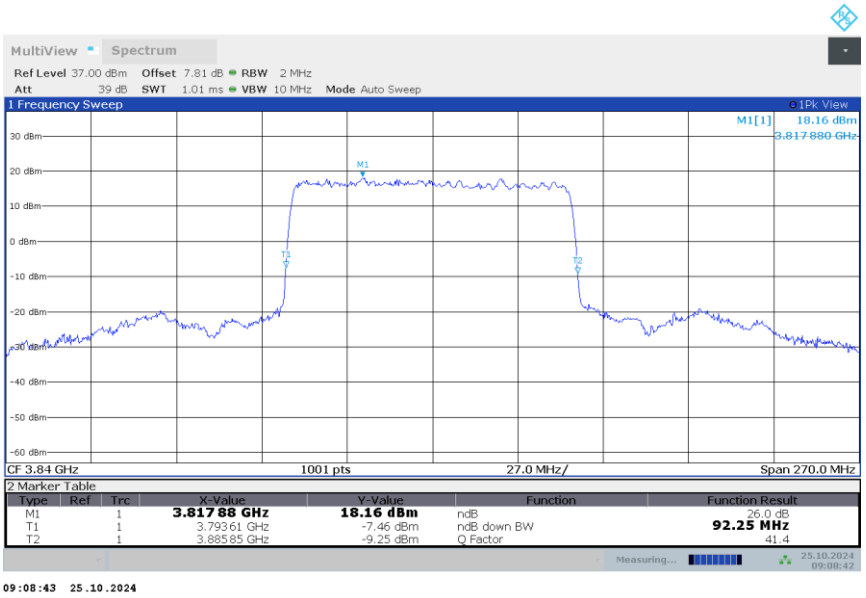
n77H

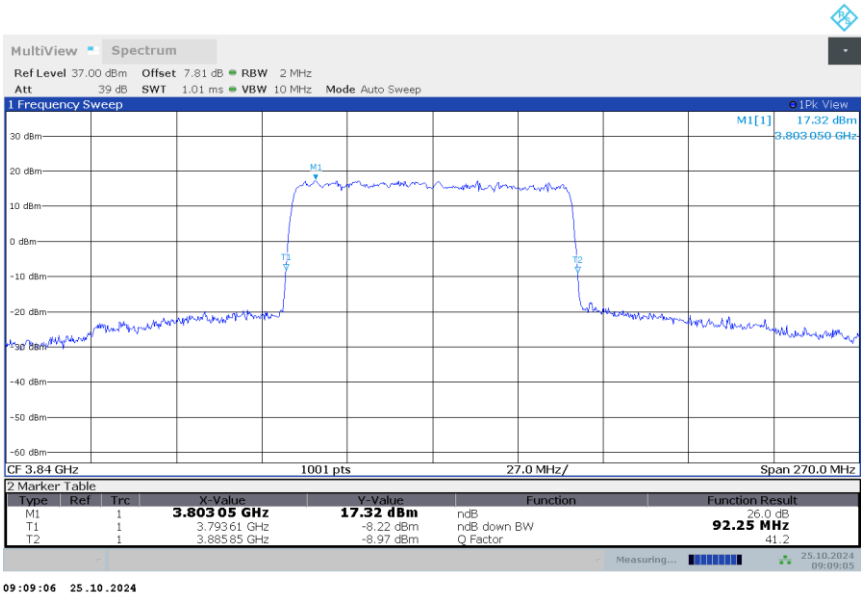
n77H,90MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	92.250	92.250

n77H,90MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,90MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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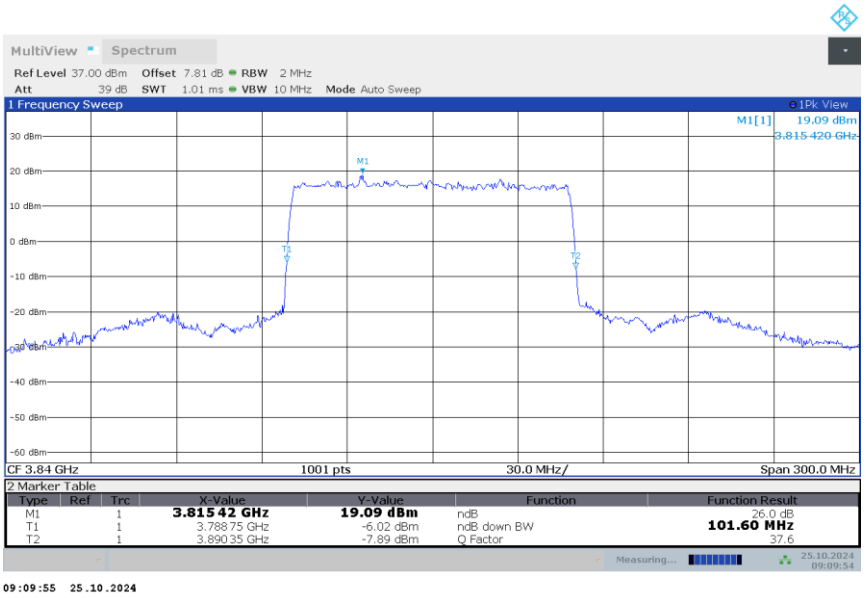
n77H

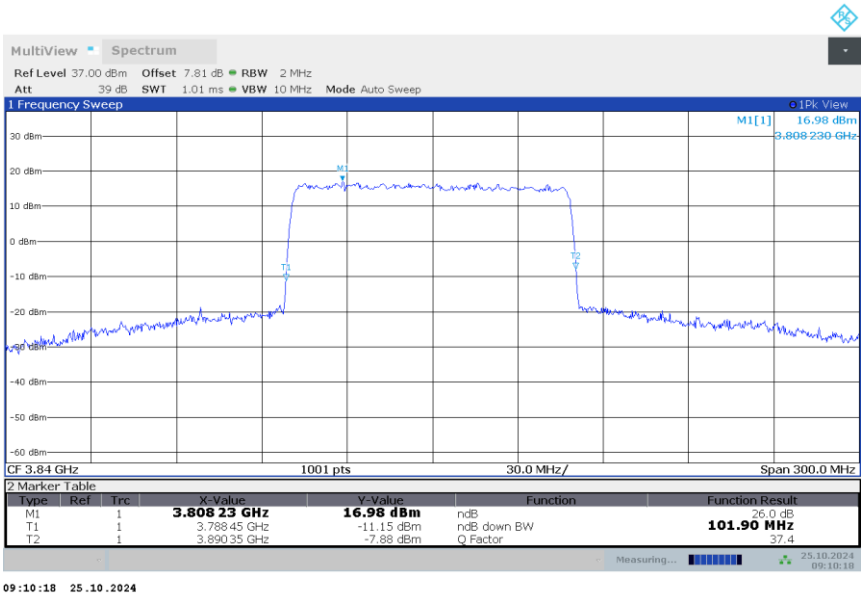
n77H,100MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	101.600	101.900

n77H,100MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,100MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



Note: The maximum value of expanded measurement uncertainty for this test item is U = 0.626 kHz, k = 2.

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A.6 Band Edge Compliance

A.6.1 Measurement limit

Part 22.917, Part 24.238 and Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

Part 27.53(m) specifies for mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 27.53(a) states for mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands: By a factor of not less than: 43 +10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

Part 96.41(e) states for channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed −13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater

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than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed −25 dBm/MHz. Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

Part 90.543 states that for operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations. (2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations. (3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB. (4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment. (5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

Part 90.691 states that out-of-band emission requirement shall apply only to the ‘‘outer’’ channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116\text{Log}_{10}(f/6.1)$ decibels or 50 + 10 $\text{Log}_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + $10\text{Log}_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

Part 27.53(n) states for mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Part 27.53(l) states for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation

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employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.
The spectrum analyzer readings are corrected by [10 log (1/duty cycle)] for the non-continuous transmitting scenario.

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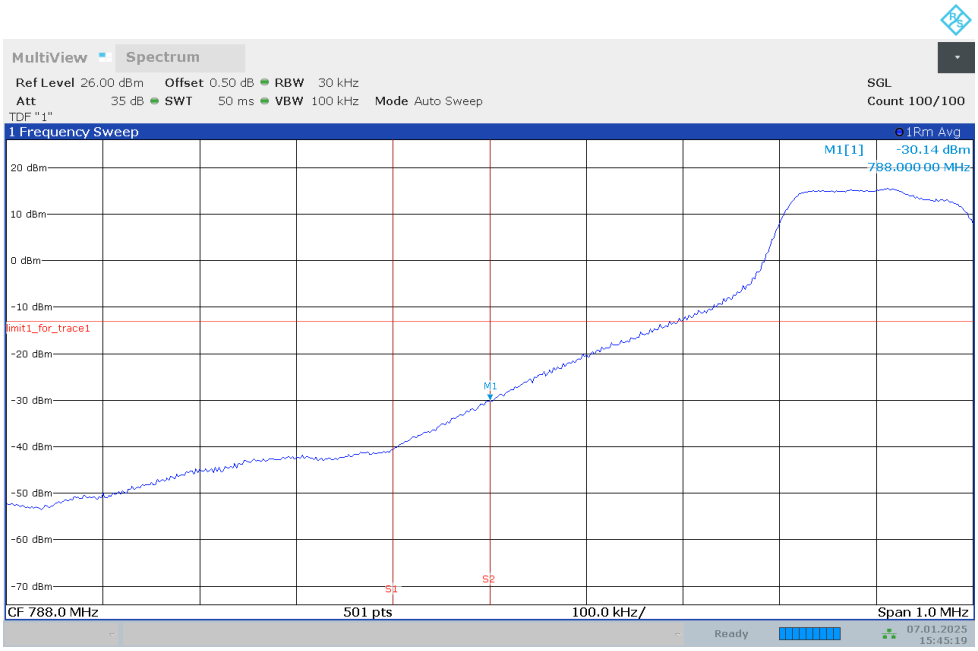
A.6.2 Measurement result

Measurement Results from UT14a:

NR n14

LOW BAND EDGE BLOCK-10MHz-1RB-LOW_offset



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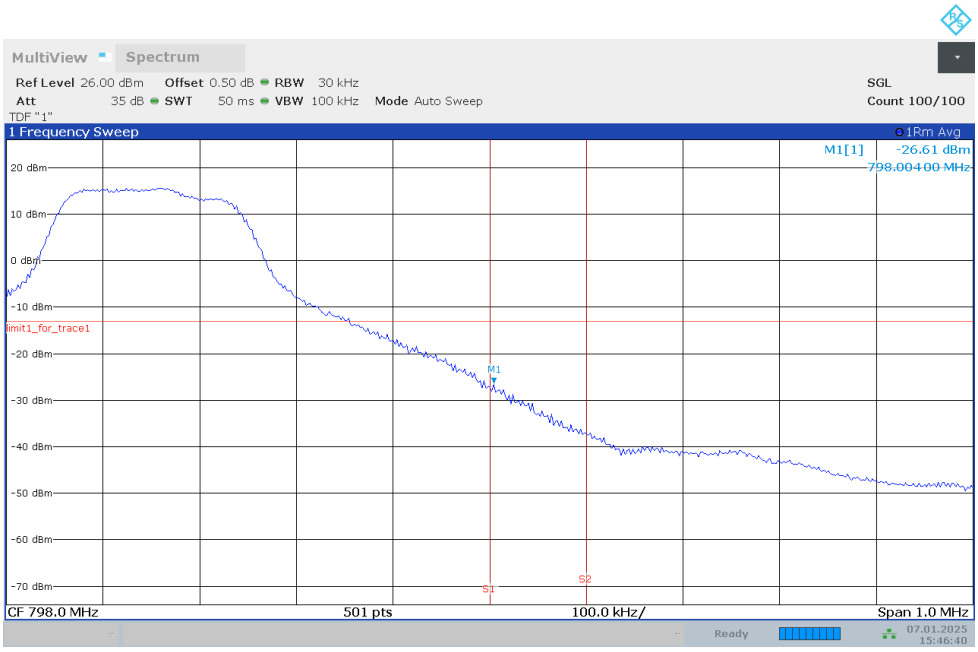
HIGH BAND EDGE BLOCK-5MHz-1RB-HIGH_offset



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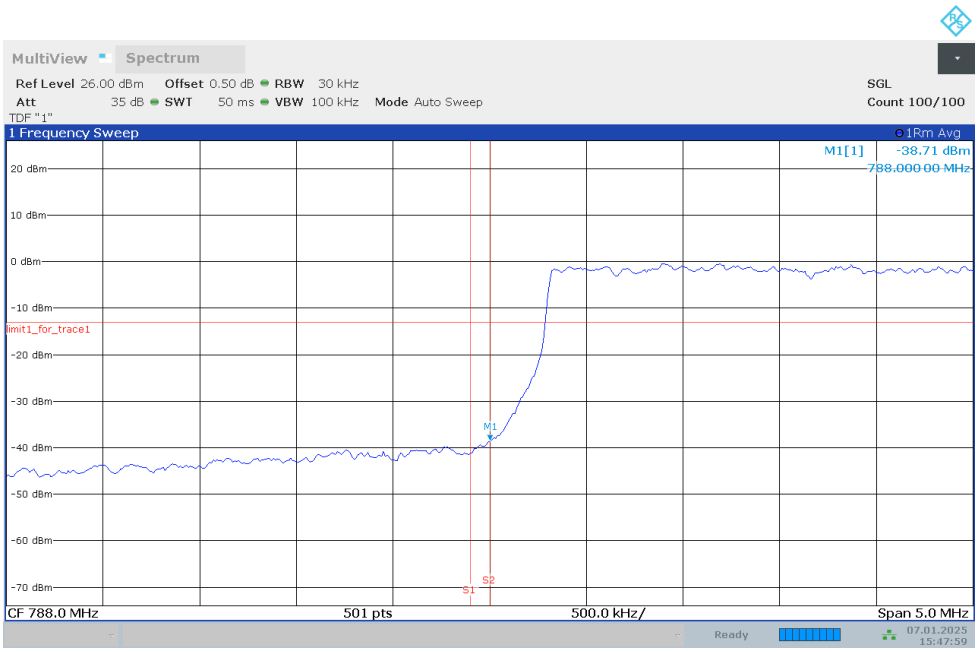
LOW BAND EDGE BLOCK-10MHz-100%RB



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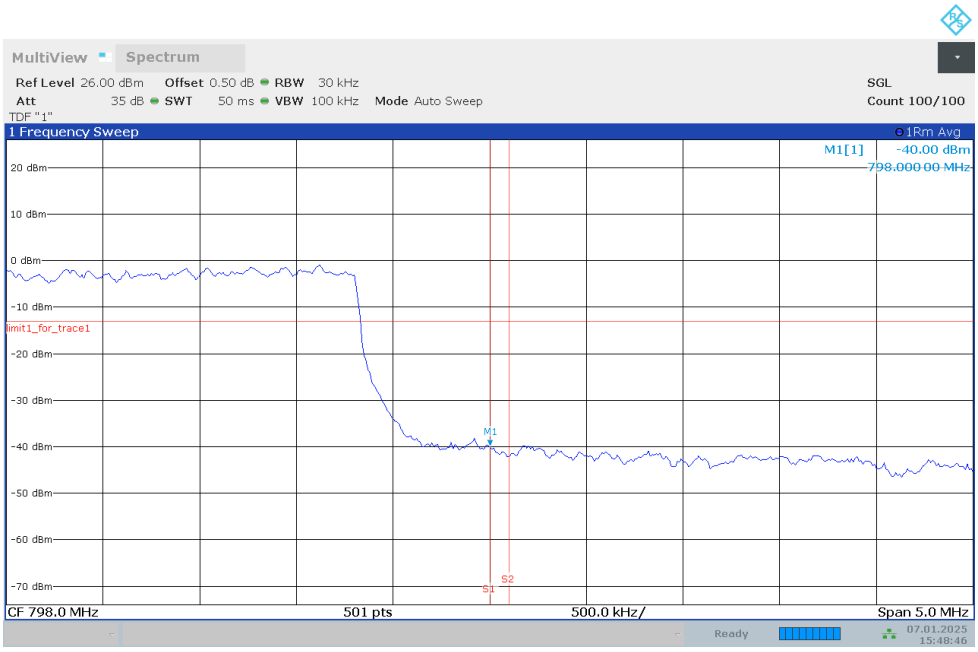

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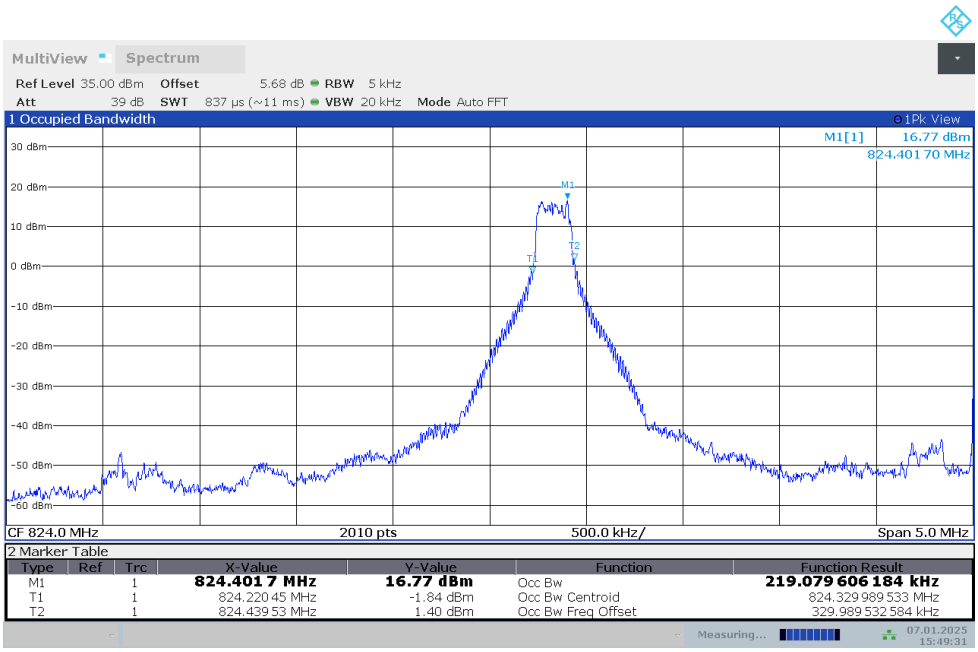
NR n26_Part22

OBW: 1RB-LOW_offset_5MHz



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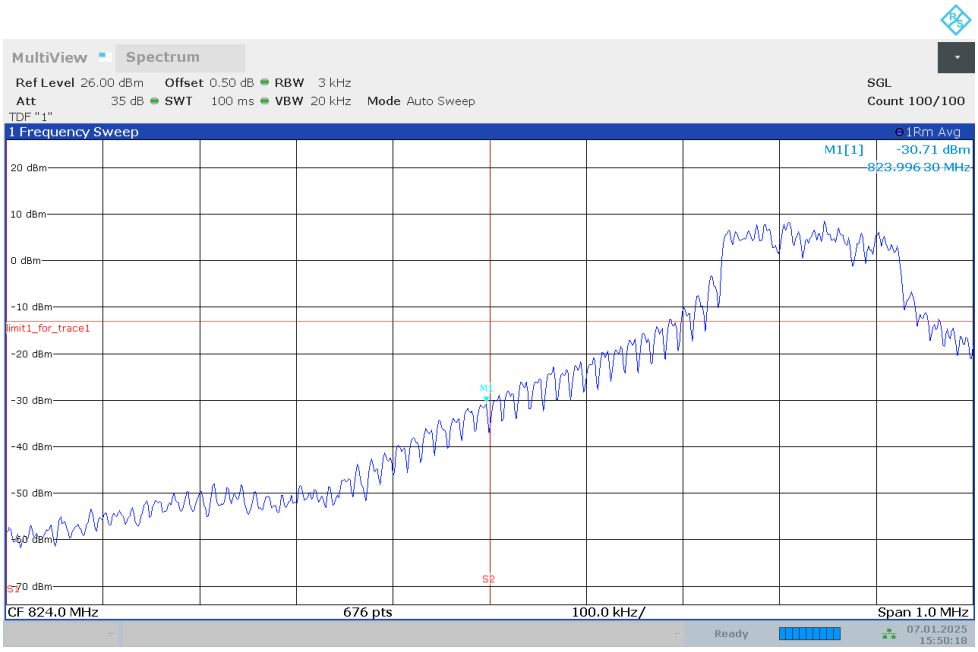

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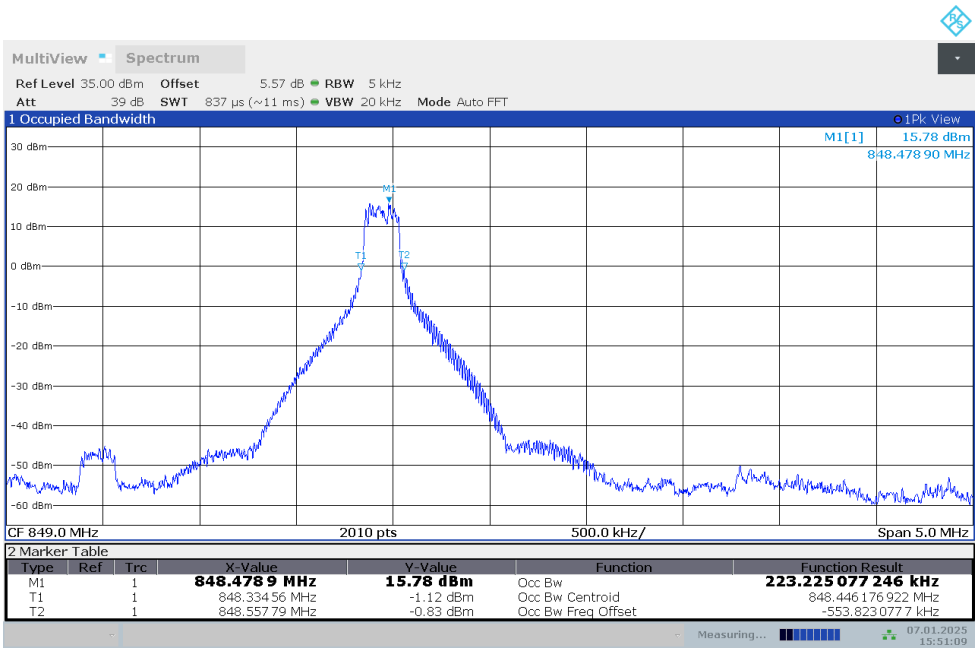
OBW: 1RB-HIGH_offset_20MHz



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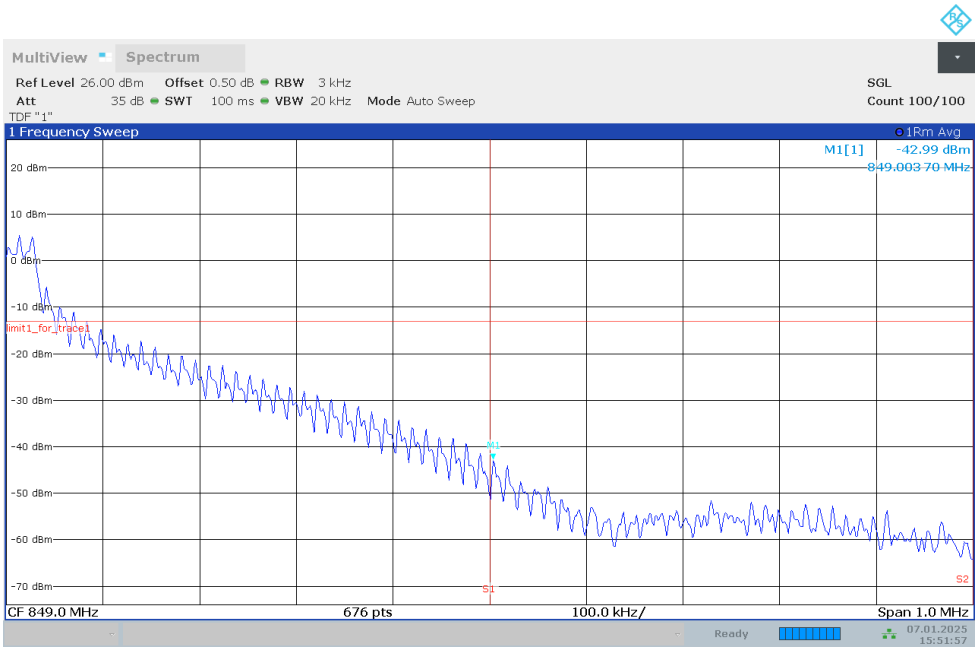

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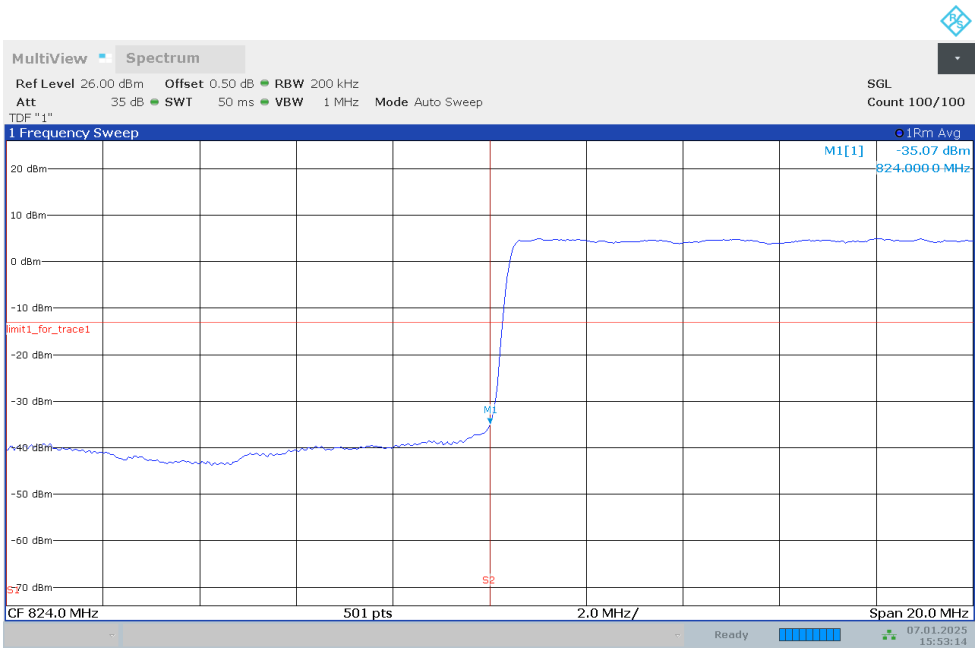
LOW BAND EDGE BLOCK-20MHz-100%RB



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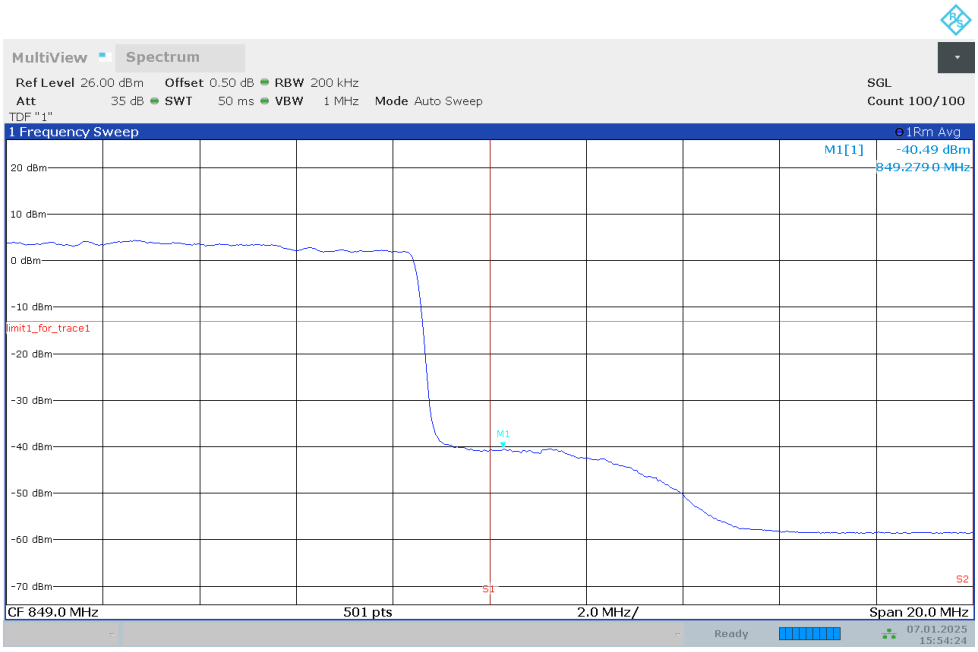

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NR n26_Part90

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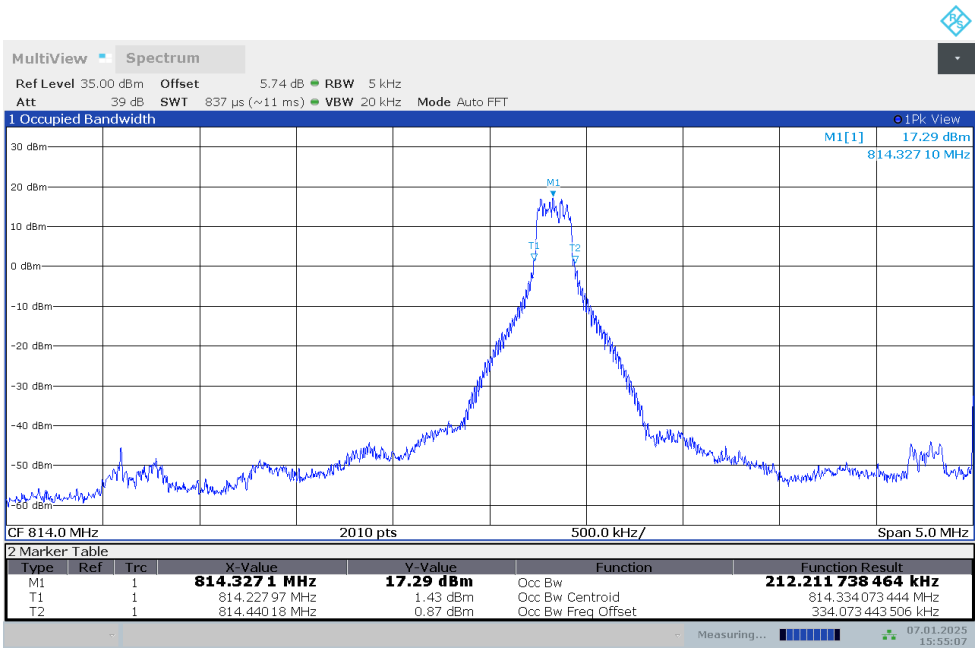

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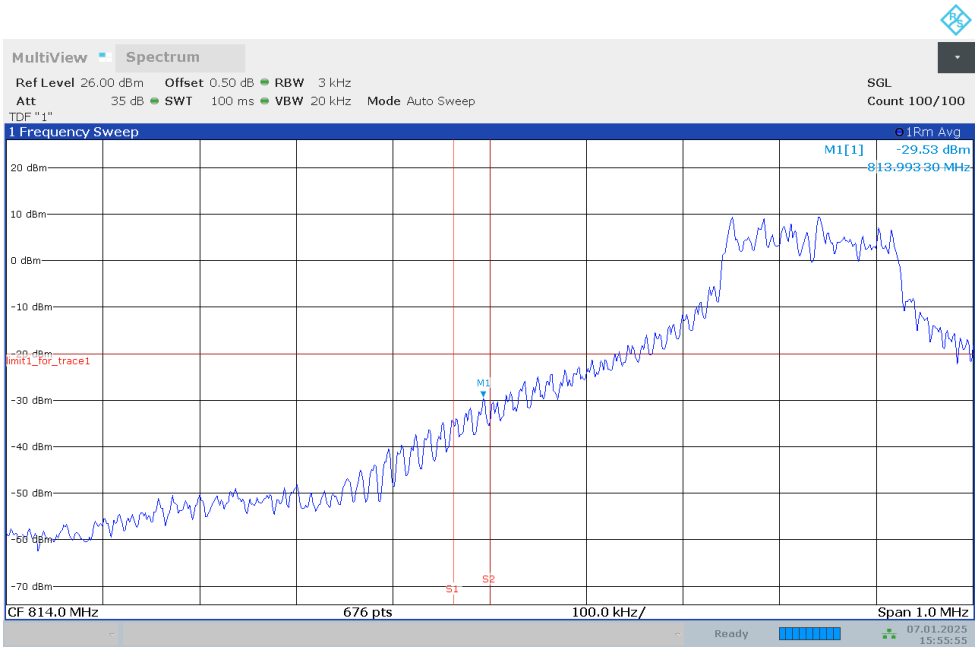

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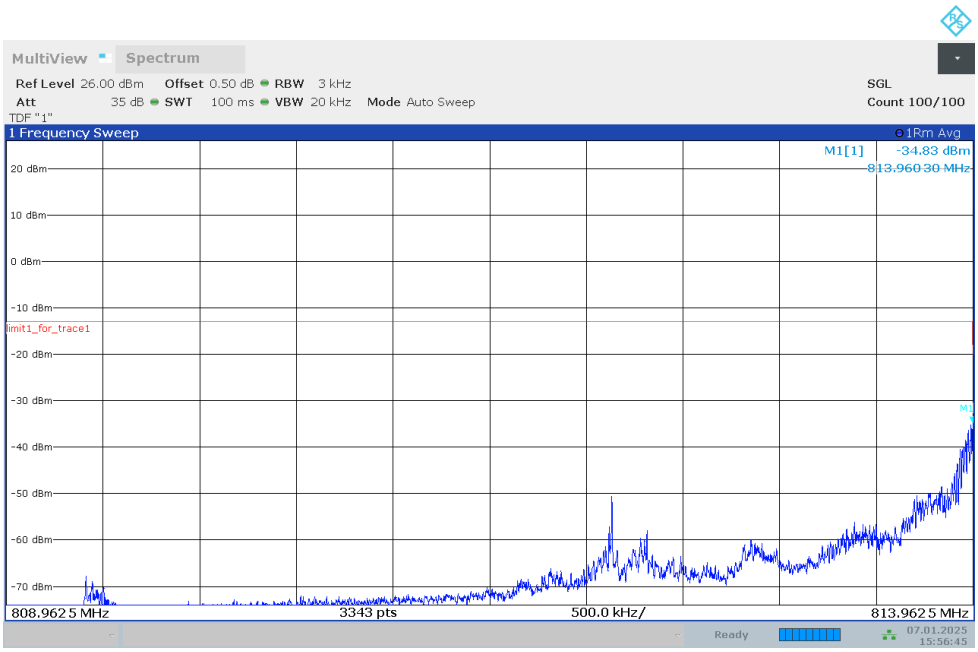

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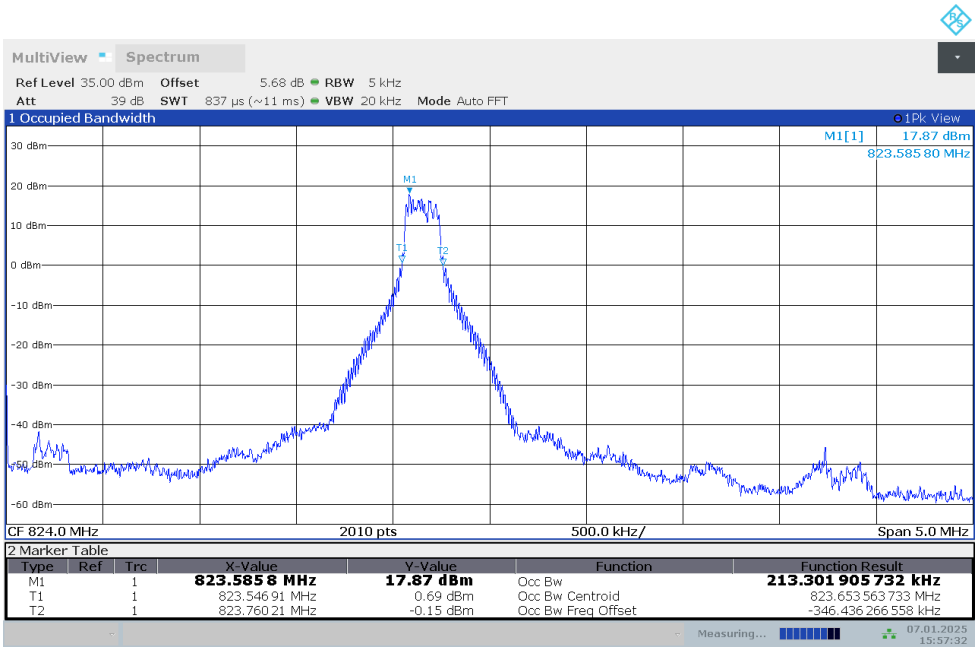

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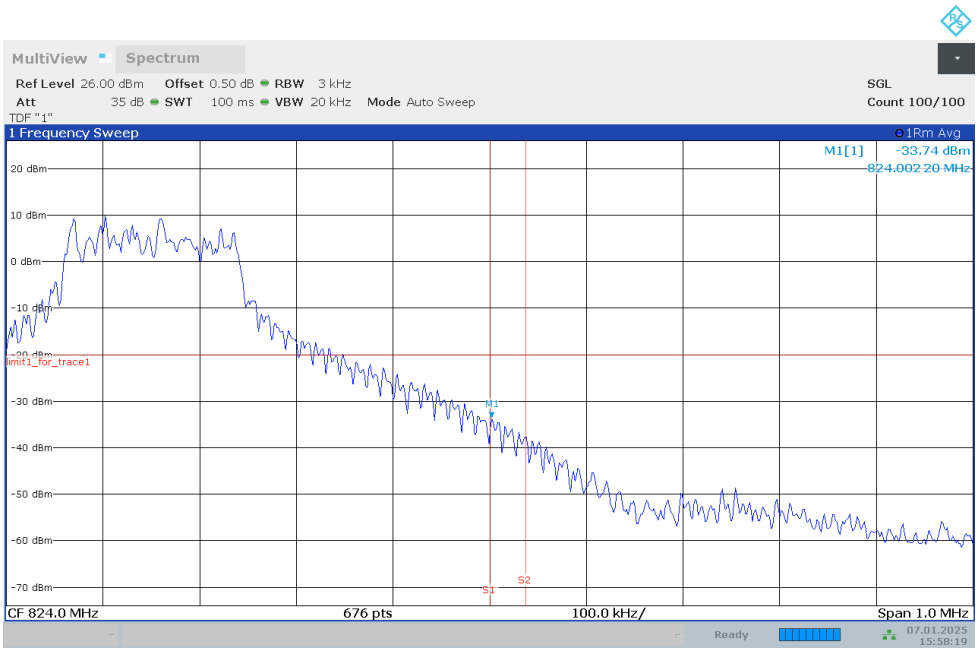
HIGH BAND EDGE BLOCK-5MHz-1RB-HIGH_offset



