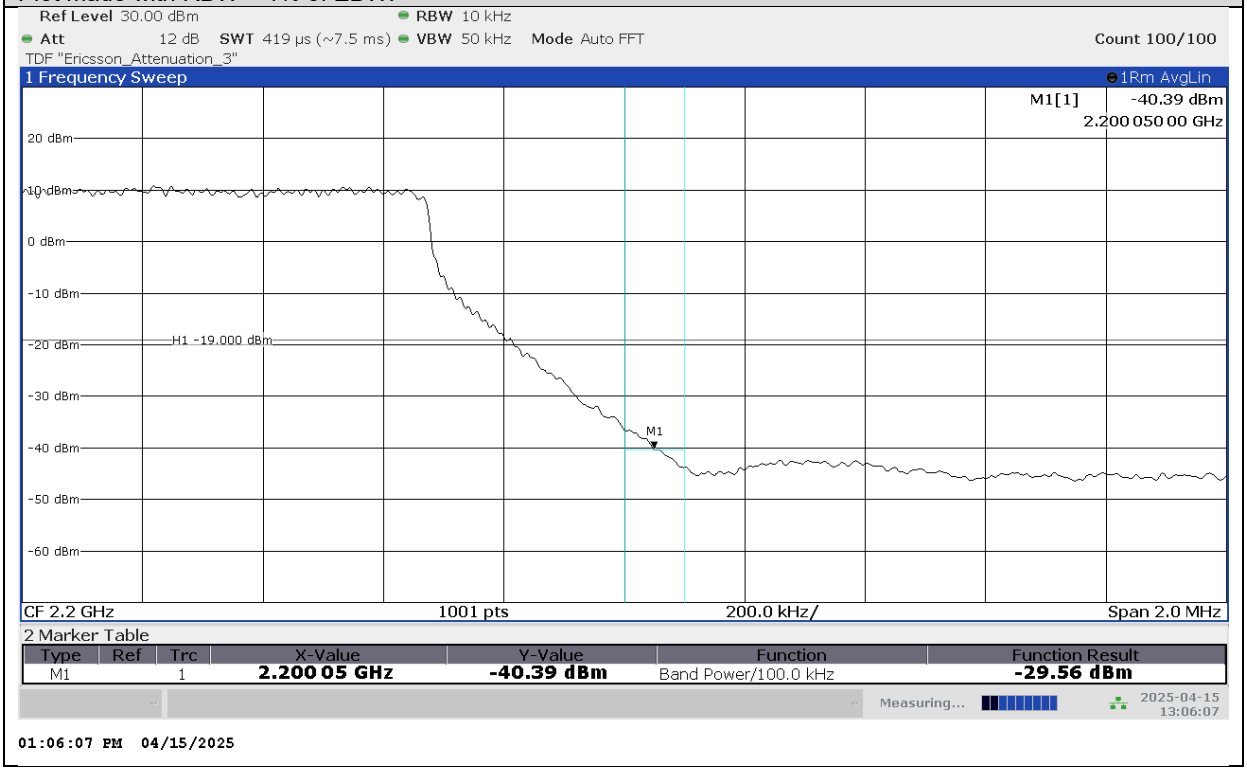
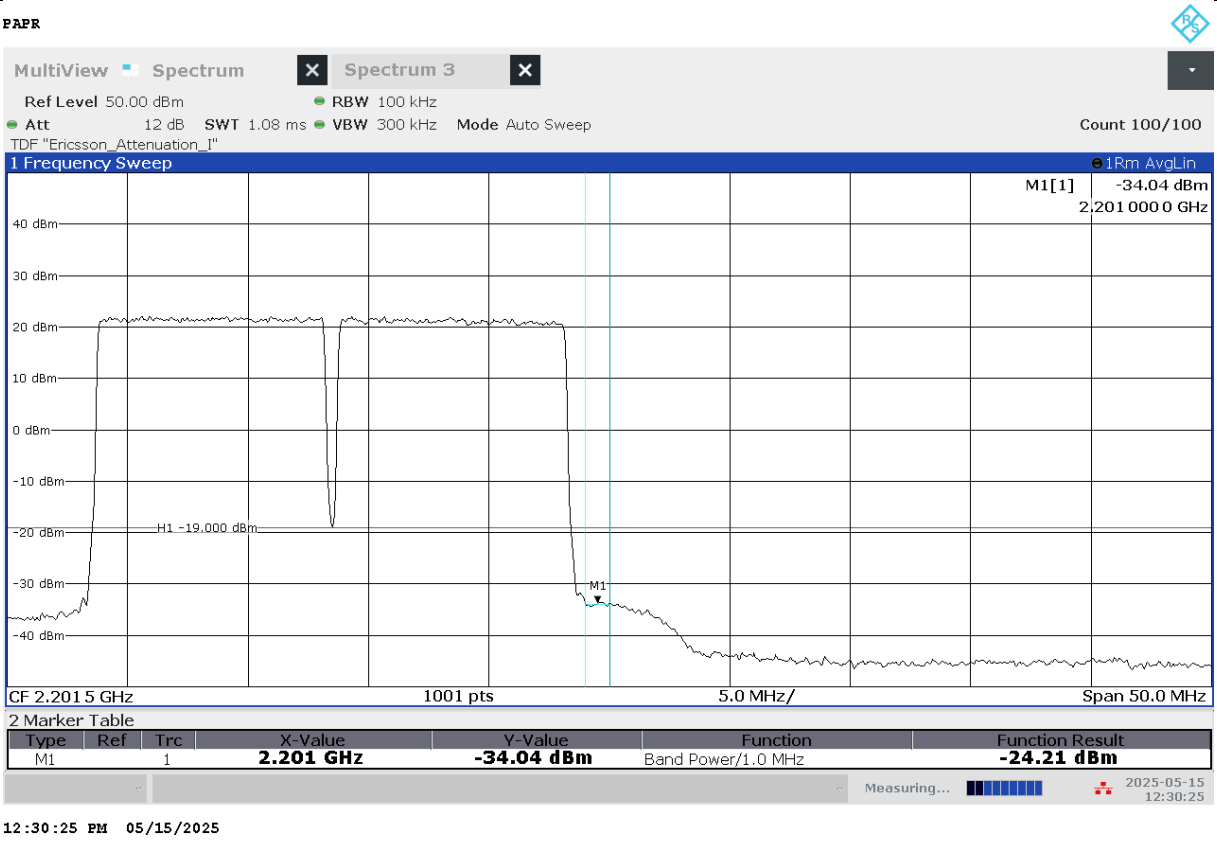
Configuration 34, Upper edge< 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4
Correct limit line 1% of EBW:		-19.1 dBm							
Plot made with RBW < 1% of EBW.									

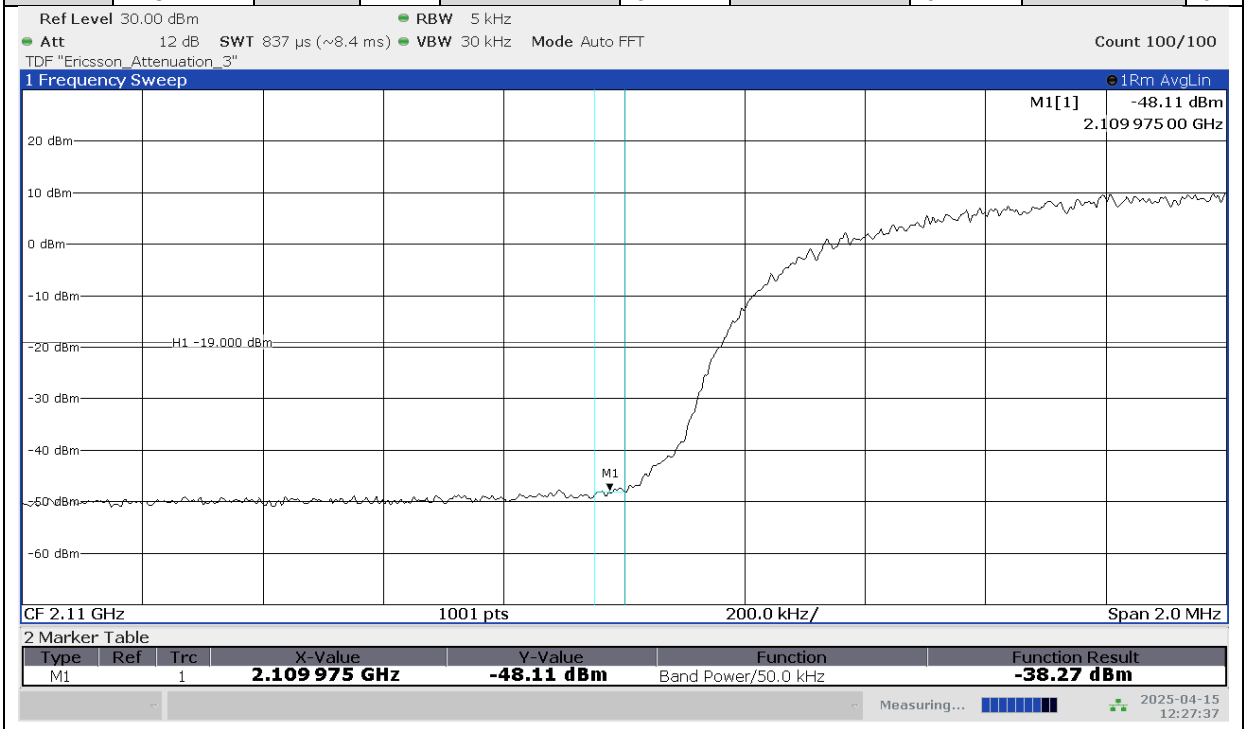


Configuration 34, Upper edge> 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4



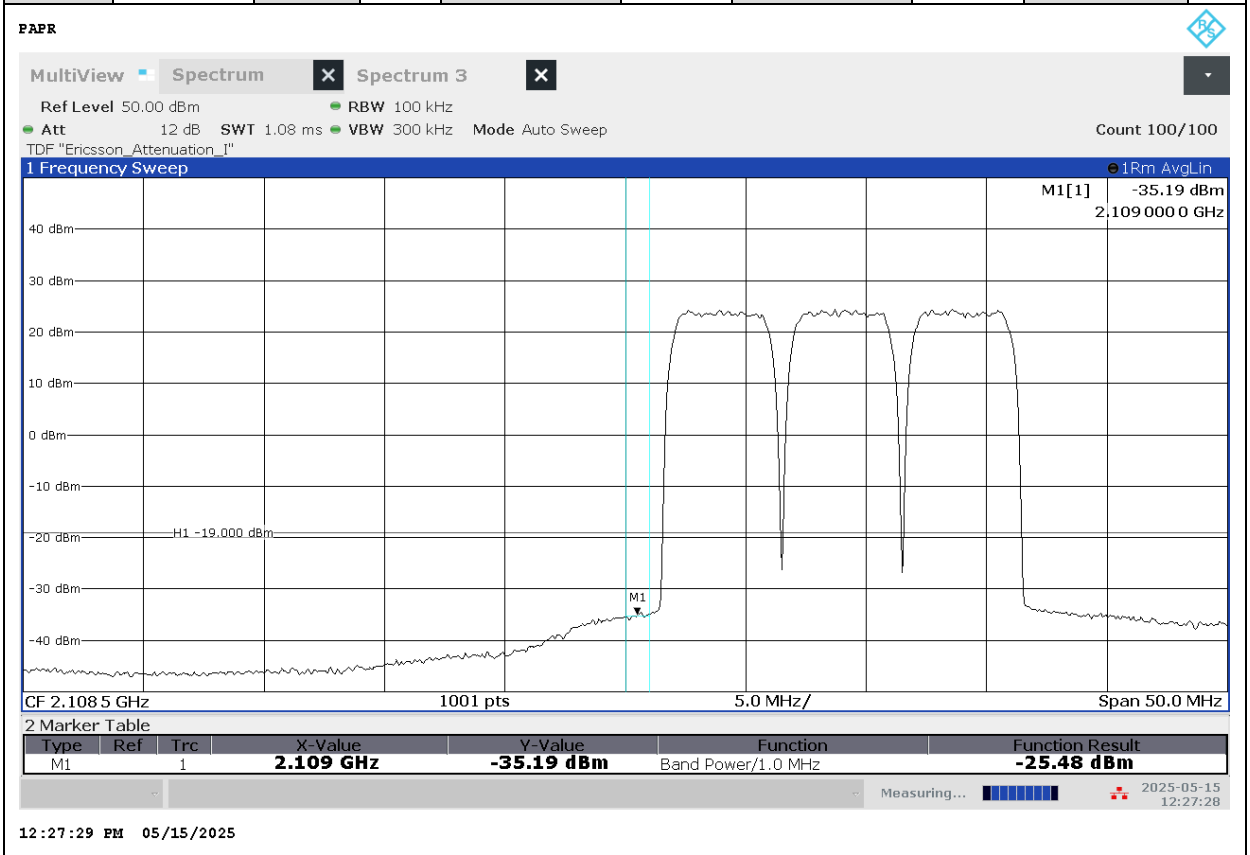
Configuration 35, Lower edge< 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



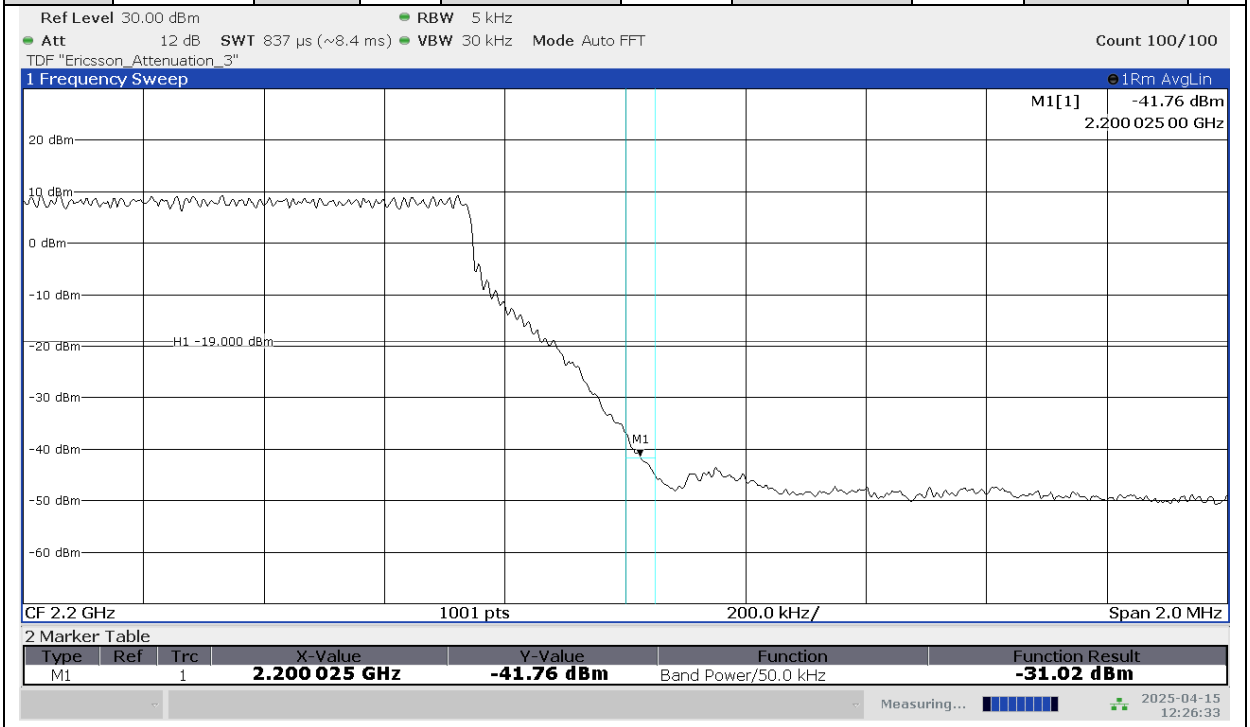
Configuration 35, Lower edge > 1 MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