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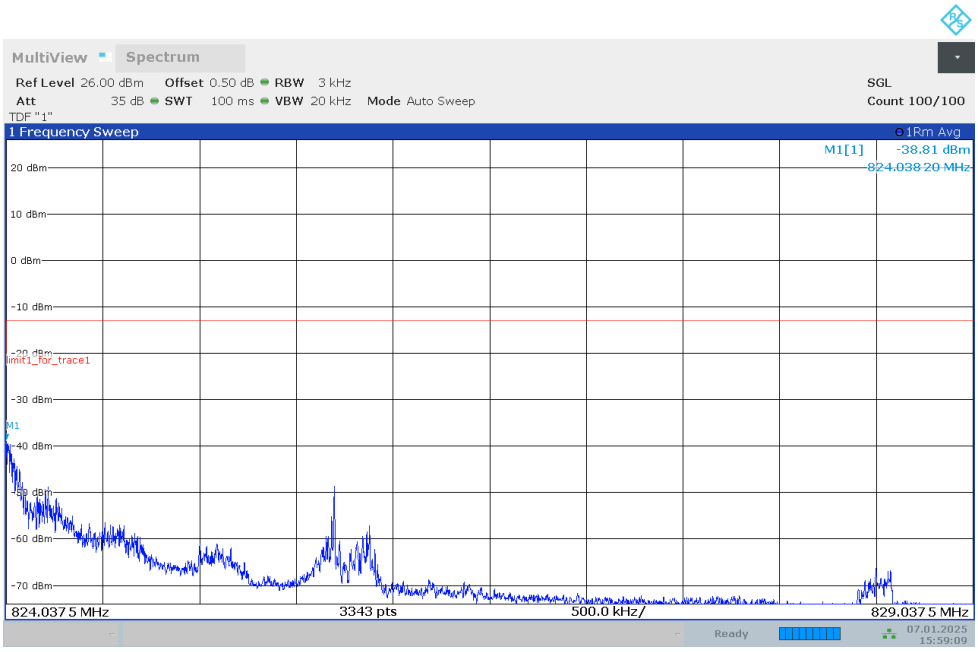

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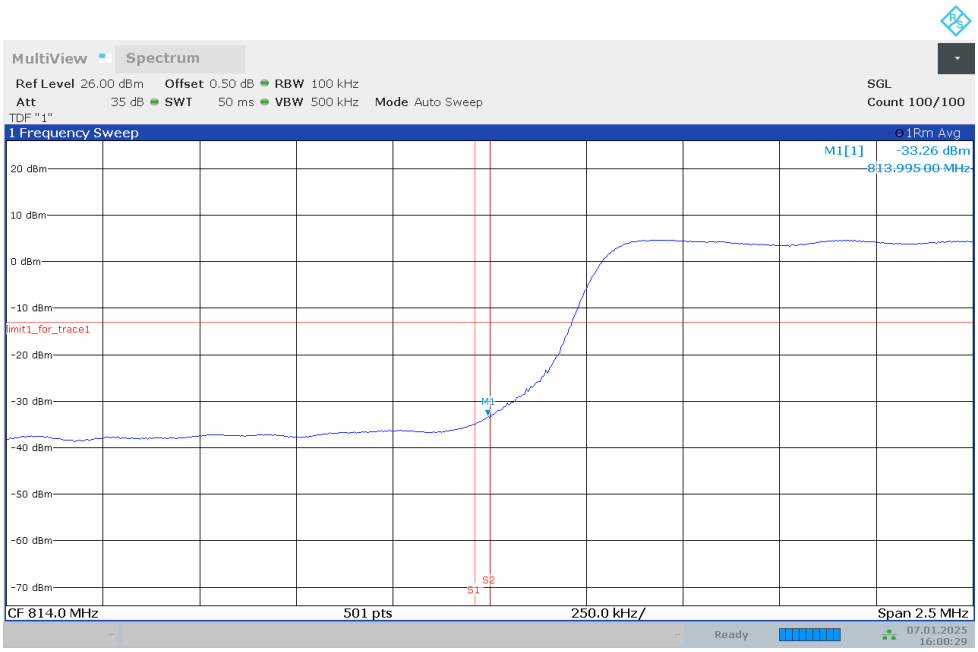
LOW BAND EDGE BLOCK-10MHz-100%RB



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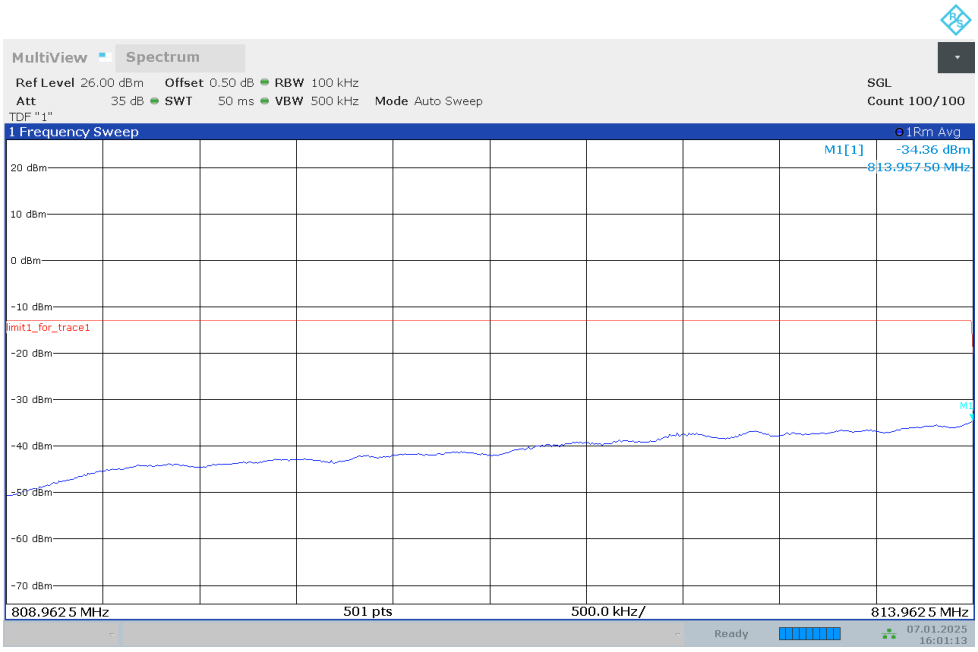
LOW BAND EDGE BLOCK-10MHz-100%RB



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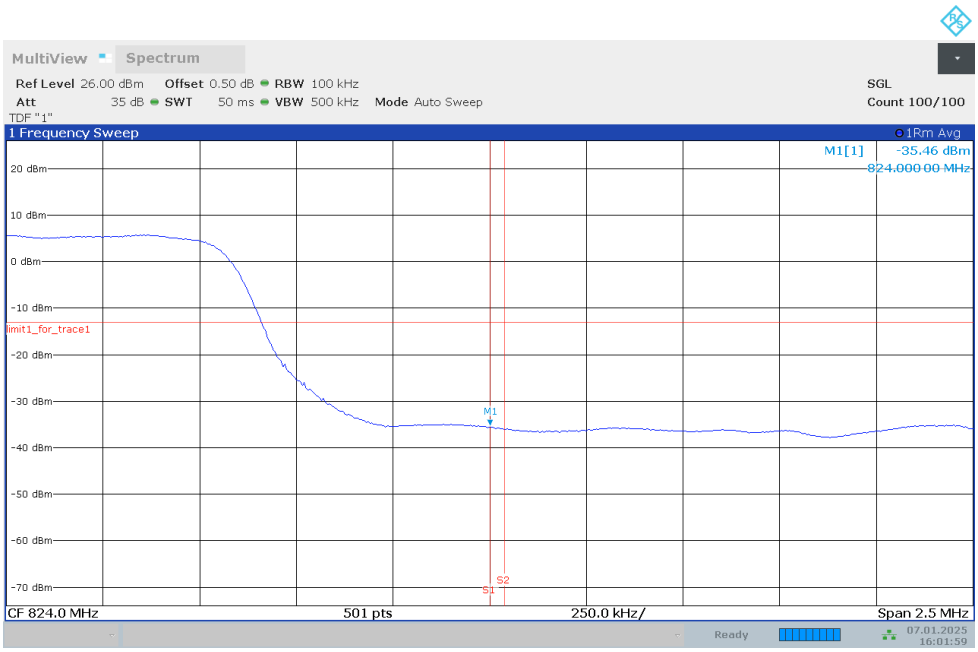
HIGH BAND EDGE BLOCK-10MHz-100%RB



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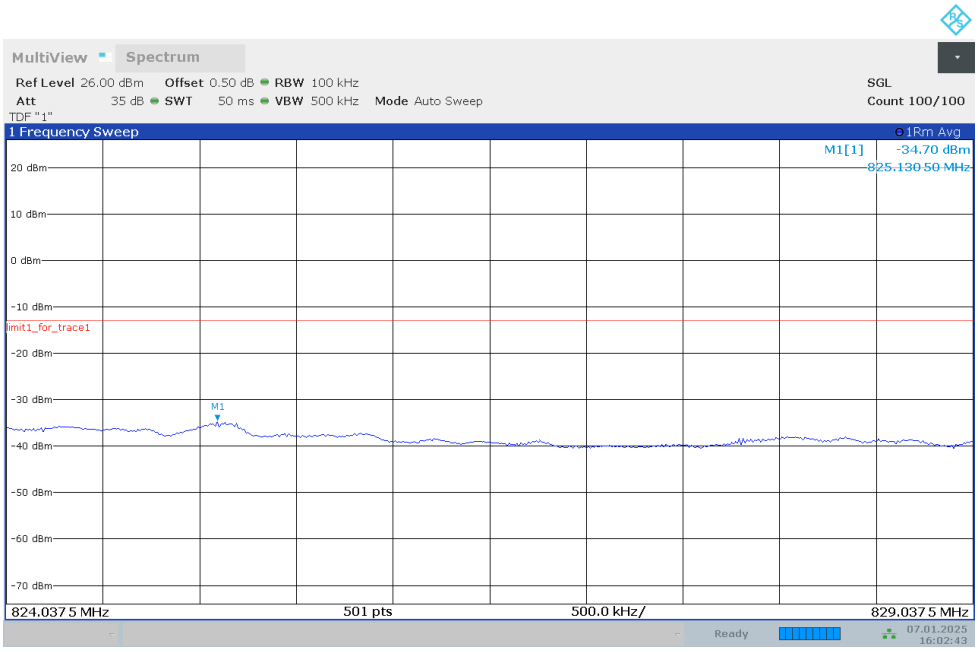

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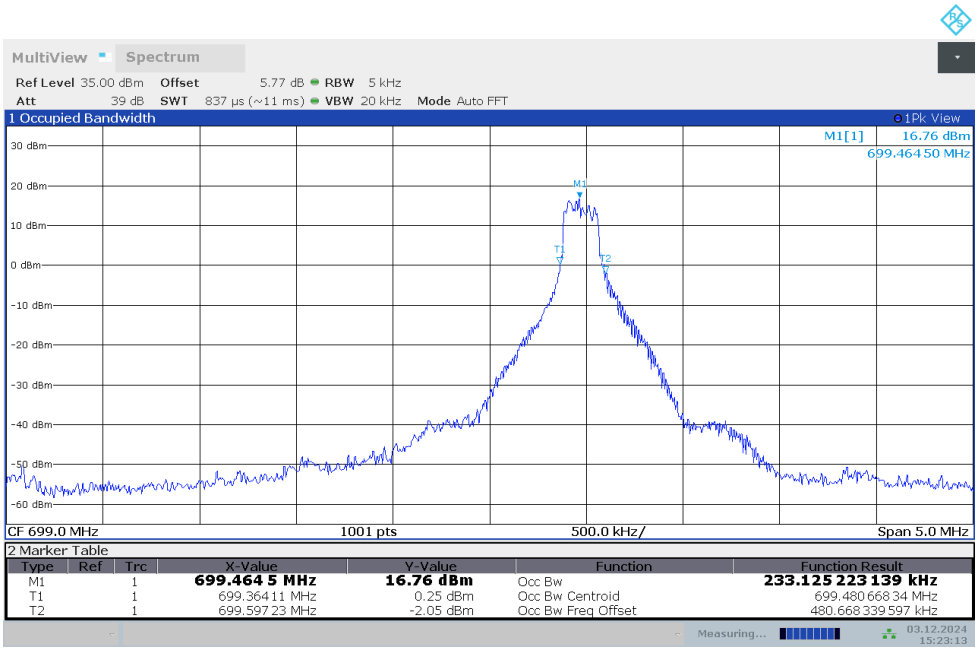
Measurement Results from 24T04Z102806:

NR n12

OBW: 1RB-LOW_offset



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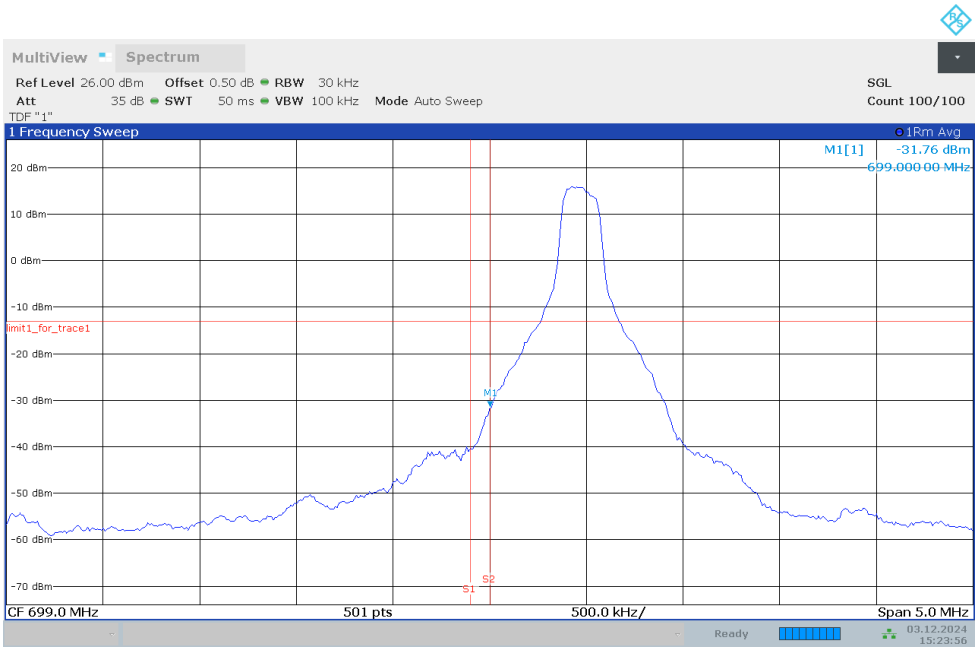

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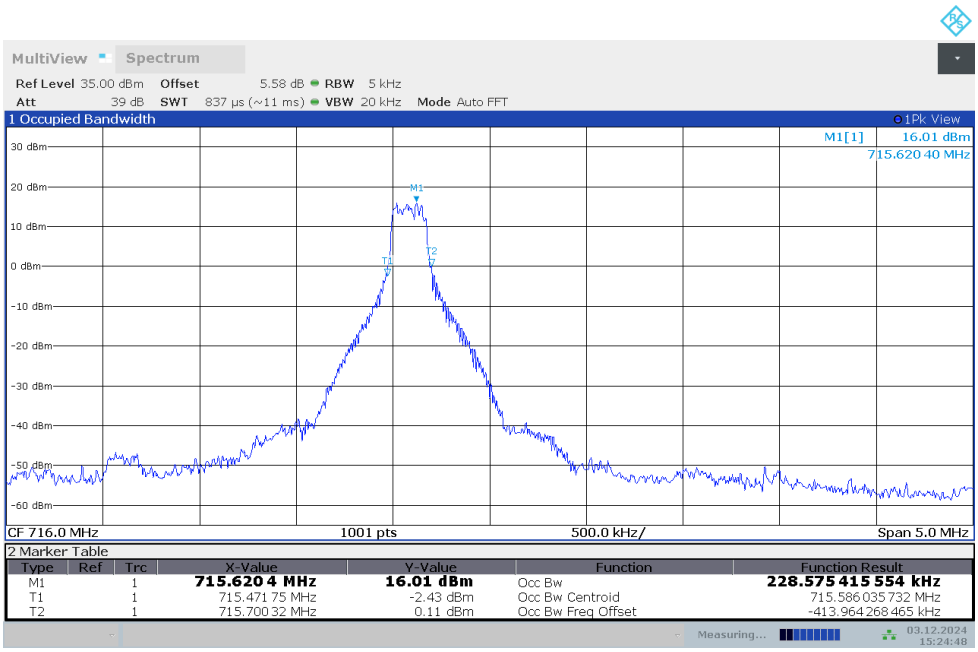

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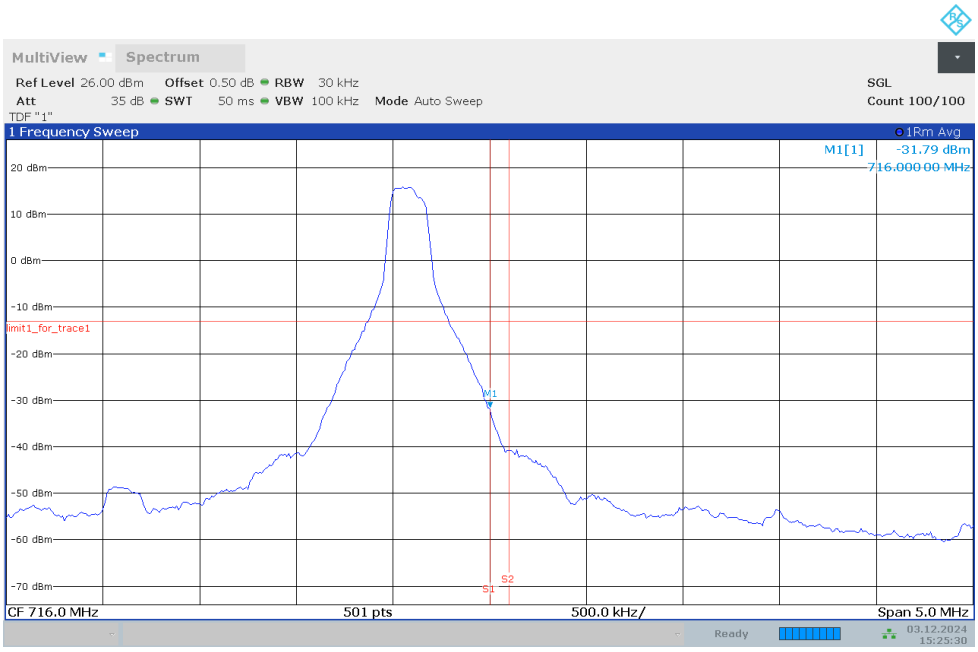

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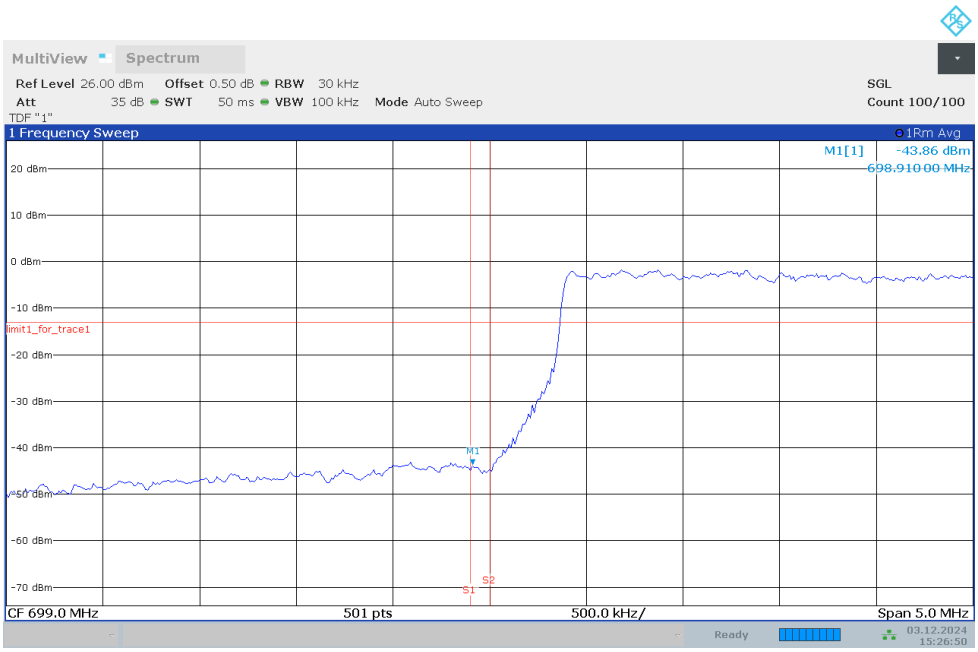
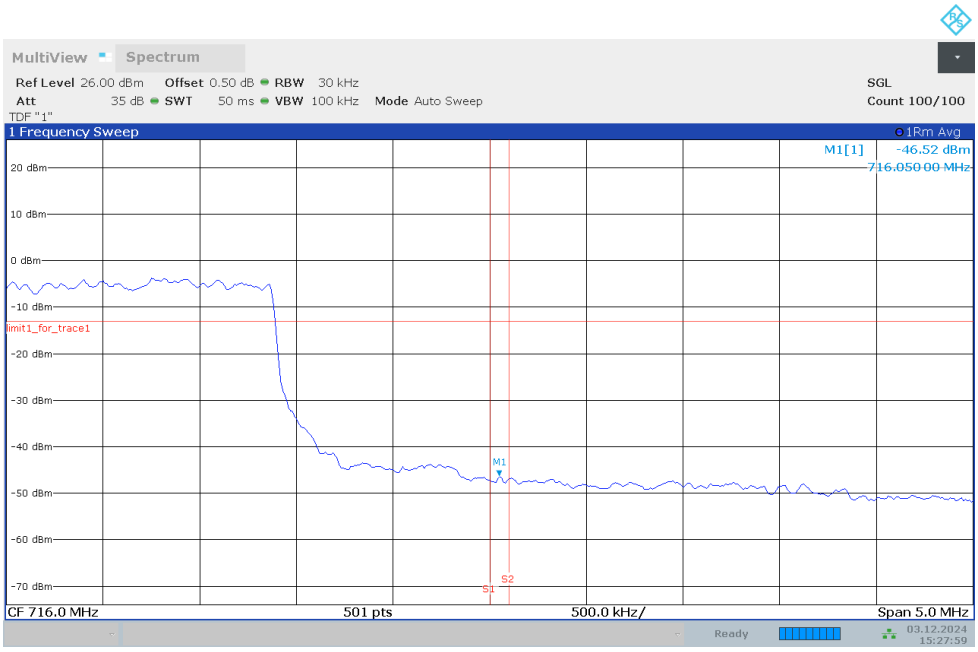
LOW BAND EDGE BLOCK-15MHz-100%RB



15:26:50 03.12.2024

HIGH BAND EDGE BLOCK-15MHz-100%RB



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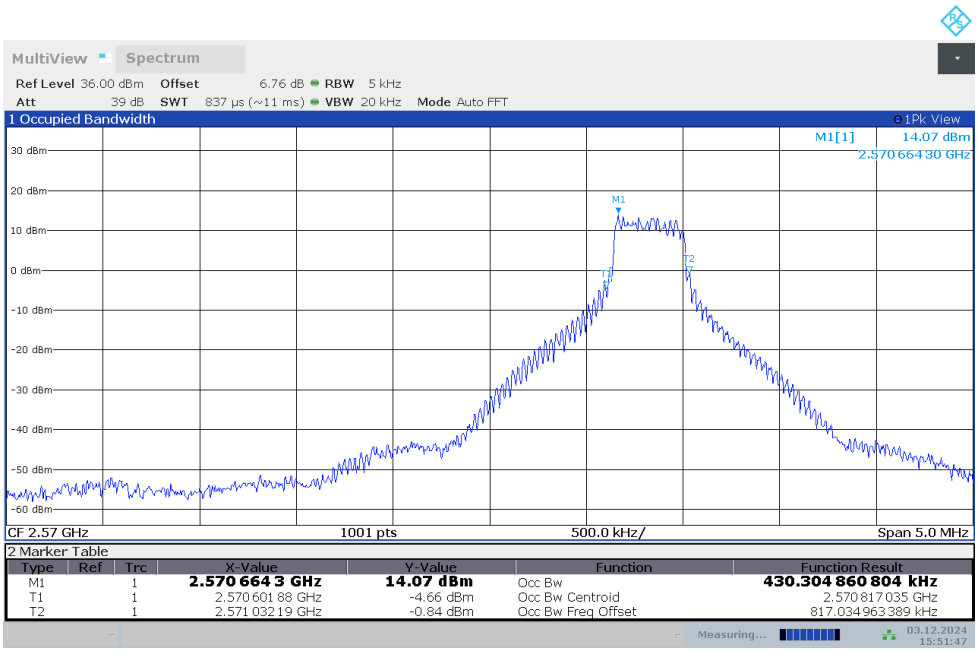
NR n38

OBW: 1RB-LOW_offset



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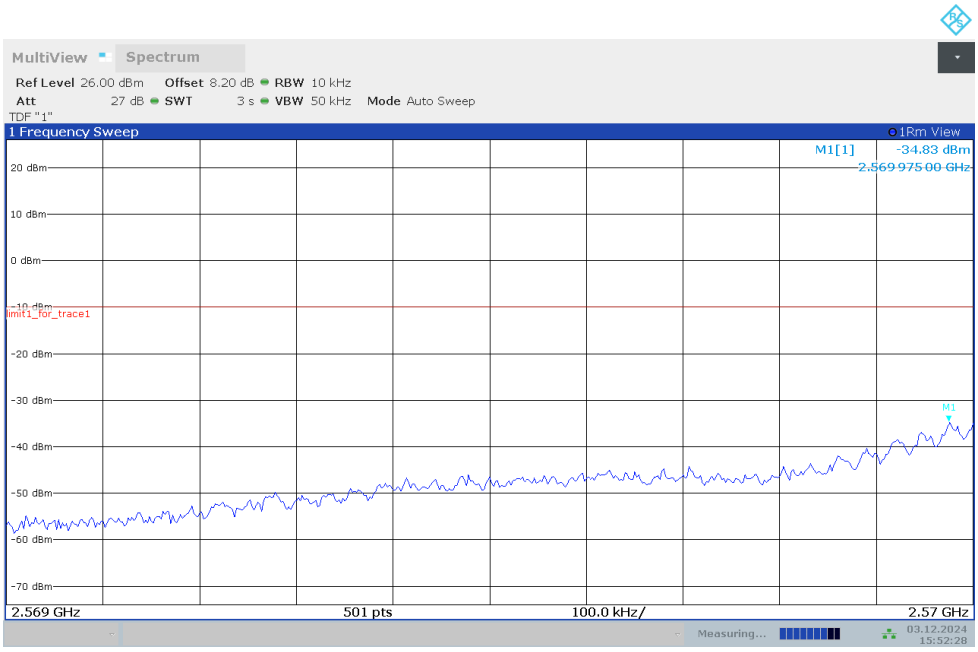

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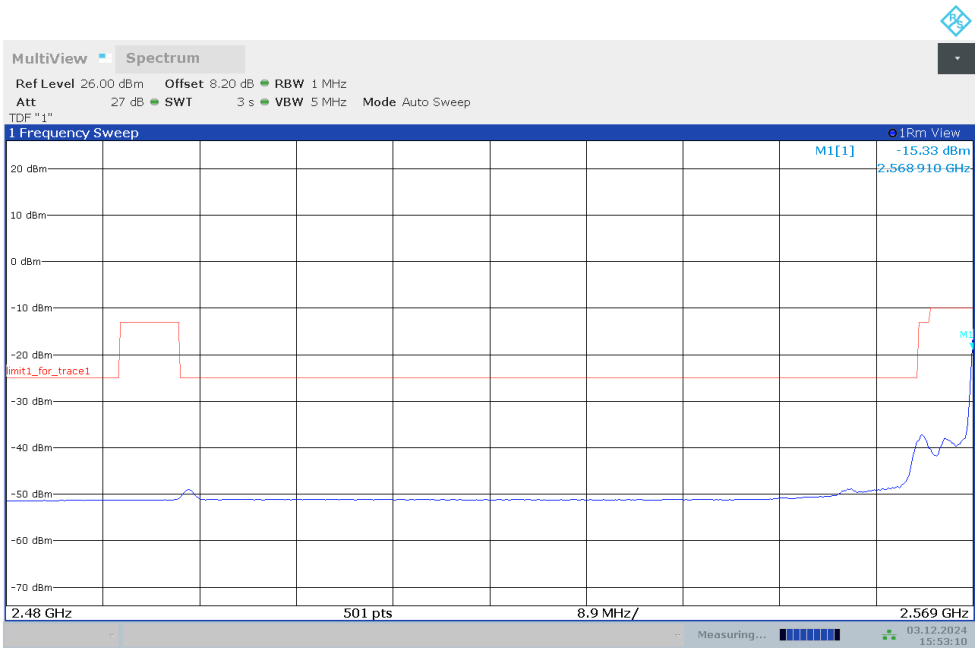
LOW BAND EDGE BLOCK-1RB-LOW_offset



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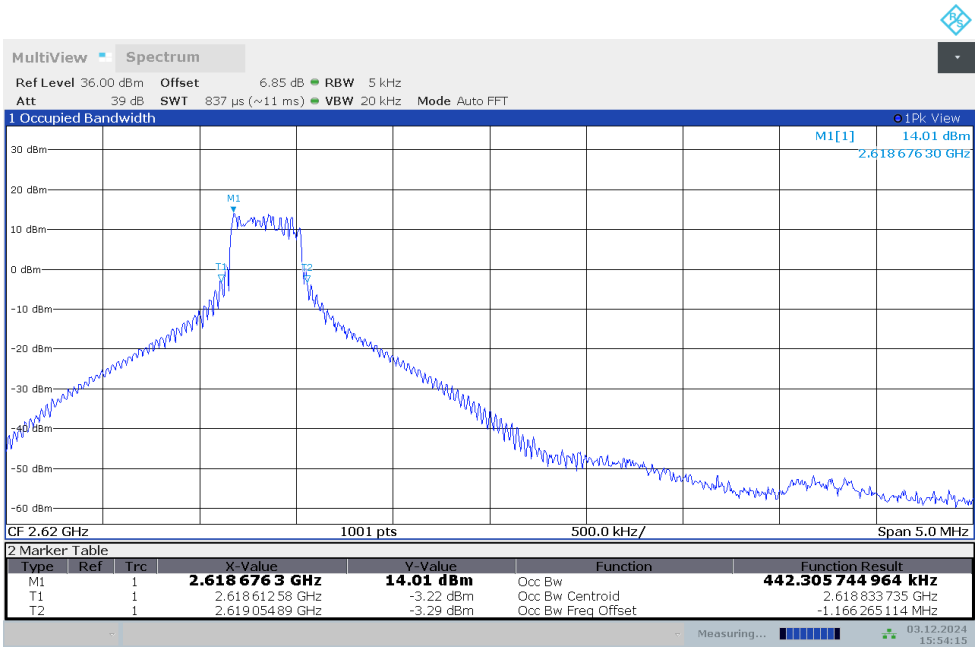

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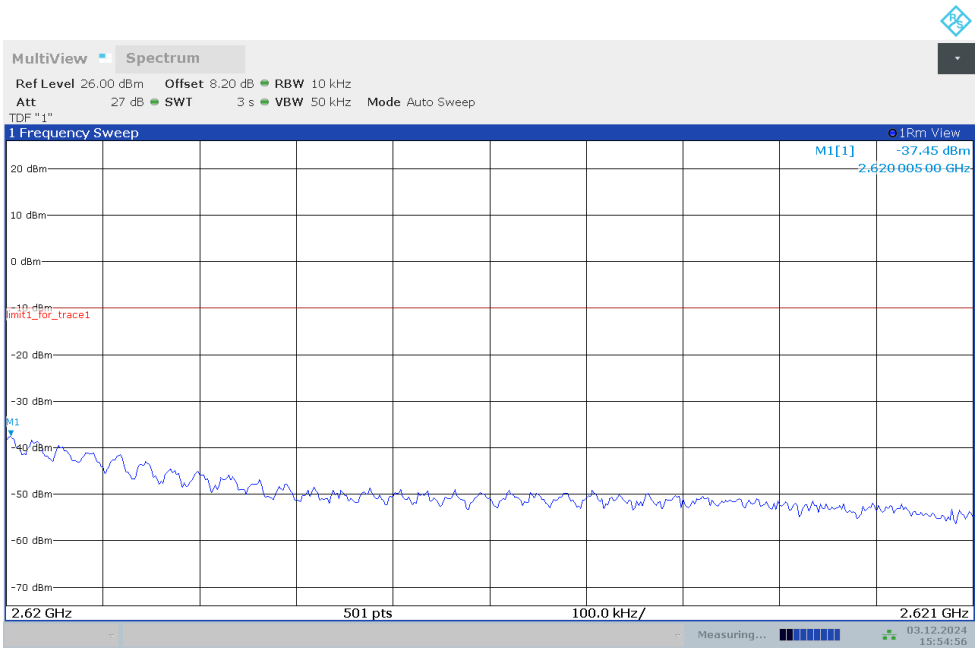
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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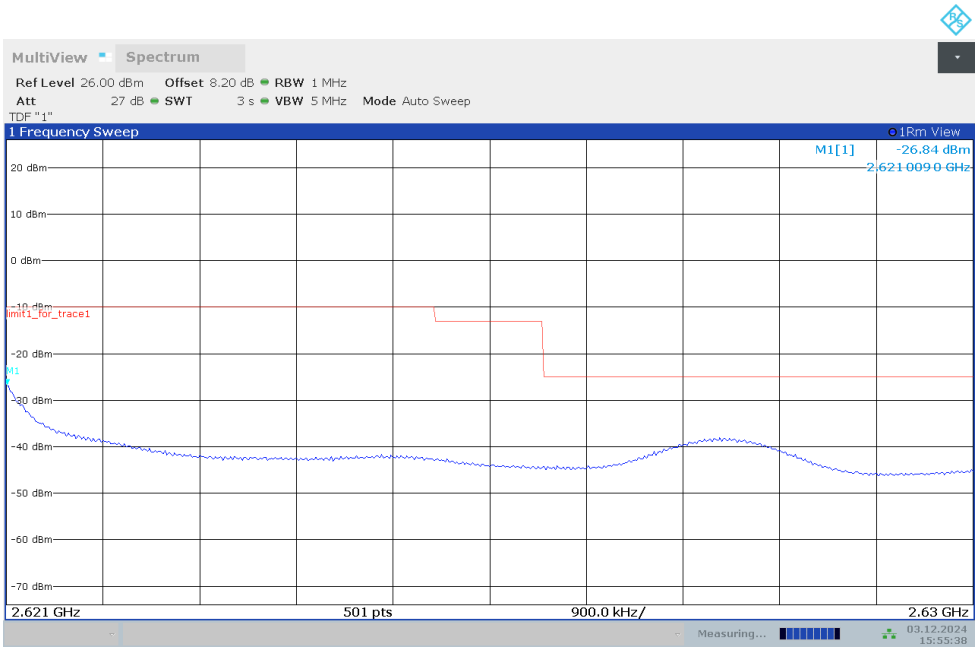
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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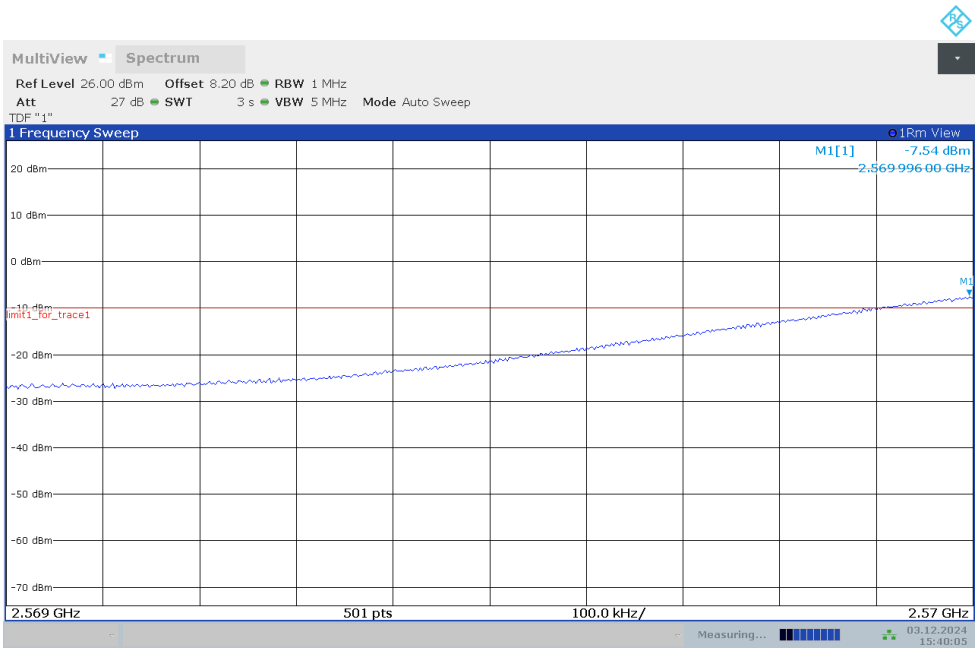
LOW BAND EDGE BLOCK-40MHz-100%RB



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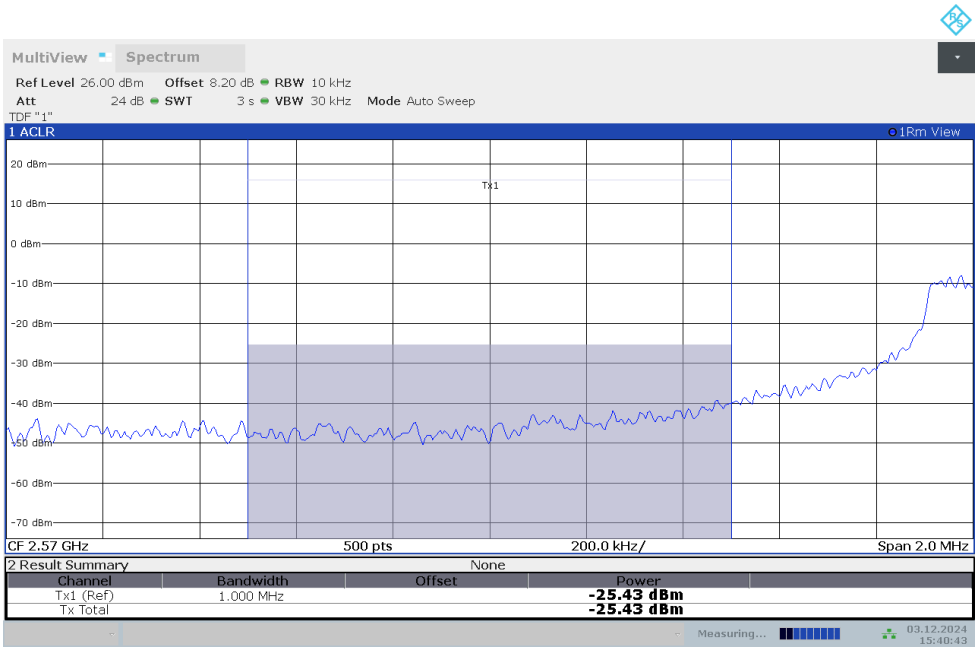
Channel power



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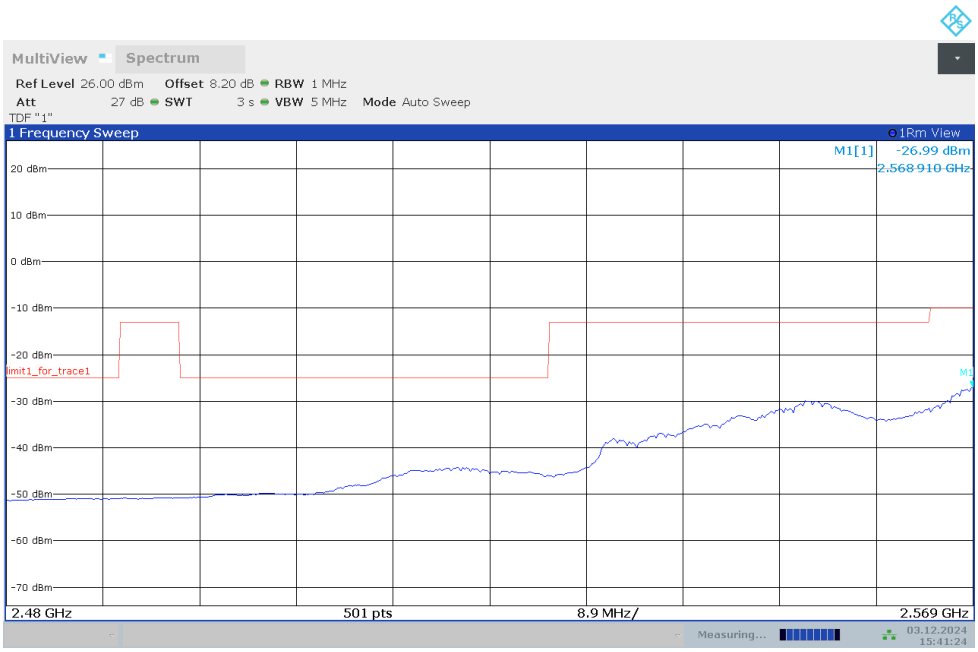
LOW BAND EDGE BLOCK-40MHz-100%RB



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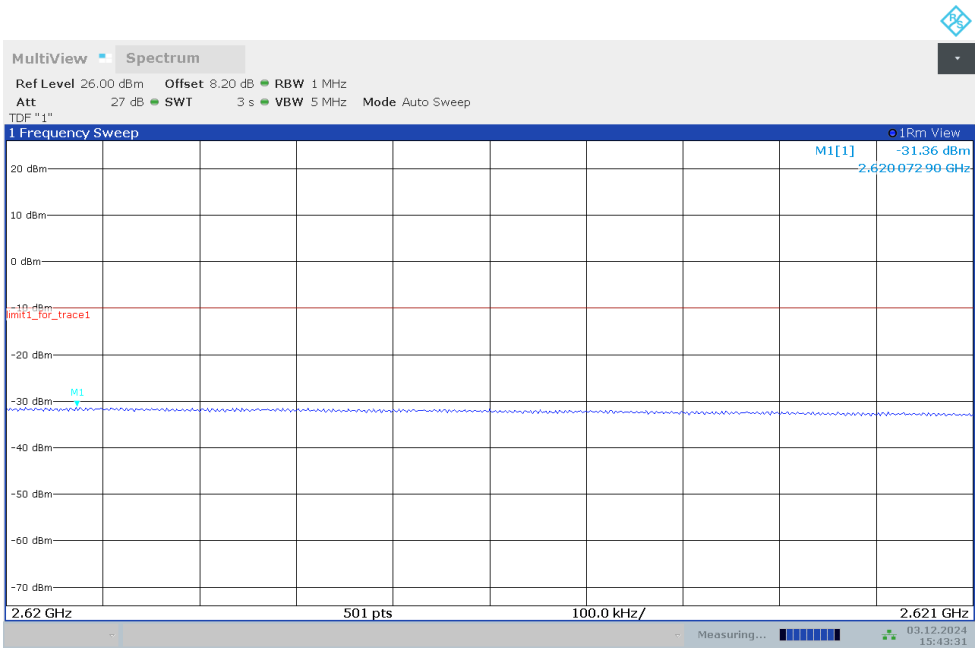
HIGH BAND EDGE BLOCK-40MHz-100%RB



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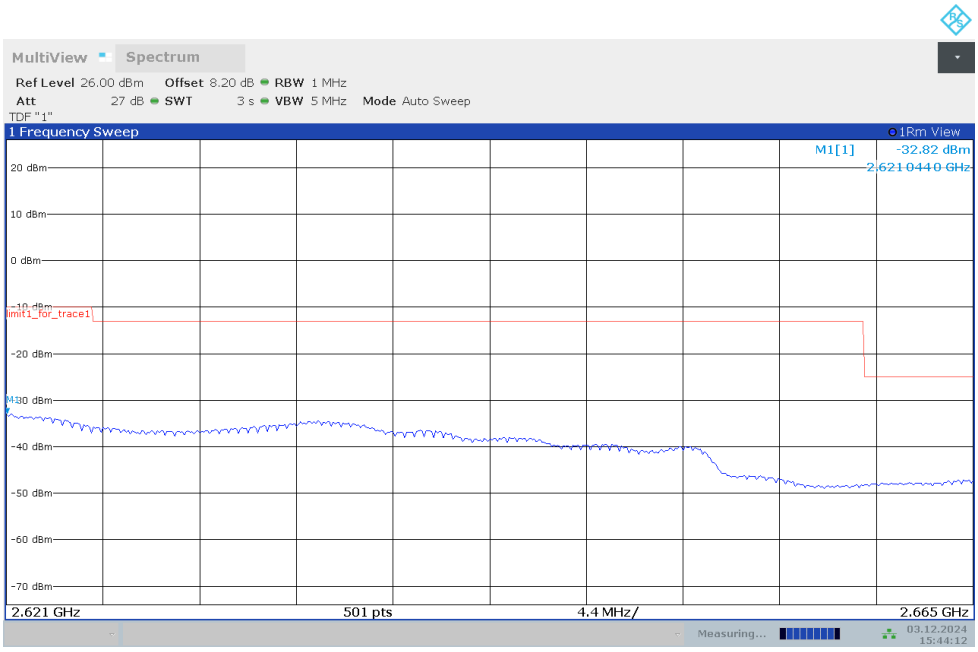
HIGH BAND EDGE BLOCK-40MHz-100%RB



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Reference Measurement Results from 24T04Z102259:

NR n2

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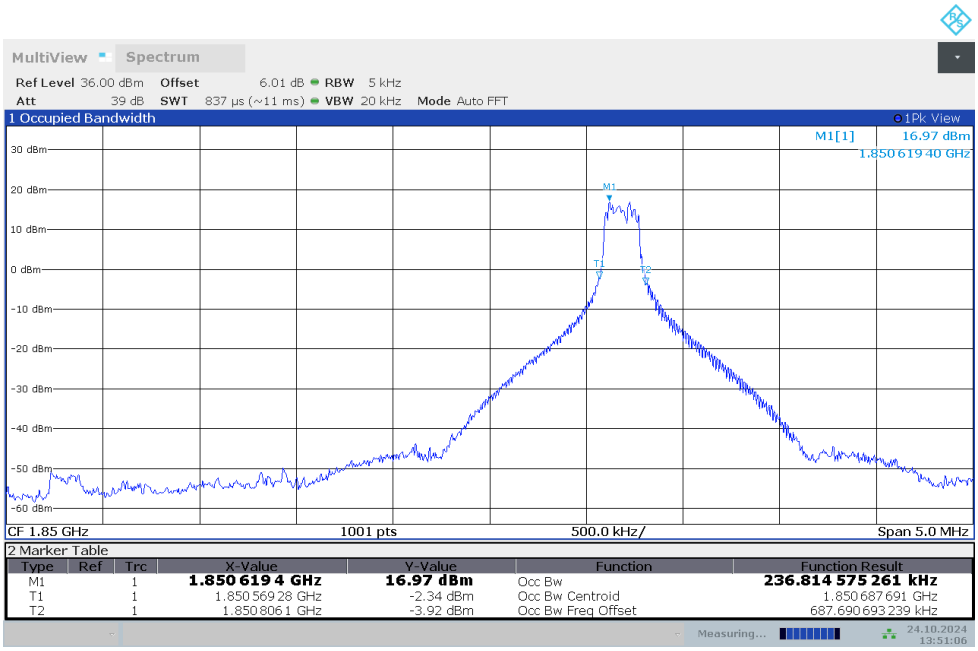

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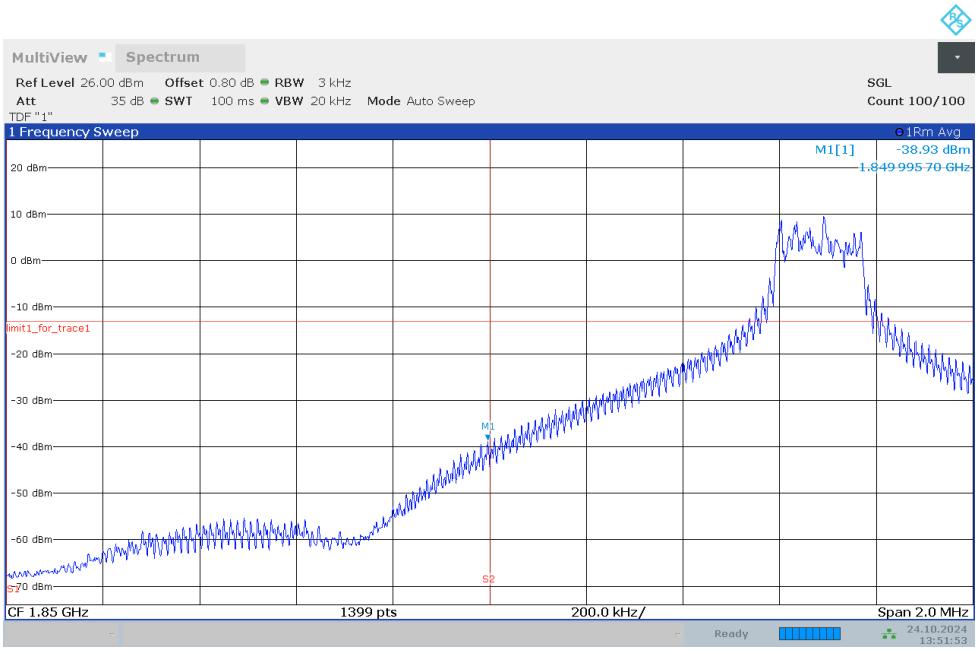

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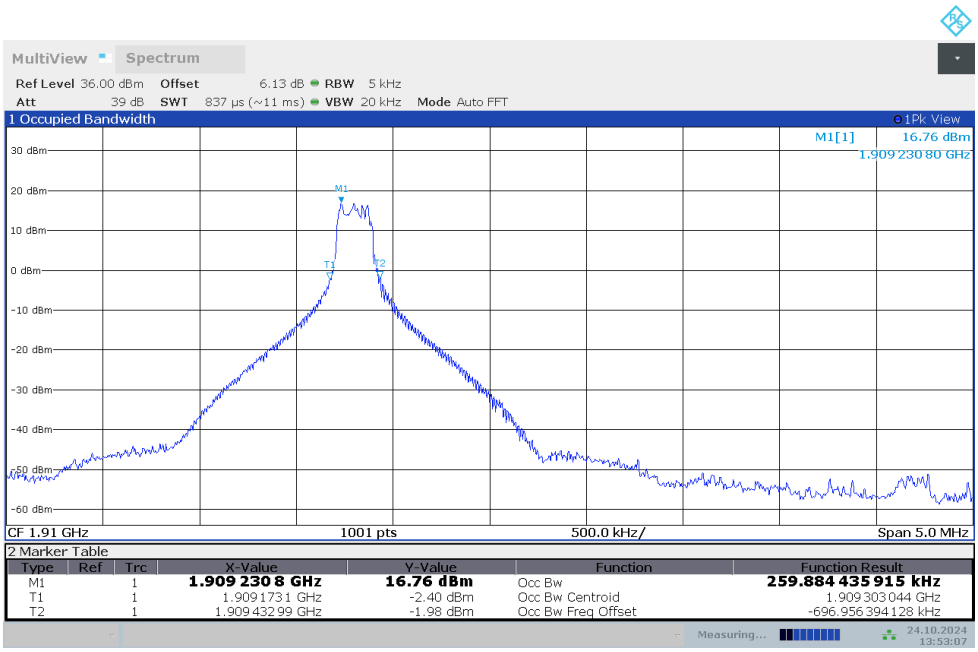

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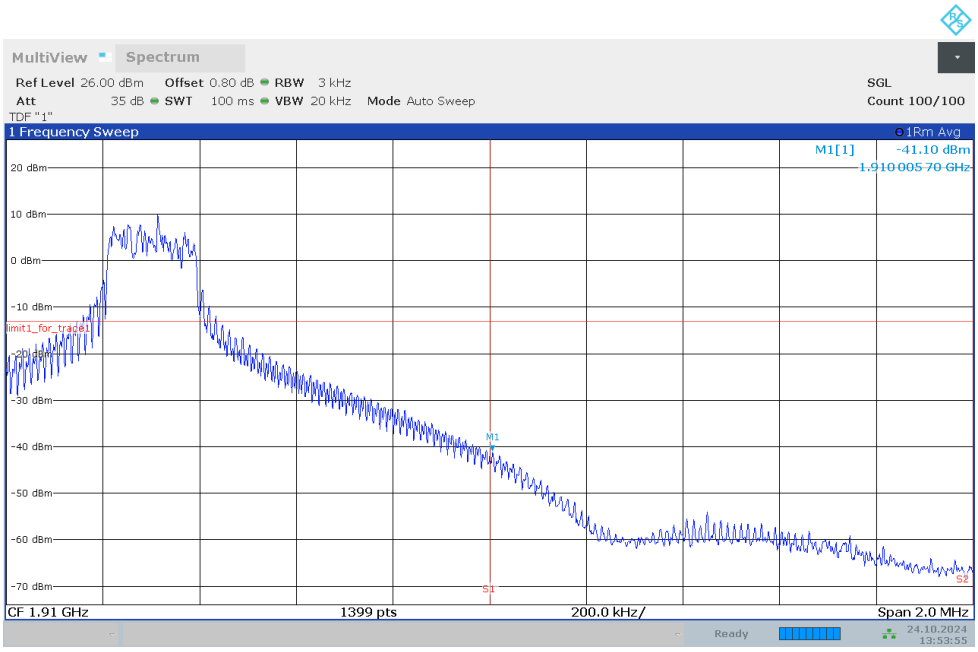

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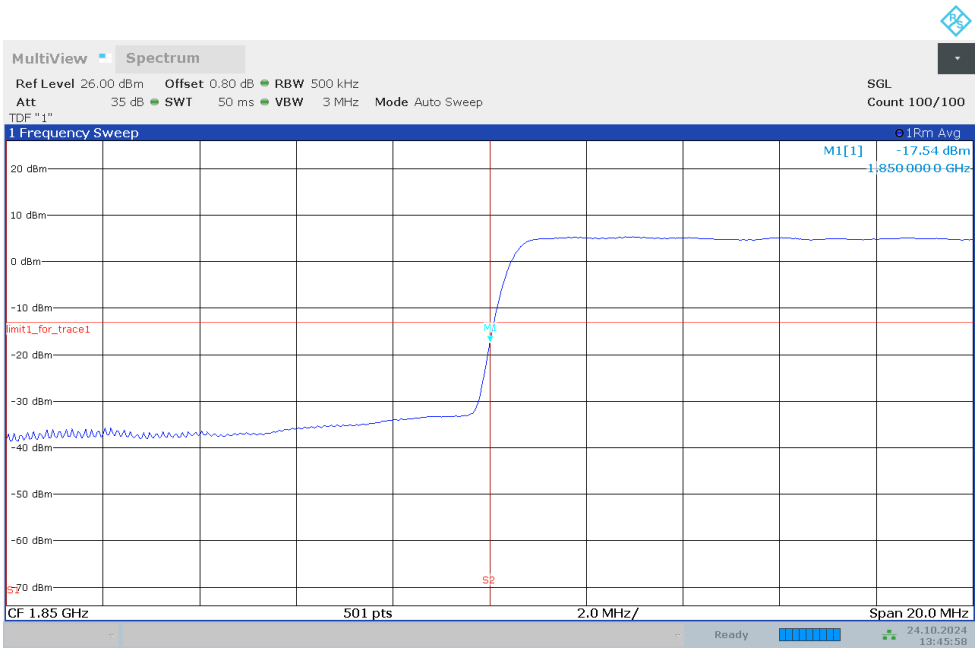
LOW BAND EDGE BLOCK-40MHz-100%RB



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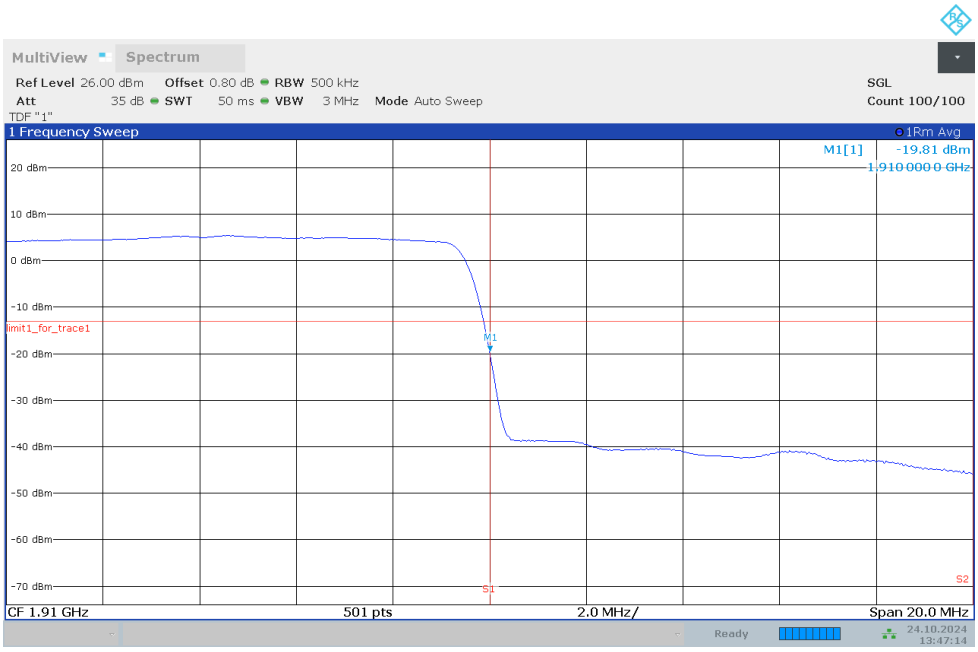
HIGH BAND EDGE BLOCK-40MHz-100%RB



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NR n5

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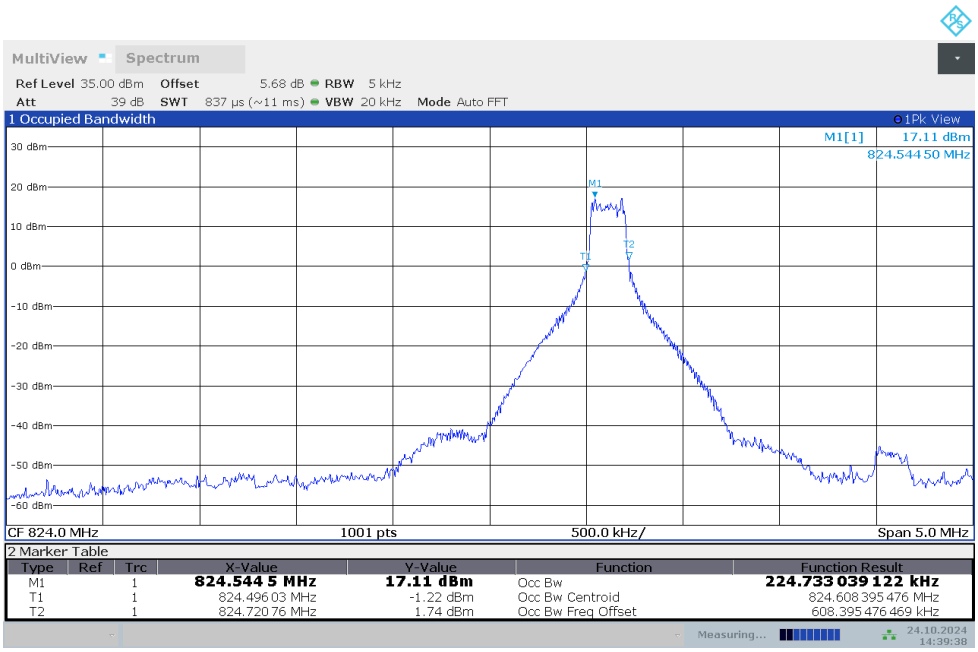

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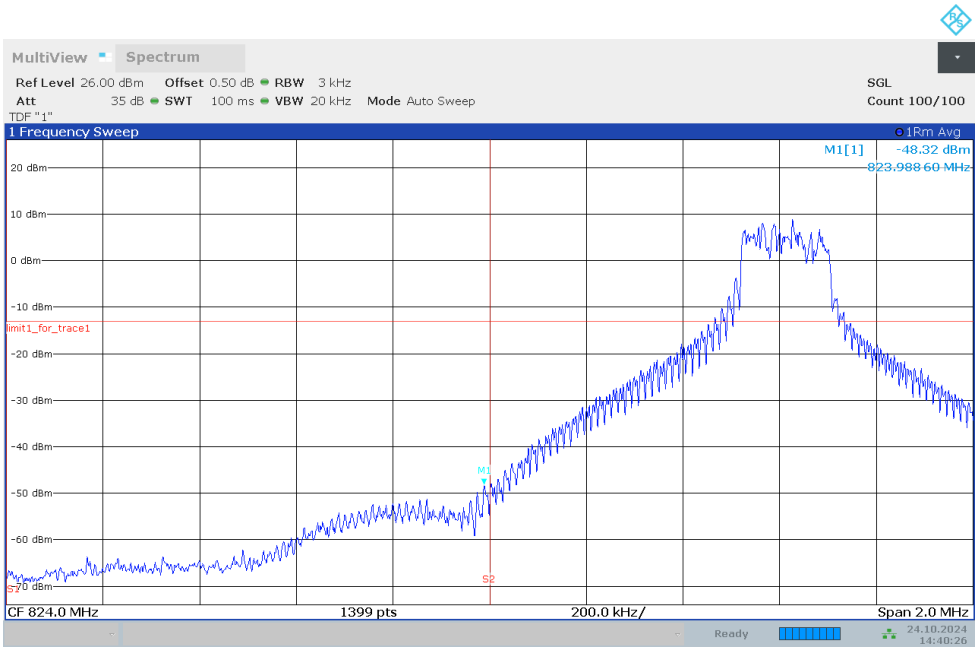

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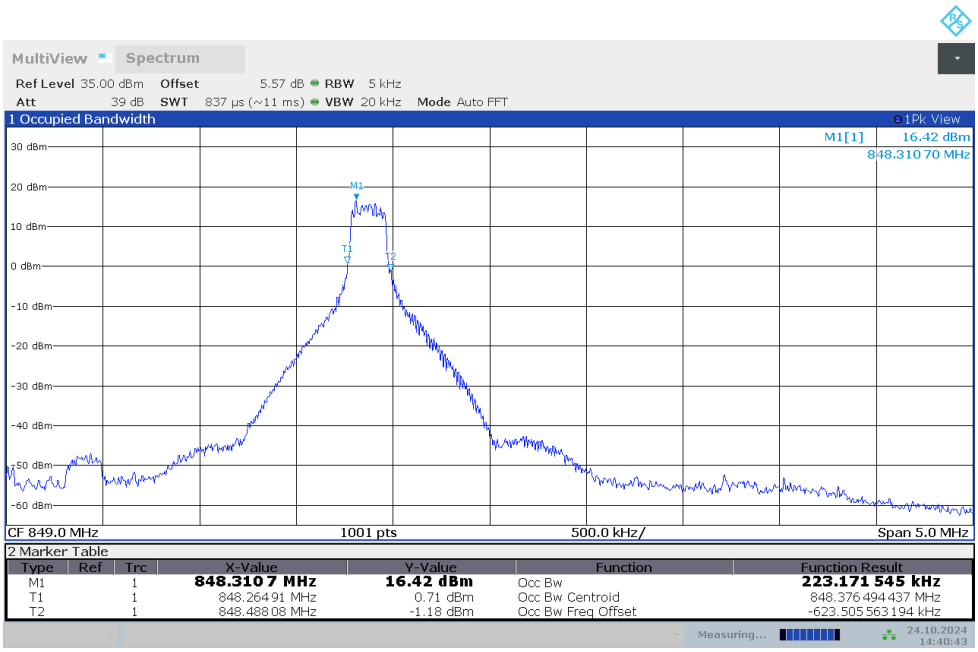
OBW: 1RB-HIGH_offset



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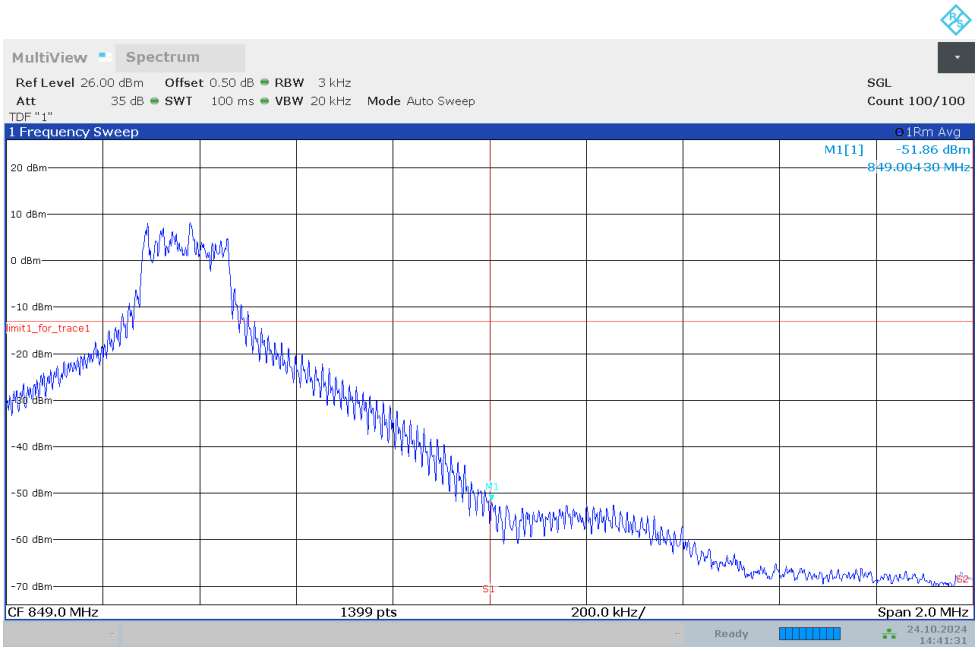
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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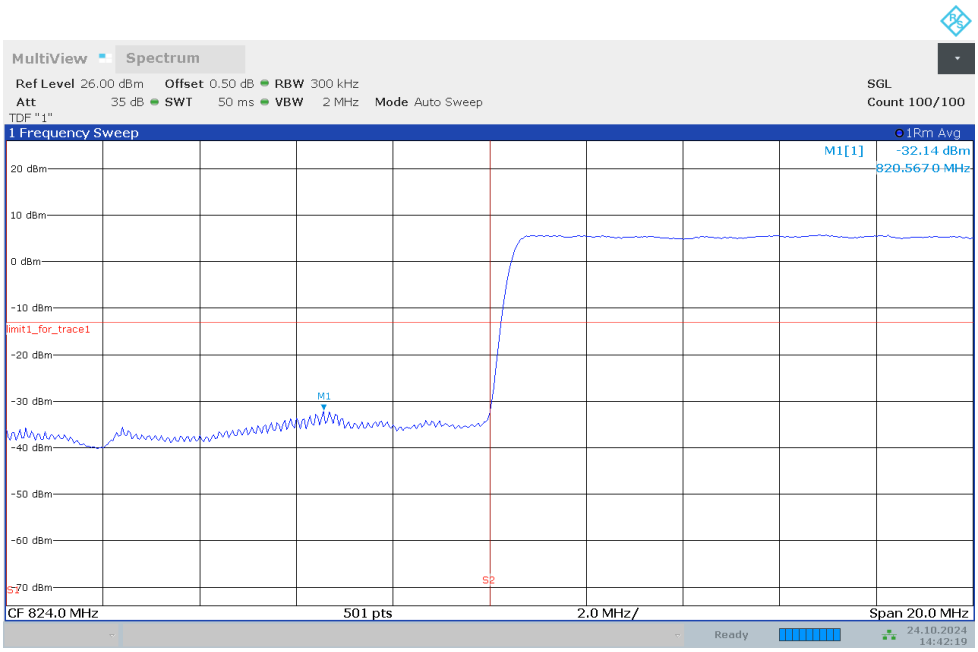
LOW BAND EDGE BLOCK-25MHz-100%RB



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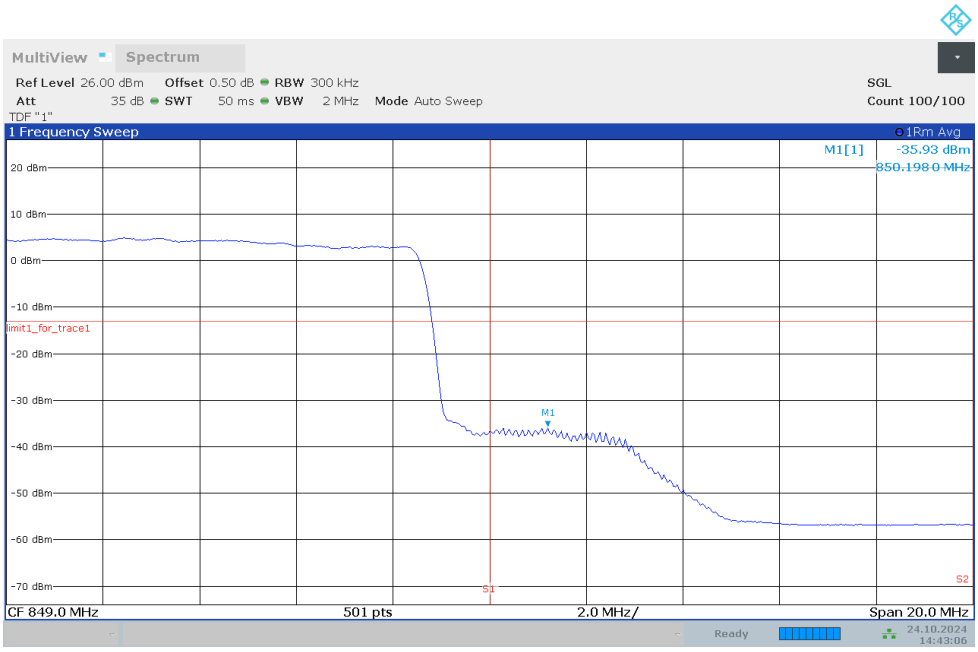
HIGH BAND EDGE BLOCK-25MHz-100%RB



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NR n25

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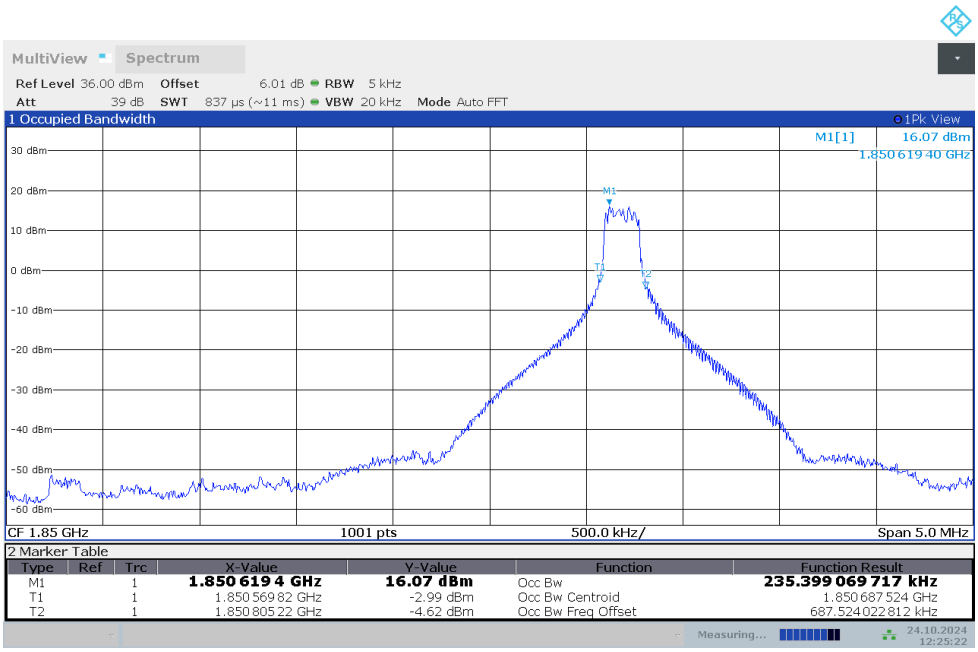

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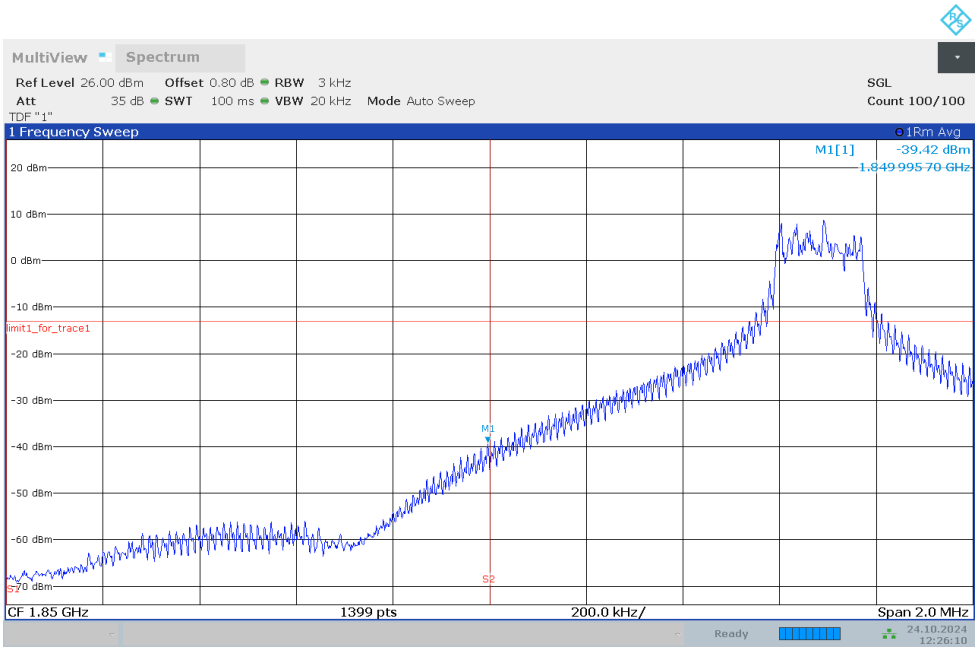

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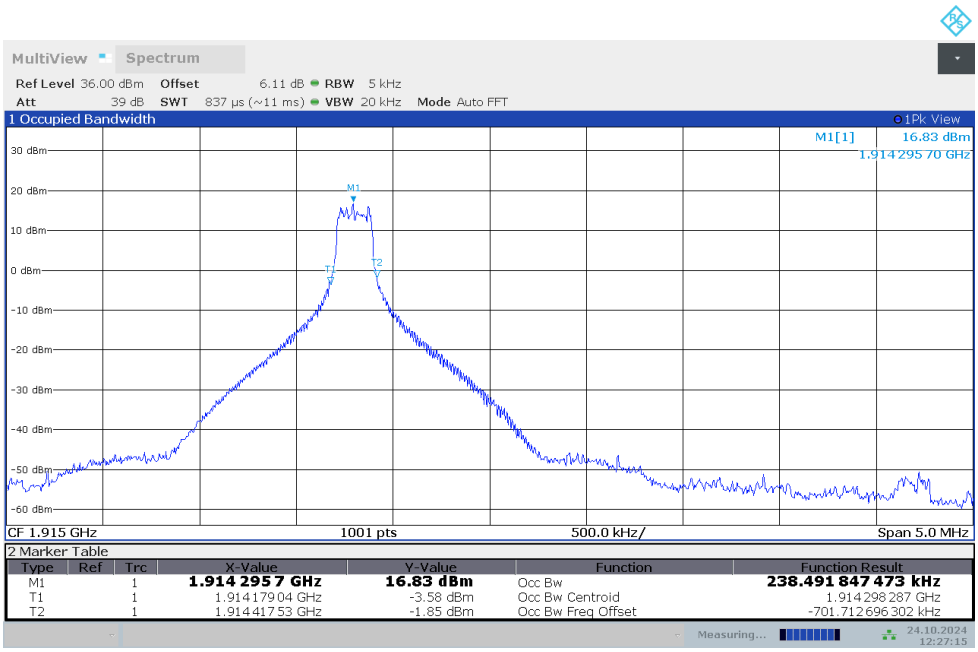
OBW: 1RB-HIGH_offset



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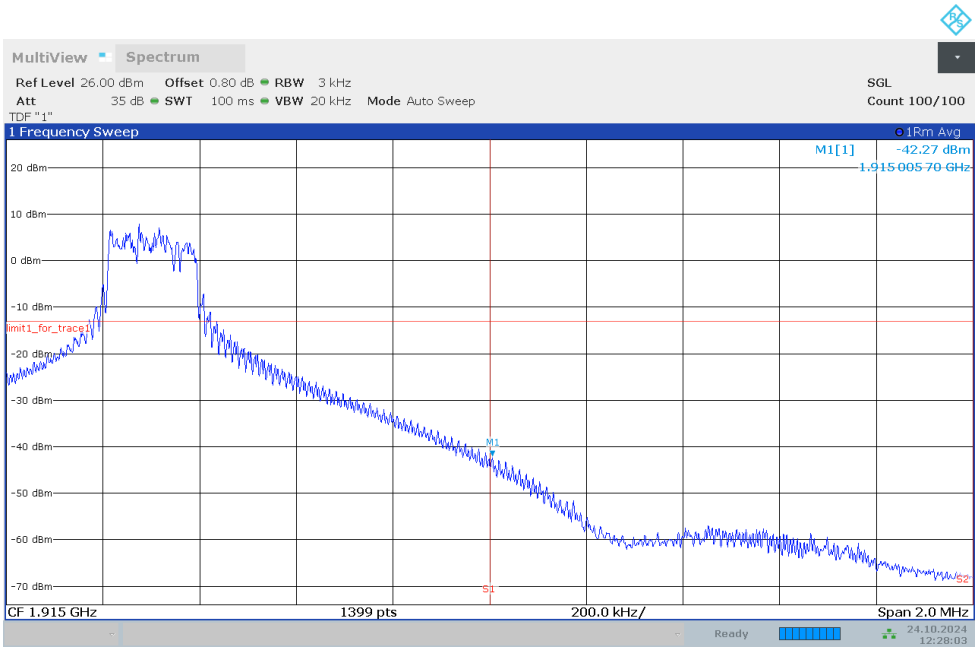
HIGH BAND EDGE BLOCK--1RB-HIGH_offset



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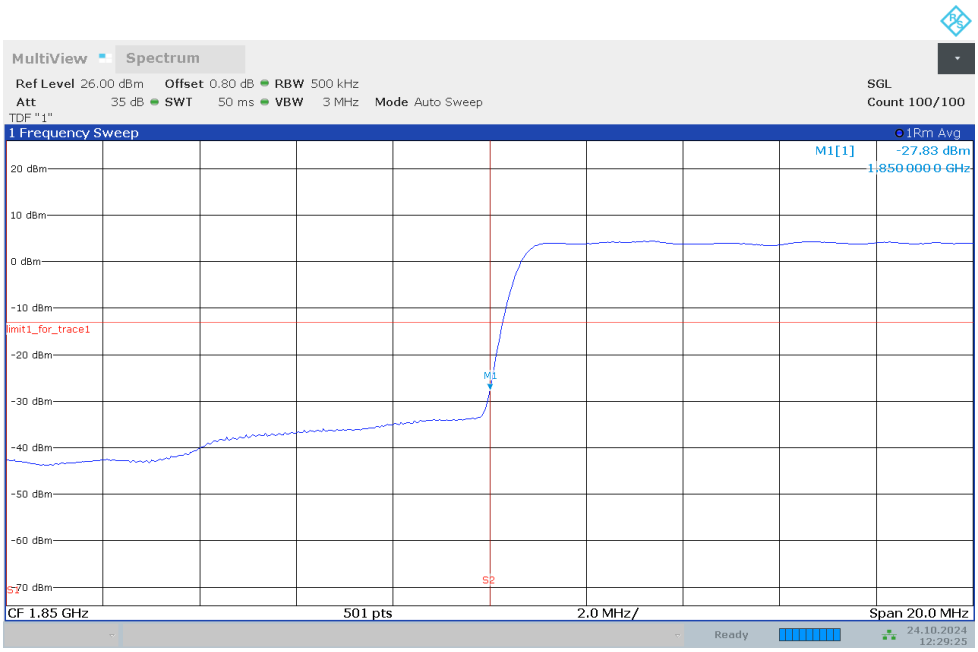
LOW BAND EDGE BLOCK-45MHz-100%RB