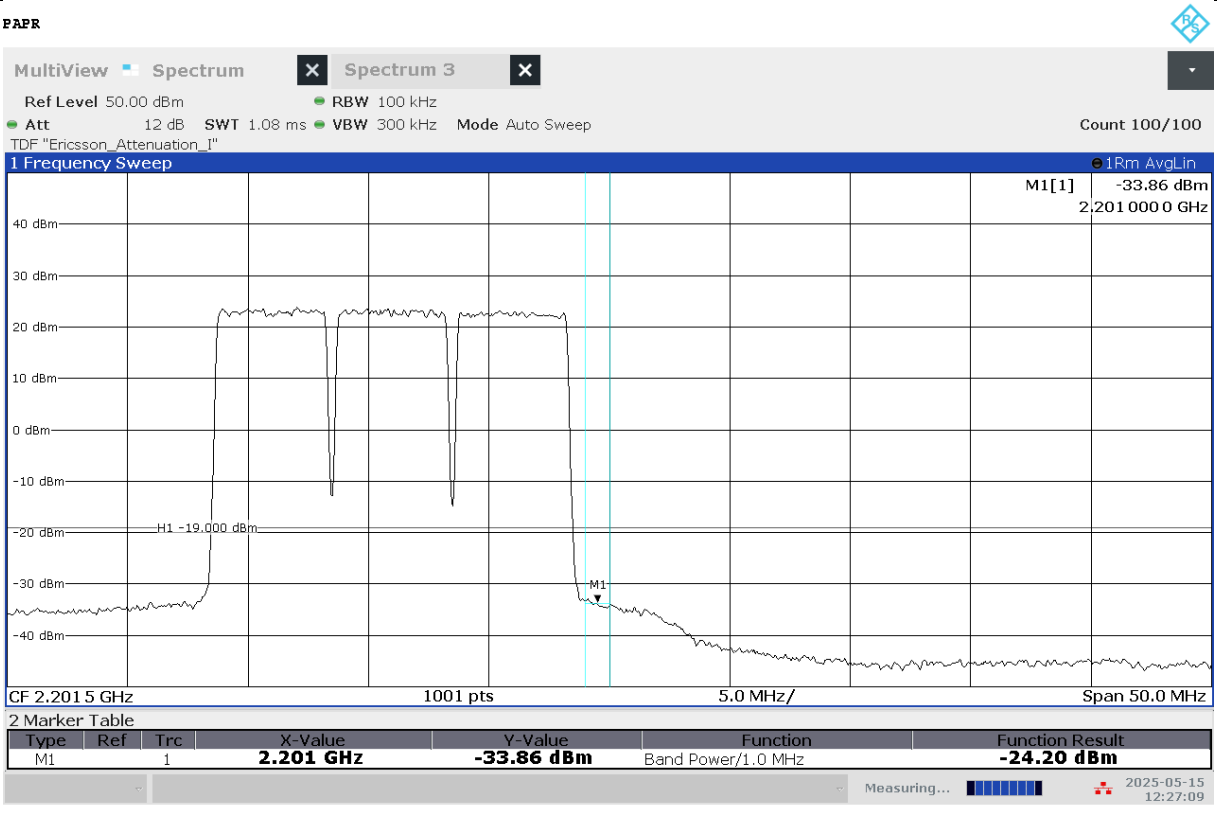
Configuration 35, Upper edge< 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



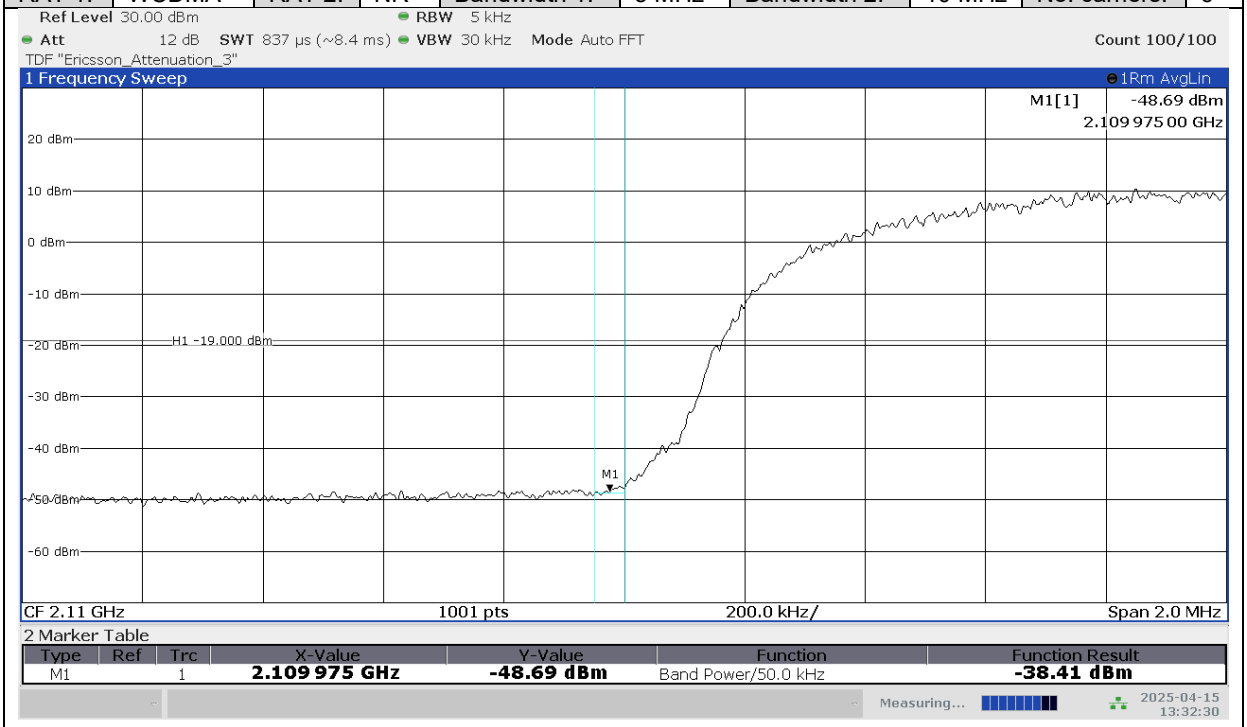
Configuration 35, Upper edge> 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6



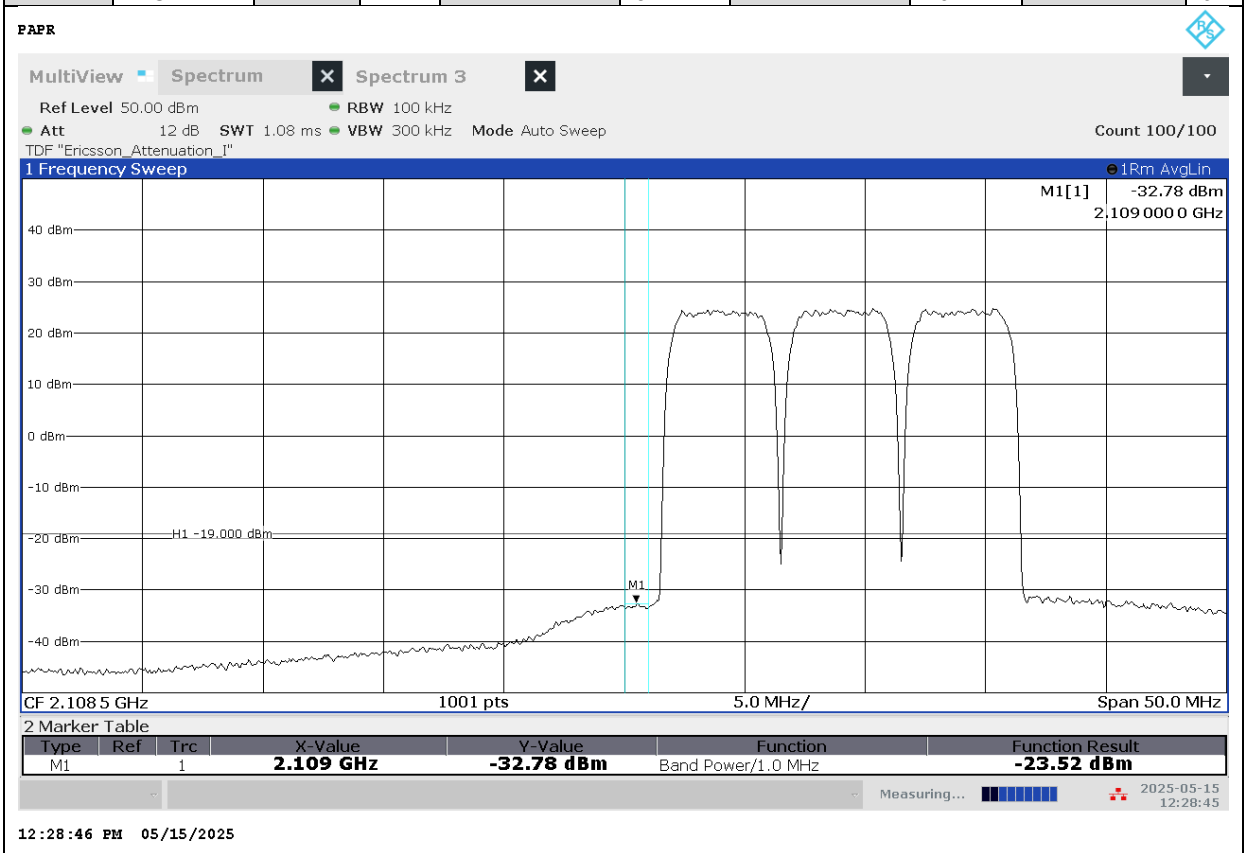
Configuration 35, Lower edge< 1MHz

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6

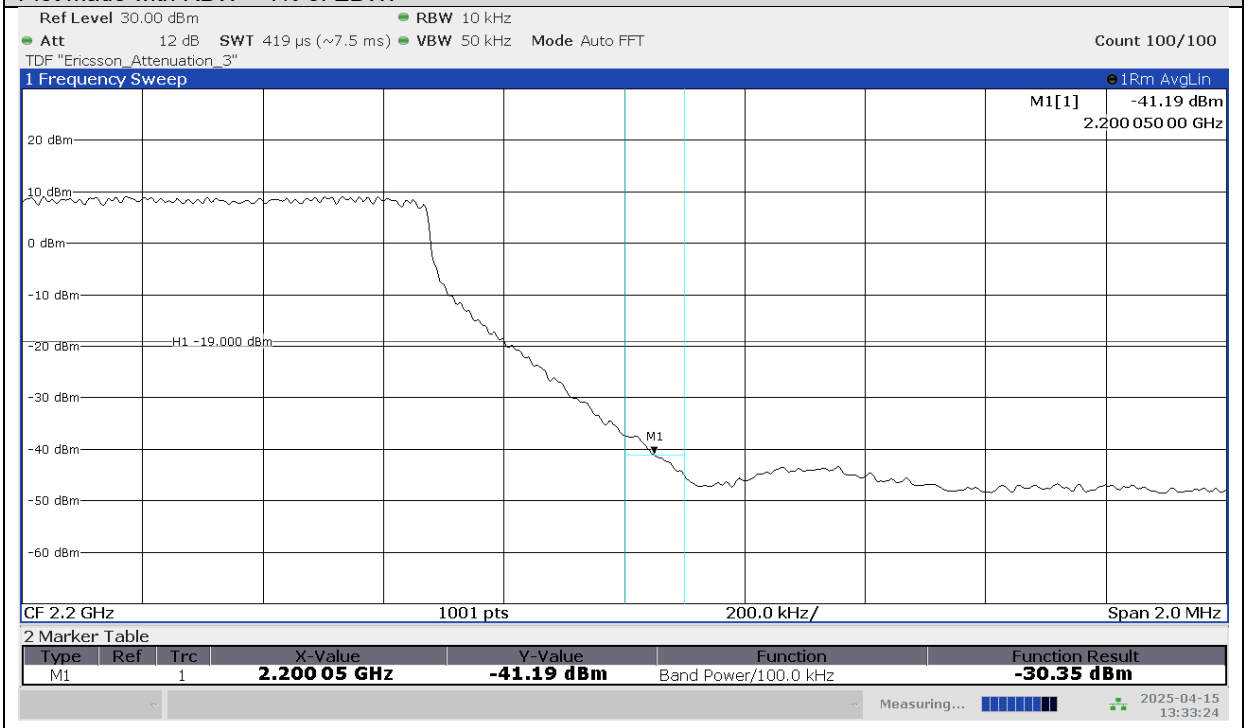


Configuration 35, Lower edge > 1MHz

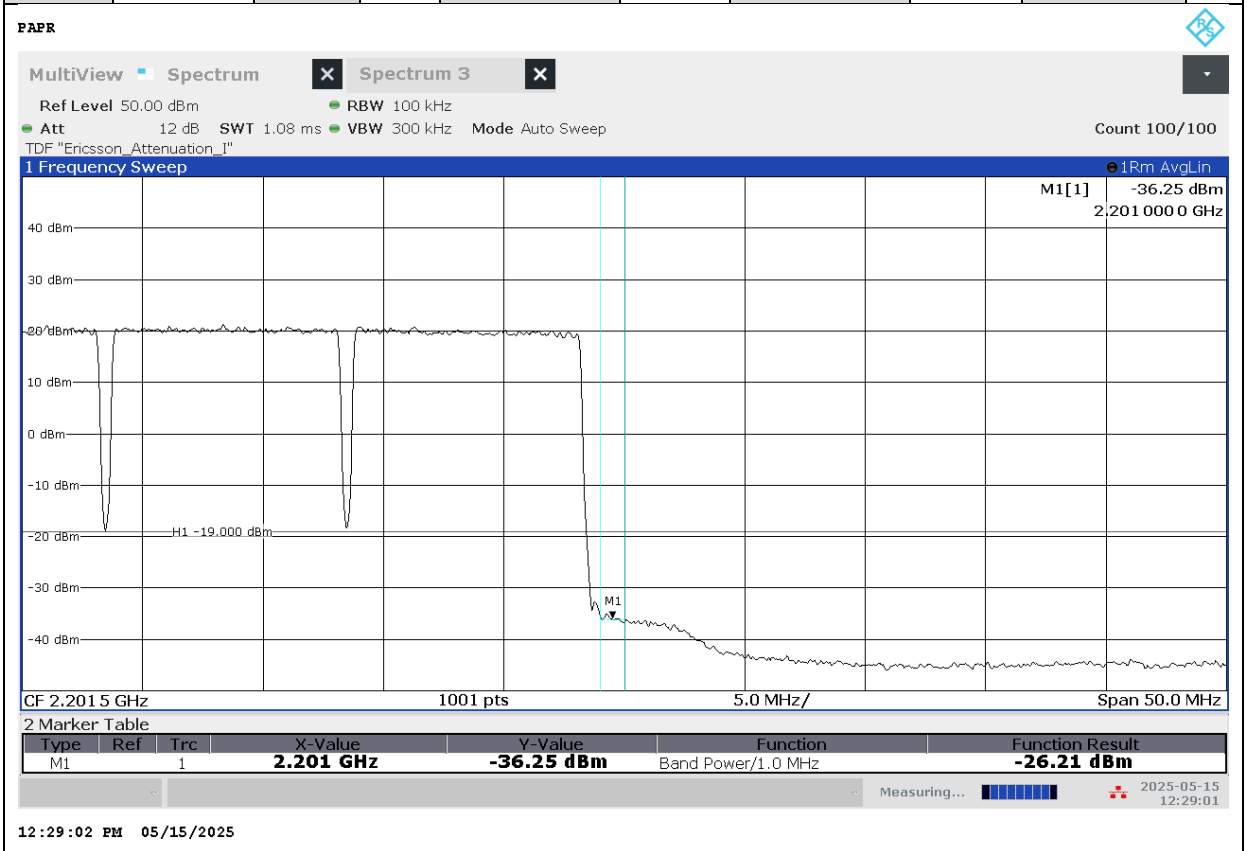
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6



Configuration 35, Upper edge< 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6
Correct limit line 1% of EBW:				-19.1 dBm					
Plot made with RBW < 1% of EBW.									