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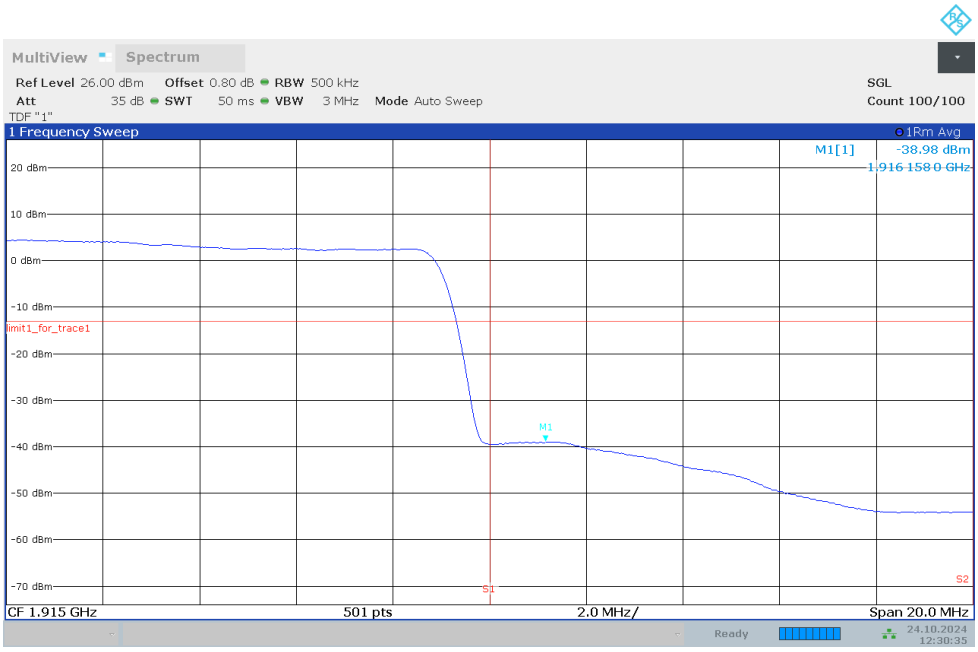
HIGH BAND EDGE BLOCK-45MHz-100%RB



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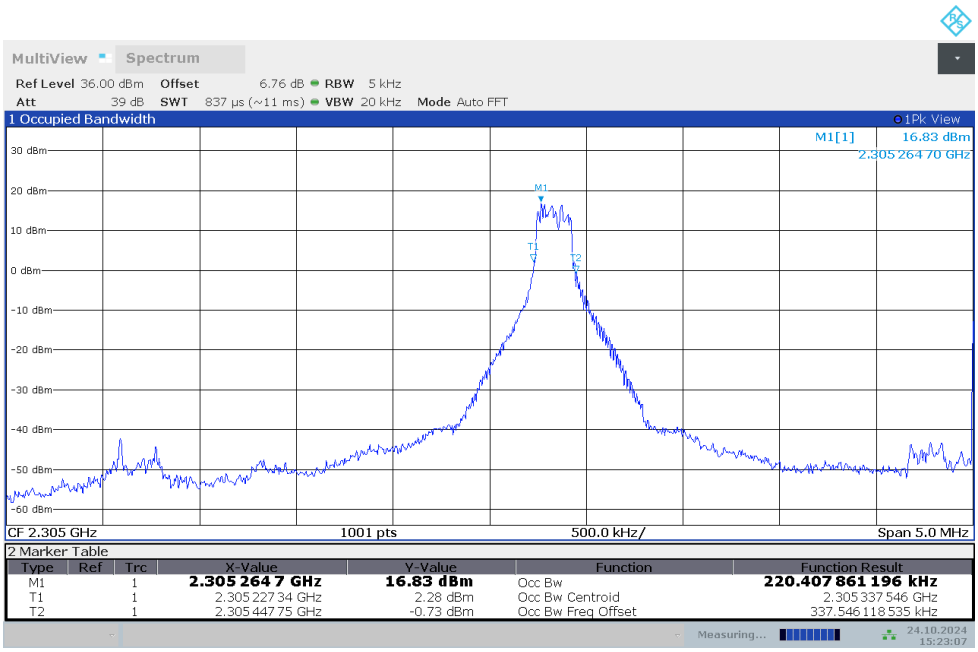
NR n30

OBW: 1RB-LOW_offset



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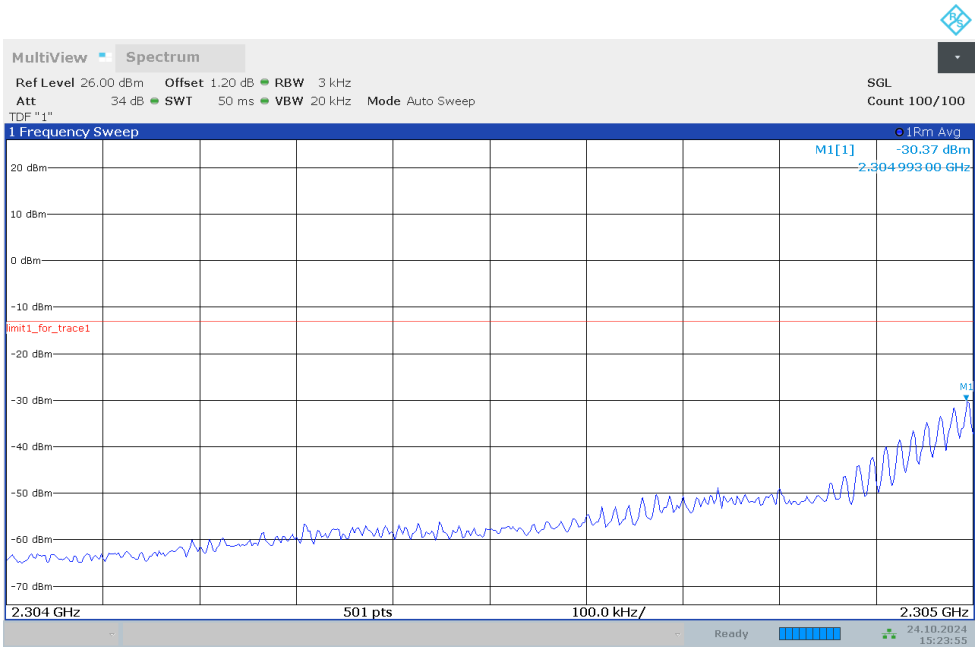

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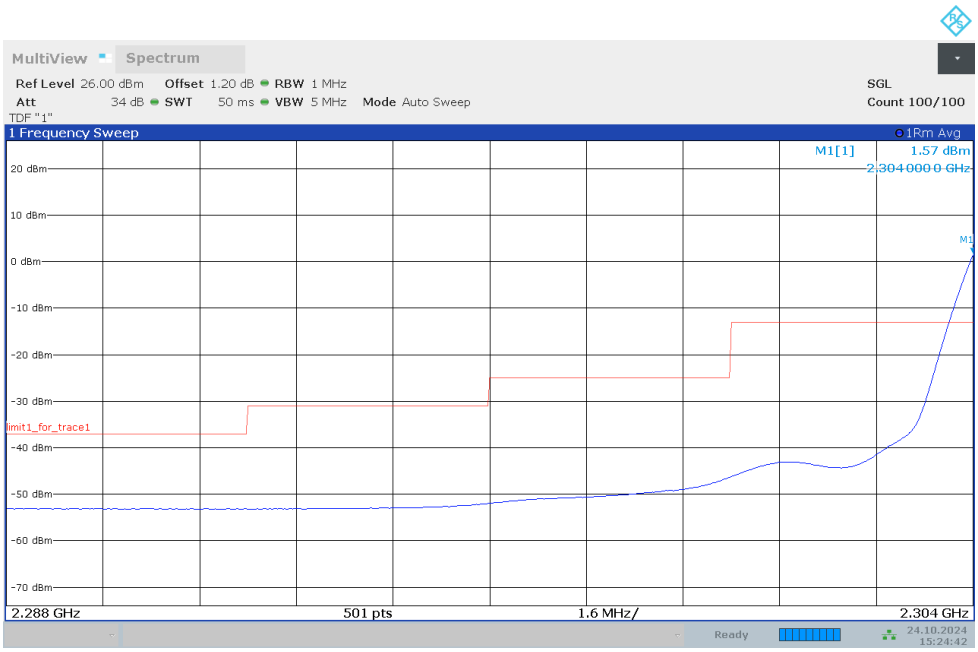
LOW BAND EDGE BLOCK-1RB-LOW_offset



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Channel power

15:25:22 24.10.2024

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OBW: 1RB-HIGH_offset

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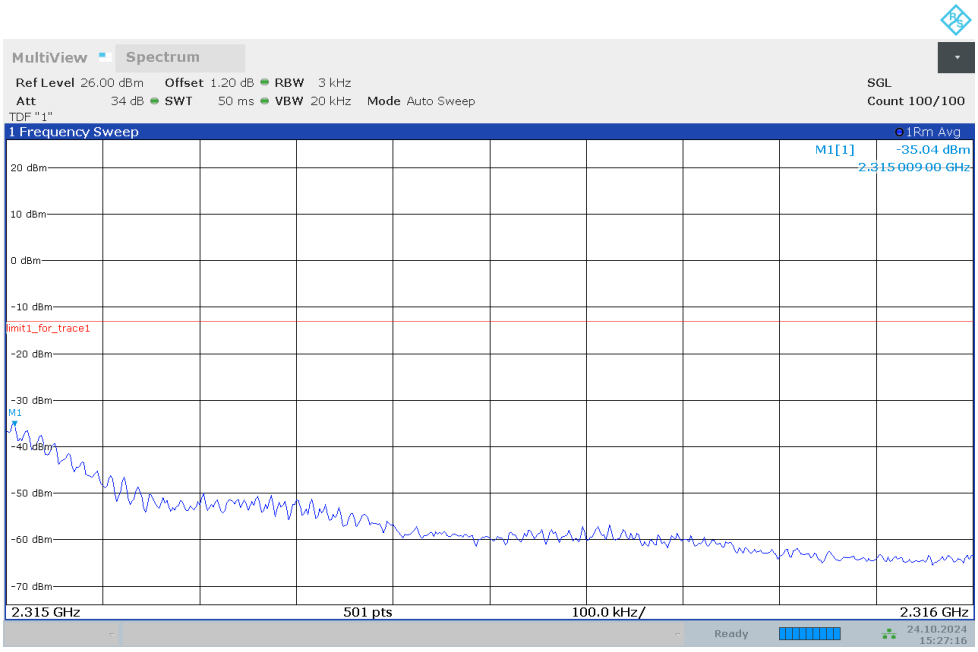
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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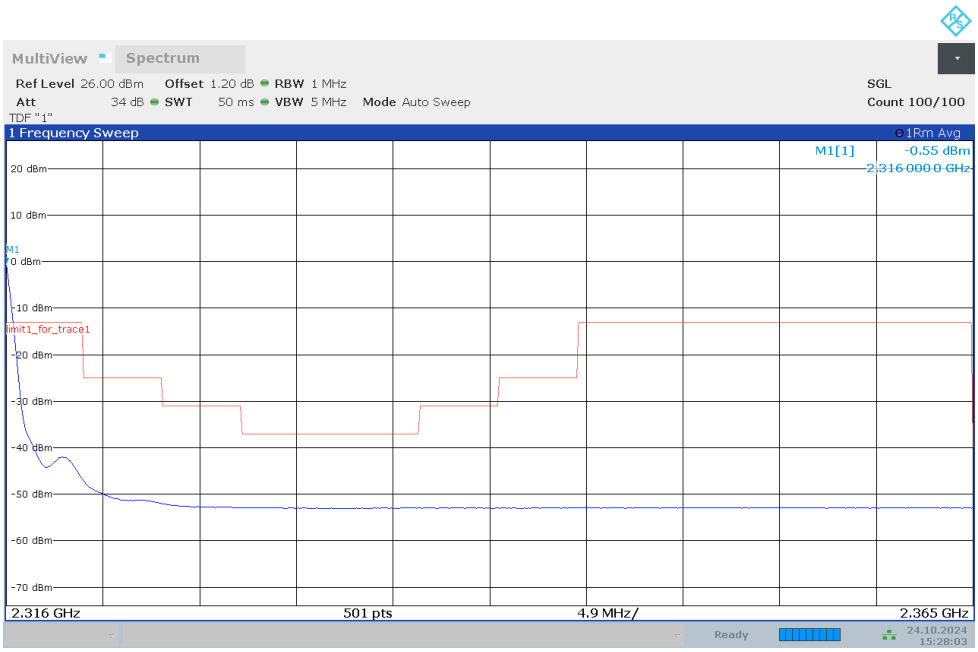
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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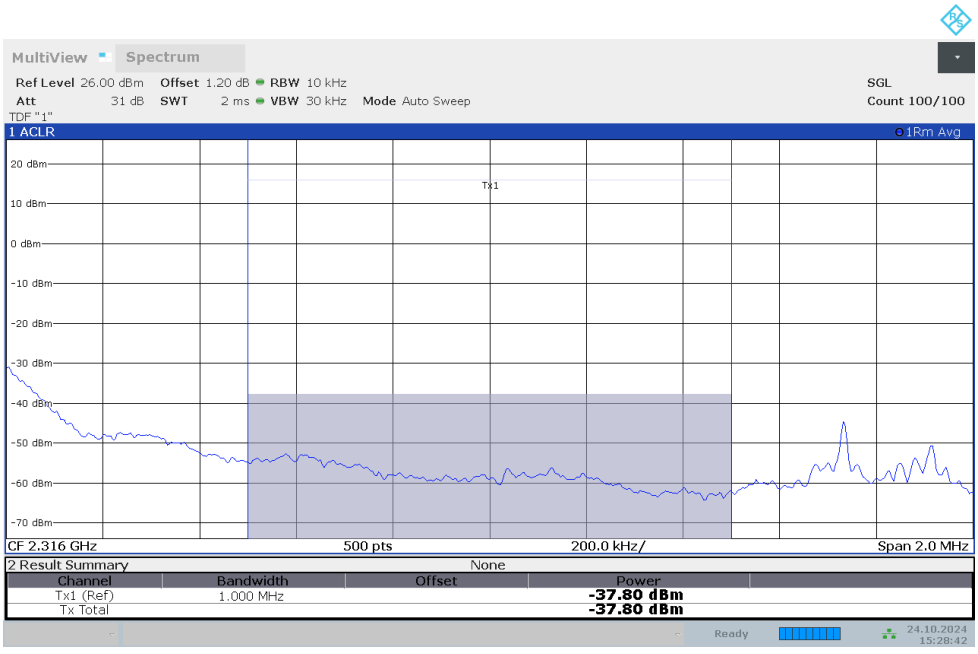
Channel power



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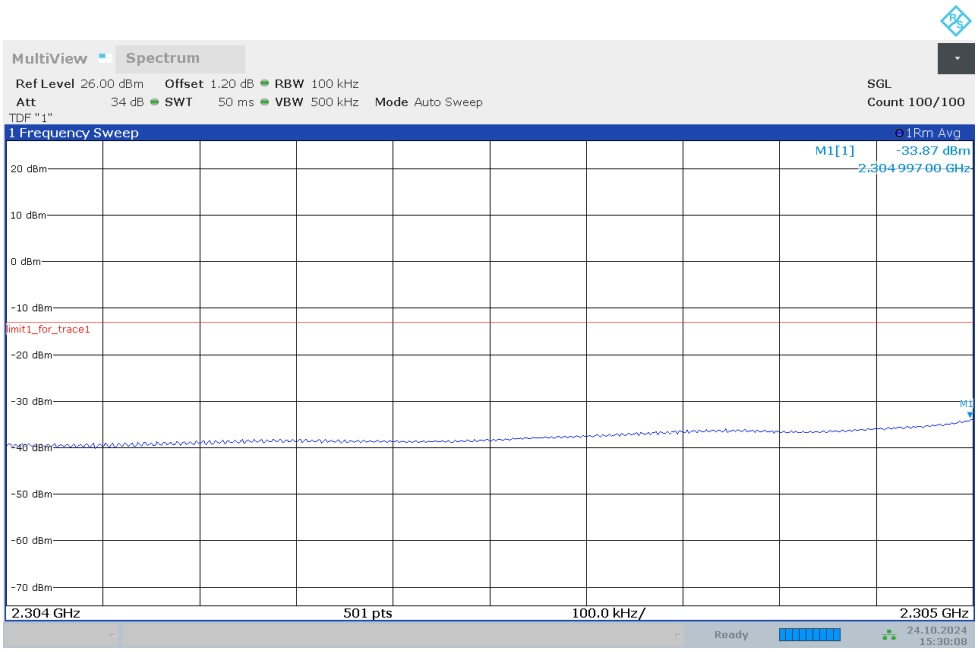
LOW BAND EDGE BLOCK-10MHz-100%RB



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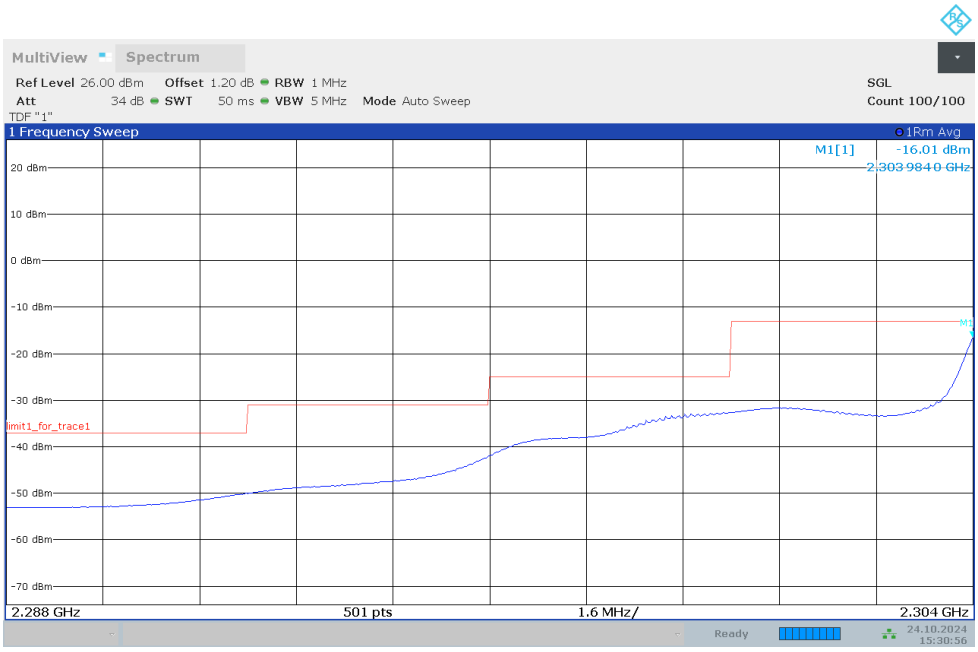
LOW BAND EDGE BLOCK-10MHz-100%RB



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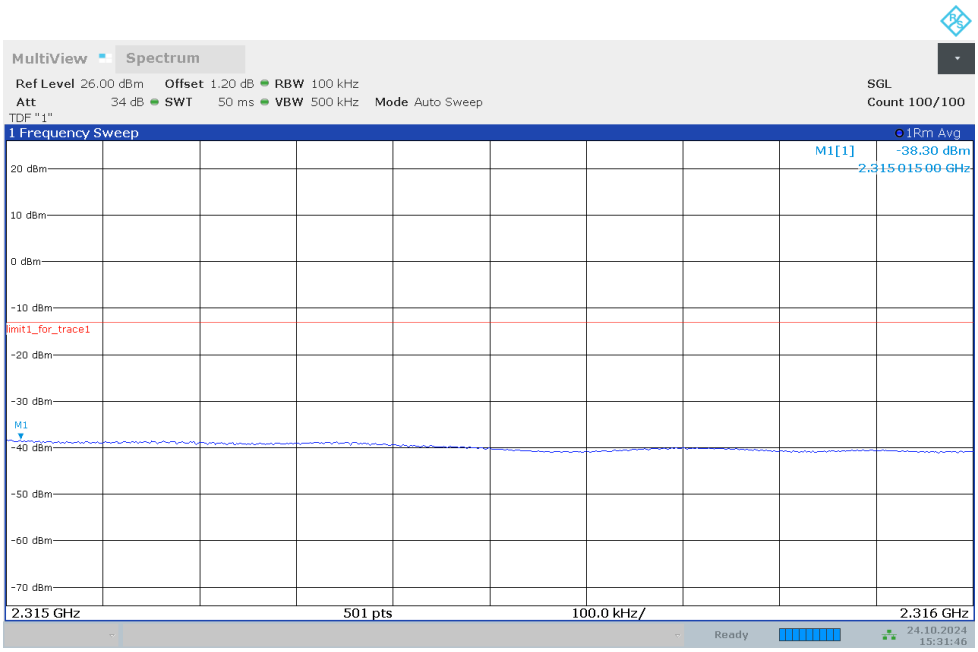
HIGH BAND EDGE BLOCK-10MHz-100%RB



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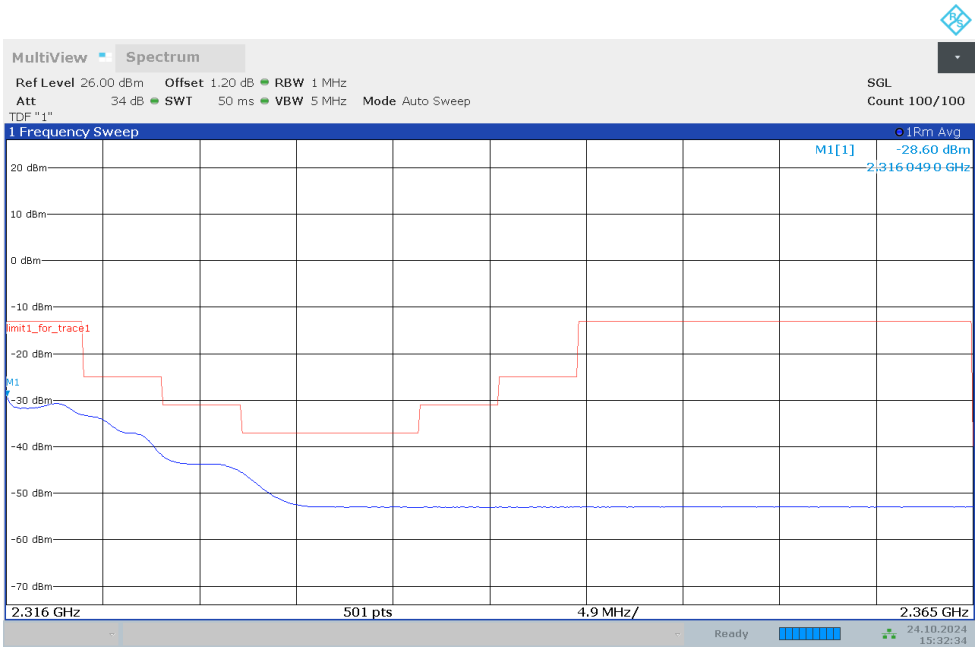
HIGH BAND EDGE BLOCK-10MHz-100%RB



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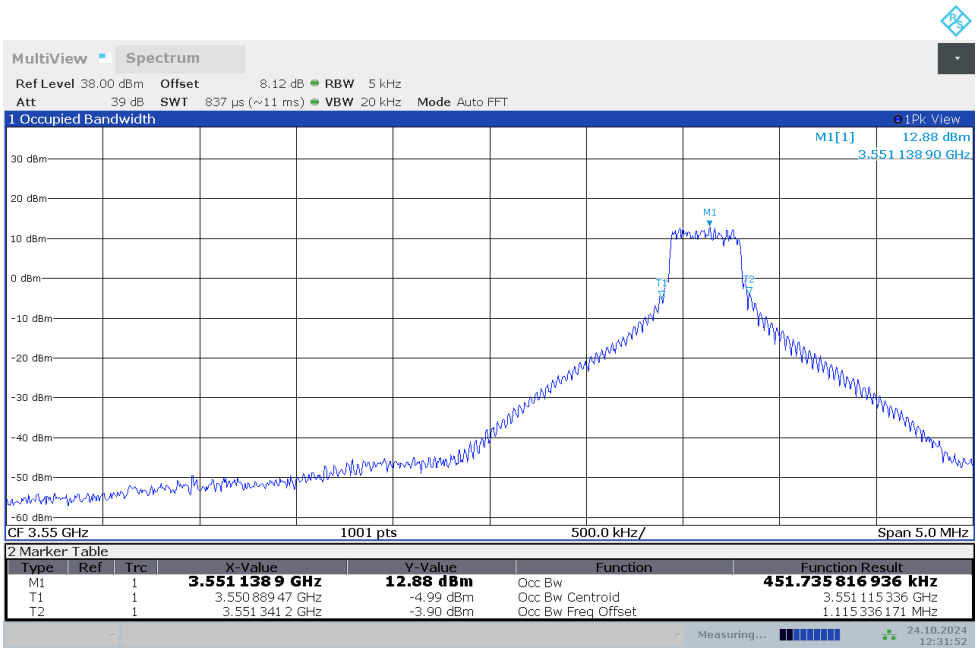
NR n48

OBW: 1RB-LOW_offset



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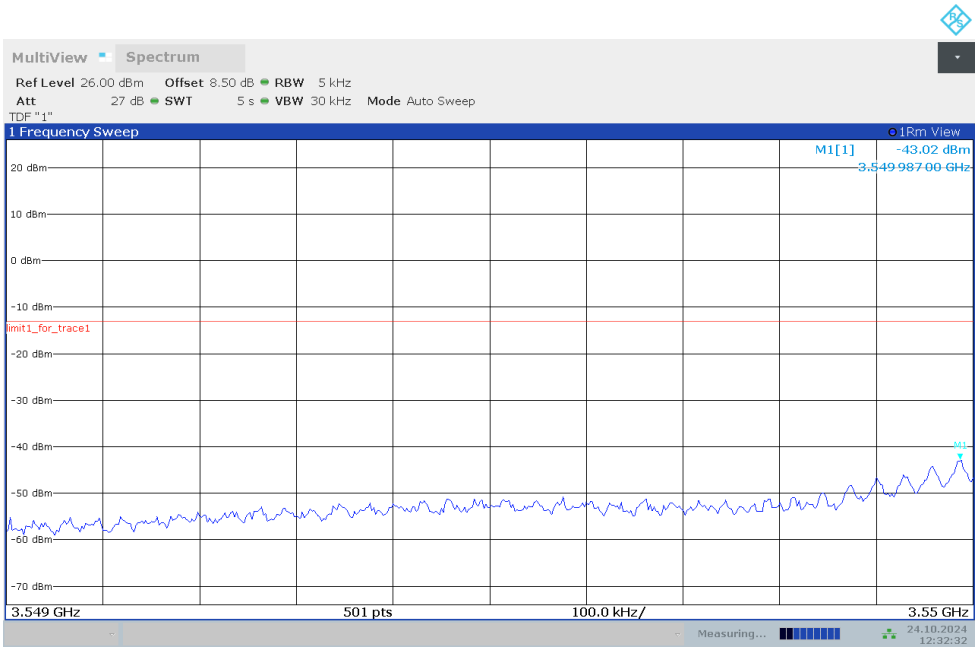

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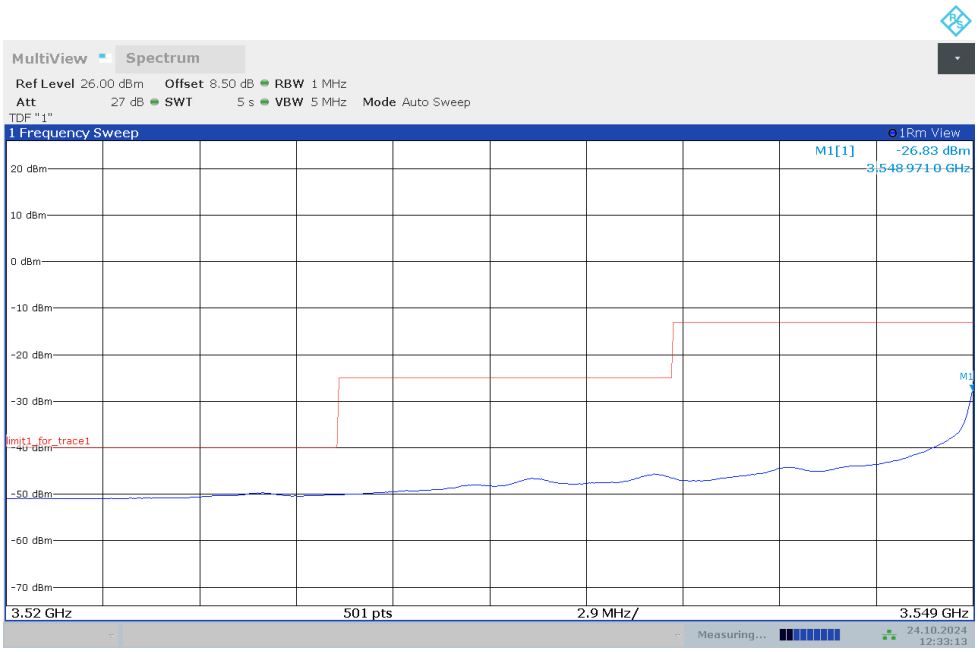
LOW BAND EDGE BLOCK-1RB-LOW_offset



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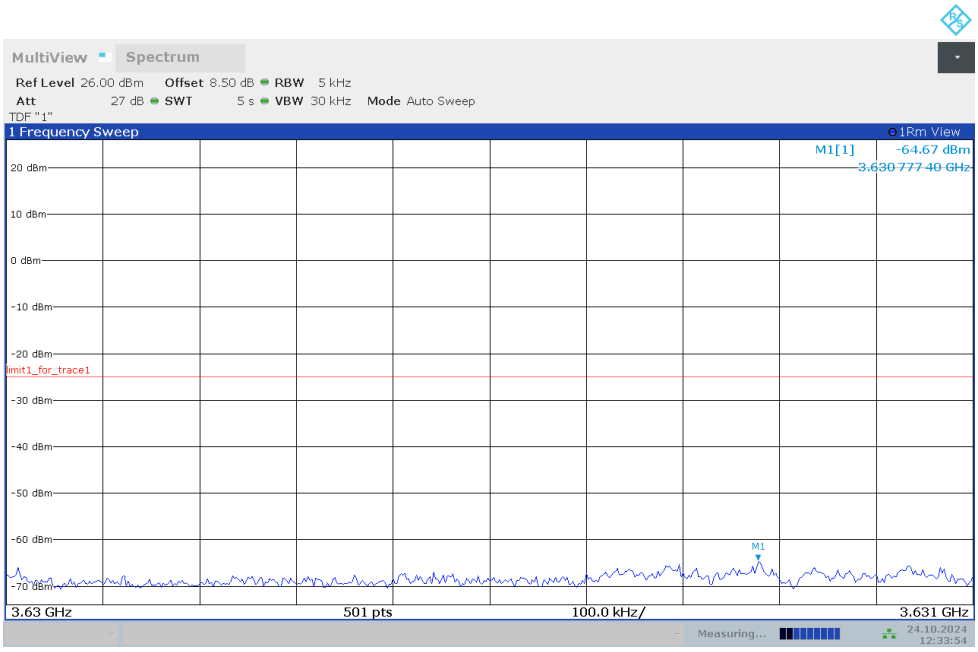

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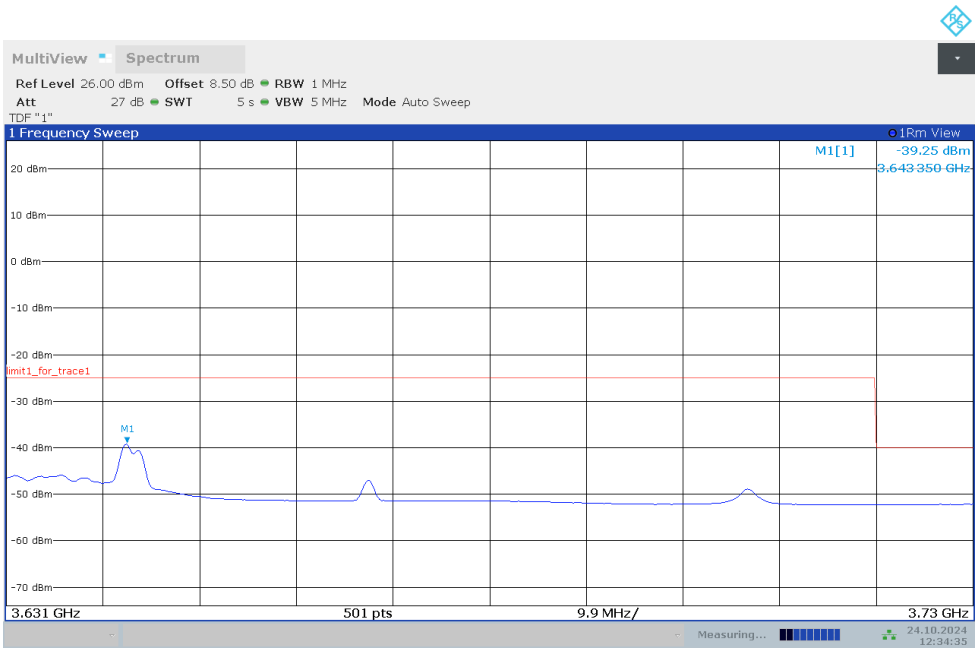
LOW BAND EDGE BLOCK-1RB-LOW_offset



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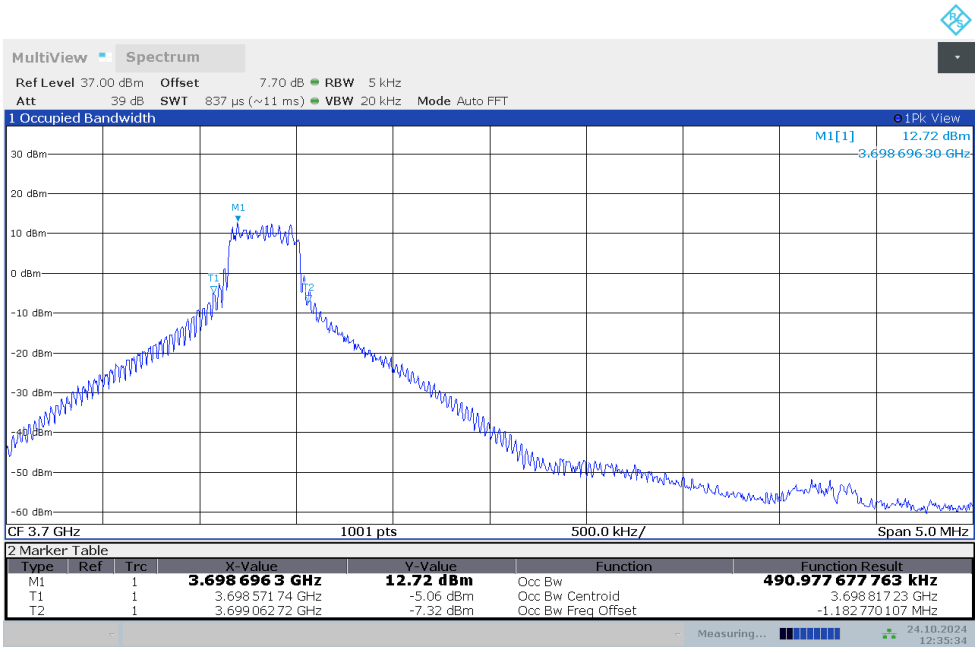

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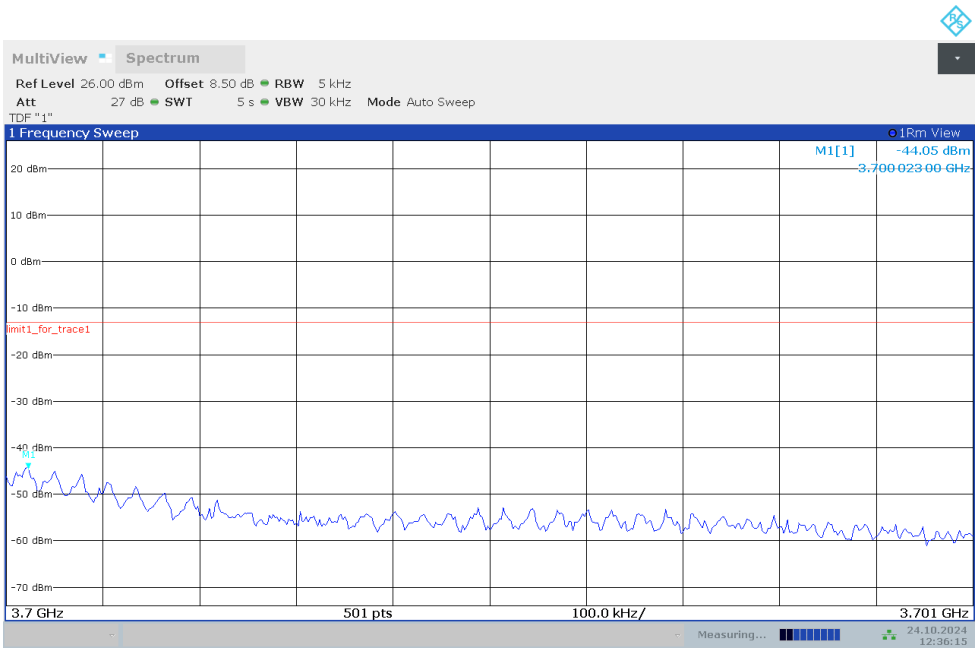
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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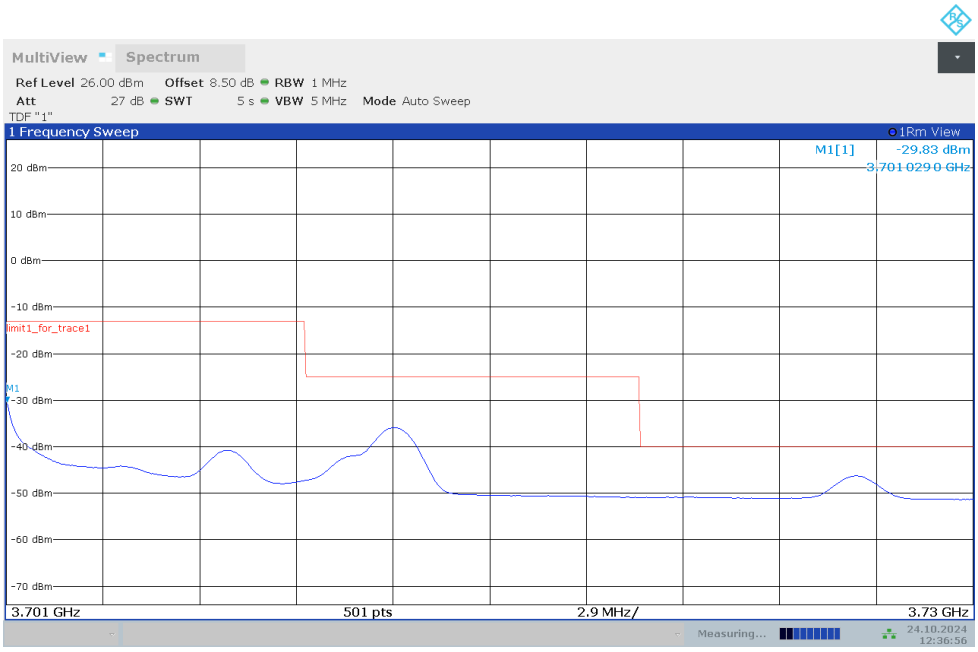
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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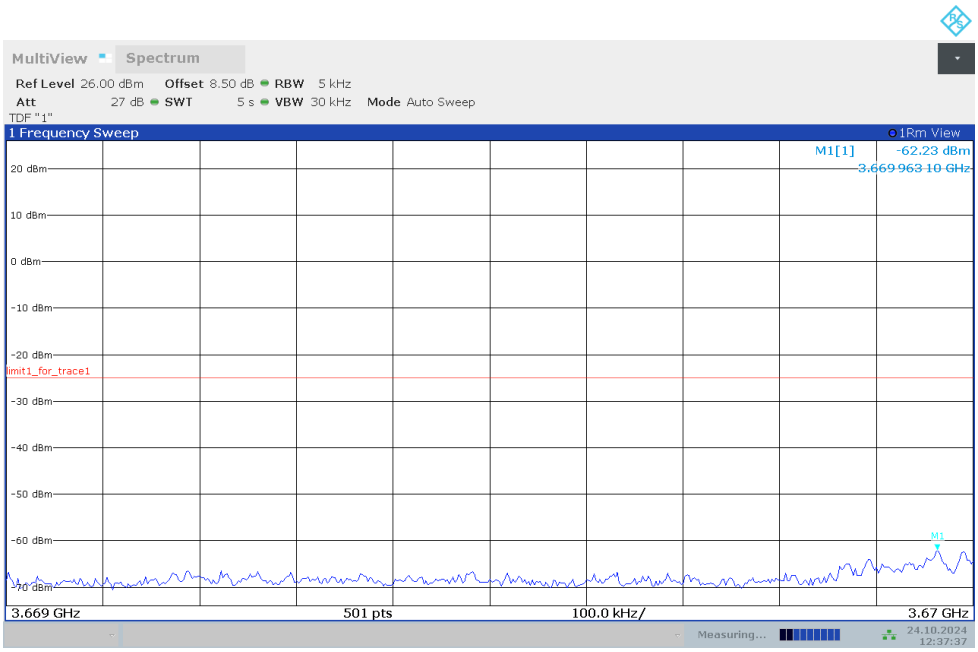
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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HIGH BAND EDGE BLOCK-1RB-HIGH_offset

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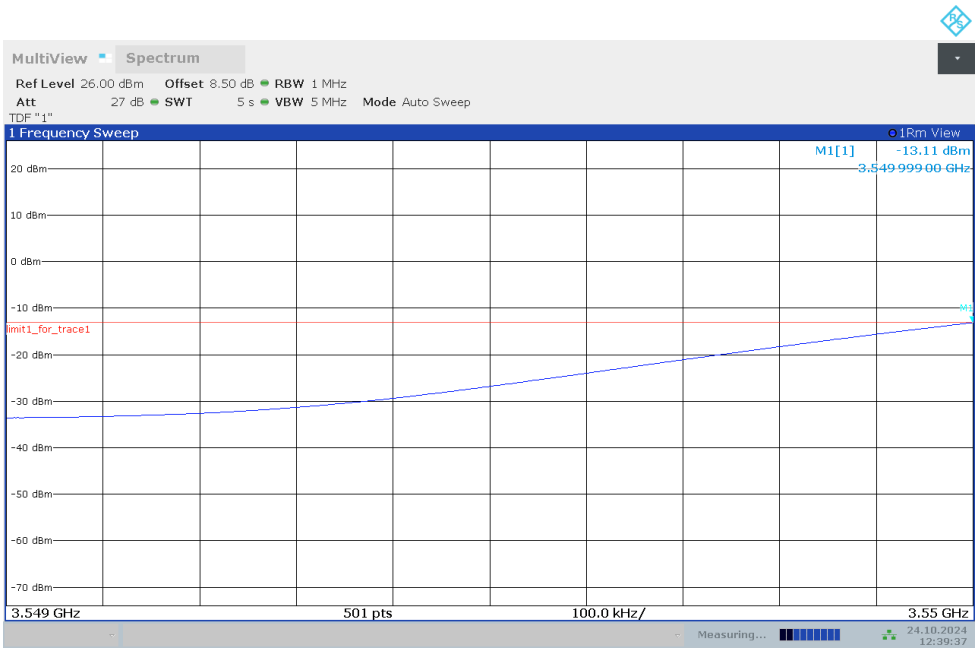
LOW BAND EDGE BLOCK-100MHz-100%RB



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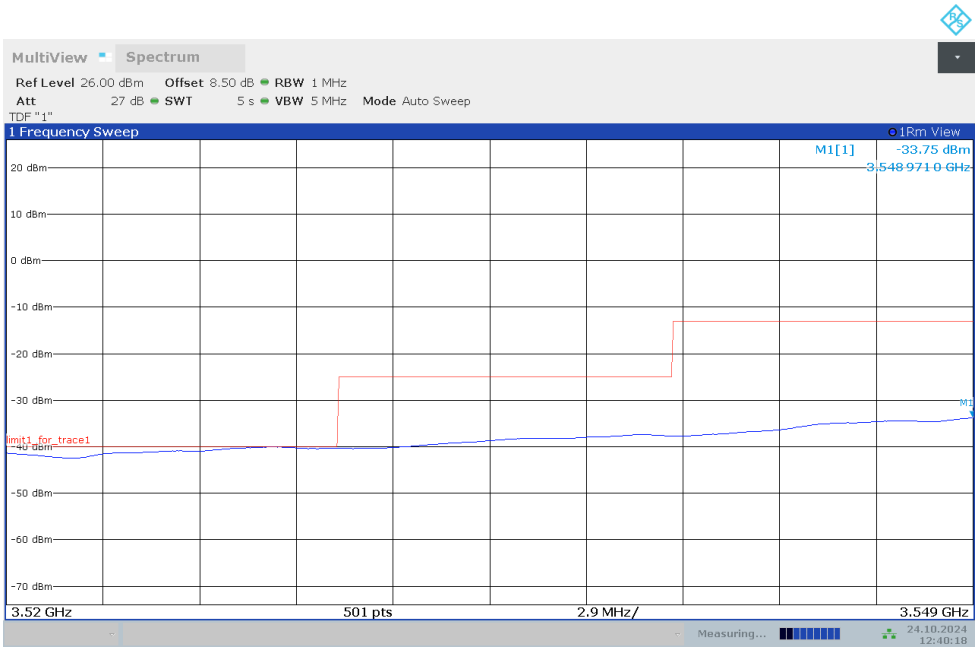
LOW BAND EDGE BLOCK-100MHz-100%RB



12:40:19 24.10.2024

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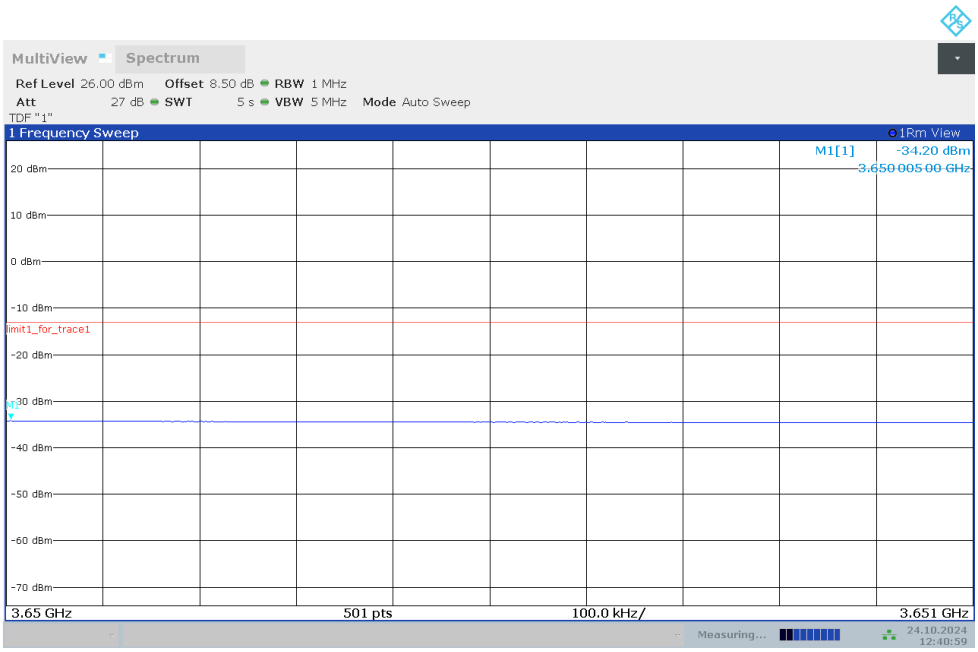
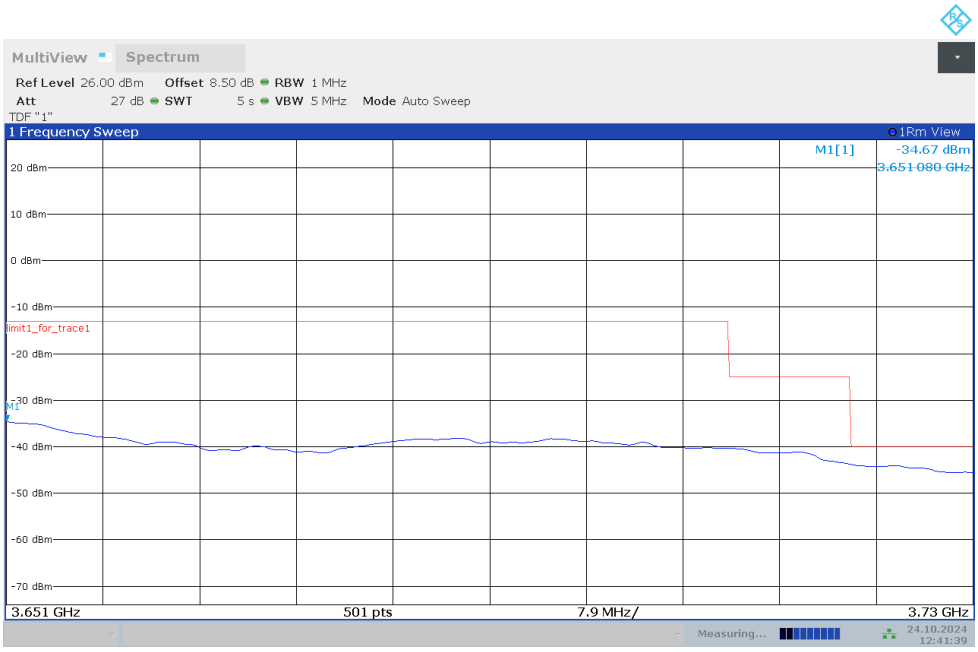
LOW BAND EDGE BLOCK-100MHz-100%RB



12:41:00 24.10.2024

LOW BAND EDGE BLOCK-100MHz-100%RB



12:41:40 24.10.2024

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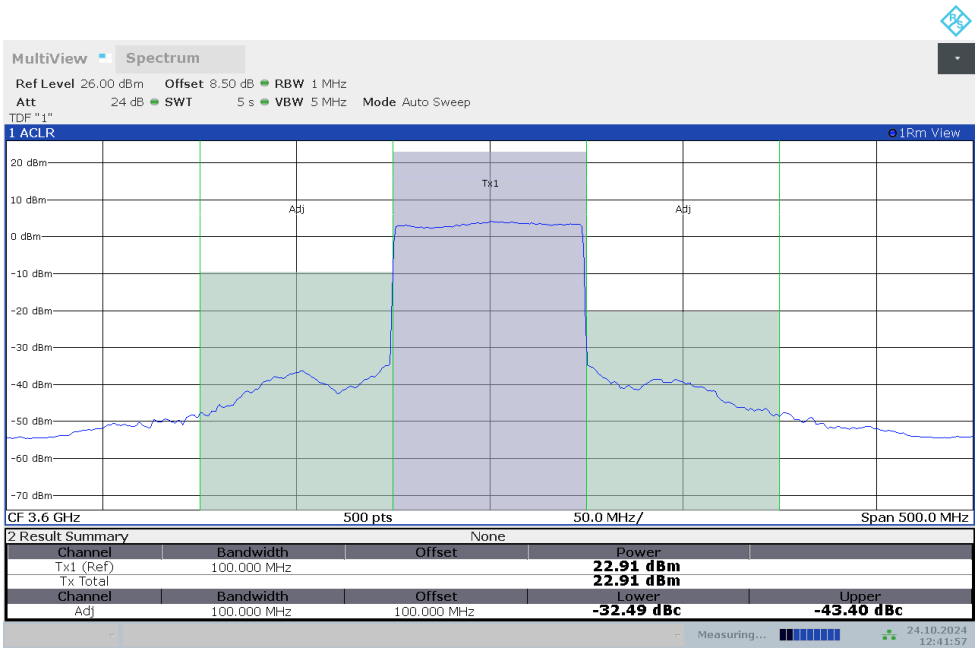
ACLR



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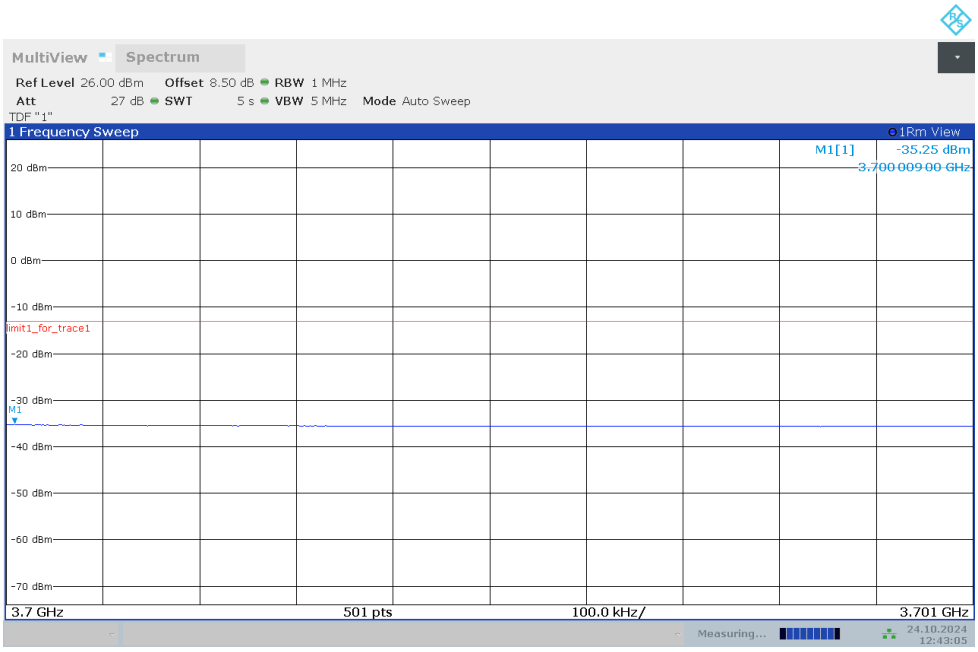
HIGH BAND EDGE BLOCK-100MHz-100%RB



12:43:06 24.10.2024

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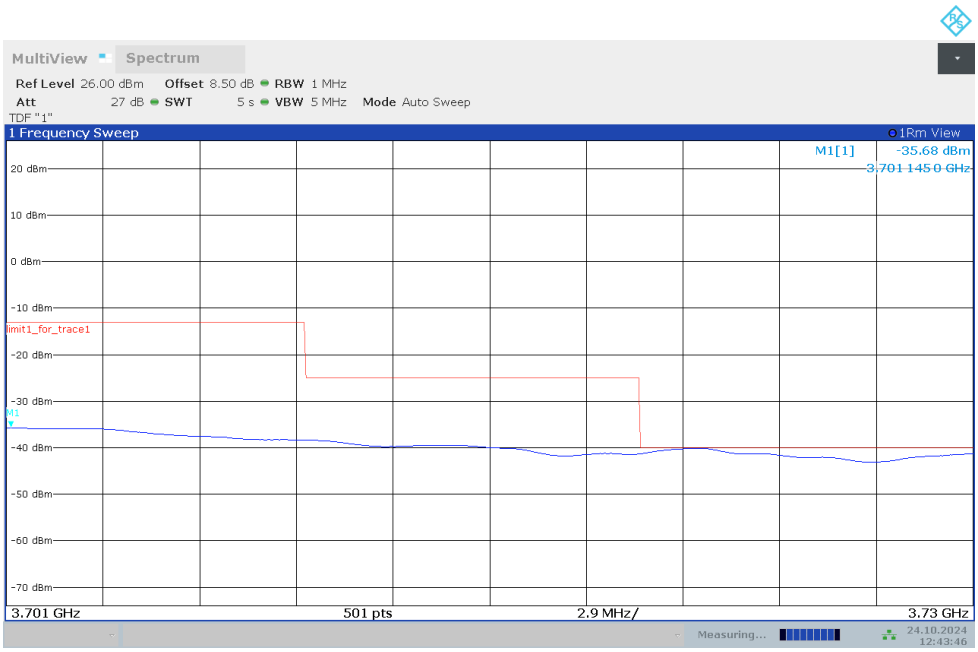
HIGH BAND EDGE BLOCK-100MHz-100%RB



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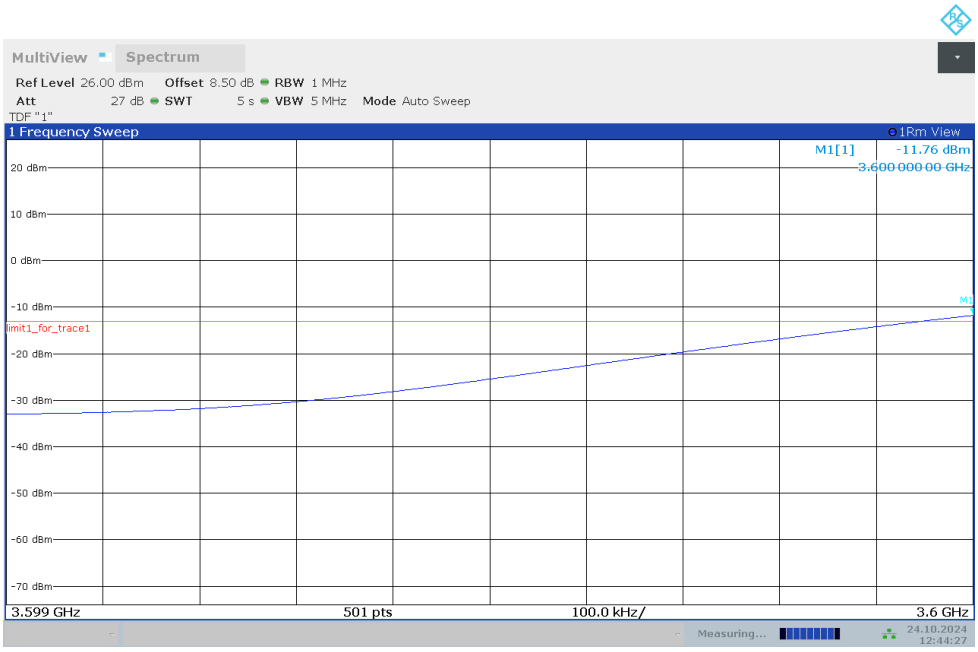
HIGH BAND EDGE BLOCK-100MHz-100%RB



12:44:28 24.10.2024

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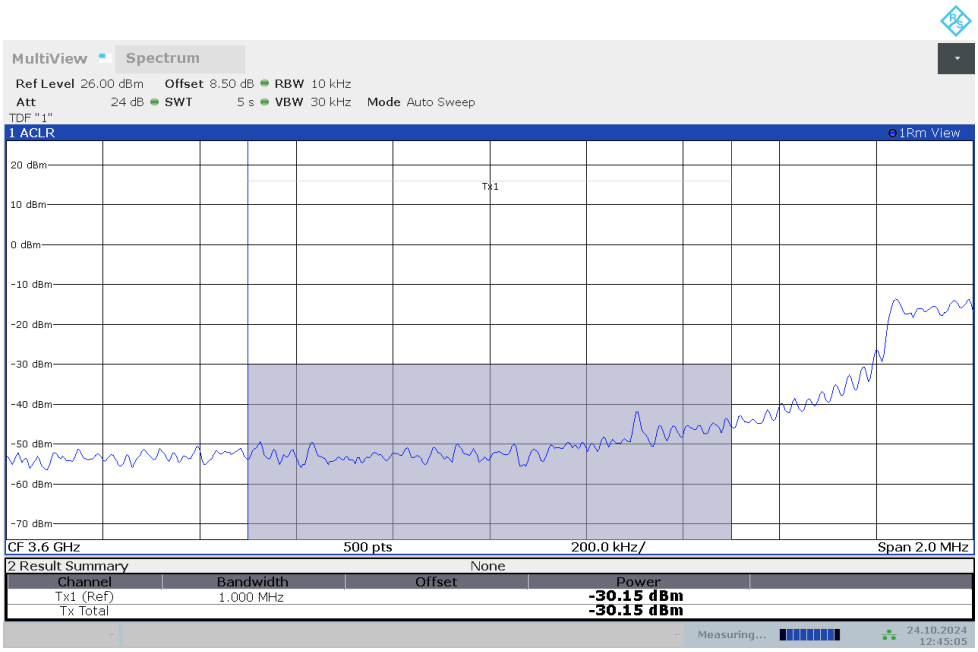
Channel power



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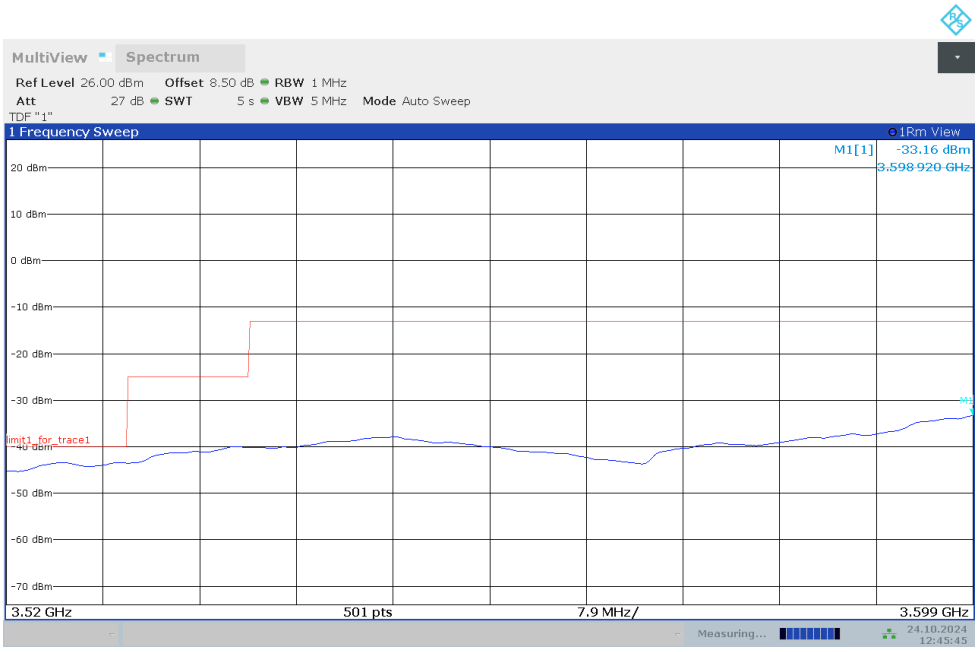
HIGH BAND EDGE BLOCK-100MHz-100%RB



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ACLR

12:46:04 24.10.2024

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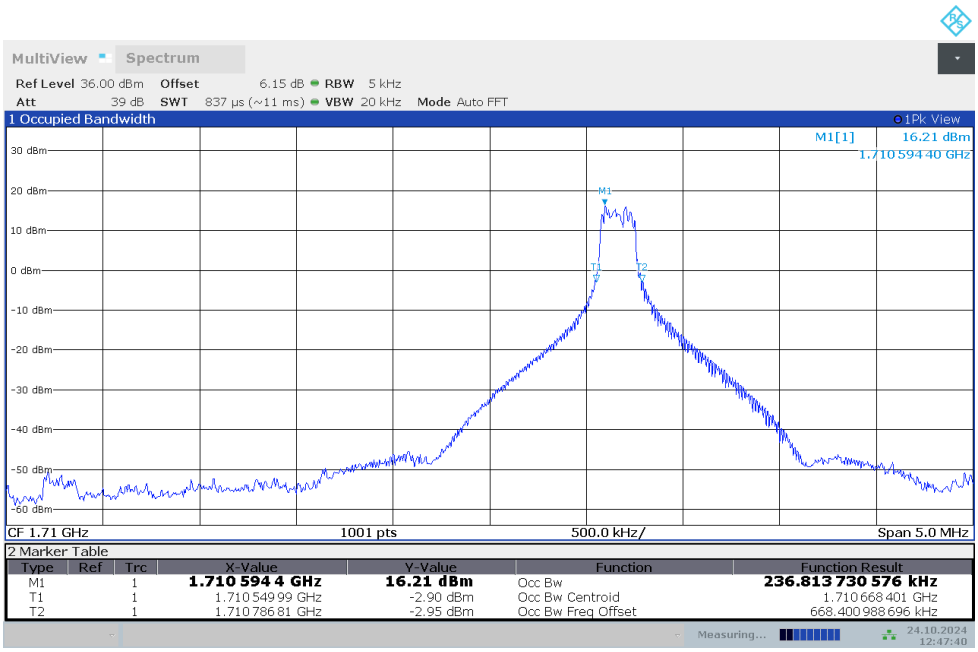
NR n66

OBW: 1RB-LOW_offset



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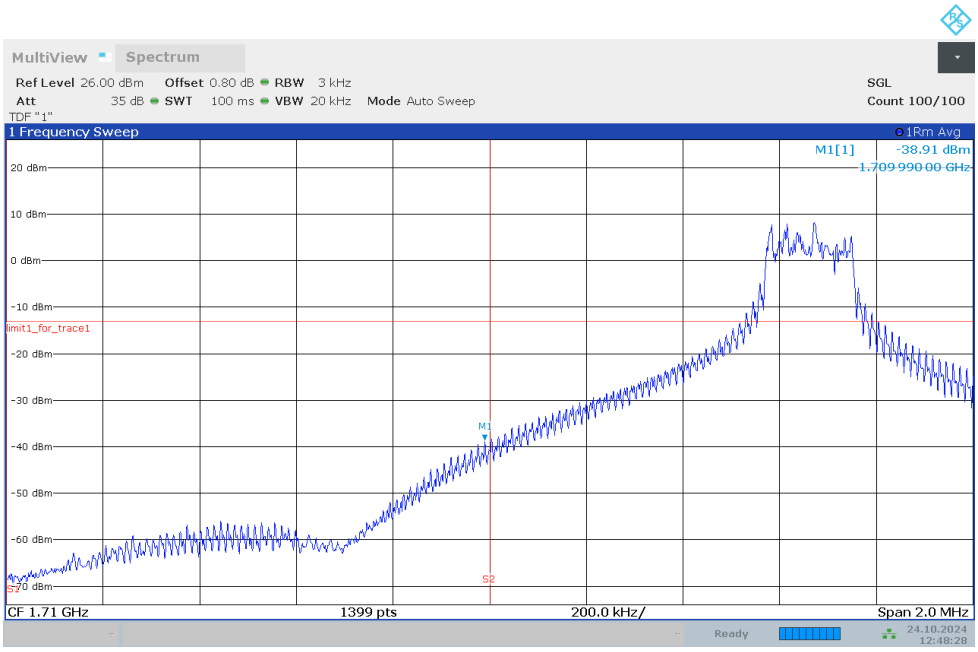
LOW BAND EDGE BLOCK-1RB-LOW_offset



12:48:29 24.10.2024

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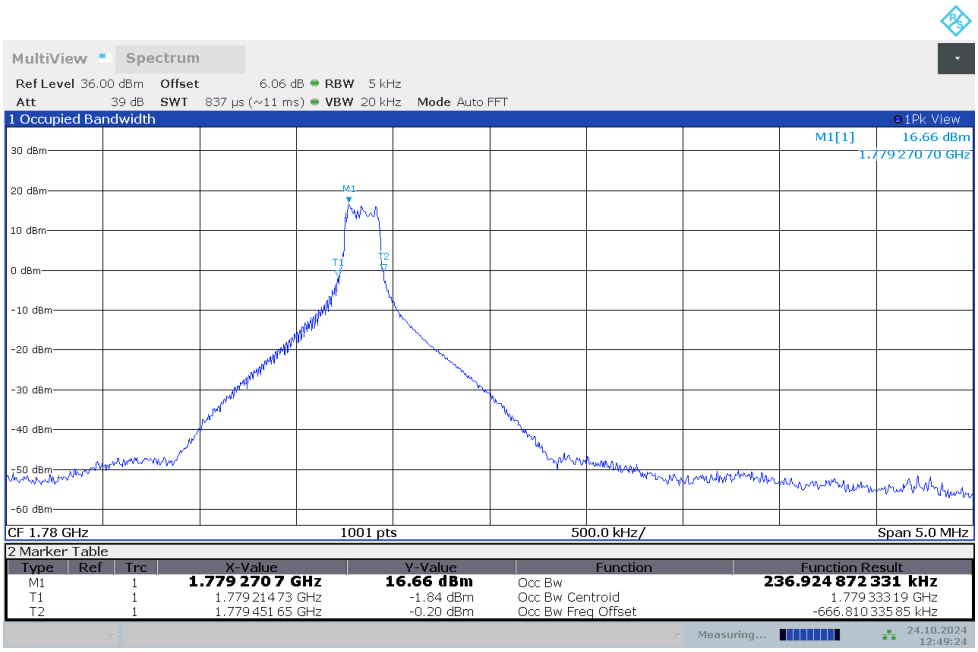
OBW: 1RB-HIGH_offset



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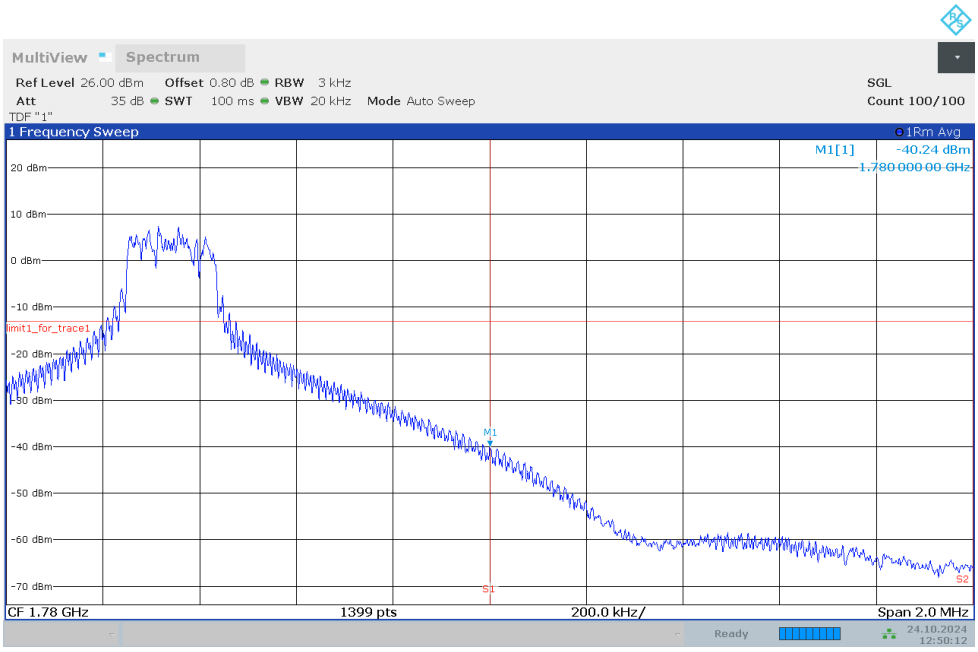
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



12:50:12 24.10.2024

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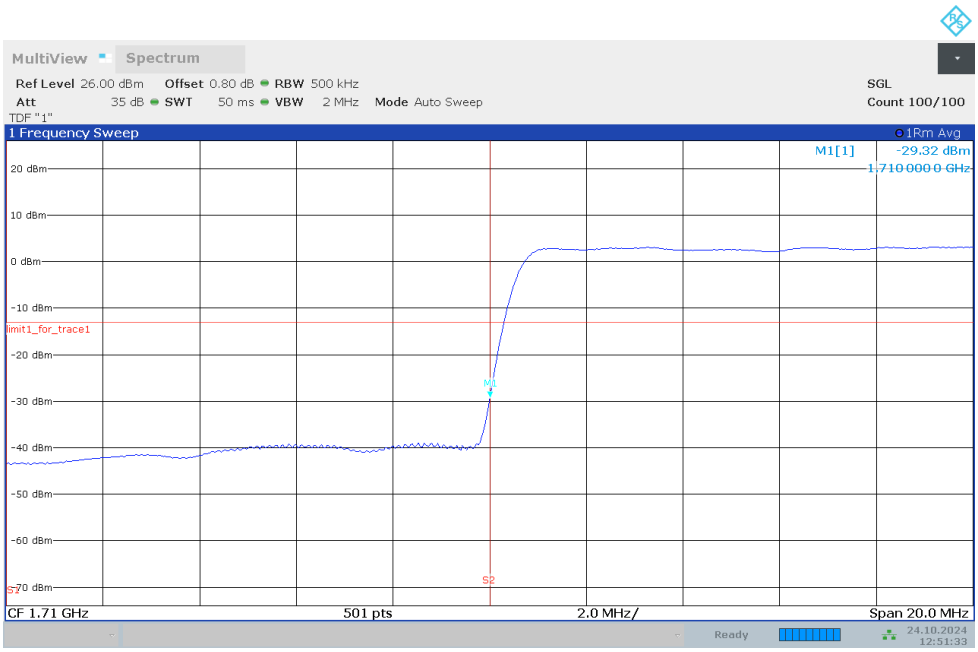
LOW BAND EDGE BLOCK-45MHz-100%RB



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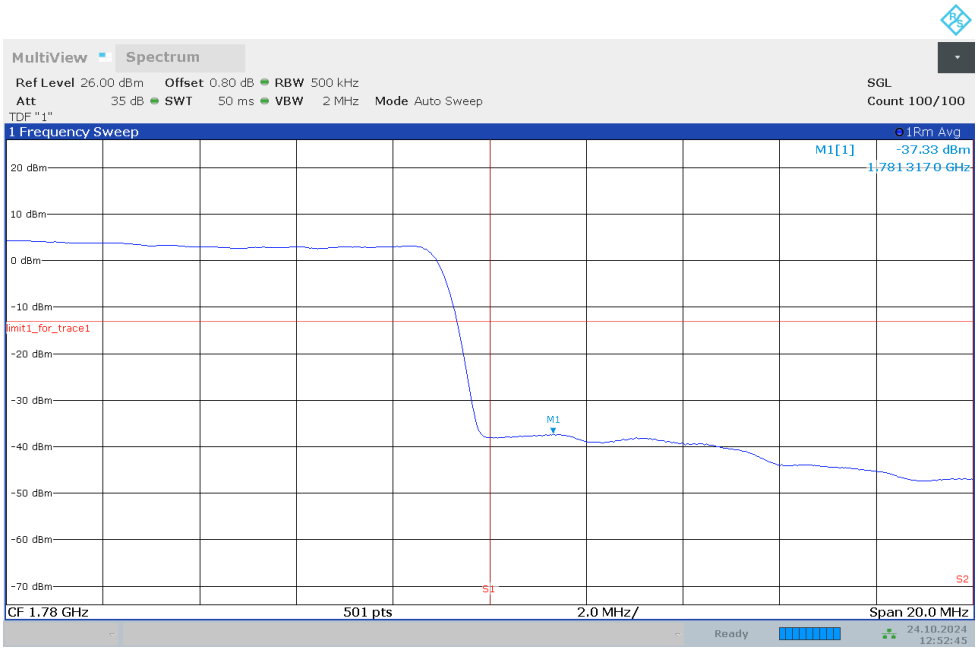
HIGH BAND EDGE BLOCK-45MHz-100%RB



12:52:45 24.10.2024

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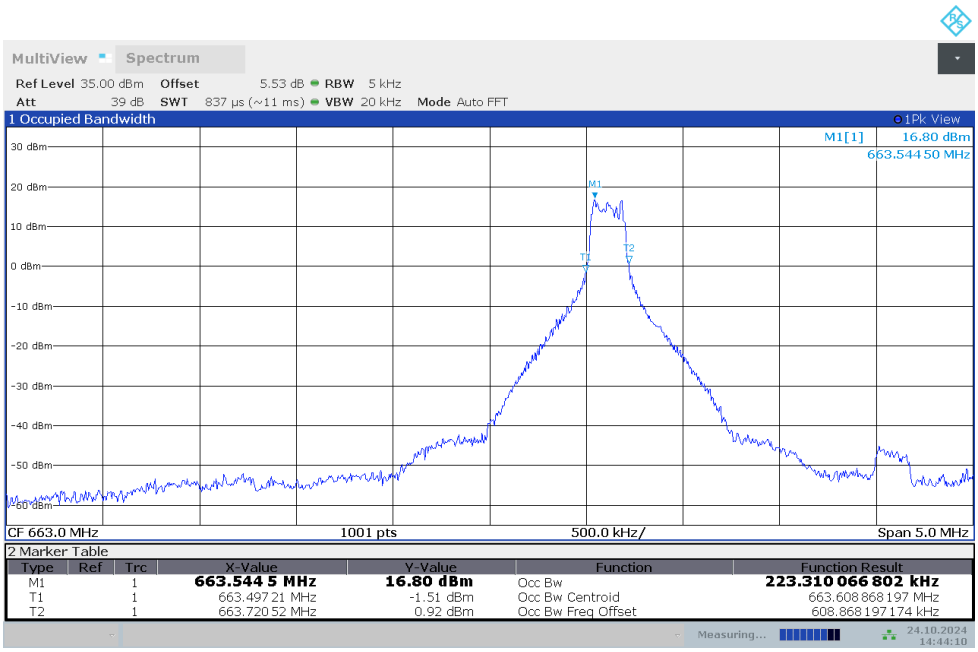
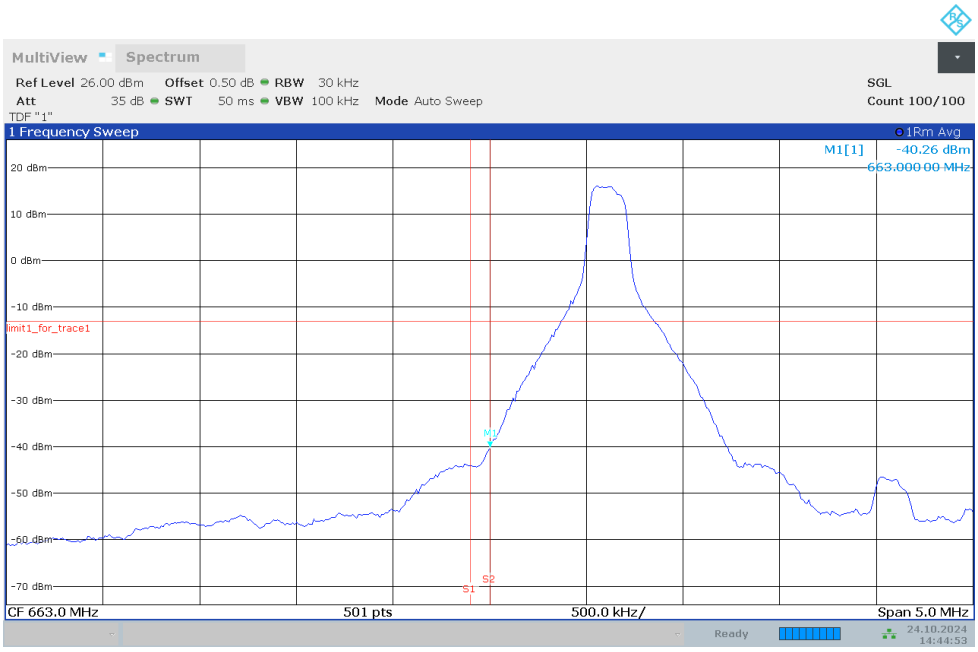
NR n71