Configuration 35, Upper edge > 1MHz									
RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6



8 TRANSMITTER SPURIOUS EMISSIONS

Date of test:	24 March – 11 April 2025	**Test location:**	E-torget
EUT Serial:	E23G305405	**Ambient temp:**	19°C - 21°C
Tested by:	Algot Rickman Nahome Michael	**Relative humidity:**	16% - 36%
Test result:	Pass		

8.1 Test set-up and test procedure.

The test method is in accordance with KDB 971168 D01 section 6.1 and ANSI C63.26-2015 section 5.7.

The EUT was connected to spectrum analyser via rf-cable and a 40 dB attenuator.

The EUT was set up in order to emit maximum emissions.

On the spurious emission plots the “FAIL” label belong to the fundamental frequency emission and not fail of spurious emissions.

Power measurements have only been performed on one of the EUTs four ports. To compensate for this, the limit was adjusted by a factor 10 log(N_{ANT}) where N_{ANT} is the number of output ports. This was done according to KDB 662911D01 E.2.c).

8.2 Requirements

CFR 47 §27.53:

General protection levels. Except as otherwise specified below, for operations in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz, and 2180–2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB.

For each supported bandwidth configuration the resolution bandwidth of at least 1% of the emission bandwidth were used within 1 MHz from the band edge frequency. For each supported bandwidth configuration, the resolution bandwidth of 1 MHz was used from 1 MHz away from the band edge frequency.

The measurements of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.

Limit: -43 dBW = -13 dBm
Limit compensated for number of ports: -13 dBm - 10 * Log(4) = -19 dBm

RSS-139, Section 5.6:

Limit within 1 MHz of frequency block edge (compensated for number of ports): -19 dBm/(1% of OBW)
Limit outside 1 MHz of frequency block edge (compensated for number of ports): -19 dBm/MHz

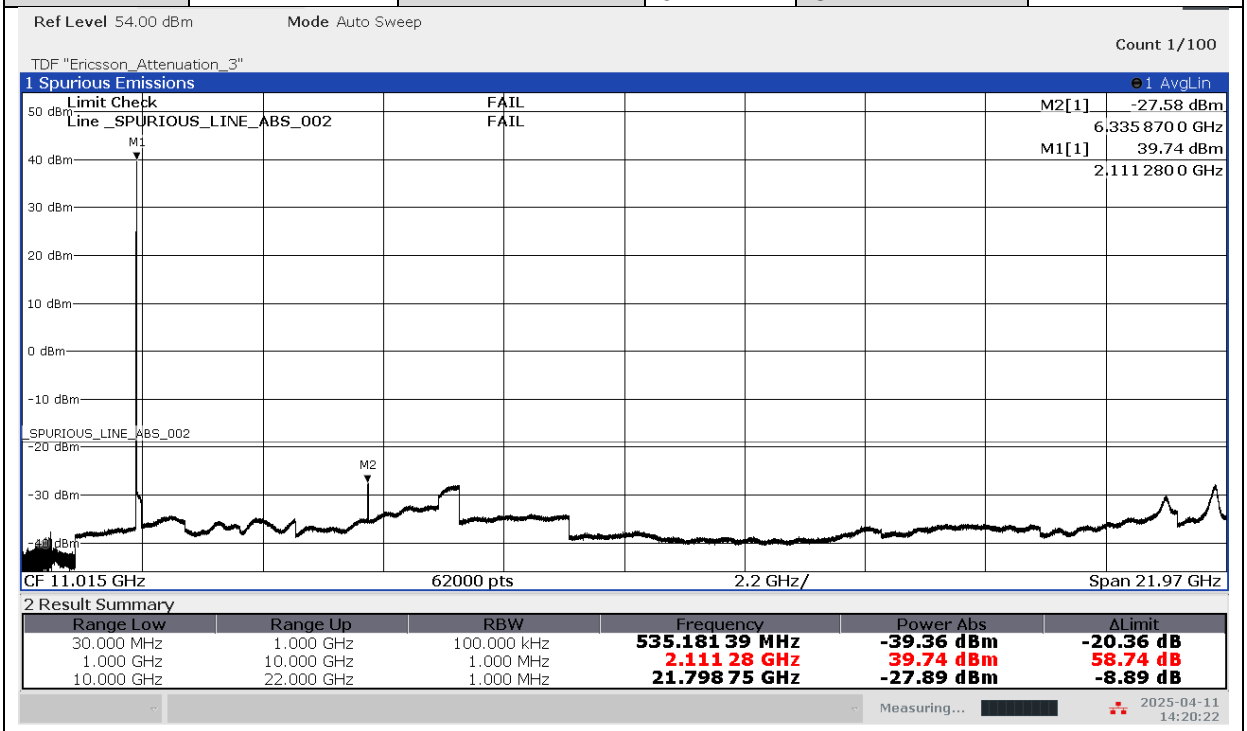
RSS-GEN:

When the unwanted emissions limits are defined in relative terms, the same parameter, peak power or average power, shall be used as the reference for both the transmitter’s output power and the unwanted emissions measurements.

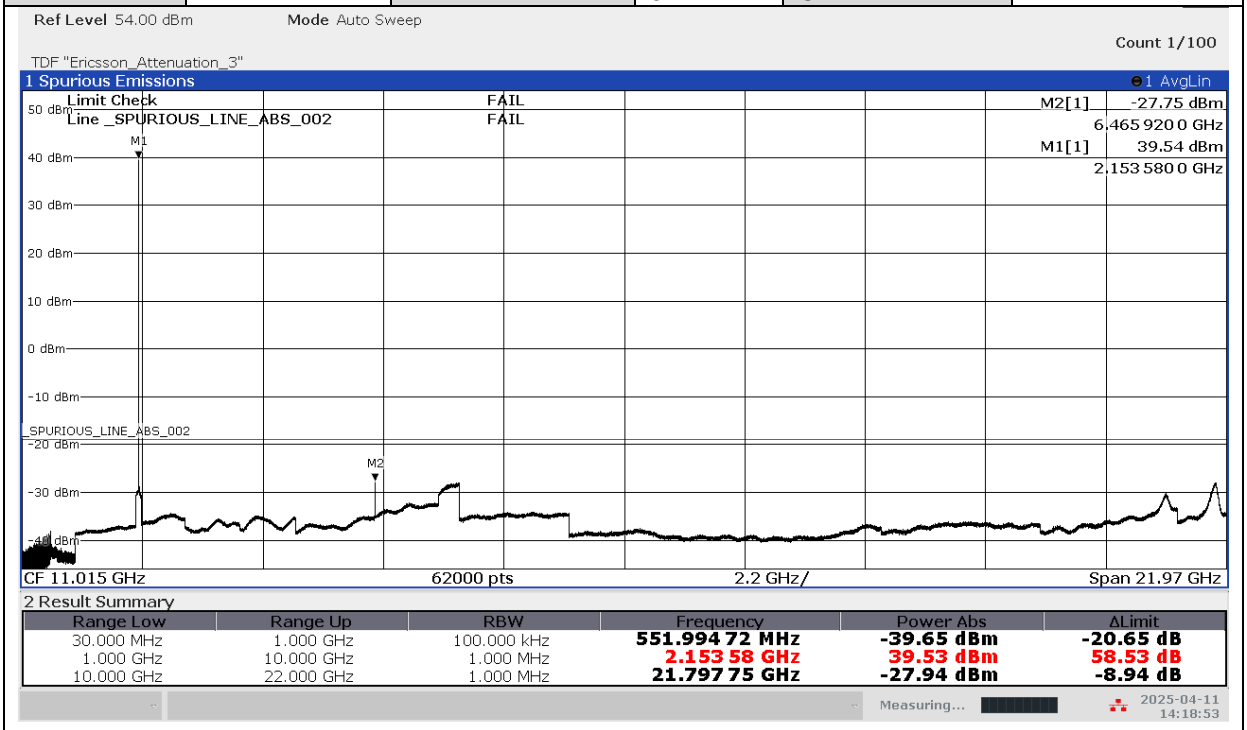
8.3 Test Results

8.3.1 Single carrier

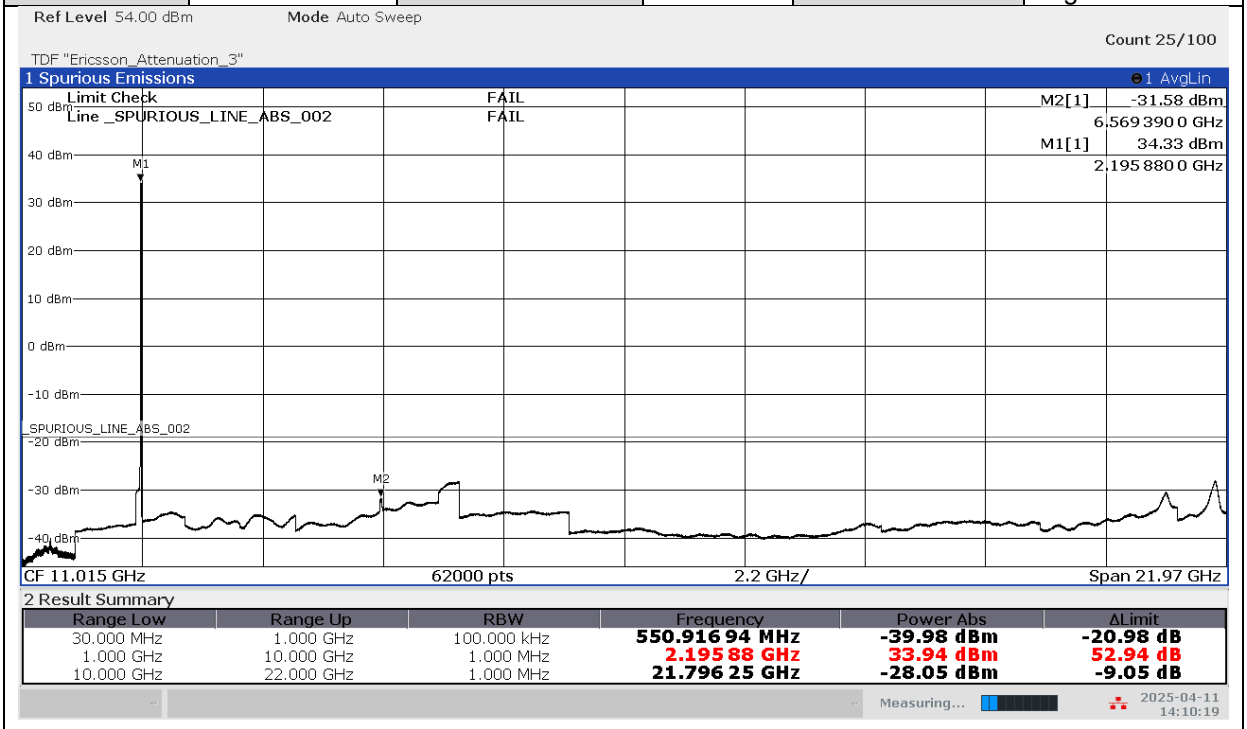
configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	5 MHz	Channel:	Low



configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	5 MHz	Channel:	Middle



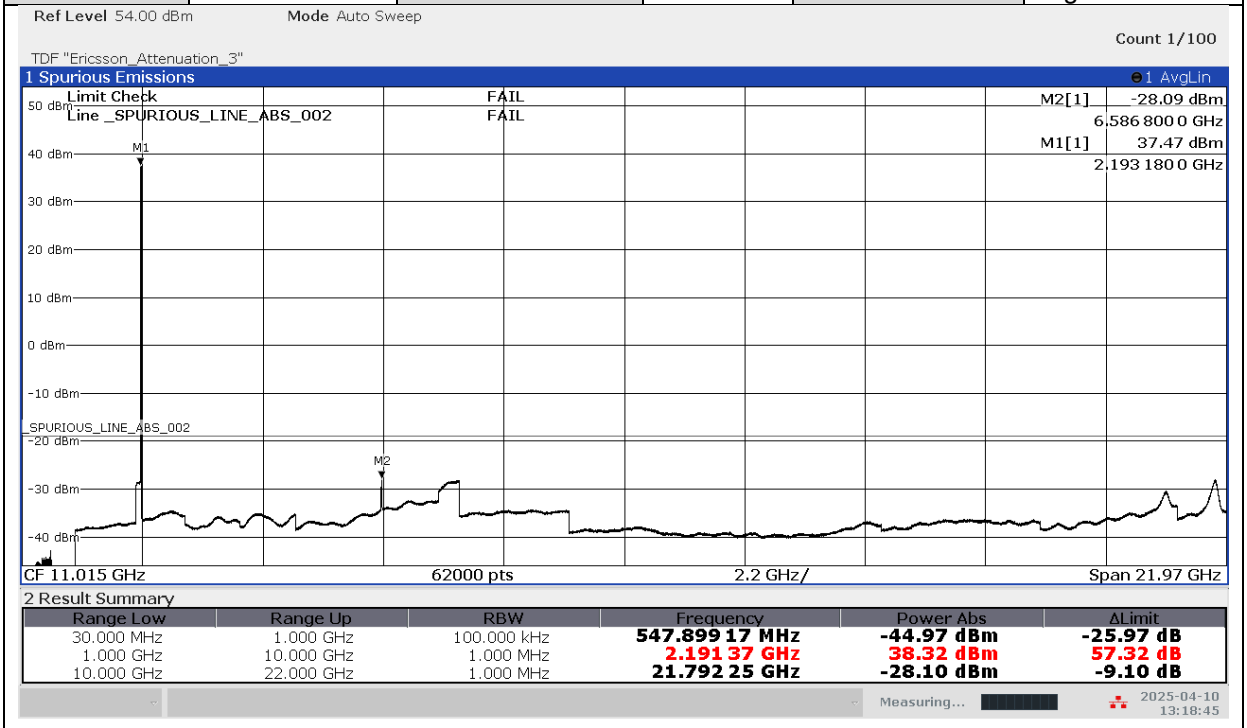
configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	5 MHz	Channel:	High



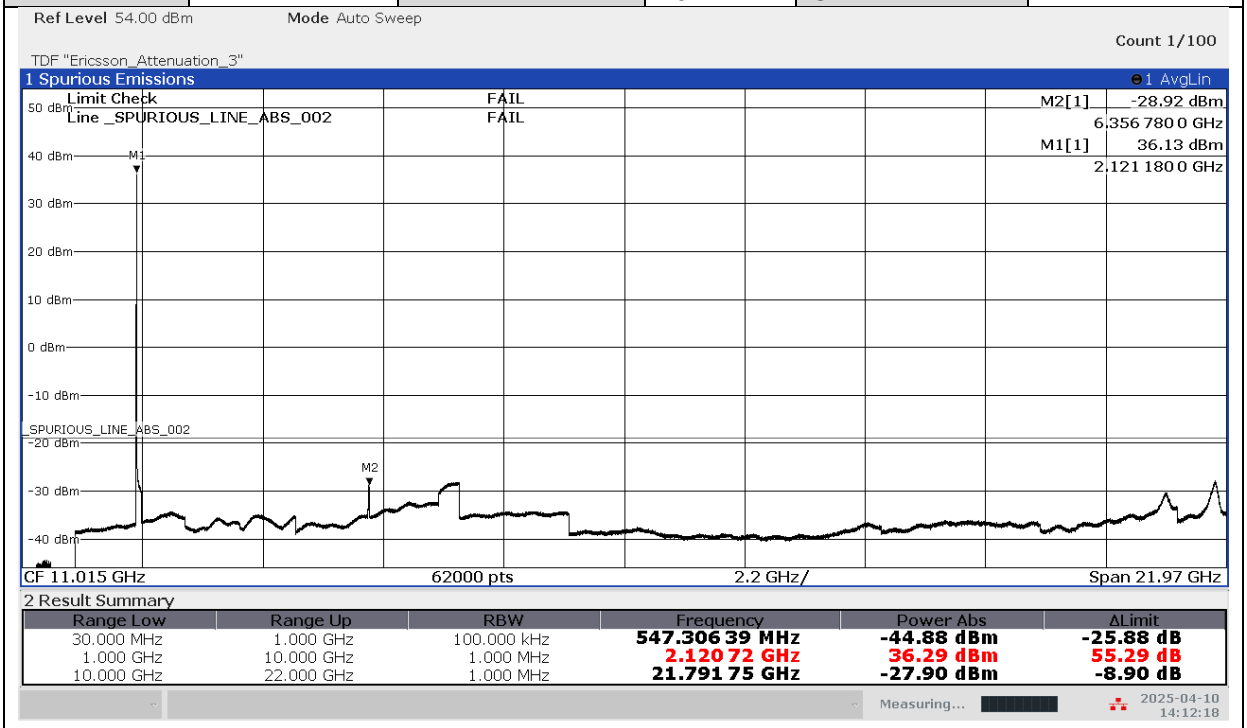
configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	10 MHz	Channel:	Low

configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	10 MHz	Channel:	Middle

configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	10 MHz	Channel:	High

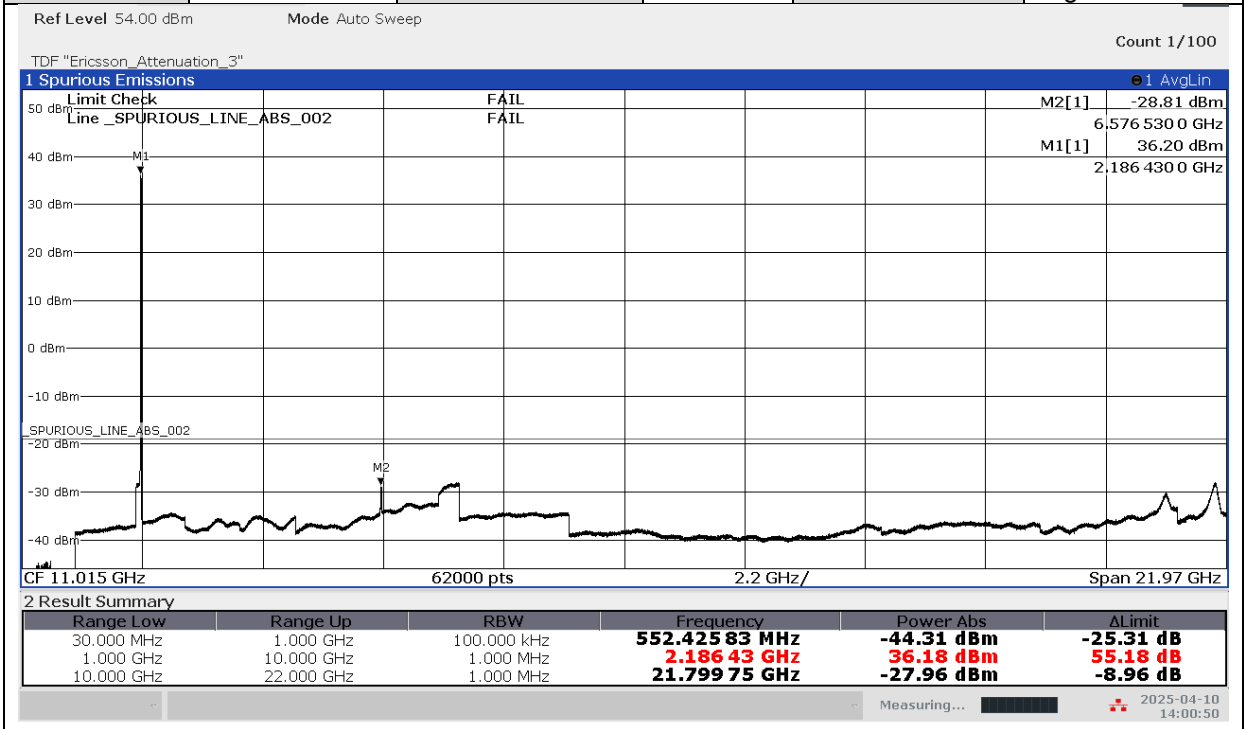


configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	15 MHz	Channel:	Low

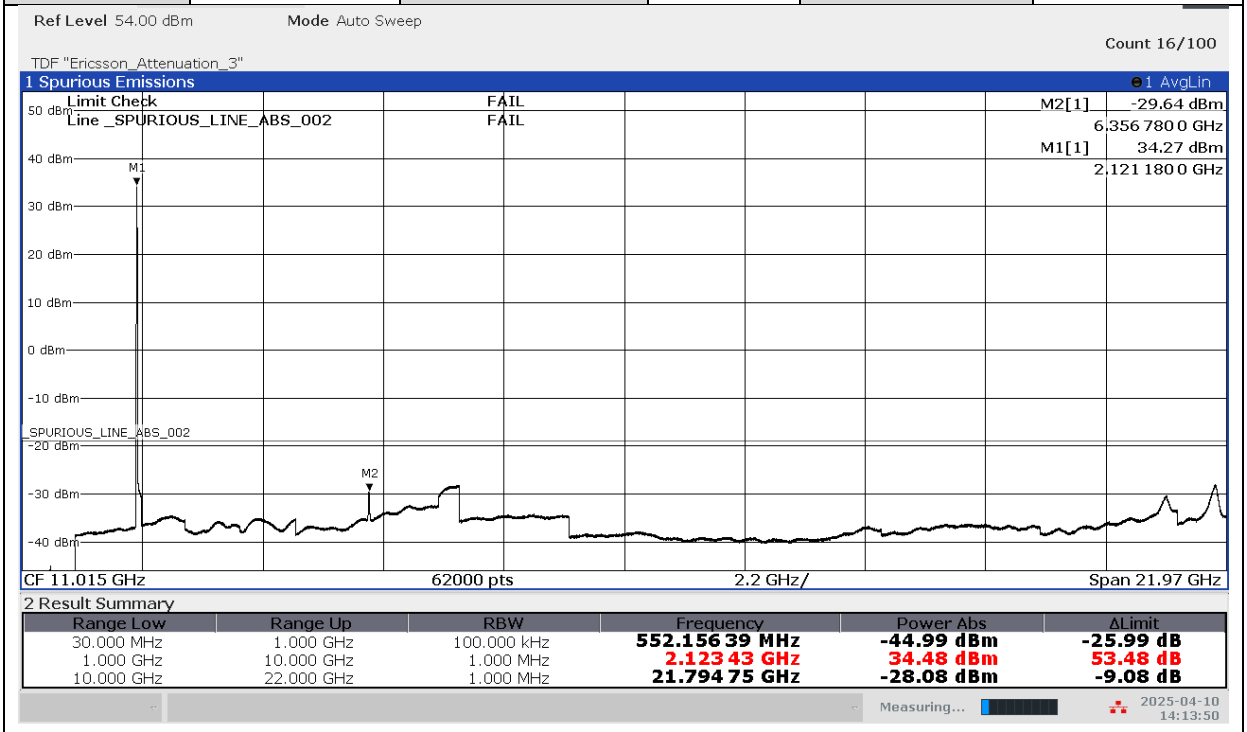


configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	15 MHz	Channel:	Middle

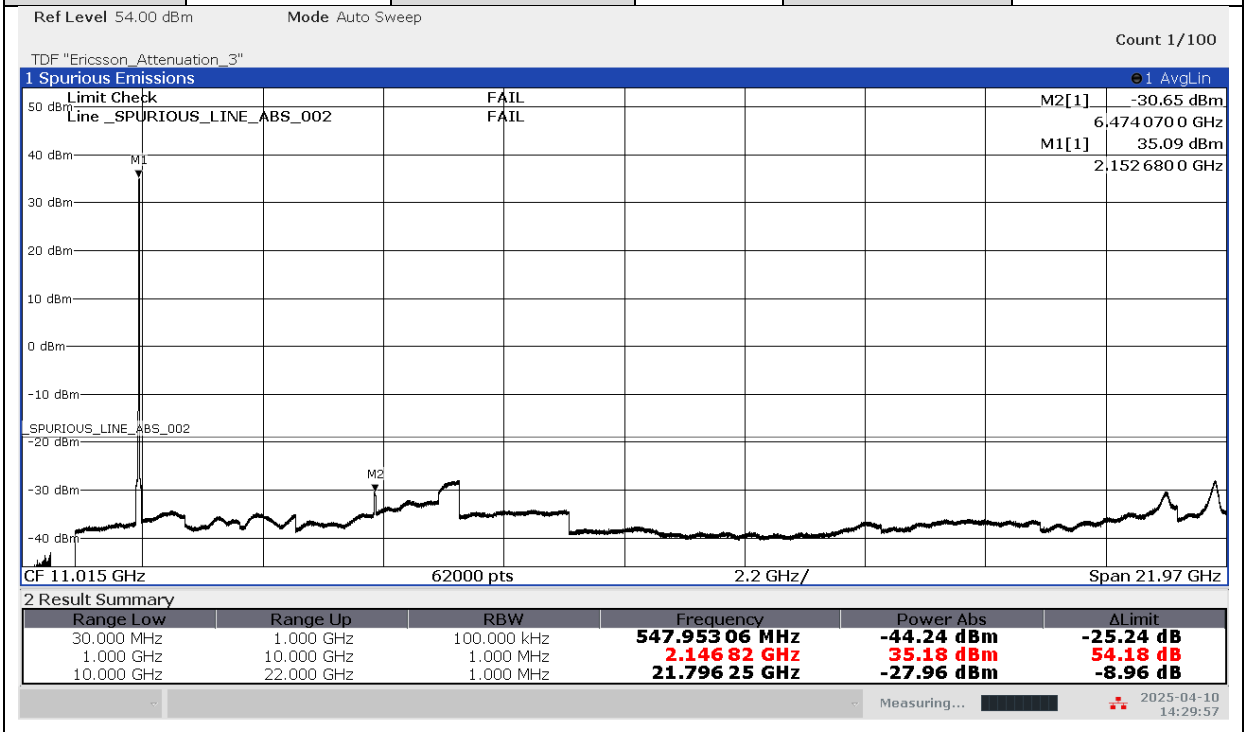
configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	15 MHz	Channel:	High



configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	20 MHz	Channel:	low

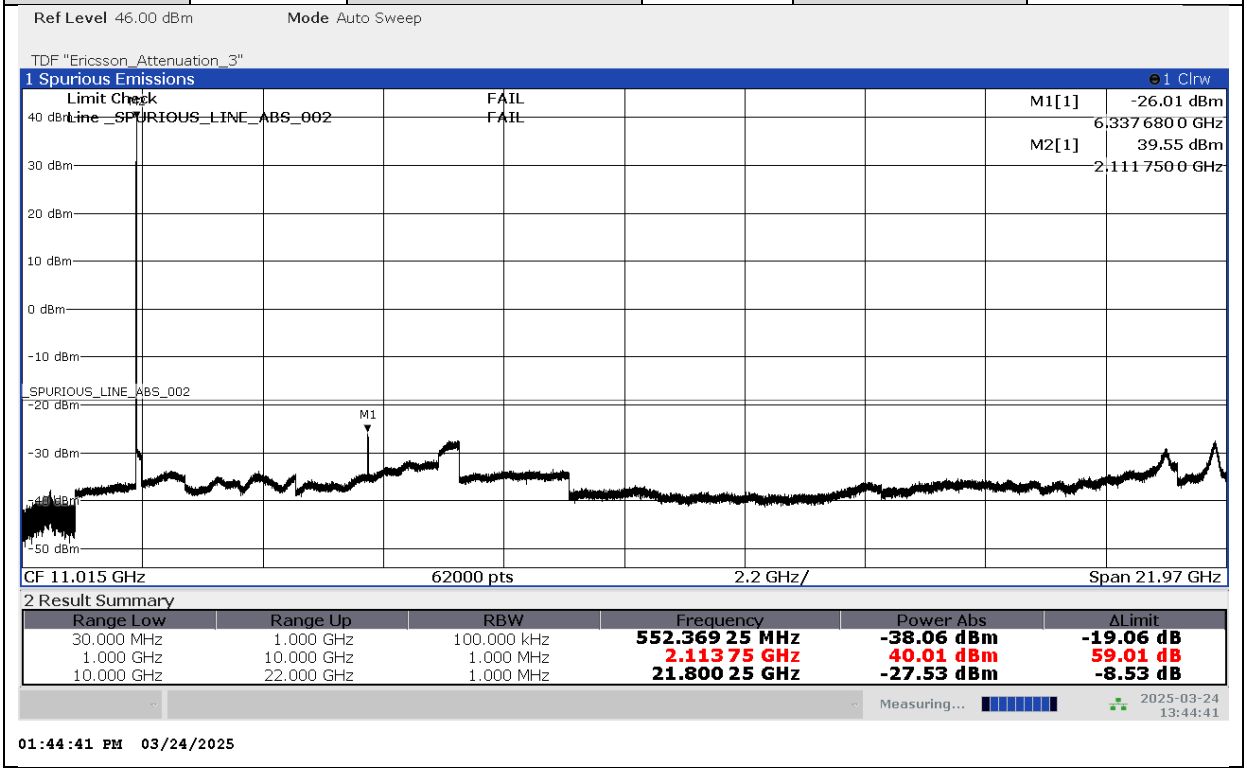


configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	20 MHz	Channel:	Middle