OBW: 1RB-LOW_offset



14:44:11 24.10.2024

LOW BAND EDGE BLOCK-1RB-LOW_offset



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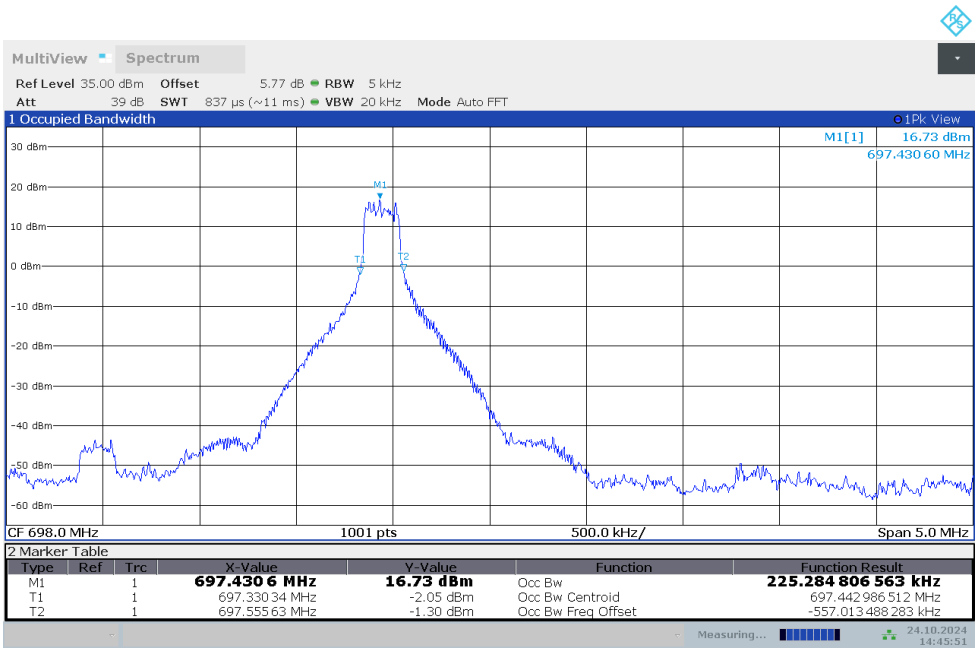
OBW: 1RB-HIGH_offset



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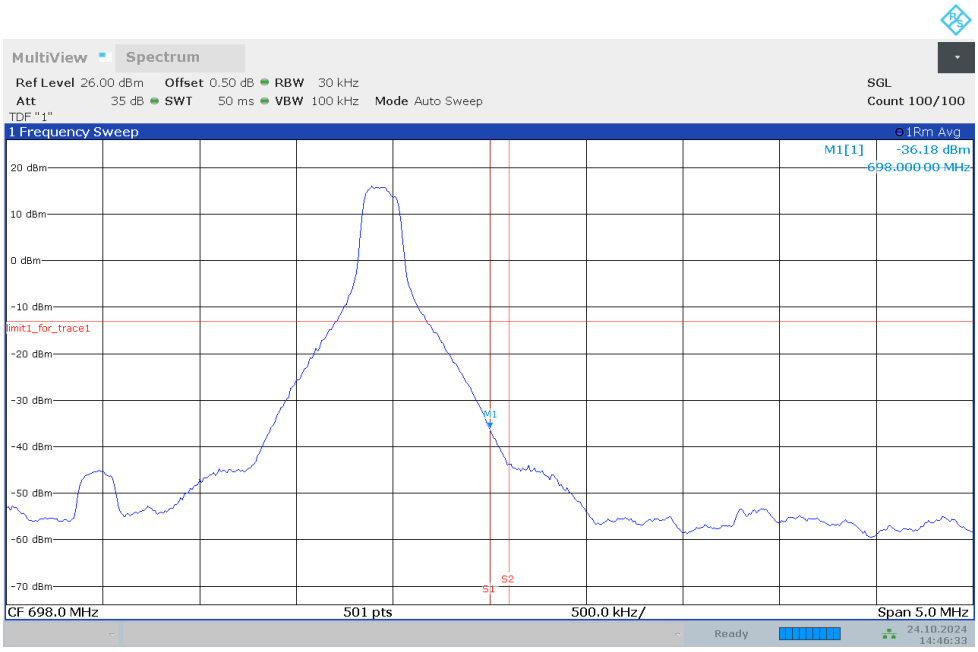
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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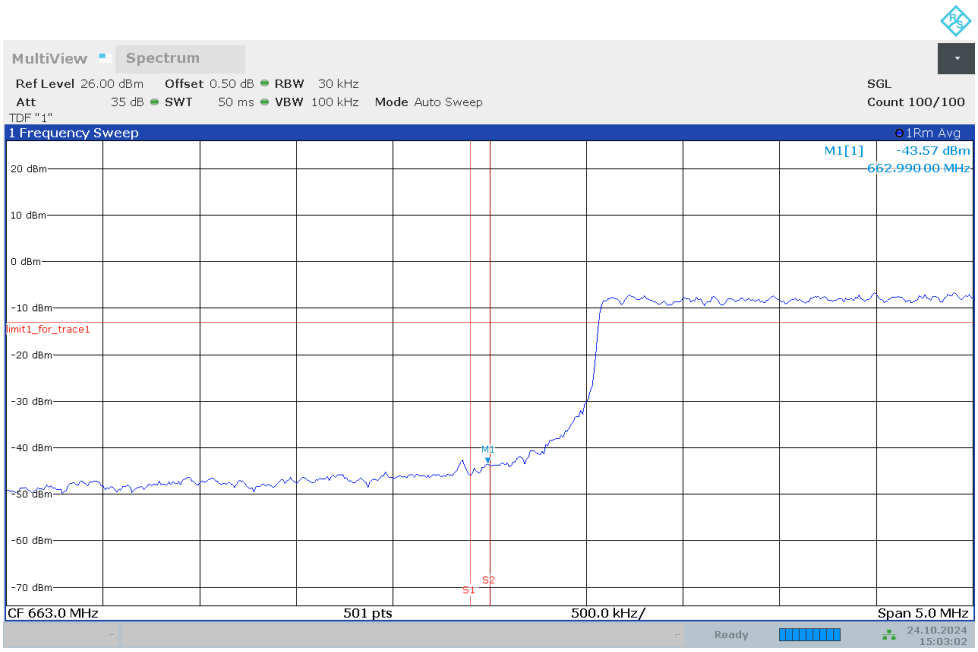
LOW BAND EDGE BLOCK-35MHz-100%RB



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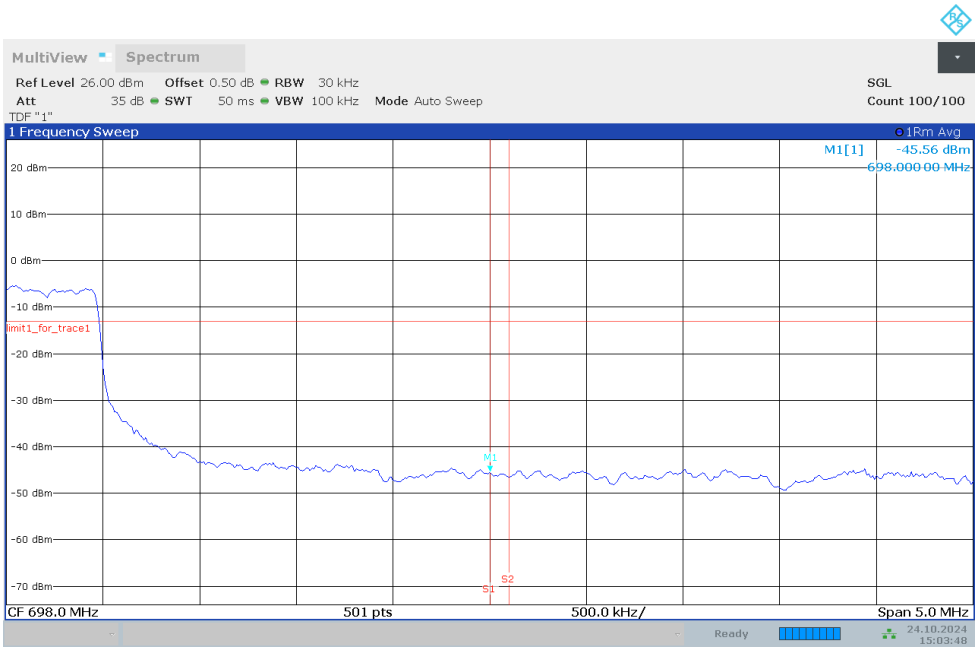
HIGH BAND EDGE BLOCK-35MHz-100%RB



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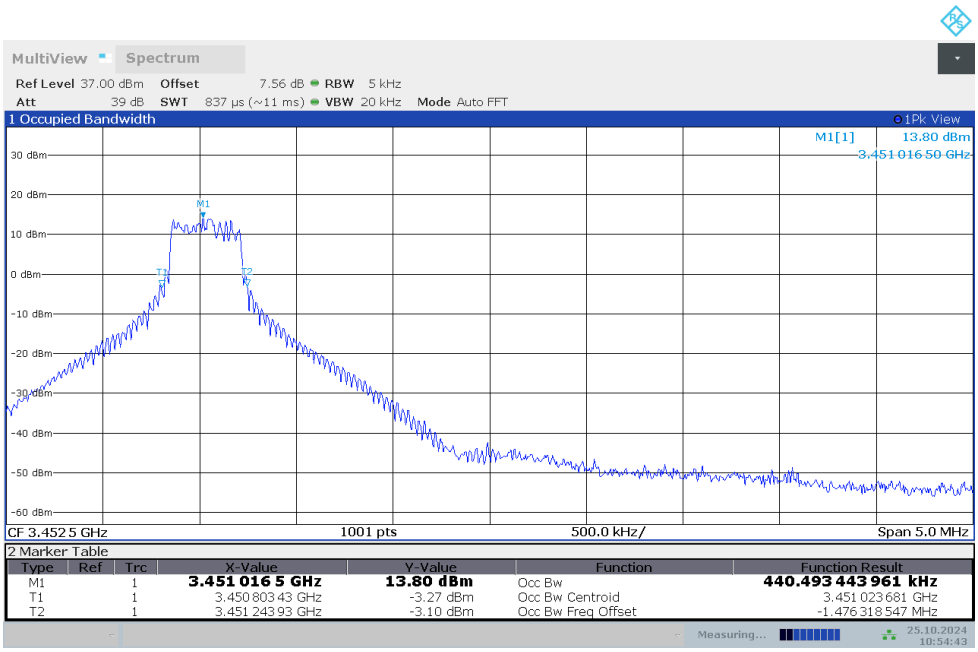
NR n78L

OBW: 1RB-LOW_offset



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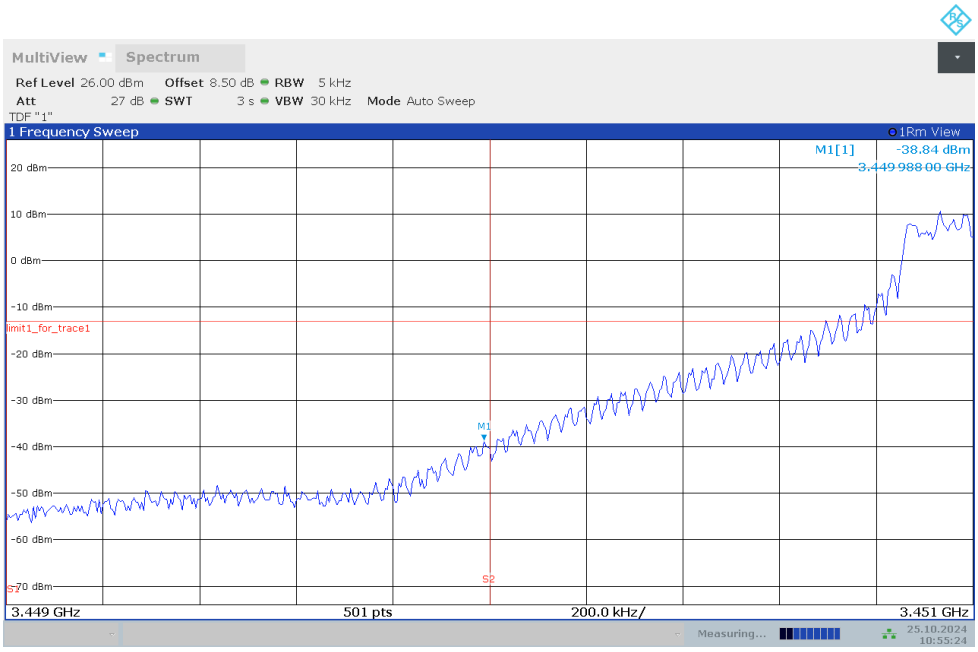

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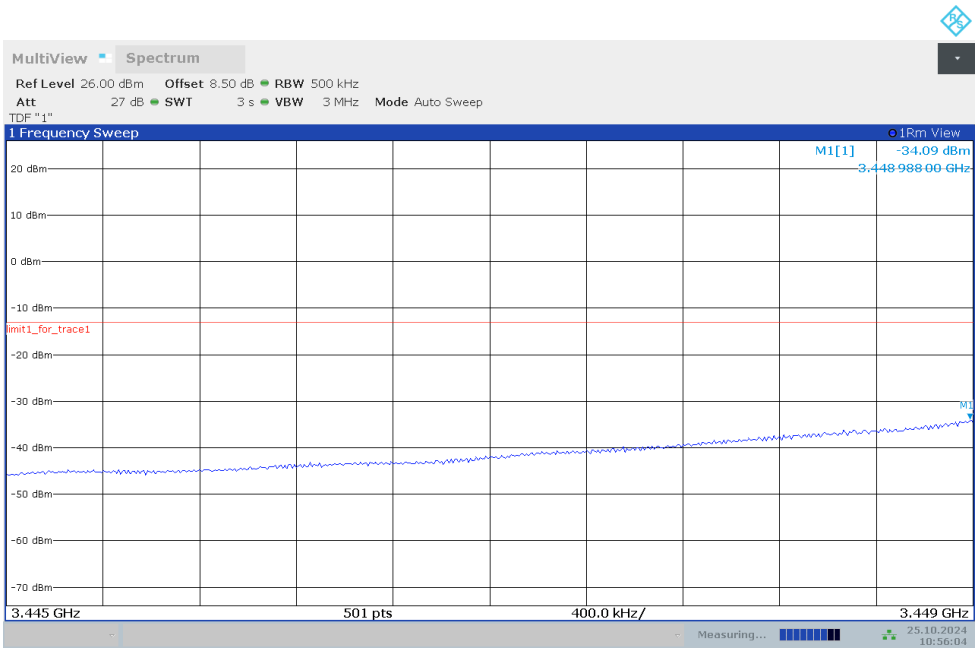
LOW BAND EDGE BLOCK-1RB-LOW_offset



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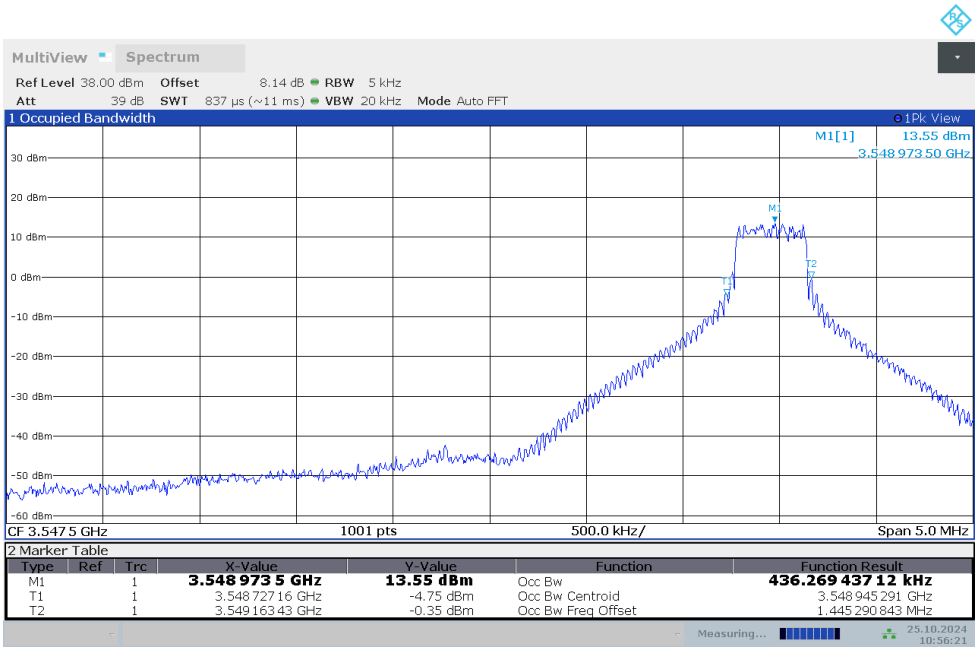
OBW: 1RB-HIGH_offset



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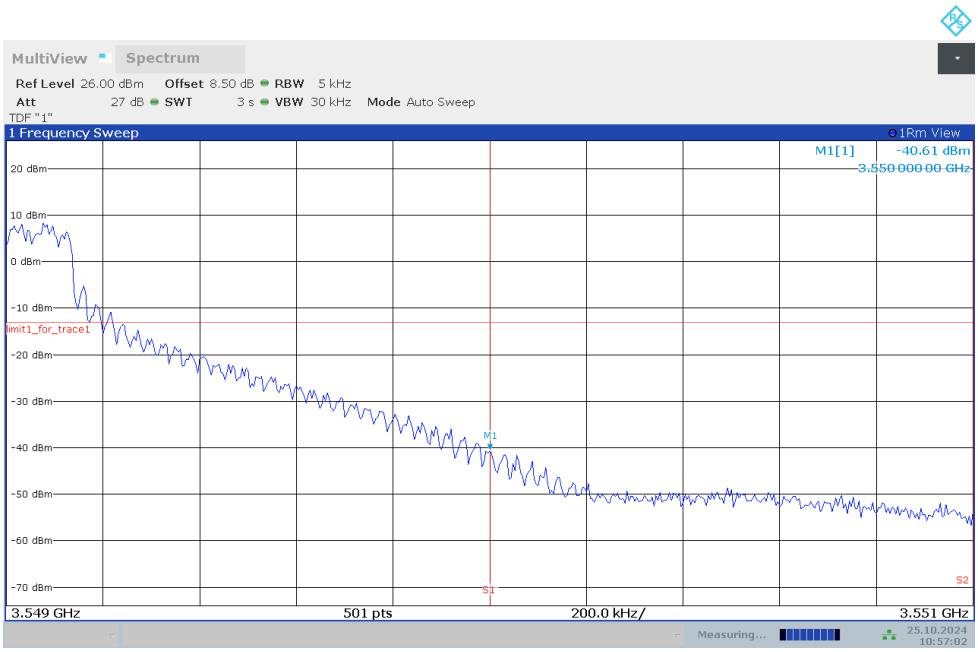
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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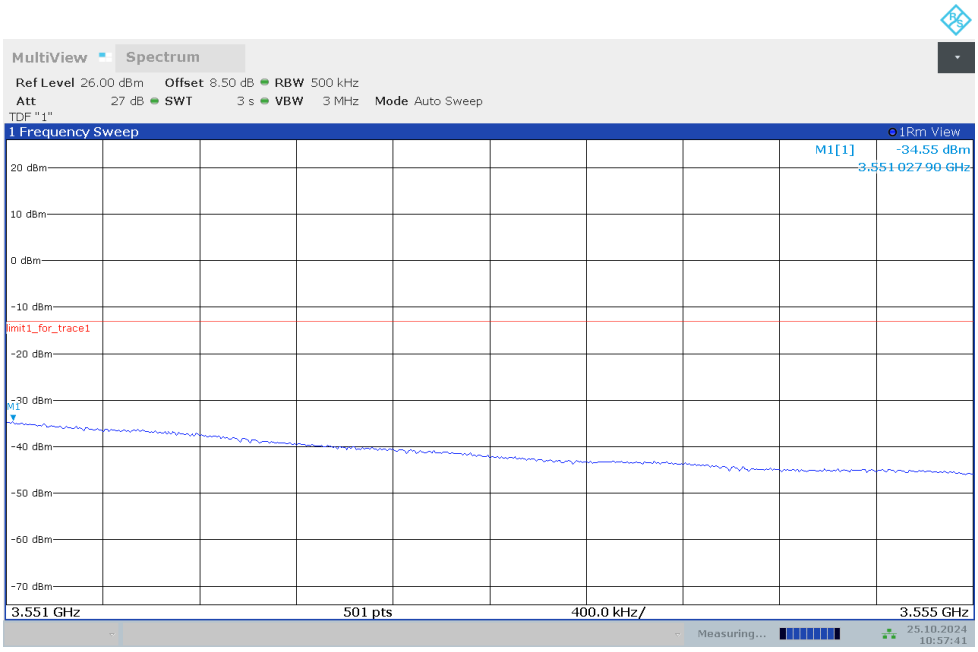
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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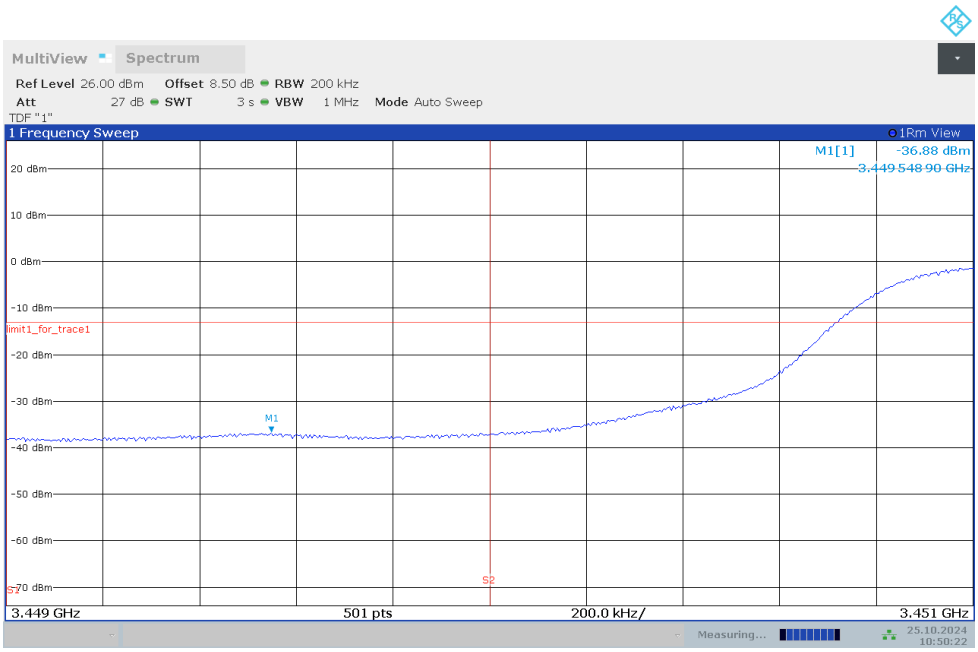
LOW BAND EDGE BLOCK-100MHz-100%RB



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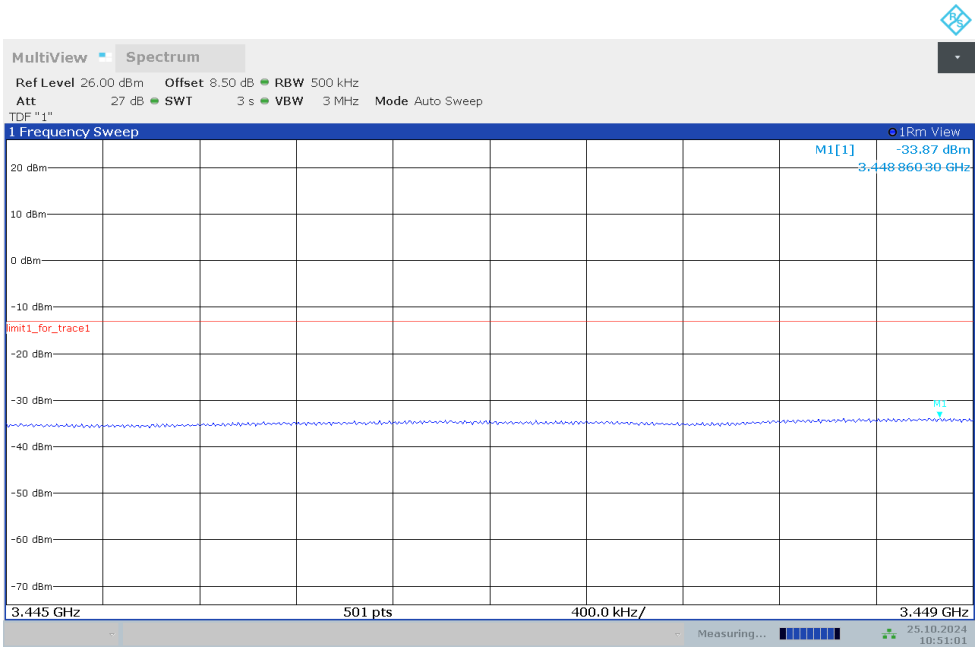
LOW BAND EDGE BLOCK-100MHz-100%RB



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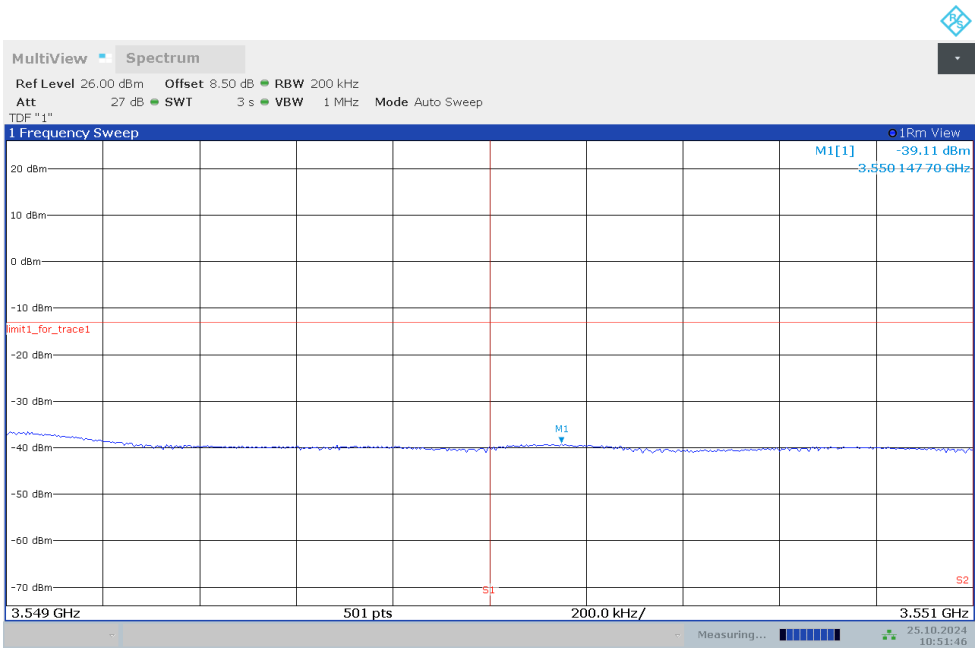
HIGH BAND EDGE BLOCK-100MHz-100%RB



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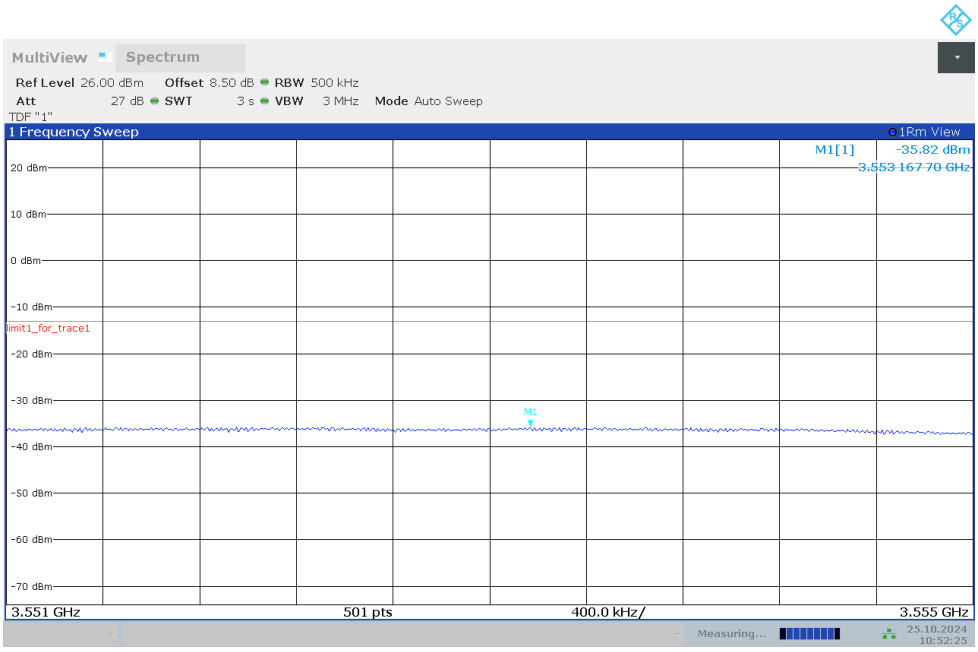
HIGH BAND EDGE BLOCK-100MHz-100%RB



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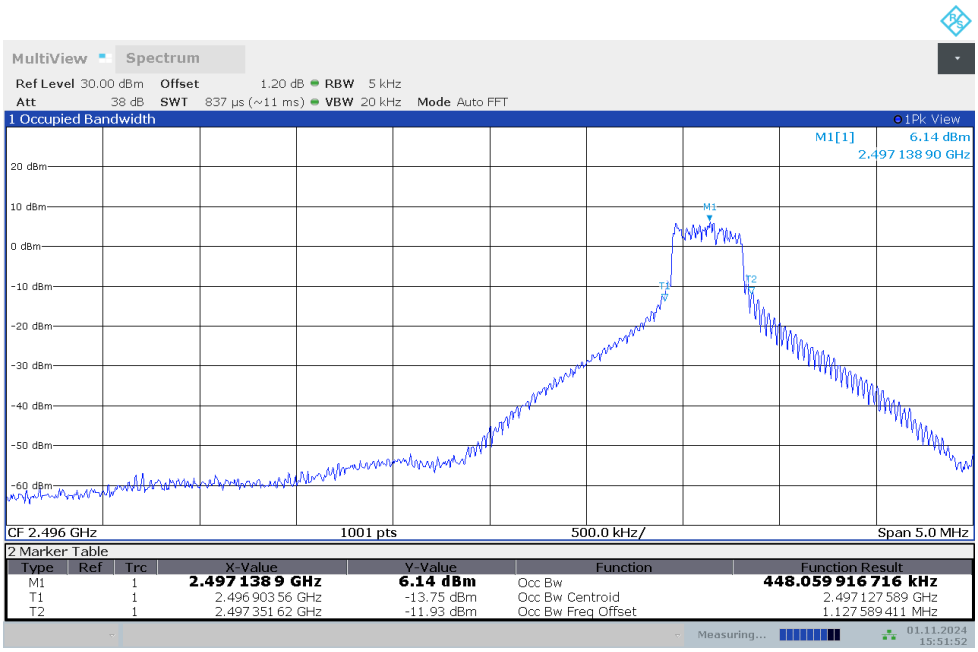
NR n41

OBW: 1RB-LOW_offset



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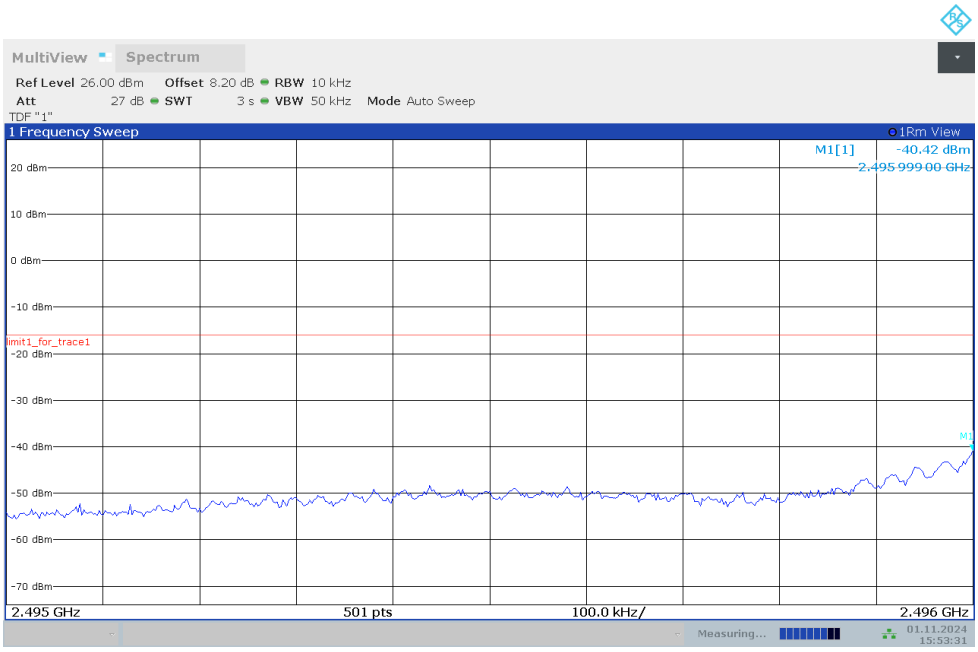
LOW BAND EDGE BLOCK-1RB-LOW_offset



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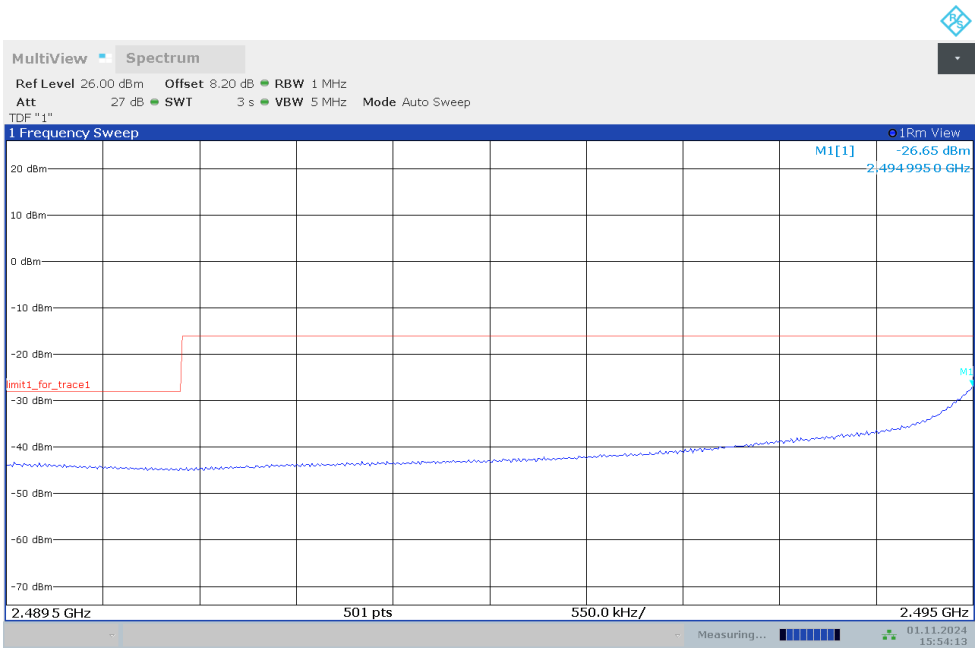
LOW BAND EDGE BLOCK-1RB-LOW_offset



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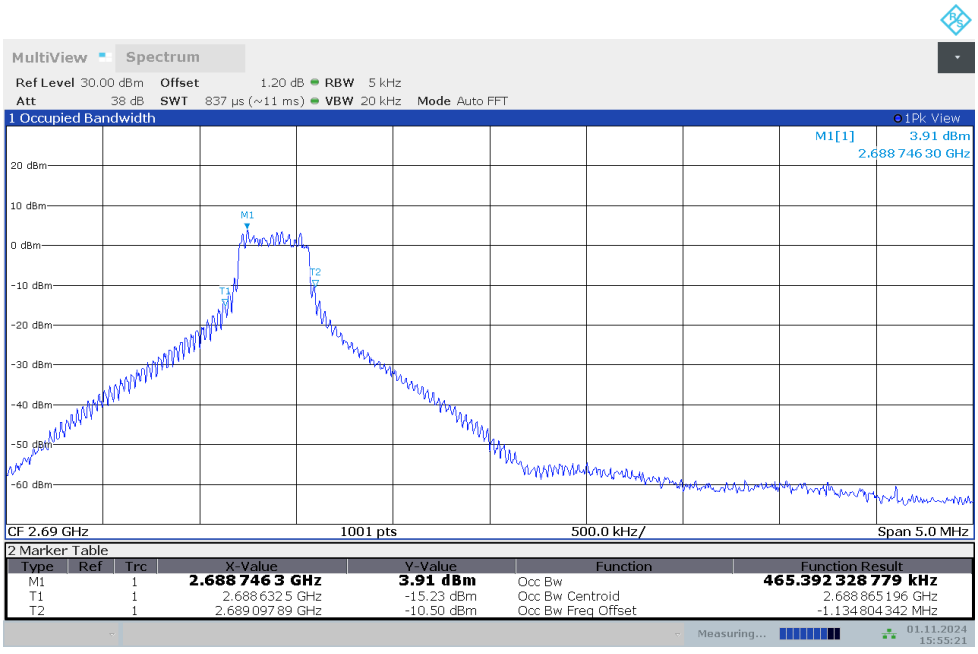
OBW: 1RB-HIGH_offset