configuration 2					
RAT:	LTE IB NB-IoT	Bandwidth:	20 MHz	Channel:	High

Configuration 4					
RAT:	NR	Bandwidth:	5 MHz	Channel:	Low



Configuration 4					
RAT:	NR	Bandwidth:	5 MHz	Channel:	Middle

Configuration 4					
RAT:	NR	Bandwidth:	5 MHz	Channel:	High

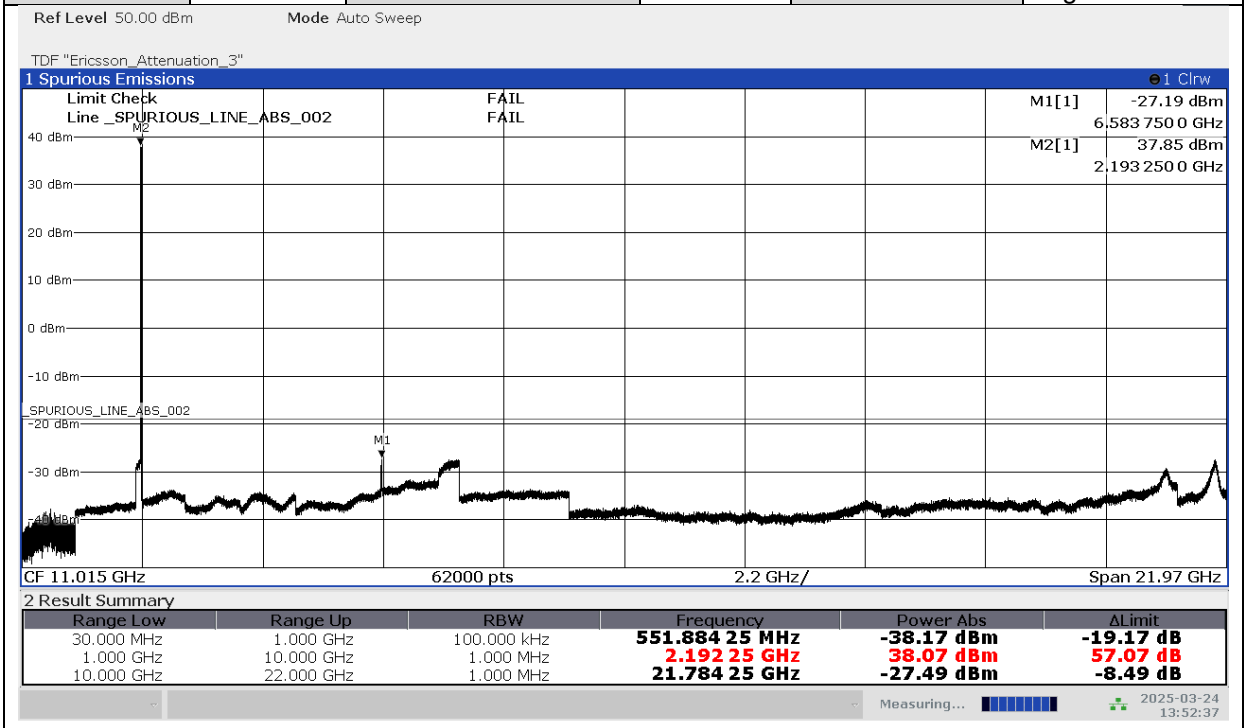
Configuration 4

RAT:	NR	Bandwidth:	10 MHz	Channel:	Low

Configuration 4

RAT:	NR	Bandwidth:	10 MHz	Channel:	Middle

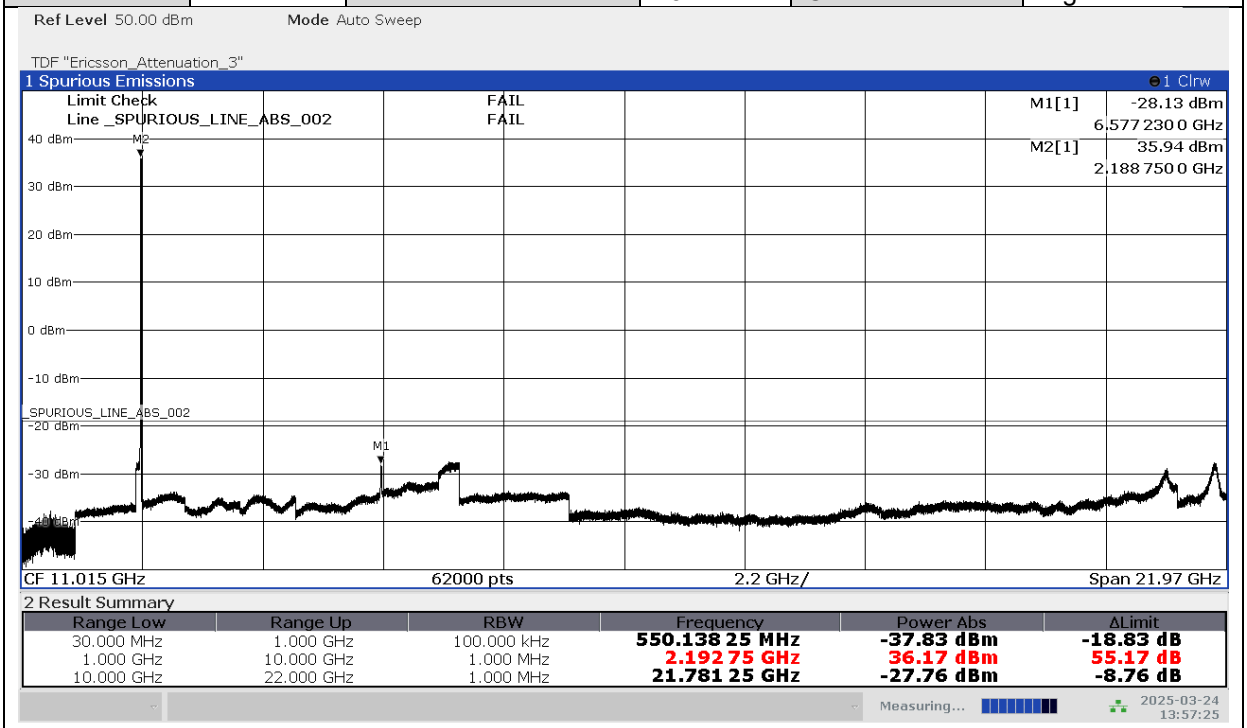
Configuration 4					
RAT:	NR	Bandwidth:	10 MHz	Channel:	High



Configuration 4					
RAT:	NR	Bandwidth:	15 MHz	Channel:	Low

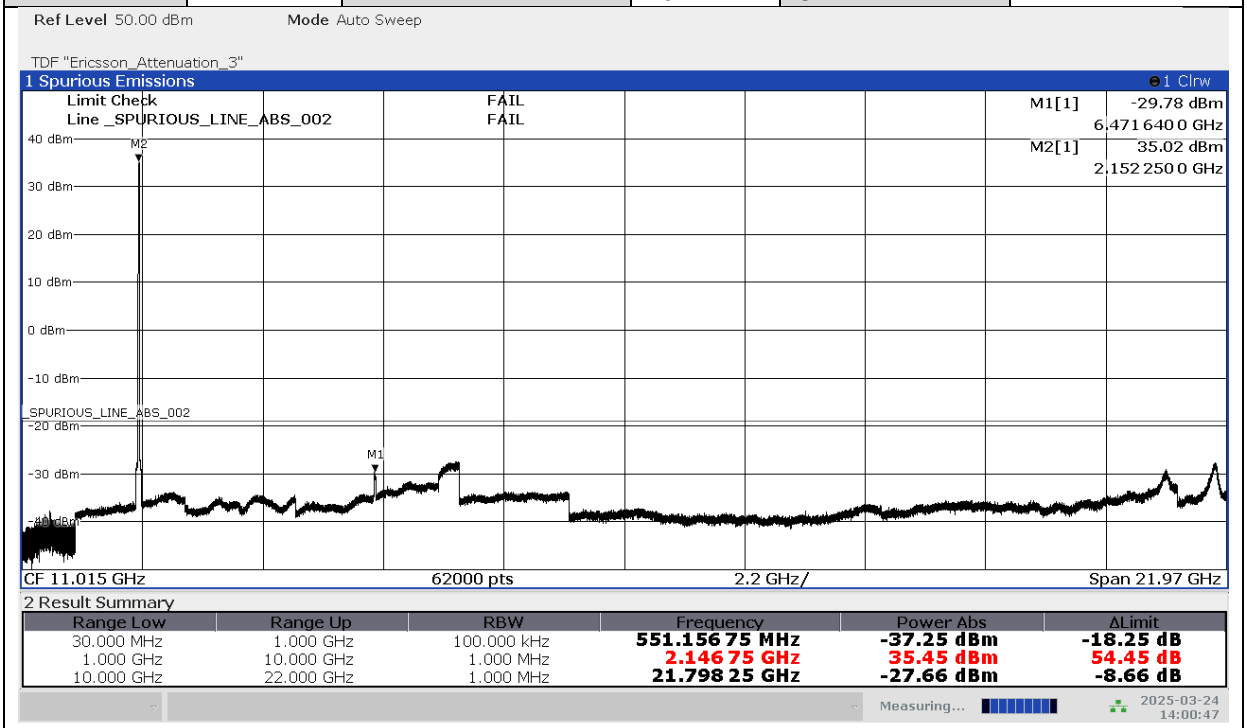
Configuration 4					
RAT:	NR	Bandwidth:	15 MHz	Channel:	Middle