15:55:21 01.11.2024

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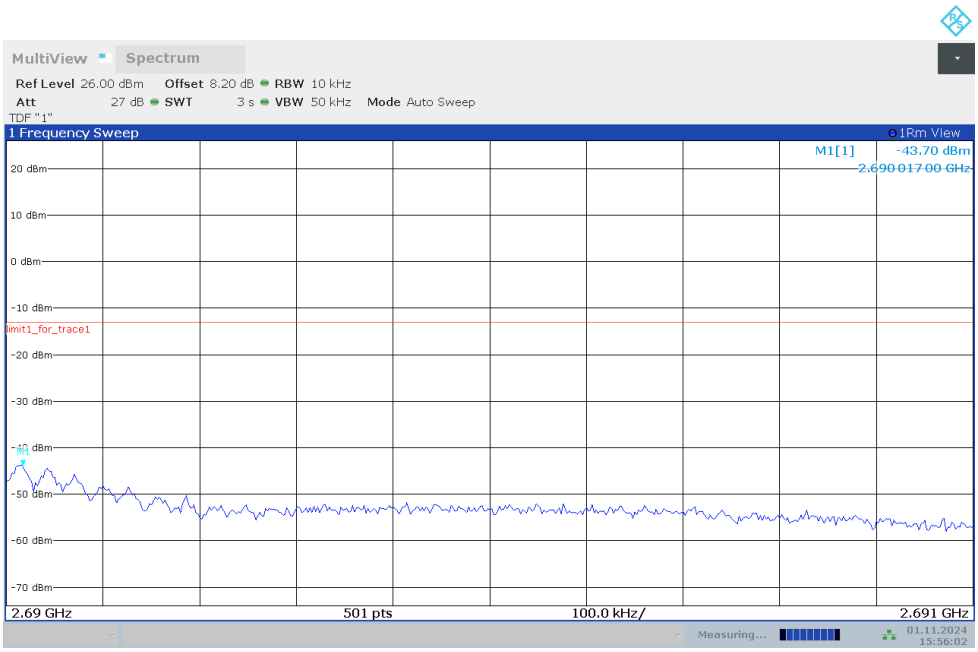
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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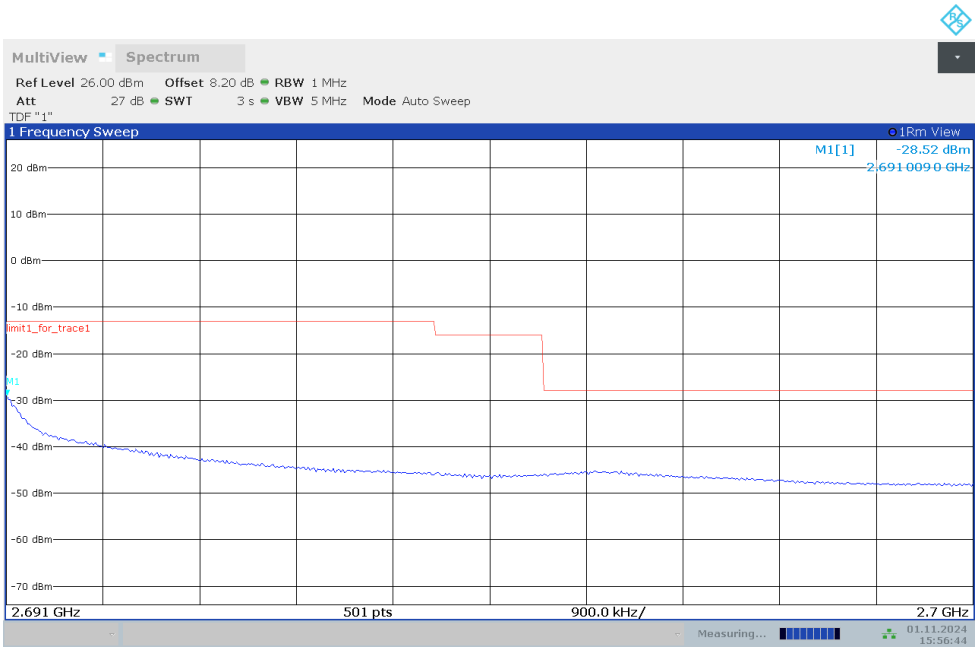
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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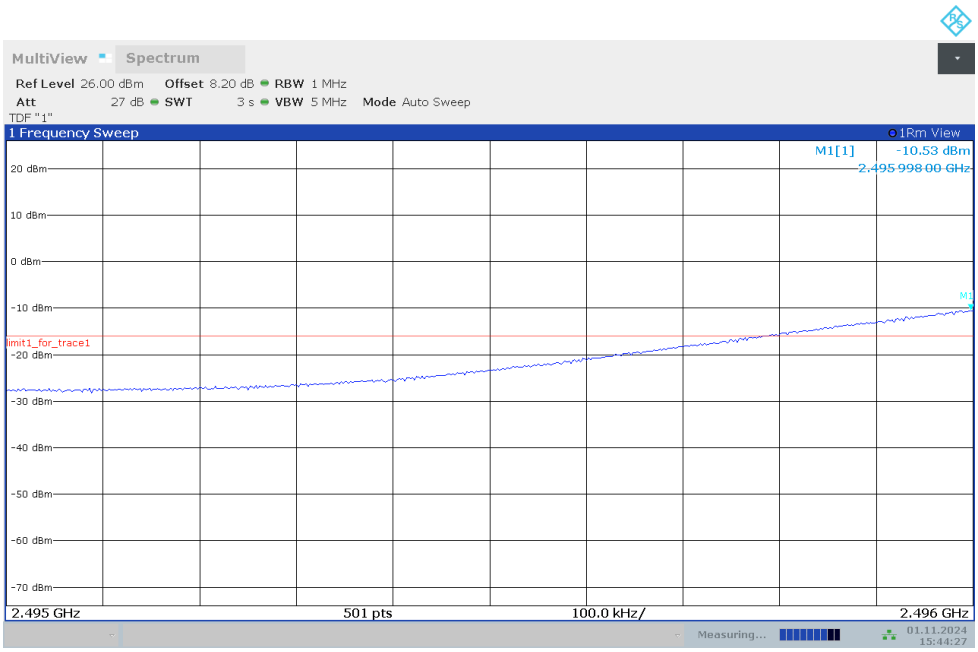
LOW BAND EDGE BLOCK-100MHz-100%RB



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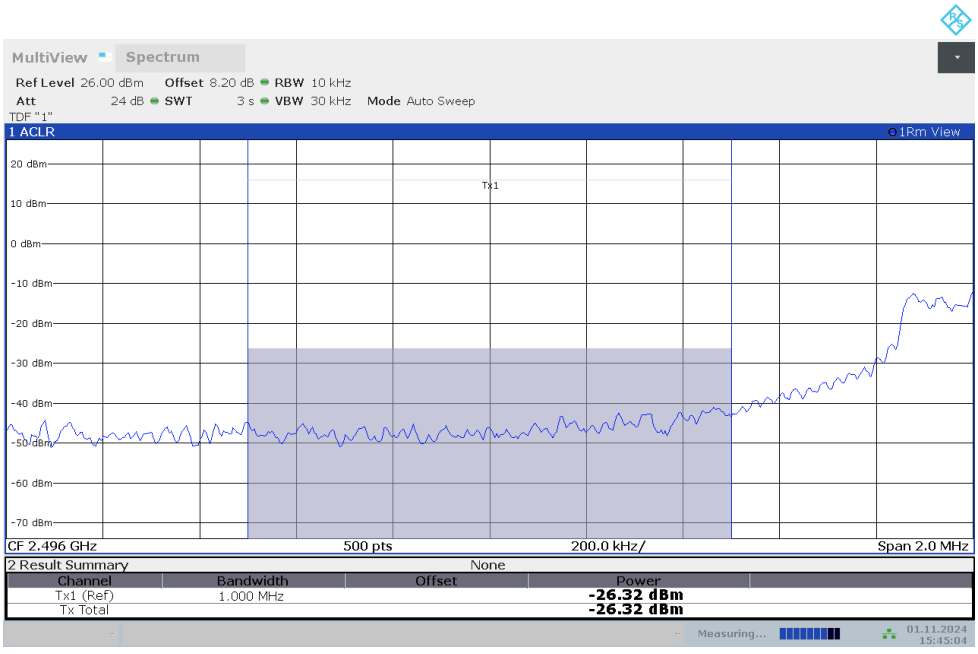
Channel power



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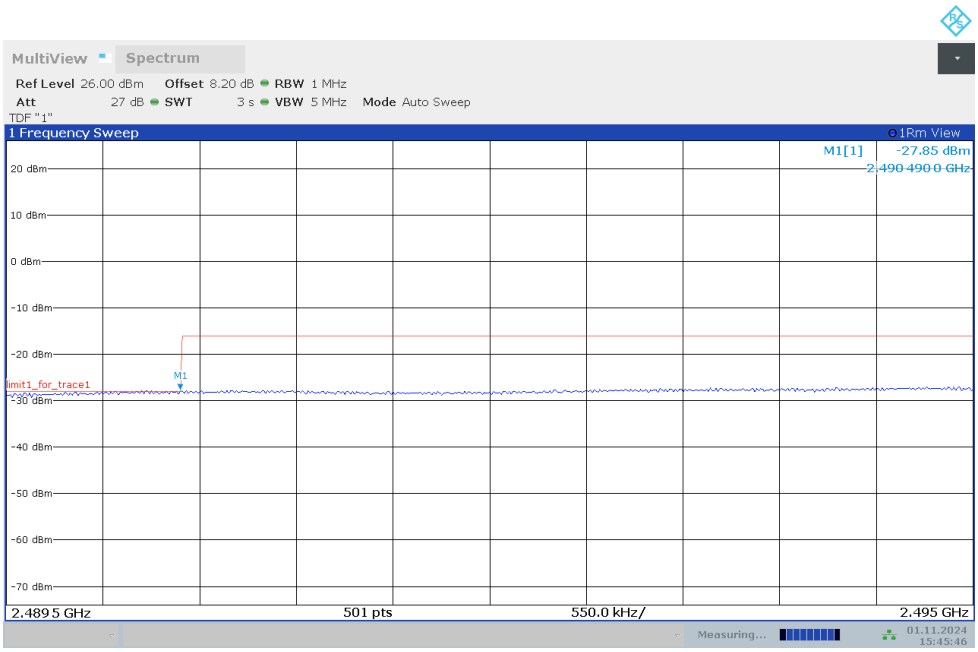
LOW BAND EDGE BLOCK-100MHz-100%RB



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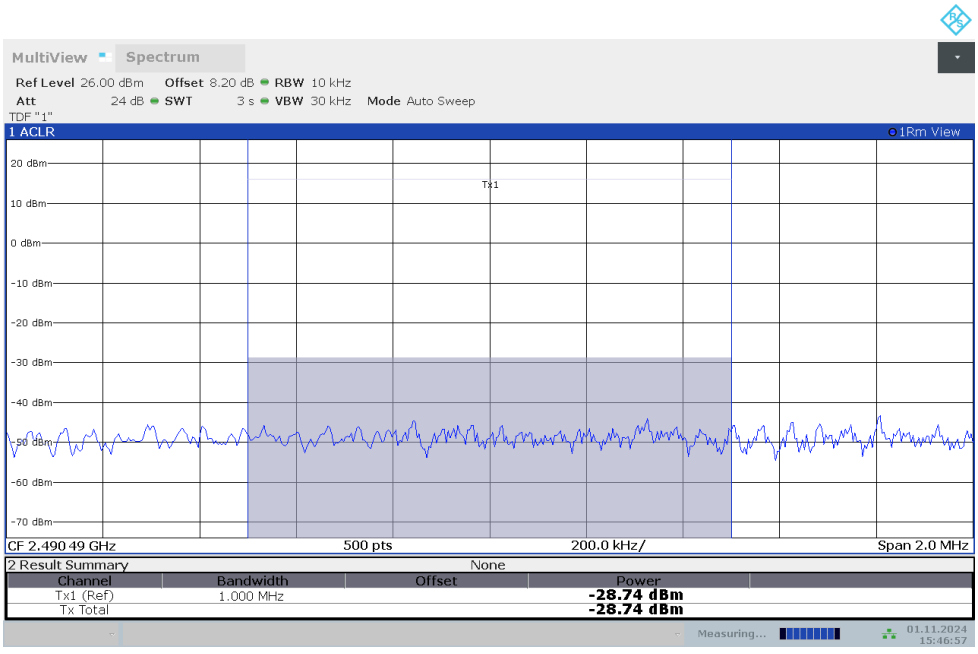
Channel power



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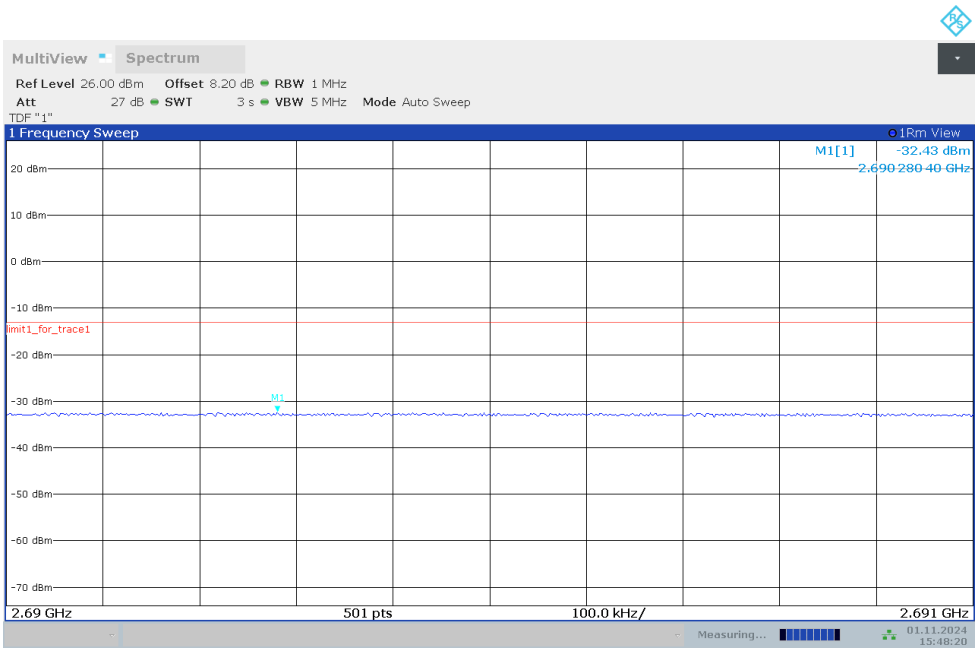
HIGH BAND EDGE BLOCK-100MHz-100%RB



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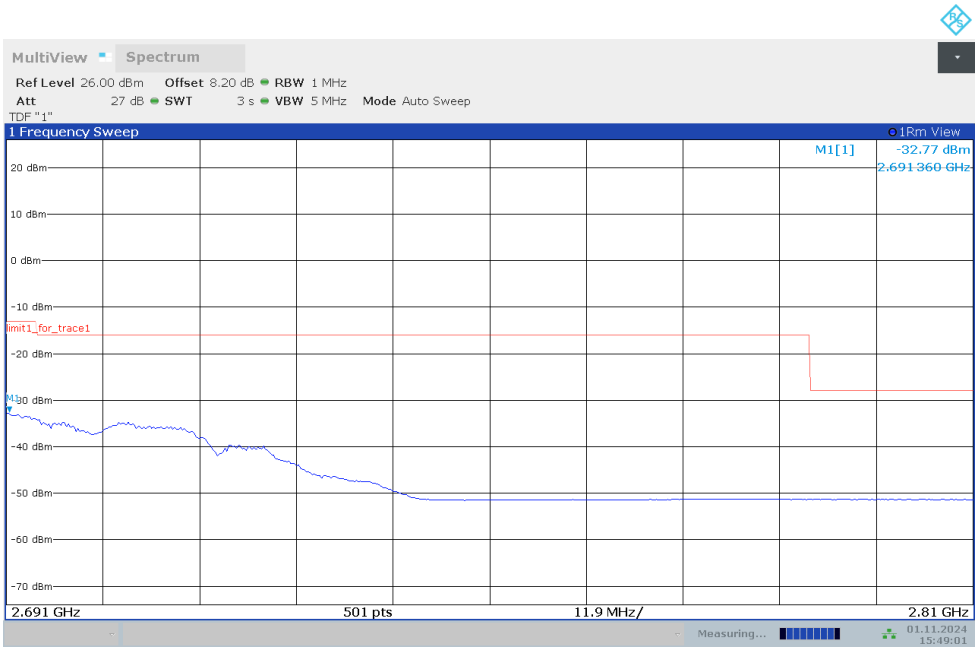
HIGH BAND EDGE BLOCK-100MHz-100%RB



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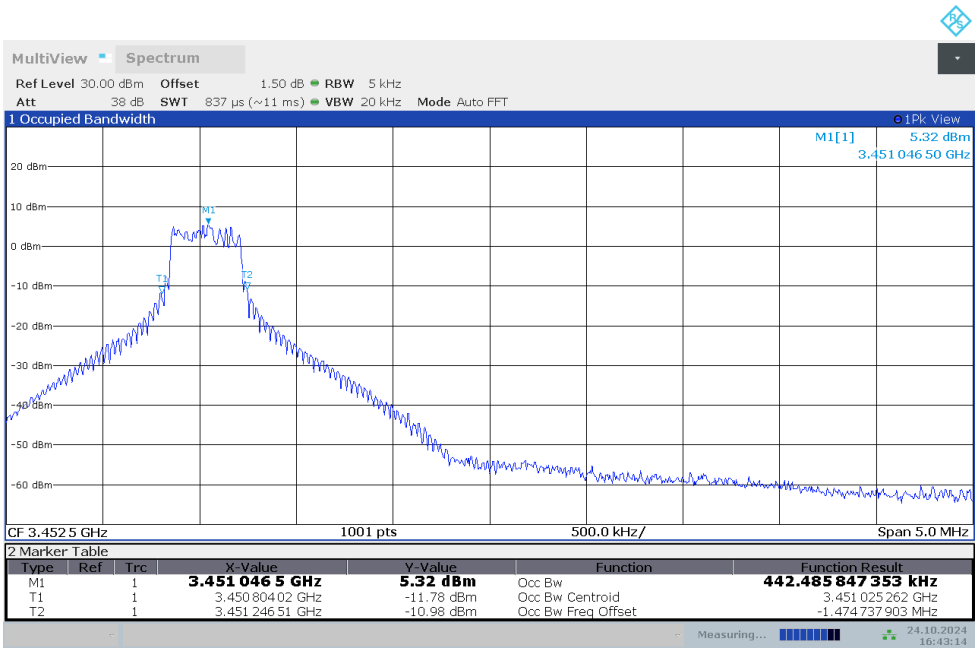
NR n77L

OBW: 1RB-LOW_offset



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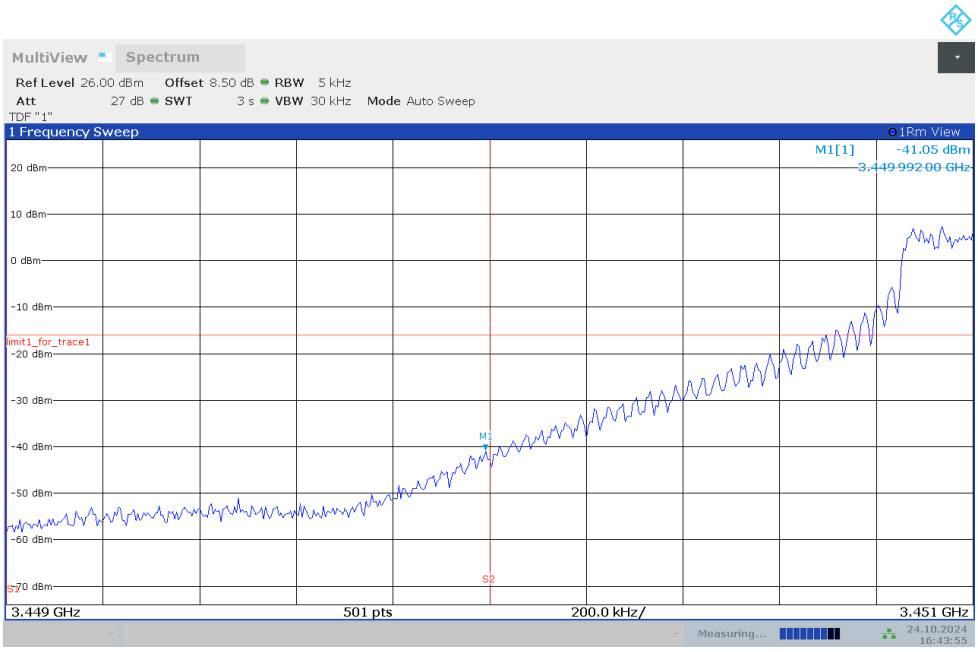
LOW BAND EDGE BLOCK-1RB-LOW_offset



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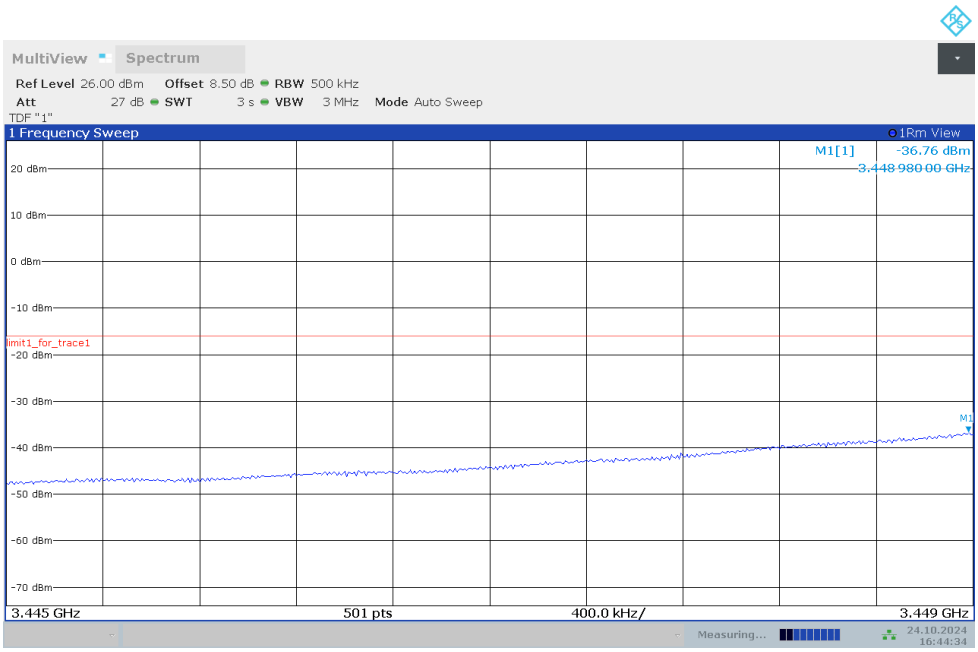
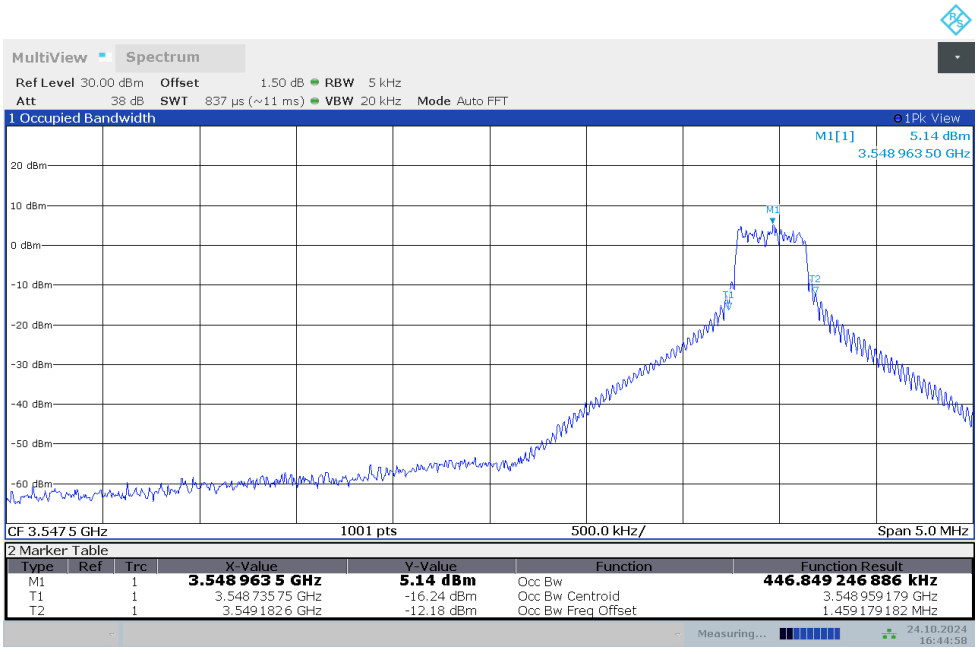
LOW BAND EDGE BLOCK-1RB-LOW_offset



16:44:35 24.10.2024

OBW: 1RB-HIGH_offset



16:44:58 24.10.2024

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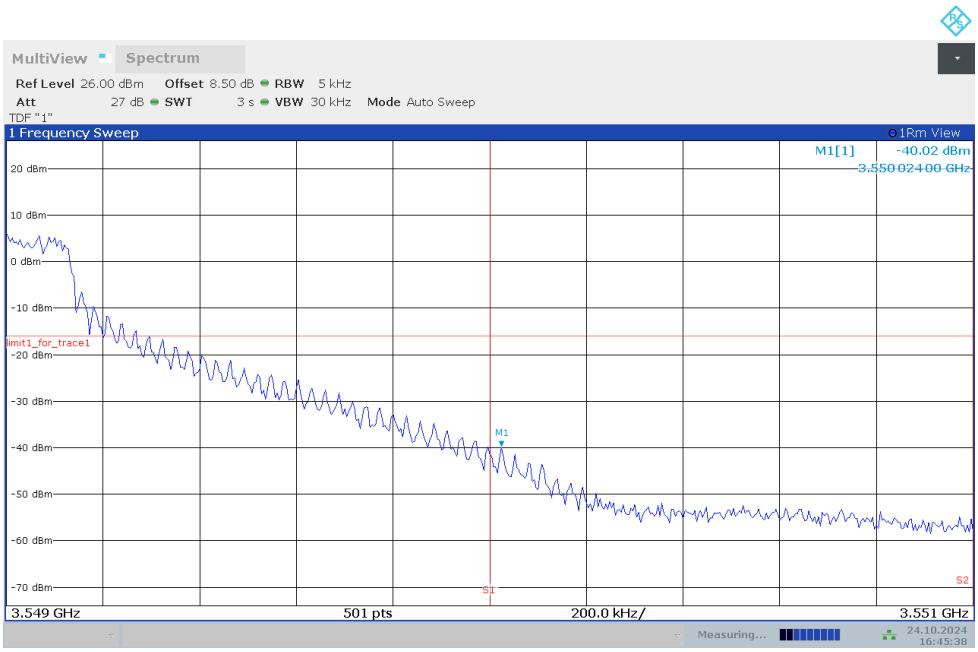
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



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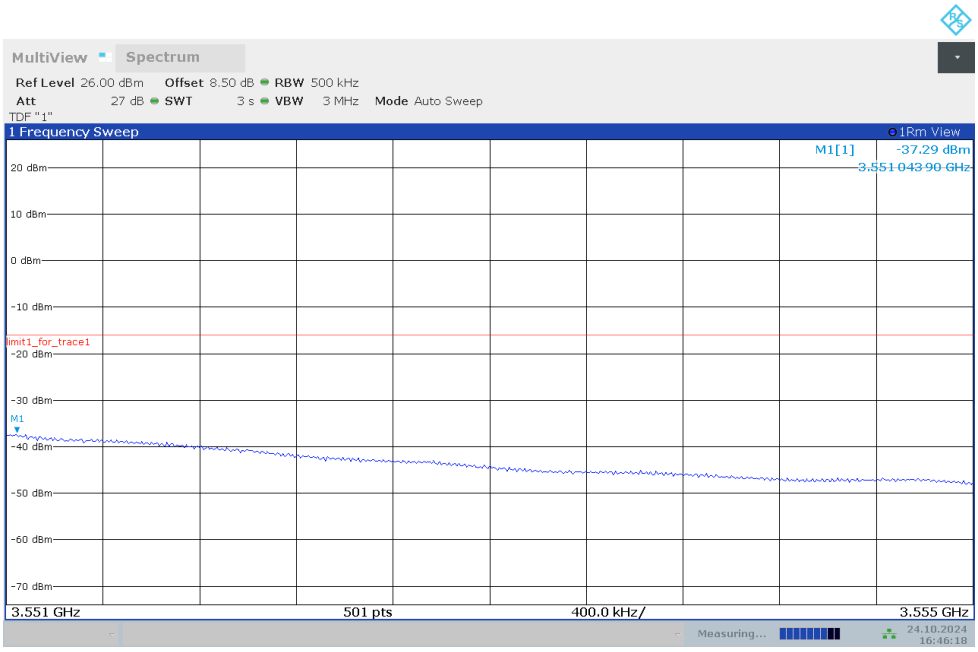

16:46:18 24.10.2024

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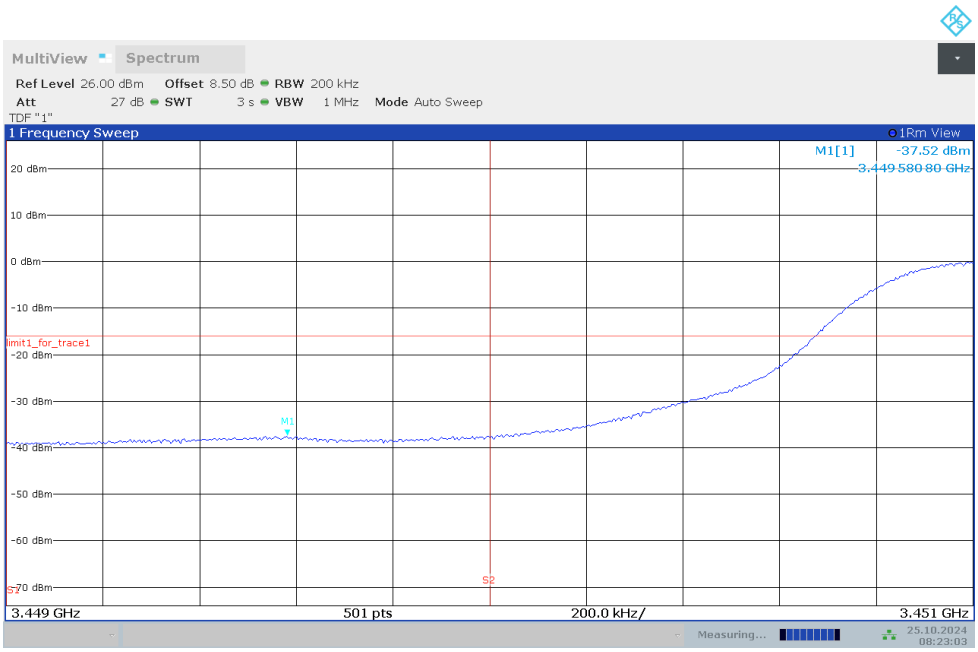
LOW BAND EDGE BLOCK-100MHz-100%RB



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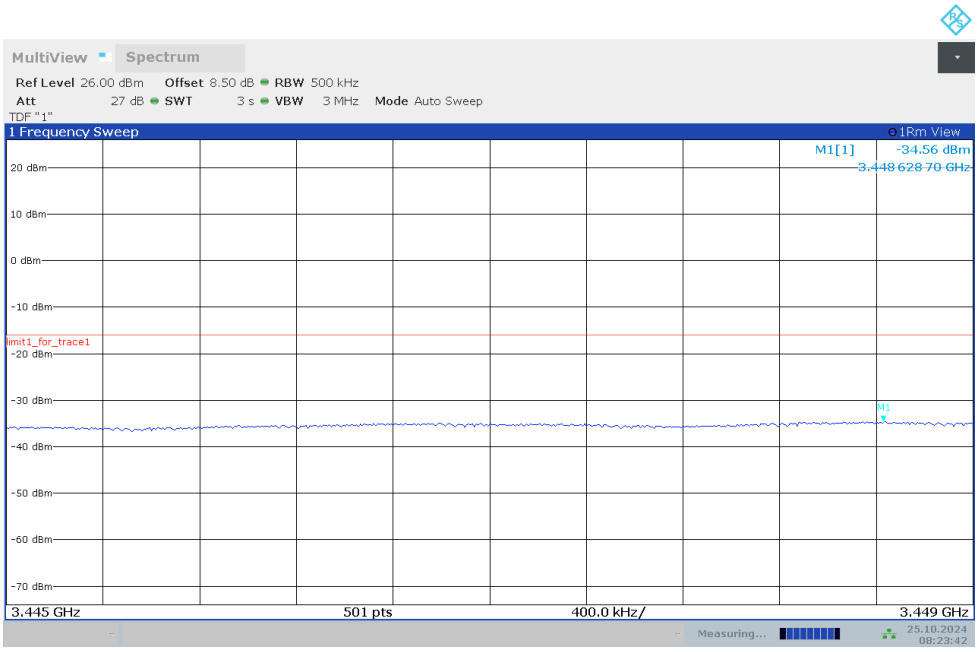
LOW BAND EDGE BLOCK-100MHz-100%RB



08:23:42 25.10.2024

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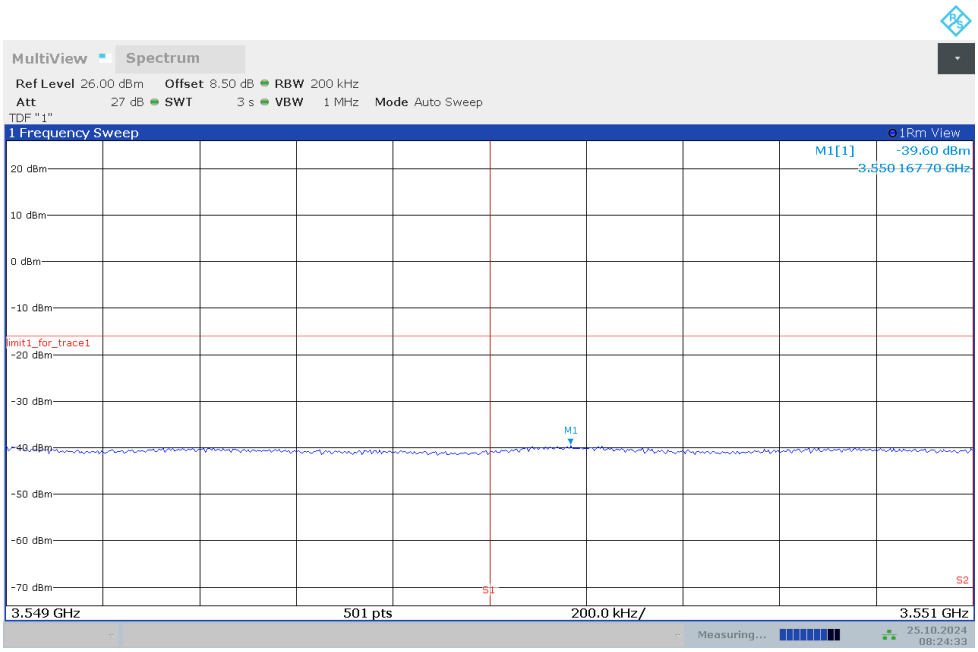
HIGH BAND EDGE BLOCK-100MHz-100%RB



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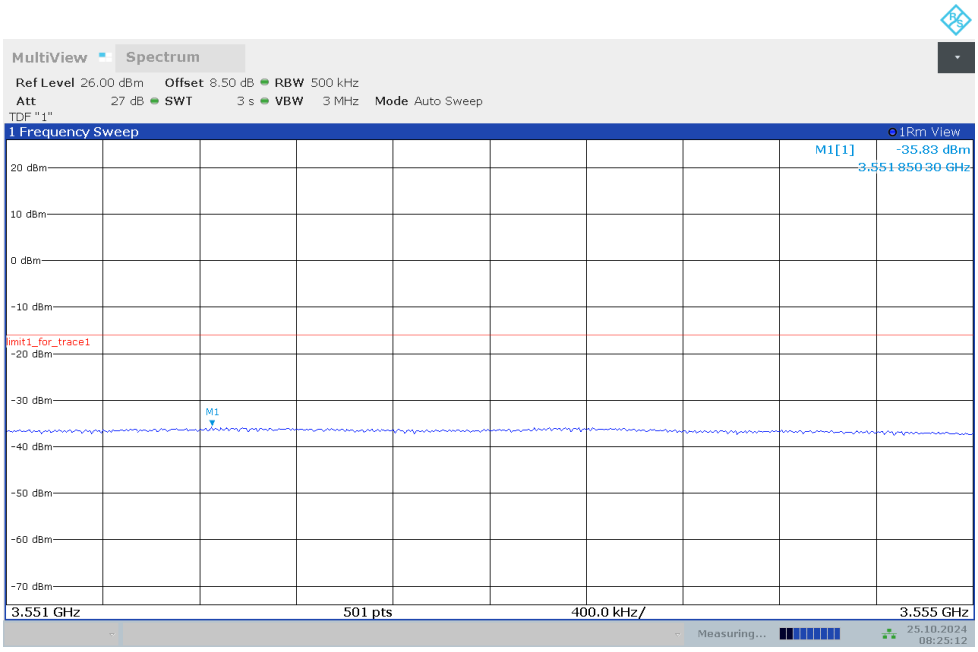
HIGH BAND EDGE BLOCK-100MHz-100%RB



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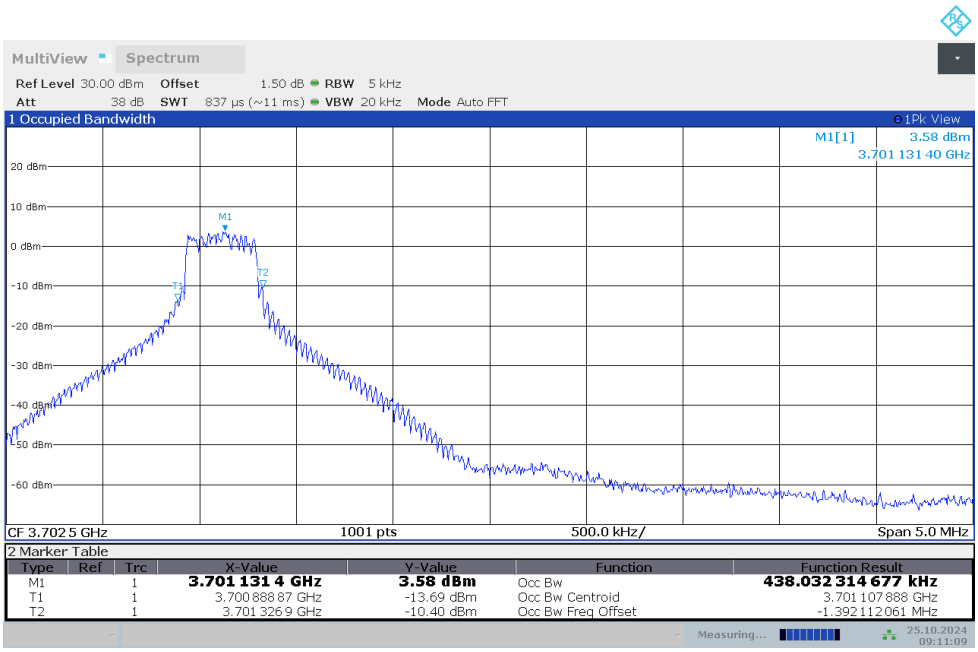
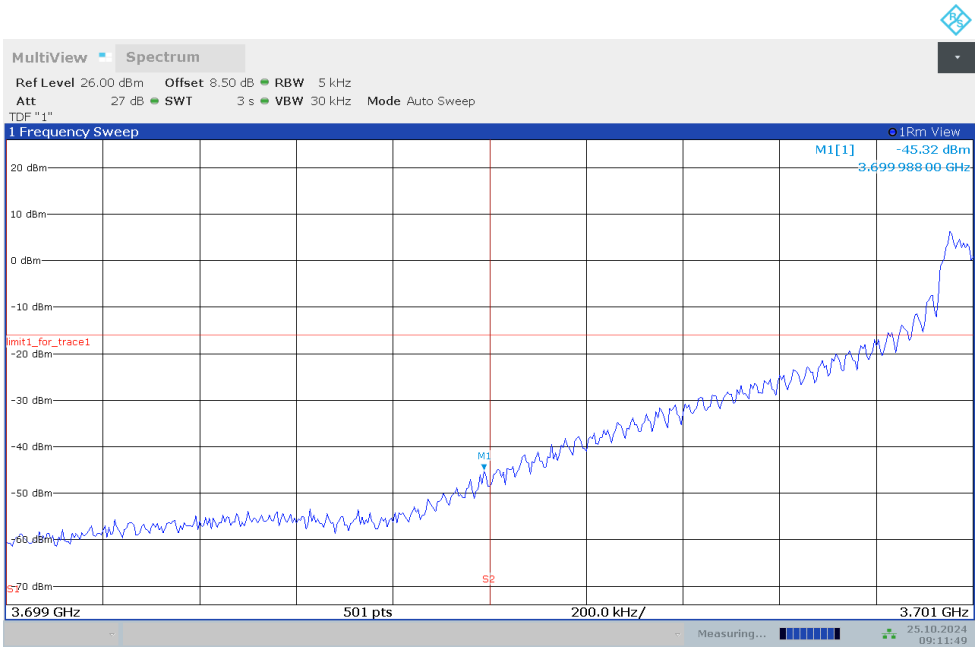
NR n77H