Configuration 4					
RAT:	NR	Bandwidth:	15 MHz	Channel:	High

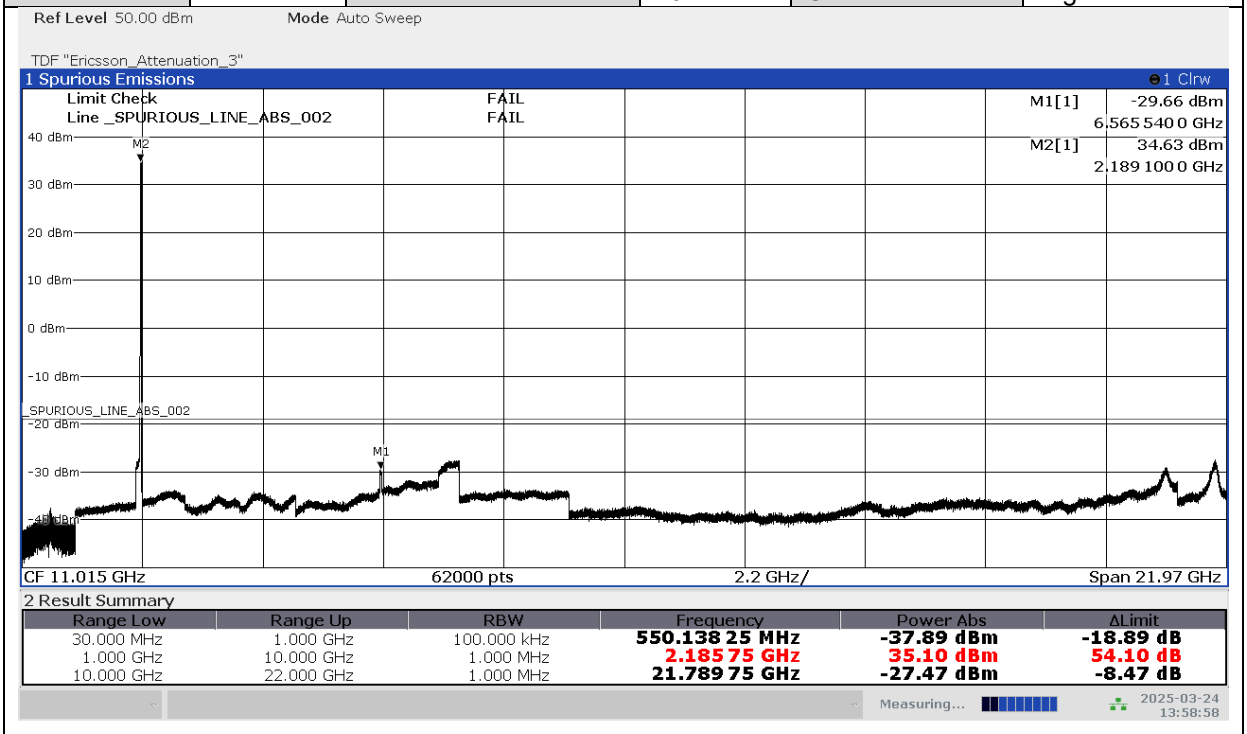


Configuration 4					
RAT:	NR	Bandwidth:	20 MHz	Channel:	Low

Configuration 4					
RAT:	NR	Bandwidth:	20 MHz	Channel:	Middle

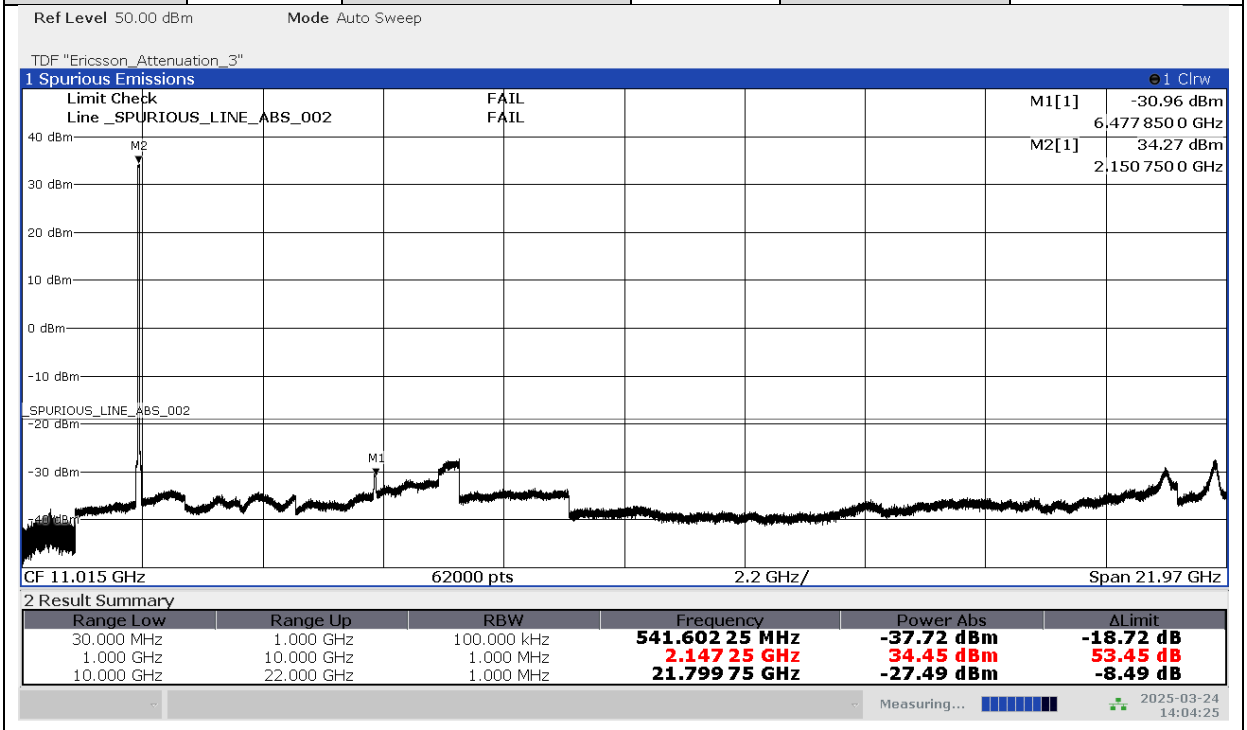


Configuration 4					
RAT:	NR	Bandwidth:	20 MHz	Channel:	High



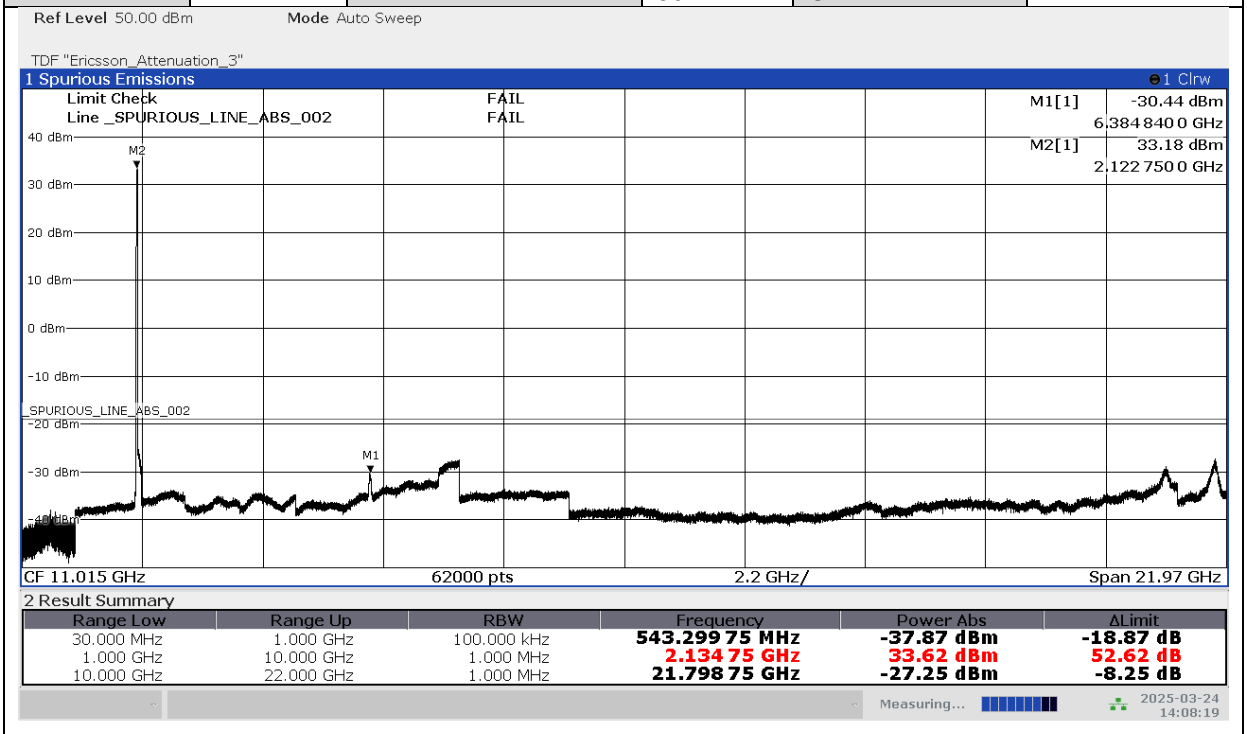
Configuration 4					
RAT:	NR	Bandwidth:	25 MHz	Channel:	Low

Configuration 4					
RAT:	NR	Bandwidth:	25 MHz	Channel:	Middle

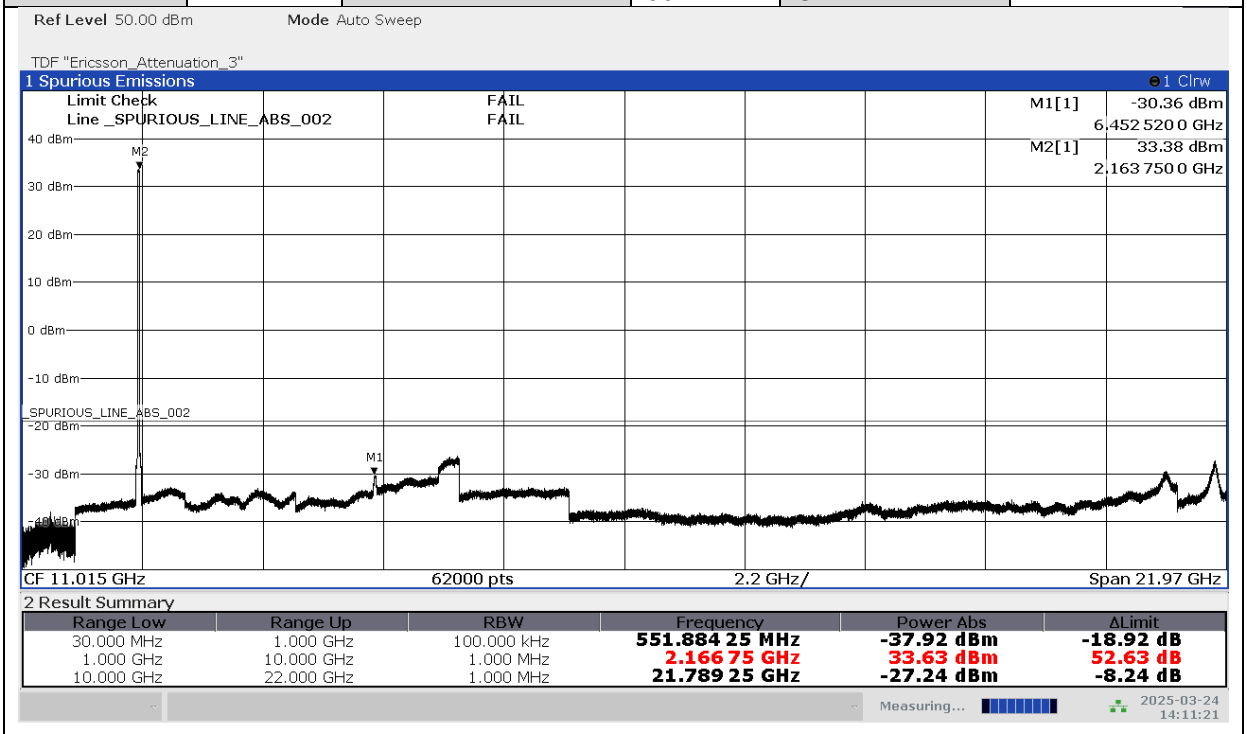


Configuration 4					
RAT:	NR	Bandwidth:	25 MHz	Channel:	High

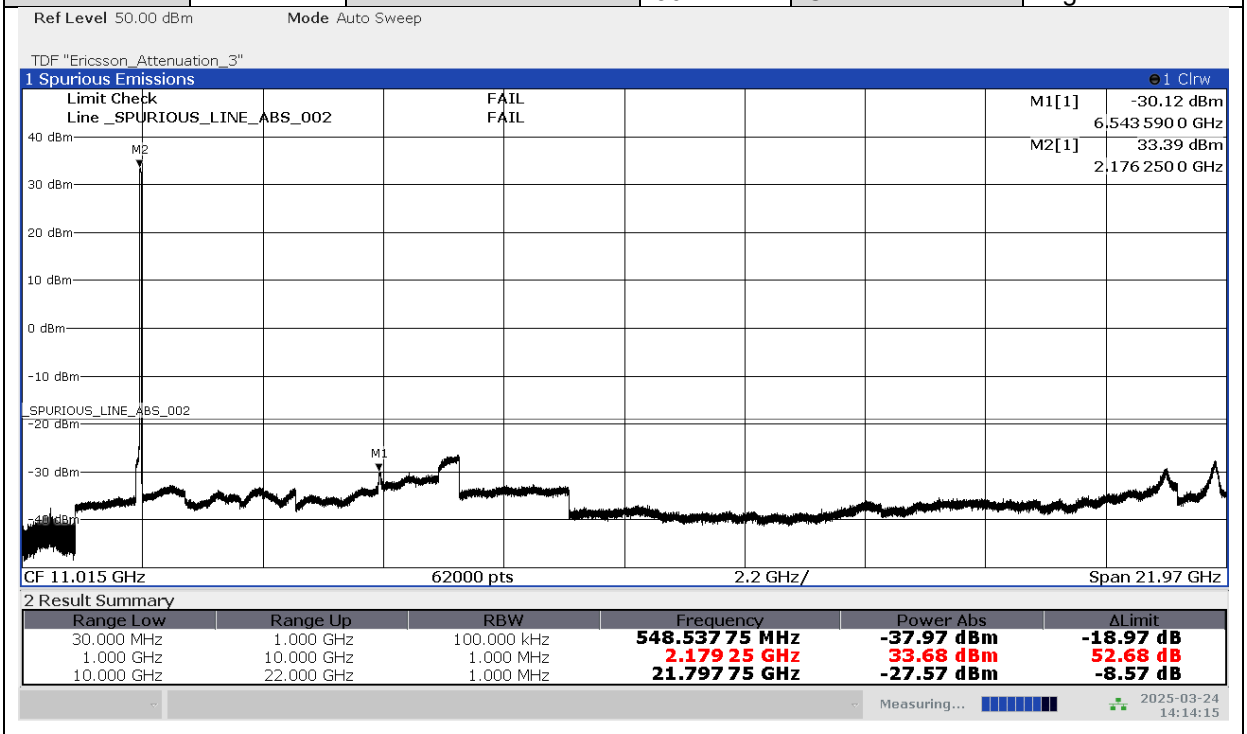
Configuration 4					
RAT:	NR	Bandwidth:	30 MHz	Channel:	Low



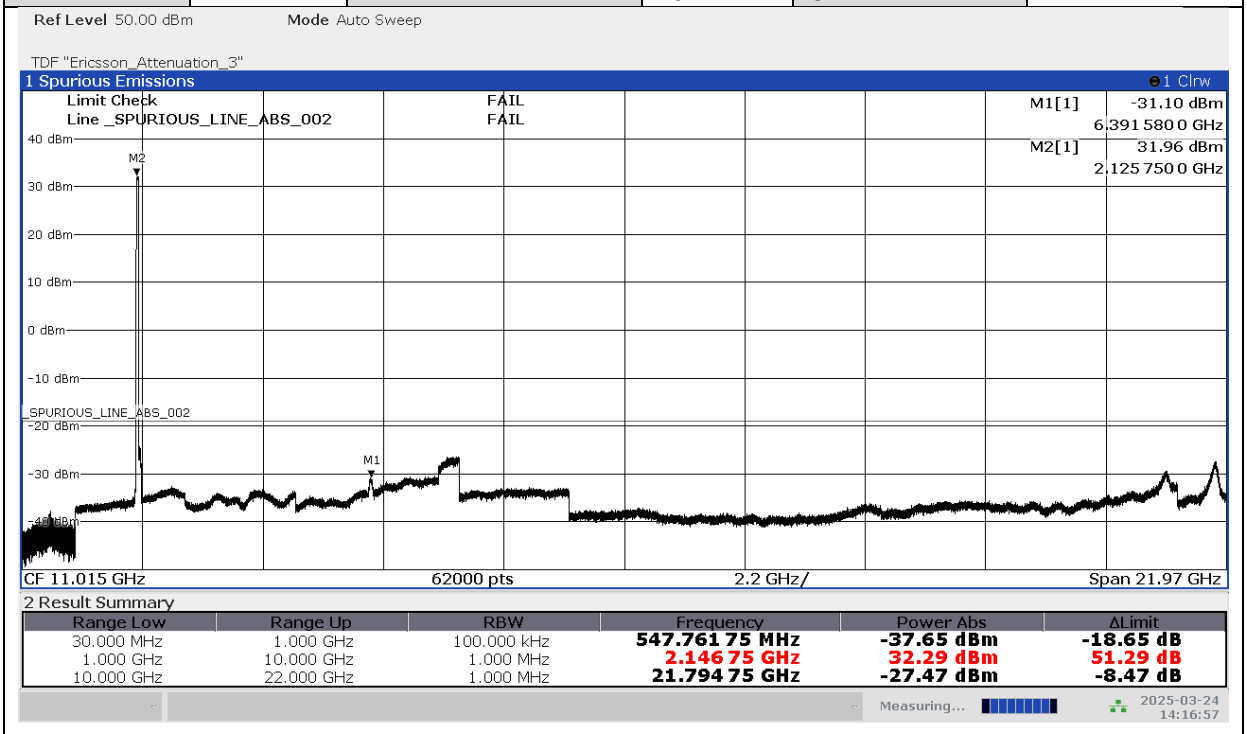
Configuration 4					
RAT:	NR	Bandwidth:	30 MHz	Channel:	Middle



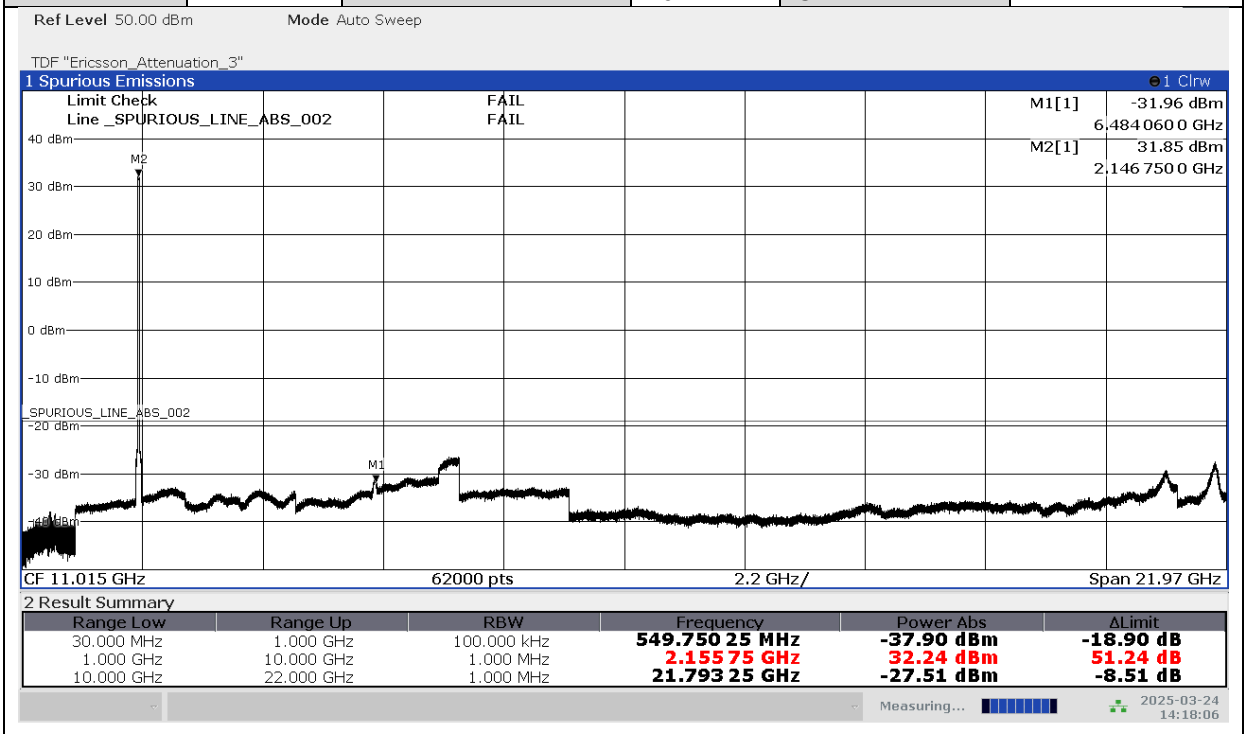
Configuration 4					
RAT:	NR	Bandwidth:	30 MHz	Channel:	High



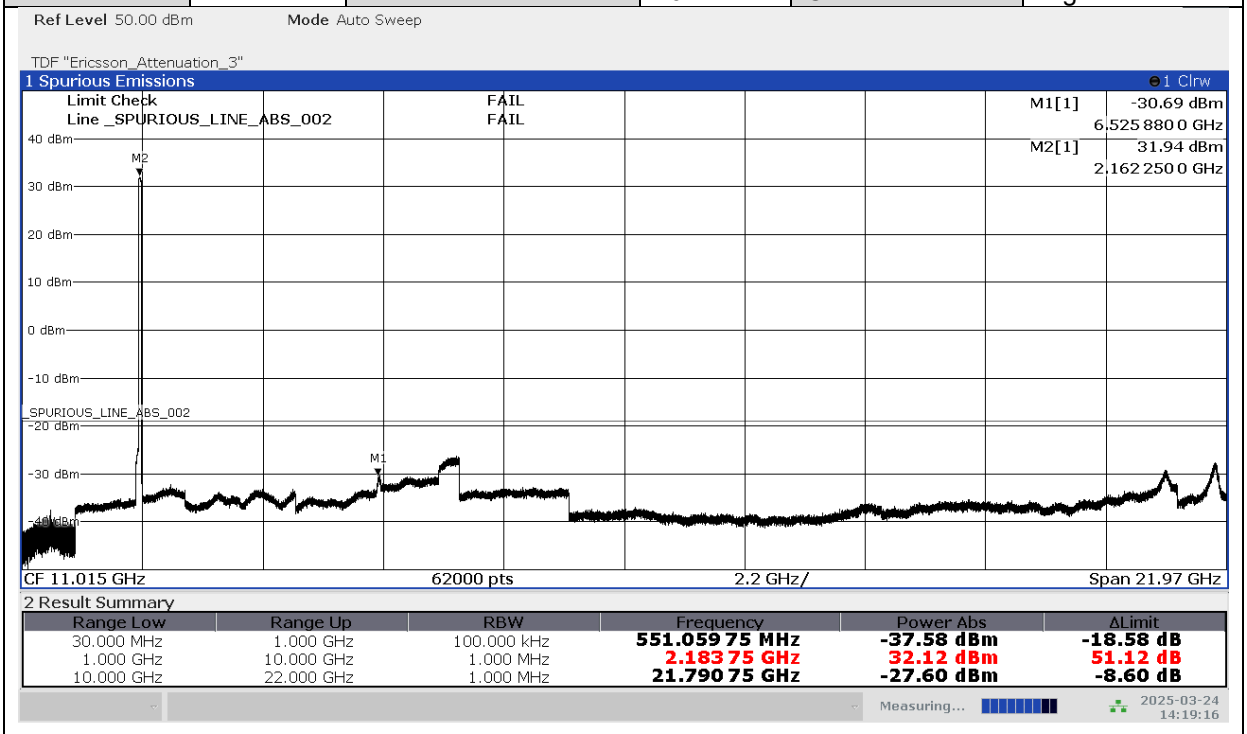
Configuration 4					
RAT:	NR	Bandwidth:	40 MHz	Channel:	Low



Configuration 4					
RAT:	NR	Bandwidth:	40 MHz	Channel:	Middle



Configuration 4					
RAT:	NR	Bandwidth:	40 MHz	Channel:	High



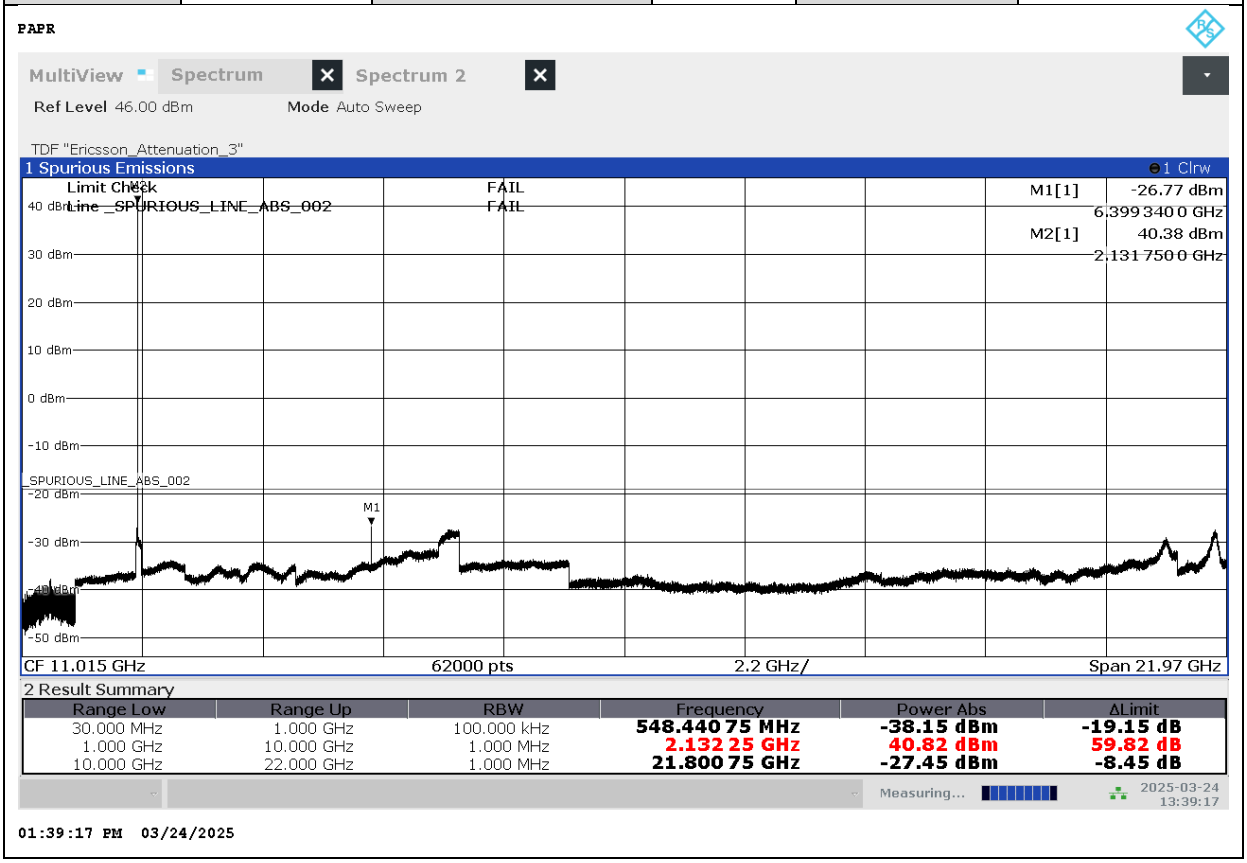
Configuration 6					
RAT:	WCDMA	Bandwidth:	4.2 MHz	Channel:	Low

Configuration 6					
RAT:	WCDMA	Bandwidth:	4.2 MHz	Channel:	Middle

Configuration 6					
RAT:	WCDMA	Bandwidth:	4.2 MHz	Channel:	High

Configuration 6					
RAT:	WCDMA	Bandwidth:	5 MHz	Channel:	Low

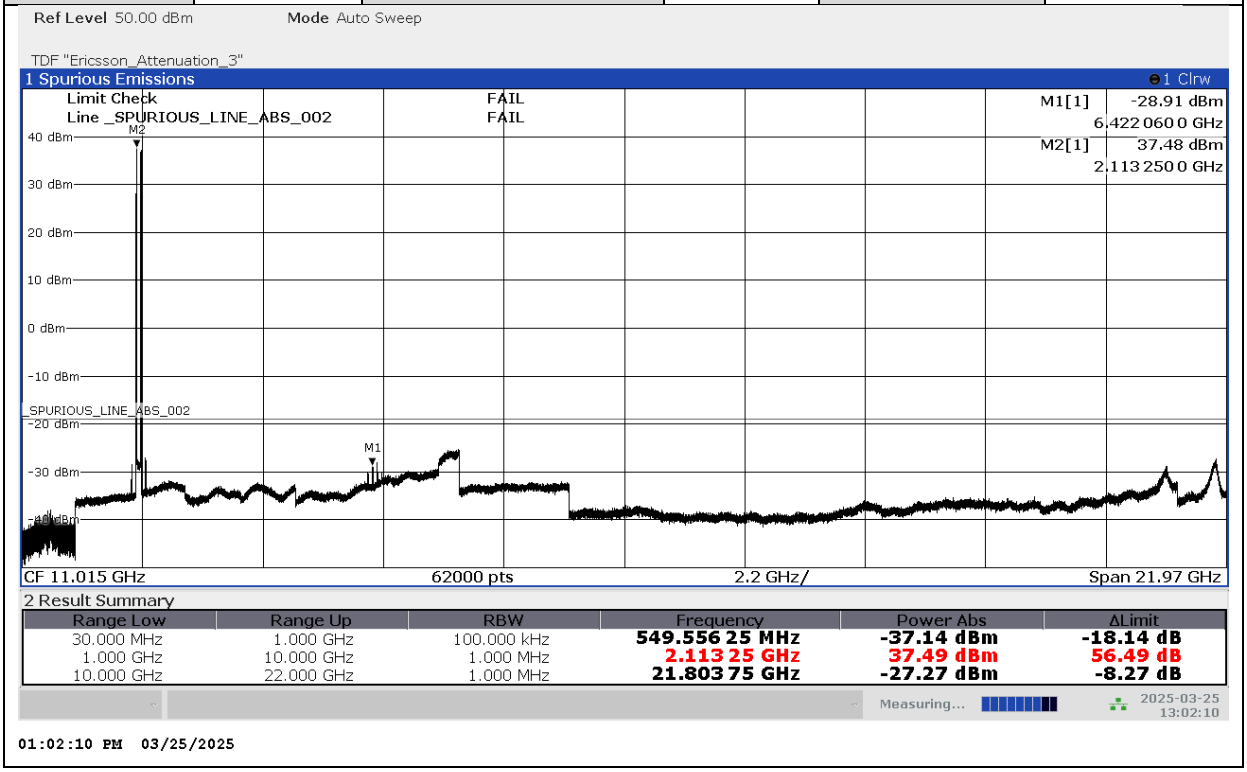
Configuration 6					
RAT:	WCDMA	Bandwidth:	5 MHz	Channel:	Middle



Configuration 6					
RAT:	WCDMA	Bandwidth:	5 MHz	Channel:	High

8.3.2 Multi carrier

Configuration 7					
RAT:	LTE	Bandwidth:	5 MHz	No. carriers	2



Configuration 7					
RAT:	LTE	Bandwidth:	10 MHz	No. carriers	2

Configuration 7					
RAT:	LTE	Bandwidth:	15 MHz	No. carriers	2

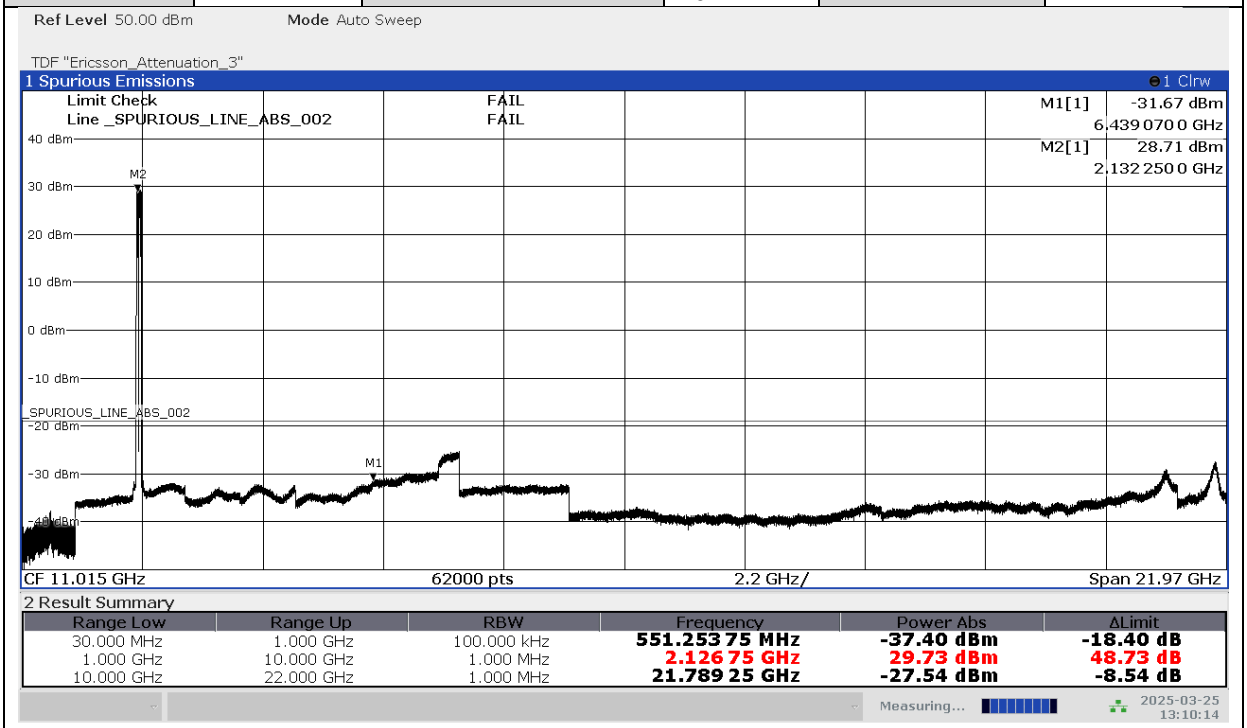
Configuration 7					
RAT:	LTE	Bandwidth:	20 MHz	No. carriers	2

Configuration 8					
RAT:	LTE	Bandwidth:	5 MHz	No. carriers	4

Configuration 8					
RAT:	LTE	Bandwidth:	10 MHz	No. carriers	4

Configuration 8					
RAT:	LTE	Bandwidth:	15 MHz	No. carriers	4

Configuration 8					
RAT:	LTE	Bandwidth:	20 MHz	No. carriers	4



Configuration 9					
RAT:	LTE	Bandwidth:	5 MHz	No. carriers	6

Configuration 9					
RAT:	LTE	Bandwidth:	10 MHz	No. carriers	6

Configuration 9					
RAT:	LTE	Bandwidth:	15 MHz	No. carriers	6

Configuration 16					
RAT:	NR	Bandwidth:	5 MHz	No. carriers	2

Configuration 16					
RAT:	NR	Bandwidth:	10 MHz	No. carriers	2

Configuration 16					
RAT:	NR	Bandwidth:	15 MHz	No. carriers	2

Configuration 16					
RAT:	NR	Bandwidth:	20 MHz	No. carriers	2

Configuration 16					
RAT:	NR	Bandwidth:	25 MHz	No. carriers	2

Configuration 16					
RAT:	NR	Bandwidth:	30 MHz	No. carriers	2

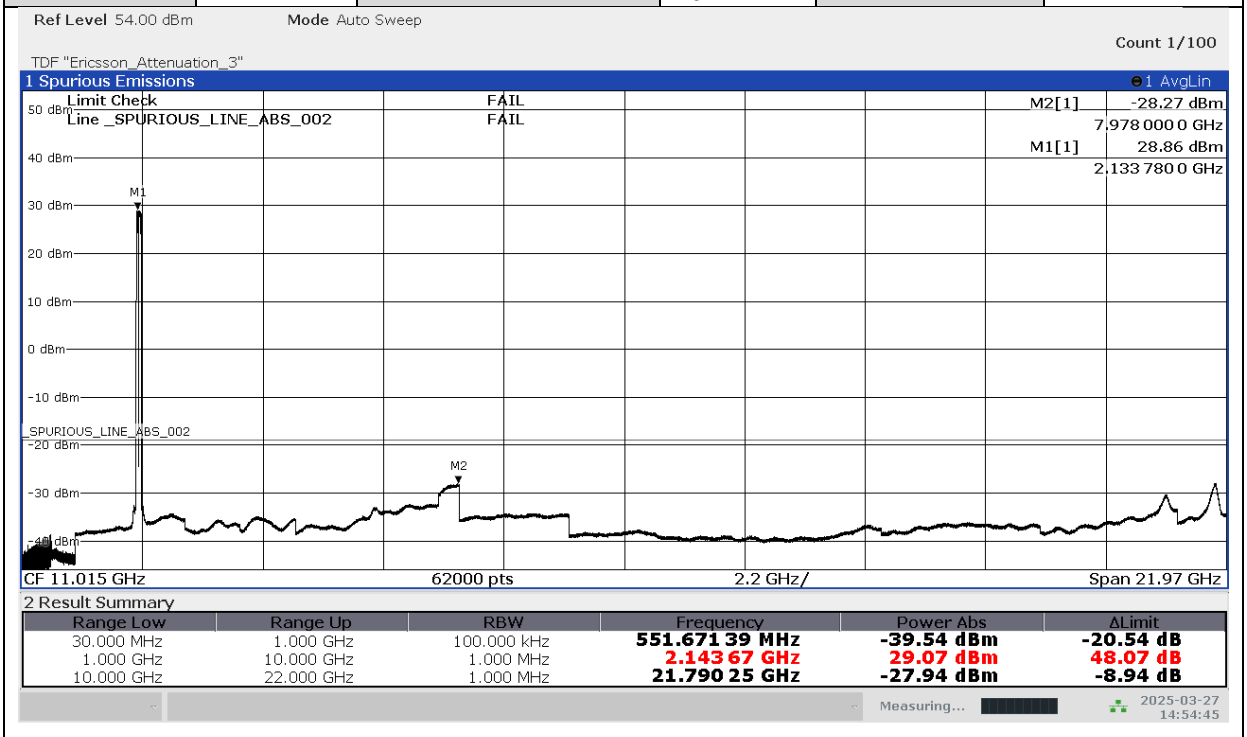
Configuration 16					
RAT:	NR	Bandwidth:	40 MHz	No. carriers	2

Configuration 17					
RAT:	NR	Bandwidth:	5 MHz	No. carriers	4

Configuration 17					
RAT:	NR	Bandwidth:	10 MHz	No. carriers	4

Configuration 17					
RAT:	NR	Bandwidth:	15 MHz	No. carriers	4

Configuration 17					
RAT:	NR	Bandwidth:	20 MHz	No. carriers	4



Configuration 18					
RAT:	NR	Bandwidth:	5 MHz	No. carriers	6

Configuration 18					
RAT:	NR	Bandwidth:	10 MHz	No. carriers	6

Configuration 18

RAT:	NR	Bandwidth:	15 MHz	No. carriers	6

Configuration 22

RAT:	WCDMA	Bandwidth:	4.2 MHz	No. carriers	2

Configuration 22

RAT:	WCDMA	Bandwidth:	5 MHz	No. carriers	2

Configuration 24

RAT:	WCDMA	Bandwidth:	4.2 MHz	No. carriers	4

Configuration 24

RAT:	WCDMA	Bandwidth:	5 MHz	No. carriers	4

Configuration 26

RAT:	WCDMA	Bandwidth:	4.2 MHz	No. carriers	6

Configuration 26					
RAT:	WCDMA	Bandwidth:	5 MHz	No. carriers	6

8.3.3 Multi RAT

Configuration 27

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2

Configuration 27

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	10 MHz	Bandwidth 2:	10 MHz	No. carriers:	2

Configuration 27

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	20 MHz	Bandwidth 2:	40 MHz	No. carriers:	2

09:19:16 AM 03/25/2025

Configuration 28

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4

09:05:32 AM 03/25/2025

Configuration 28

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	10 MHz	Bandwidth 2:	10 MHz	No. carriers:	4

09:13:49 AM 03/25/2025

Configuration 29

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	6 MHz	No. carriers:	6

09:08:12 AM 03/25/2025

Configuration 29

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	10 MHz	Bandwidth 2:	10 MHz	No. carriers:	6

09:11:20 AM 03/25/2025

Configuration 29

RAT 1:	LTE	RAT 2:	NR	Bandwidth 1:	15 MHz	Bandwidth 2:	15 MHz	No. carriers:	6

09:17:05 AM 03/25/2025

Configuration 30

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	100.000 kHz	**548.925 75 MHz**	**-37.85 dBm**	**-18.85 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.112 25 GHz**	**38.35 dBm**	**57.35 dB**
10.000 GHz	22.000 GHz	1.000 MHz	**21.780 75 GHz**	**-27.56 dBm**	**-8.56 dB**

Measuring... 2025-03-25 09:27:01

09:27:01 AM 03/25/2025

Configuration 30

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	100.000 kHz	**539.274 25 MHz**	**-37.98 dBm**	**-18.98 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.112 75 GHz**	**38.31 dBm**	**57.31 dB**
10.000 GHz	22.000 GHz	1.000 MHz	**21.788 75 GHz**	**-27.52 dBm**	**-8.52 dB**

Measuring... 2025-03-25 09:28:27

09:28:27 AM 03/25/2025

Configuration 31

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4

Configuration 31

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4

Configuration 32

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6

09:22:37 AM 03/25/2025

Configuration 32

RAT 1:	WCDMA	RAT 2:	LTE	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6

09:32:04 AM 03/25/2025

Configuration 33

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	2

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Configuration 33

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	2

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Configuration 34

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	4

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	100.000 kHz	**535.976 25 MHz**	**-38.07 dBm**	**-19.07 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.117 75 GHz**	**35.57 dBm**	**54.57 dB**
10.000 GHz	22.000 GHz	1.000 MHz	**21.790 75 GHz**	**-27.56 dBm**	**-8.56 dB**

Measuring... 2025-03-24 15:50:10

03:50:11 PM 03/24/2025

Configuration 34

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	4

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	100.000 kHz	**550.380 75 MHz**	**-37.36 dBm**	**-18.36 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.117 75 GHz**	**35.61 dBm**	**54.61 dB**
10.000 GHz	22.000 GHz	1.000 MHz	**21.767 75 GHz**	**-27.63 dBm**	**-8.63 dB**

Measuring... 2025-03-24 15:47:47

03:47:47 PM 03/24/2025

Configuration 35

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	5 MHz	No. carriers:	6

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	100.000 kHz	**552.029 75 MHz**	**-37.83 dBm**	**-18.83 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.112 25 GHz**	**34.24 dBm**	**53.24 dB**
10.000 GHz	22.000 GHz	1.000 MHz	**21.786 75 GHz**	**-27.56 dBm**	**-8.56 dB**

Measuring... 2025-03-24 15:53:20

03:53:20 PM 03/24/2025

Configuration 35

RAT 1:	WCDMA	RAT 2:	NR	Bandwidth 1:	5 MHz	Bandwidth 2:	10 MHz	No. carriers:	6

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	100.000 kHz	**547.325 25 MHz**	**-37.31 dBm**	**-18.31 dB**
1.000 GHz	10.000 GHz	1.000 MHz	**2.117 75 GHz**	**34.39 dBm**	**53.39 dB**
10.000 GHz	22.000 GHz	1.000 MHz	**21.783 75 GHz**	**-27.43 dBm**	**-8.43 dB**

Measuring... 2025-03-24 15:56:18

03:56:19 PM 03/24/2025

9 FREQUENCY STABILITY

Date of test:	14,17,18 March 2025	**Test location:**	Temperature chamber
EUT number:	E23G305405	**Ambient temp:**	23.8°C, 22.4°C, 20°C
Tested by:	Algot Rickman Nahome Michael Sandipan Basu	**Relative humidity:**	~15.5%
Test result:	Pass	**Margin:**	> 39 Hz

9.1 Test set-up and test procedure.

The test method is in accordance with ANSI C63.26-2015 section 5.6.

The EUT was connected to spectrum analyser via rf-cable and a 40 dB attenuator.

The test was performed in a climate-controlled room.

9.2 Requirements

CFR 47§27.54:

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

RSS-139, Section 5.4:

The frequency stability shall be sufficient to ensure that the occupied bandwidth stays within the operating frequency block or frequency block group when tested to the temperature and supply voltage variations specified in RSS-Gen.

9.3 Test results

Configuration 1					
RAT:	LTE	Bandwidth:	10	Channel:	Mid
Test no.	Temperature (°C)	Voltage (Volt)		Frequency error (Hz)	
1	+50	48.0		7.07	
2	+40	48.0		4.18	
3	+30	48.0		1.28	
4	+20	40.8		1.95	
5	+20	48.0		3.19	
6	+20	55.2		2.53	
7	+10	48.0		7.99	
8	0	48.0		4.83	
9	-10	48.0		7.13	
10	-20	48.0		2.27	
11	-30	48.0		4.48	

Configuration 4					
RAT:	NR	Bandwidth:	10	Channel:	Mid
Test no.	Temperature (°C)	Voltage (Volt)		Frequency error (Hz)	
12	+50	48.0		2.75	
13	+40	48.0		2.36	
14	+30	48.0		1.21	
15	+20	40.8		3.06	
16	+20	48.0		3.18	
17	+20	55.2		3.25	
18	+10	48.0		10.36	
19	0	48.0		3.81	
20	-10	48.0		5.36	
21	-20	48.0		1.35	
22	-30	48.0		4.39	

Configuration 6					
RAT:	WCDMA	Bandwidth:	5	Channel:	Mid
Test no.	Temperature (°C)	Voltage (Volt)		Frequency error (Hz)	
23	+50	48.0		4.80	
24	+40	48.0		2.58	
25	+30	48.0		0.28	
26	+20	40.8		0.35	
27	+20	48.0		0.66	
28	+20	55.2		2.24	
29	+10	48.0		6.58	
30	0	48.0		2.23	
31	-10	48.0		8.44	
32	-20	48.0		0.64	
33	-30	48.0		1.61	

10 TEST EQUIPMENT

Wireless Center

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Maximum carrier conducted output power, power spectral density and peak to average ratio					
Signal analyser	Rohde & Schwarz	FSW43	34390	July 2024	1 year
Measurement cable	Rosenberger	LU7-S083-3000	39182	March 2025	-
Measurement cable	Qualwave	QA800-18-NN-1.5	39318	March 2025	-
40 dB attenuator*	Weinschel	49-40-33		March 2025	-
40 dB Attenuator	Weinschel	WA92-40-0301	36386	March 2025	-
Power supply**	Delta Elektronika	SM 60-100	-	-	-
Multimeter	Fluke	287	33454	June 2024	1 year
Vector Network Analyser	Rhode & Schwarz	ZNB 100kHz-43.5 GHz	35155	September 2024	1 year
Occupied bandwidth and Emission bandwidth					
Signal analyser	Rohde & Schwarz	FSW43	34390	July 2024	1 year
Measurement cable	Rosenberger	LU7-S083-3000	39182	March 2025	-
Measurement cable	Qualwave	QA800-18-NN-1.5	39318	March 2025	-
40 dB attenuator*	Weinschel	49-40-33		March 2025	-
40 dB Attenuator	Weinschel	WA92-40-0301	36386	March 2025	-
Power supply**	Delta Elektronika	SM 60-100	-	-	-
Multimeter	Fluke	287	33454	June 2024	1 year
Vector Network Analyser	Rhode & Schwarz	ZNB 100kHz-43.5 GHz	35155	September 2024	1 year
Conducted band edge measurement					
Signal analyser	Rohde & Schwarz	FSW43	34390	July 2024	1 year
Measurement cable	Rosenberger	LU7-S083-3000	39182	March 2025	-
Measurement cable	Qualwave	QA800-18-NN-1.5	39318	March 2025	-
40 dB attenuator*	Weinschel	49-40-33		March 2025	-
40 dB Attenuator	Weinschel	WA92-40-0301	36386	March 2025	-
Power supply**	Delta Elektronika	SM 60-100	-	-	-
Multimeter	Fluke	287	33454	June 2024	1 year
Vector Network Analyser	Rhode & Schwarz	ZNB 100kHz-43.5 GHz	35155	September 2024	1 year
Transmitter spurious emissions					
Signal analyser	Rohde & Schwarz	FSW43	34390	July 2024	1 year
Measurement cable	Rosenberger	LU7-S083-3000	39182	March 2025	-
Measurement cable	Qualwave	QA800-18-NN-1.5	39318	March 2025	-
40 dB attenuator*	Weinschel	49-40-33		March 2025	-
40 dB Attenuator	Weinschel	WA92-40-0301	36386	March 2025	-
Power supply**	Delta Elektronika	SM 60-100	-	-	-

Multimeter	Fluke	287	33454	June 2024	1 year
Vector Network Analyser	Rhode & Schwarz	ZNB 100kHz-43.5 GHz	35155	September 2024	1 year
Frequency stability					
Signal analyser	Rohde & Schwarz	FSW43	34390	July 2024	1 year
Measurement cable	Rosenberger	LU7-S083-3000	39182	March 2025	-
Measurement cable	Qualwave	QA800-18-NN-2.5	39312	March 2025	-
Temperature chamber:	ACS	UC25-4585	32667	September 2024	1 year
40 dB attenuator*	Weinschel	49-40-33		March 2025	-
40 dB Attenuator	Weinschel	WA92-40-0301	36386	March 2025	-
Power supply**	Delta Elektronika	SM 60-100	-	-	-
Multimeter	Fluke	287	33454	June 2024	1 year
Rubidium Reference	Datum/Symmetricom	8040 Clas 1	40032	January 2025	1 year
Vector Network Analyser	Rhode & Schwarz	ZNB 100kHz-43.5 GHz	35155	September 2024	1 year

* Ericsson attenuator-calibrated before use
** Calibrated using multimeter before measurement

A network analyzer was used to calibrate the cables, filters and attenuators together in one RF chain.

11 MEASUREMENT UNCERTAINTY

Measurement uncertainty for conducted in-band measurements ± 0.48 dB
Measurement uncertainty for conducted spurious emissions ± 1.14 dB

The measurement uncertainty is given with a confidence of 95 %.

End of Report