OBW: 1RB-LOW_offset



09:11:09 25.10.2024

LOW BAND EDGE BLOCK-1RB-LOW_offset



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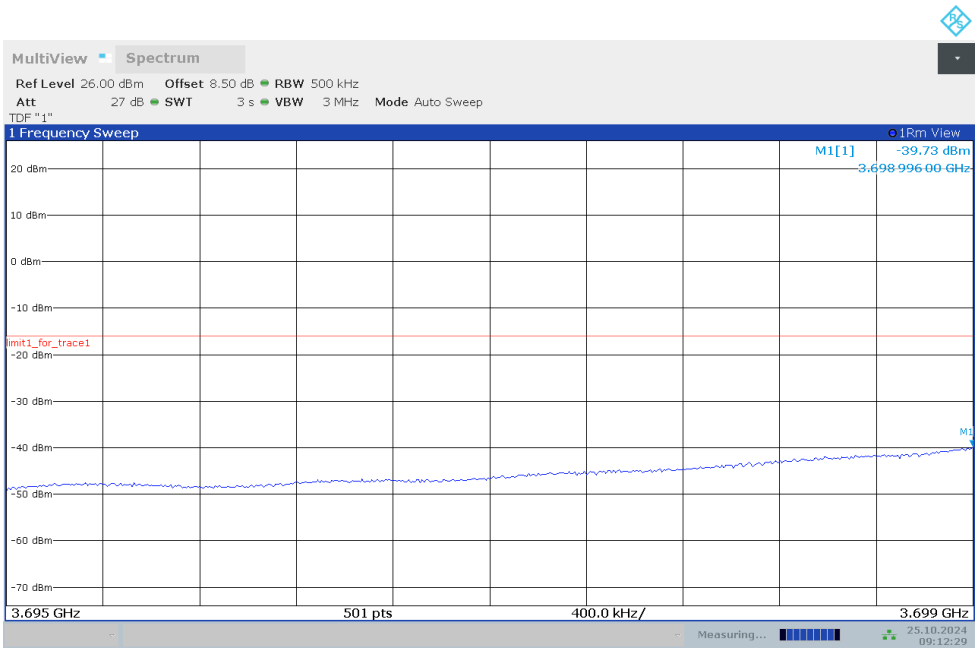
LOW BAND EDGE BLOCK-1RB-LOW_offset



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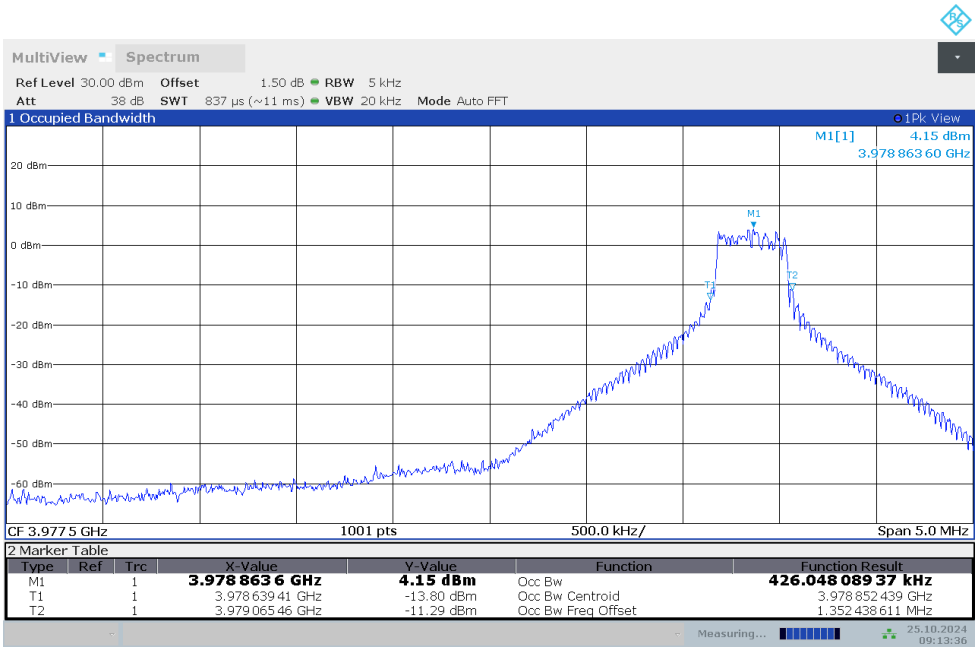

09:13:36 25.10.2024

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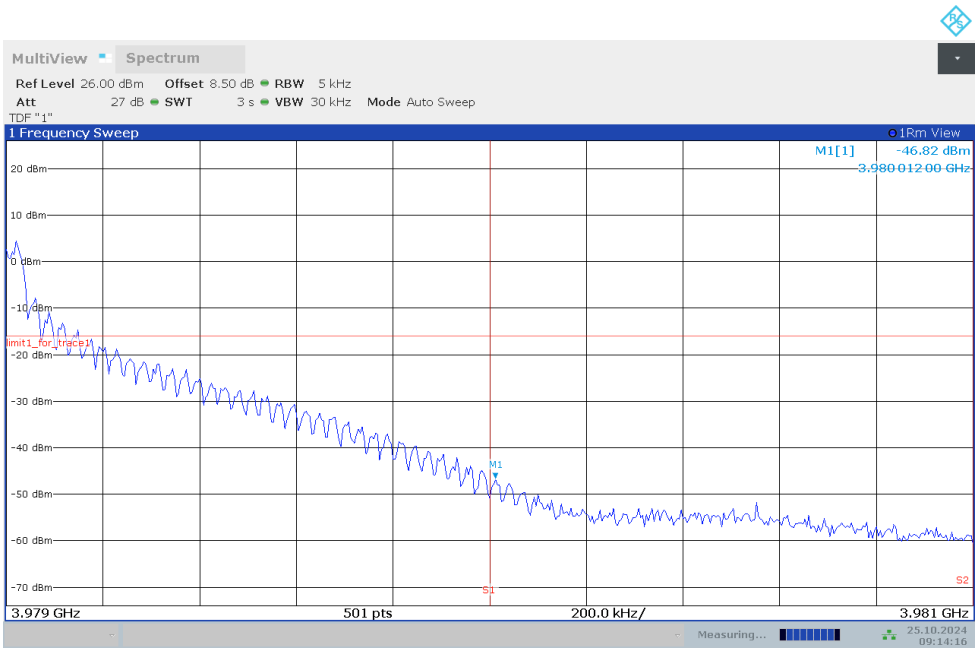
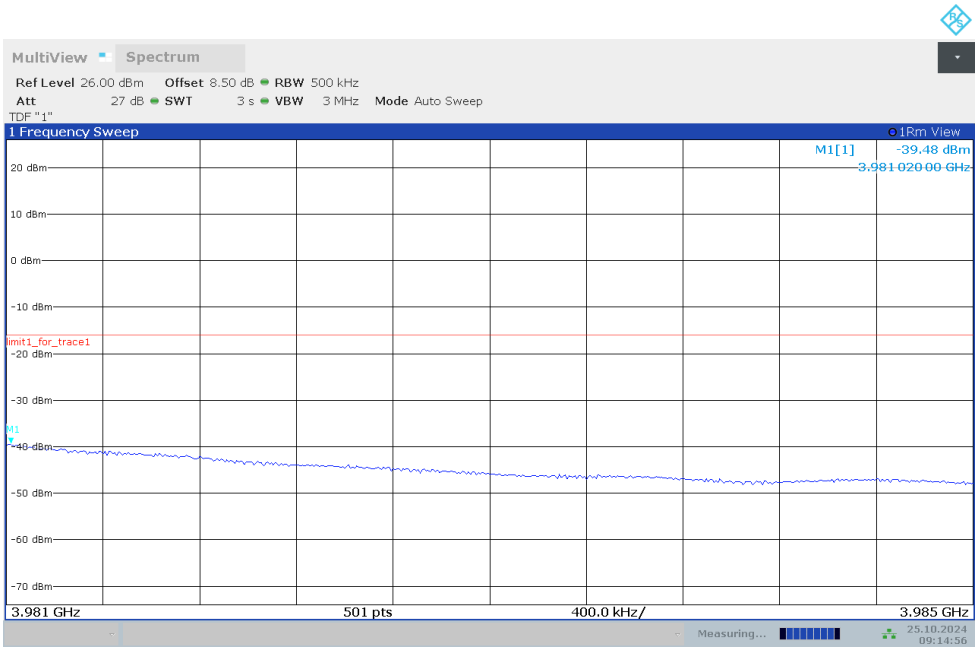
HIGH BAND EDGE BLOCK-1RB-HIGH_offset



09:14:17 25.10.2024

HIGH BAND EDGE BLOCK-1RB-HIGH_offset



09:14:56 25.10.2024

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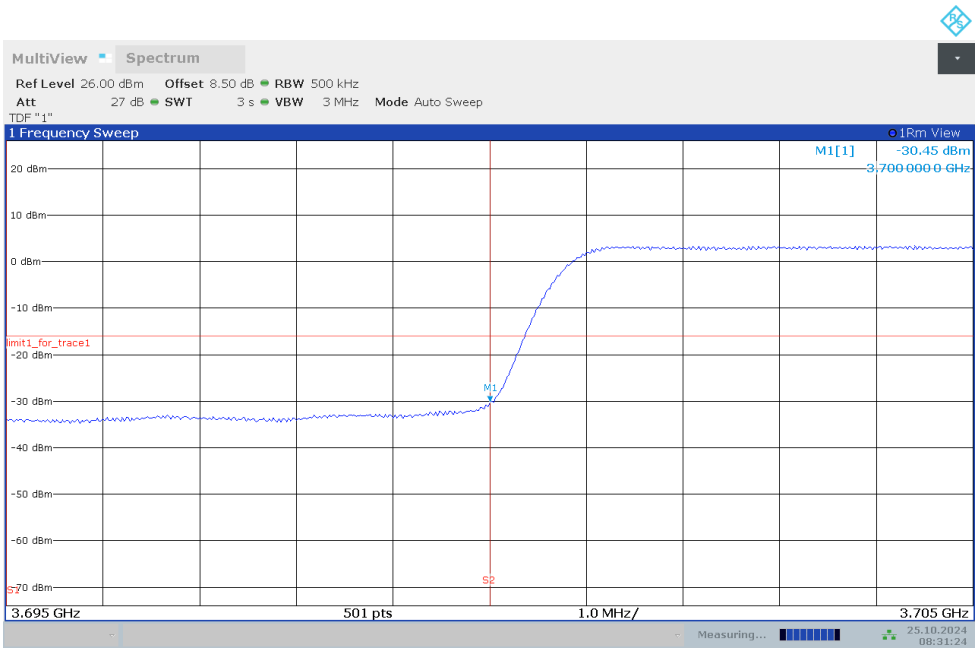
LOW BAND EDGE BLOCK-100MHz-100%RB



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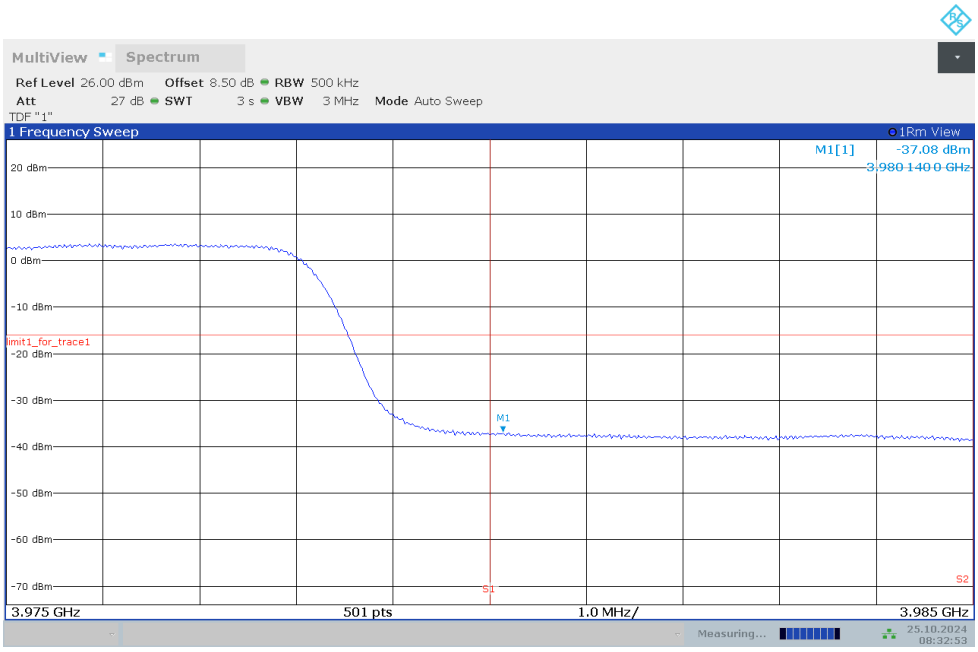
HIGH BAND EDGE BLOCK-100MHz-100%RB



08:32:53 25.10.2024

Note: The maximum value of expanded measurement uncertainty for this test item is U = 0.626 kHz, k = 2.

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A.7 Conducted Spurious Emission

A.7.1 Measurement Method

The following steps outline the procedure used to measure the conducted emissions from the EUT.

1. In measuring unwanted emissions, the spectrum shall be investigated from 30 MHz or the lowest radio frequency signal generated in the equipment, whichever is lower, without going below 9 kHz, up to at least the frequency given below:
   (a) If the equipment operates below 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
   (b) If the equipment operates at or above 10 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
2. Determine EUT transmit frequencies: below outlines the band edge frequencies pertinent to conducted emissions testing.
3. The number of sweep points of spectrum analyzer is greater than 2×span/RBW.

A. 7.2 Measurement Limit

Part 22.917, Part 24.238 and Part 27.53(h) specify that the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

Part 27.53(m) specifies for mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

Part 27.53(g) states for operations in the 600 MHz band and the 698–746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

Part 27.53(a) states for mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands: By a factor of not less than: 43 +10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P)

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dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz; By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

Part 90.543 states that for operations in the 758–768 MHz and the 788–798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following: (1) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations. (2) On all frequencies between 769–775 MHz and 799–805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations. (3) On any frequency between 775–788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB. (4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment. (5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

Part 90.691 states that out-of-band emission requirement shall apply only to the ‘‘outer’’ channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116\text{Log}_{10}(f/6.1)$ decibels or 50 + 10 $\text{Log}_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz. For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + $10\text{Log}_{10}(P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

Part 96.41(e) states for channel and frequency assignments made by a CBSD to End User Devices, the conducted power of any End User Device emission outside the fundamental emission (whether in or outside of the authorized band) shall not exceed −13 dBm/MHz within 0 to B megahertz (where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device) above the upper CBSD-assigned channel edge and within 0 to B megahertz below the lower CBSD-assigned channel edge. At all frequencies greater than B megahertz above the upper CBSD assigned channel edge and less than B megahertz below the lower CBSD-assigned channel edge, the conducted power of any End User Device emission shall not exceed −25 dBm/MHz. Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

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Part 27.53(n) states for mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Part 27.53(l) states for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

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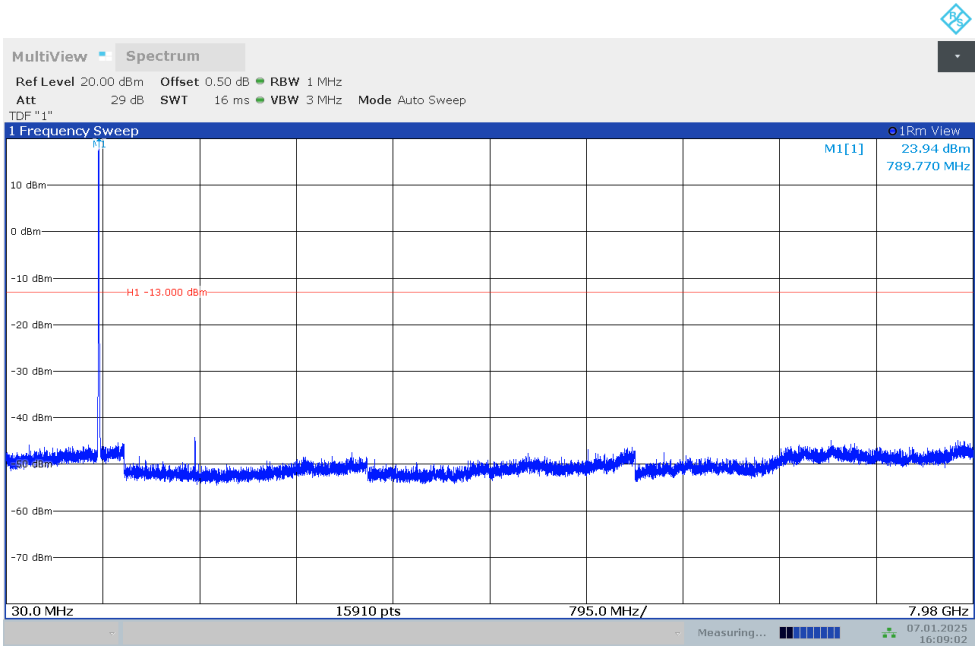
A. 7.3 Measurement result

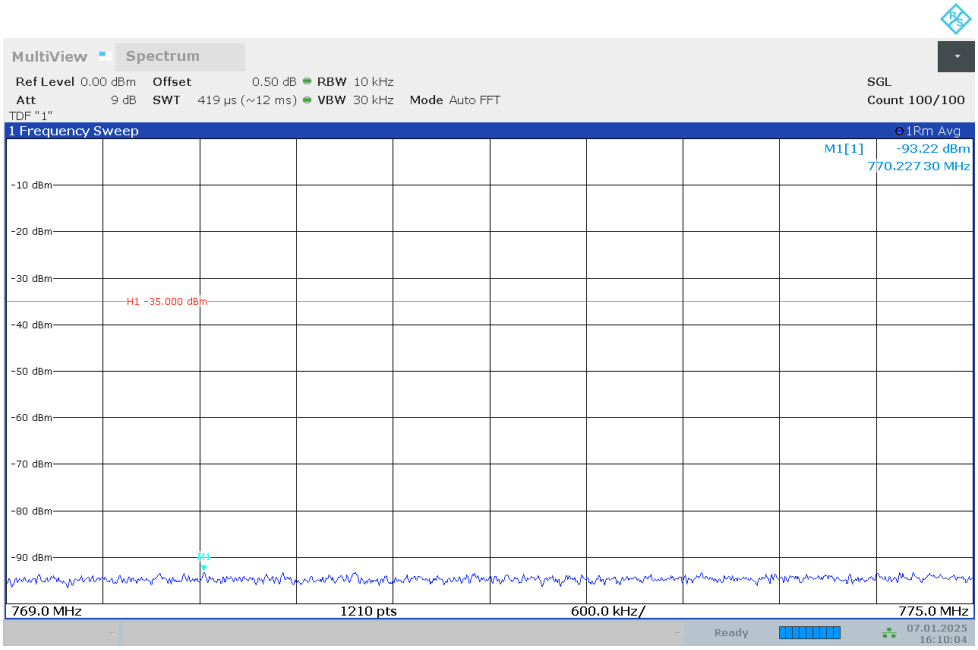
Measurement Results from UT14a:

n14

NOTE: peak above the limit line is the carrier frequency.



16:09:02 07.01.2025



16:10:05 07.01.2025

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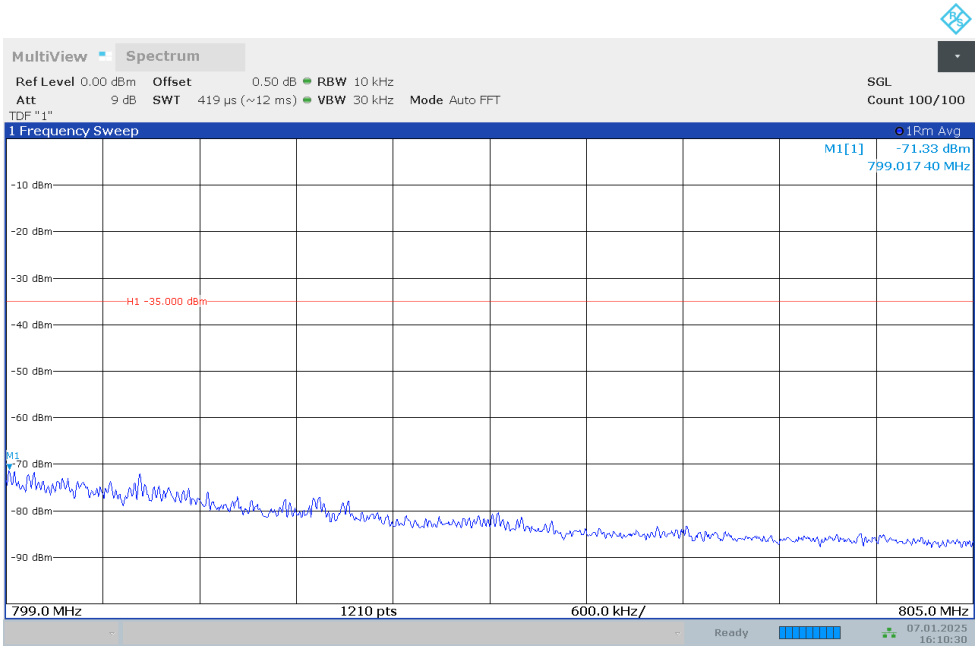

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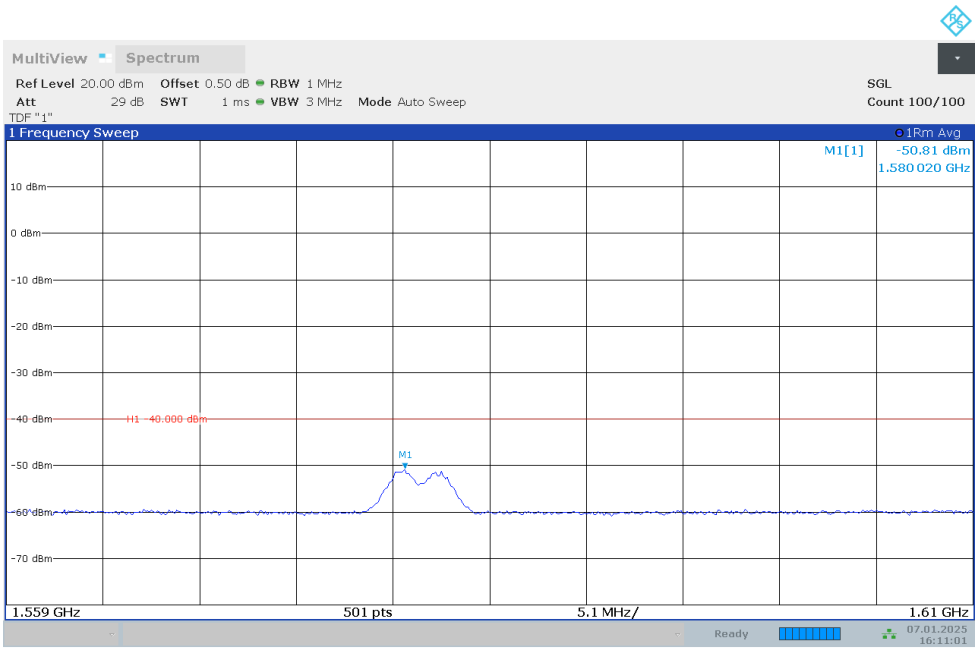

16:11:02 07.01.2025

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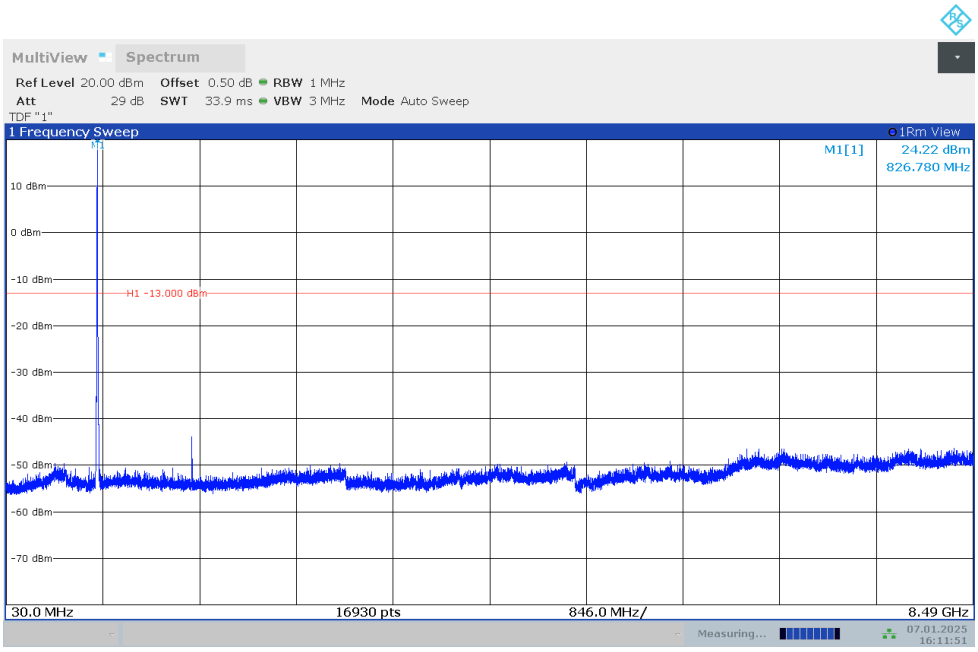
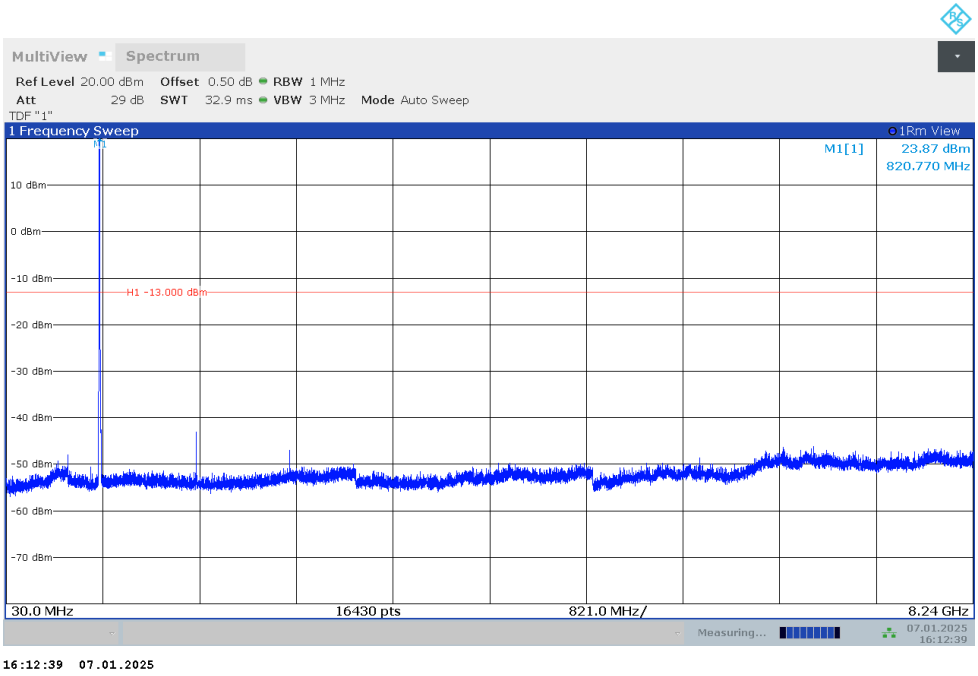
n26_Part22

NOTE: peak above the limit line is the carrier frequency.



n26_Part90

NOTE: peak above the limit line is the carrier frequency.



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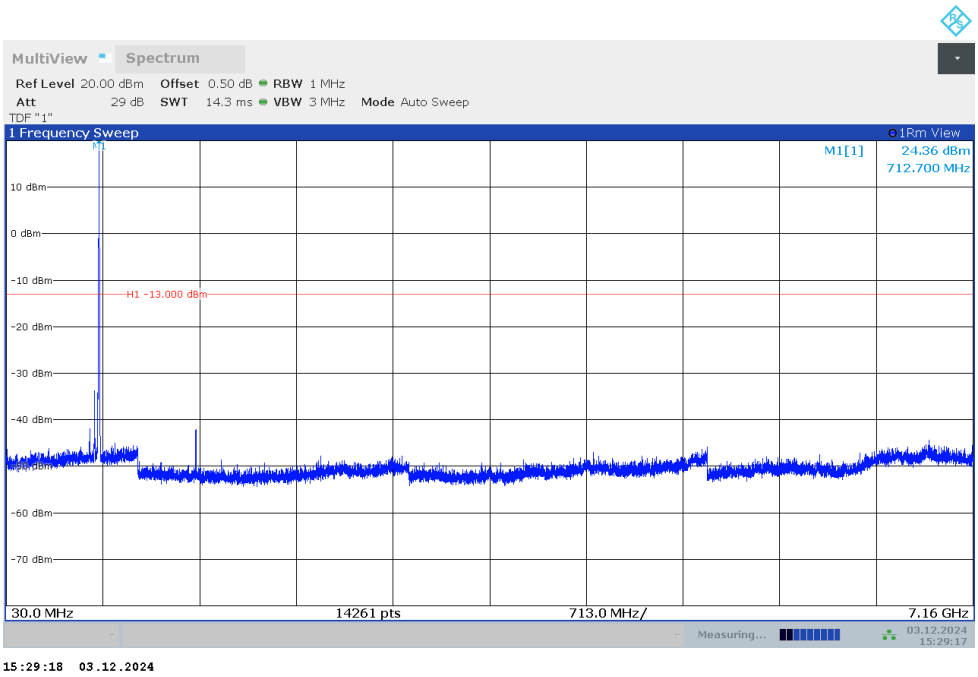
Measurement Results from UT09a:

n12

NOTE: peak above the limit line is the carrier frequency.



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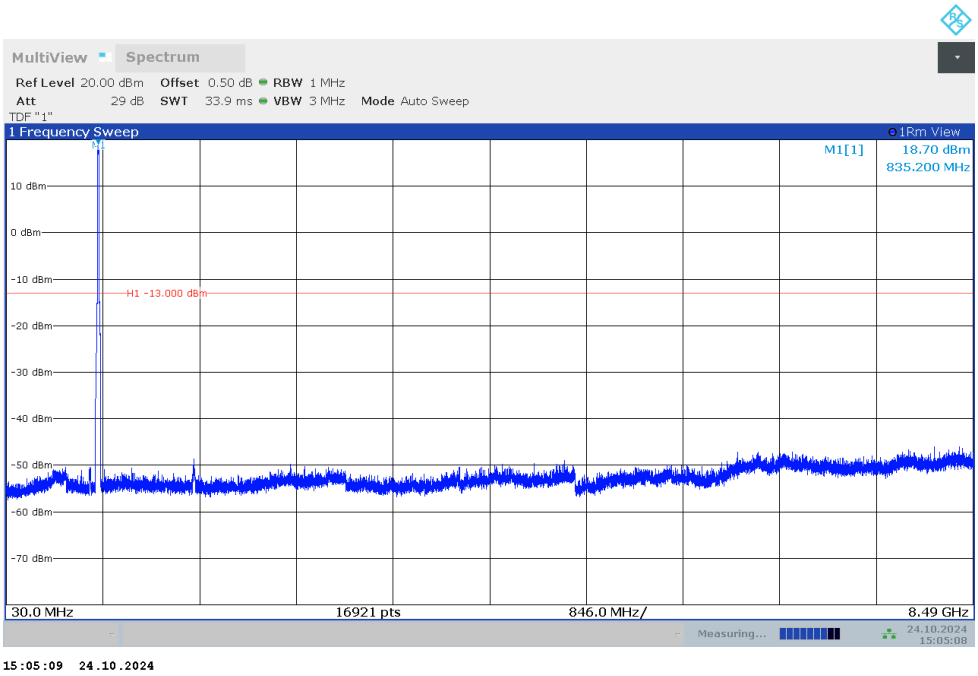
Reference Measurement Results from 24T04Z102259:

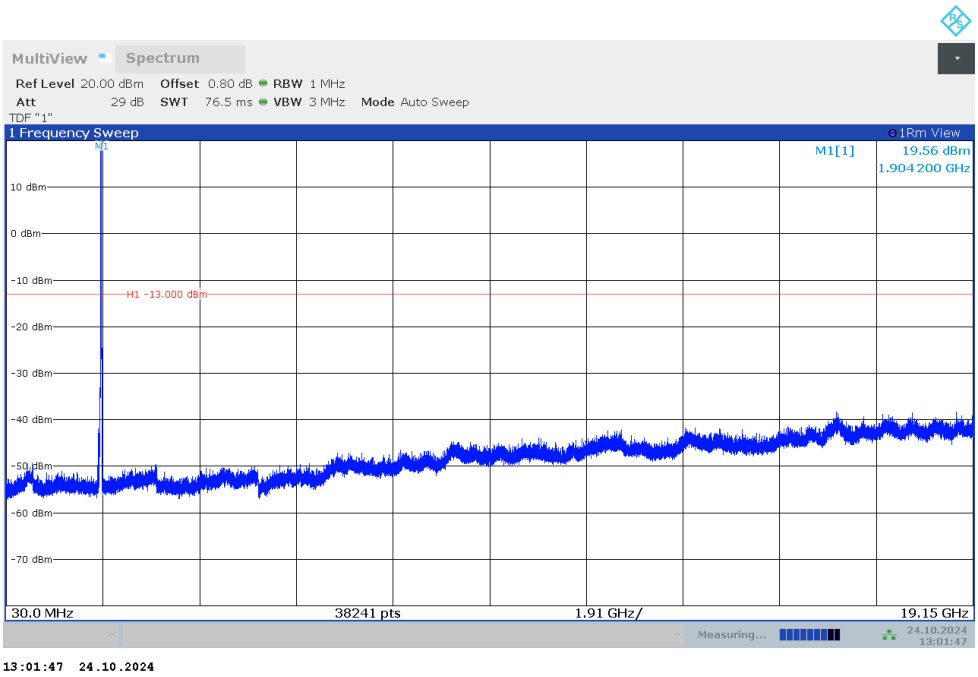
n5

NOTE: peak above the limit line is the carrier frequency.



n25

NOTE: peak above the limit line is the carrier frequency.



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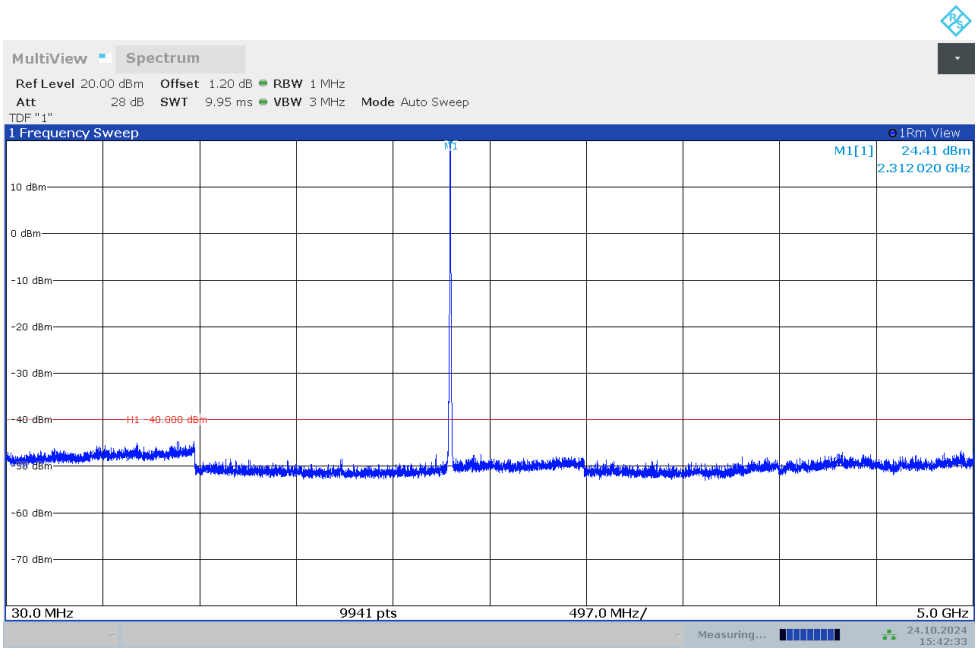
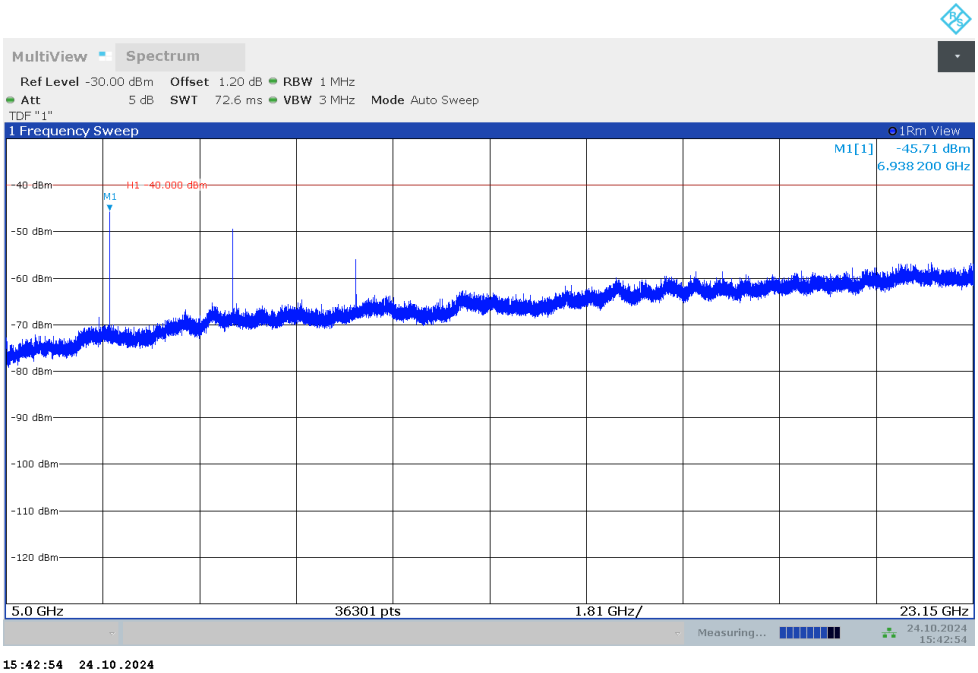
n30

NOTE: peak above the limit line is the carrier frequency.





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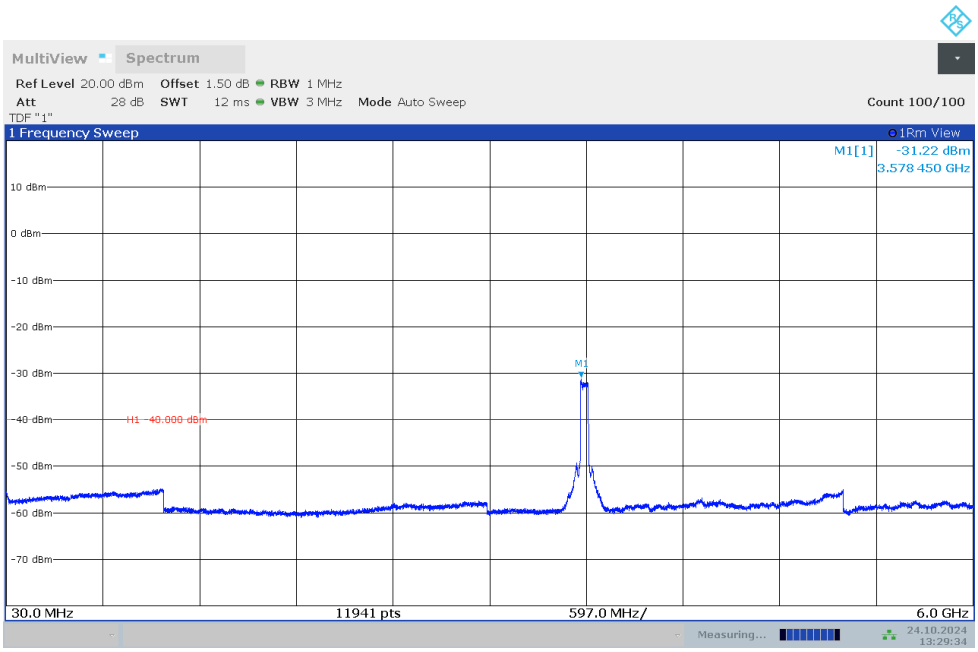
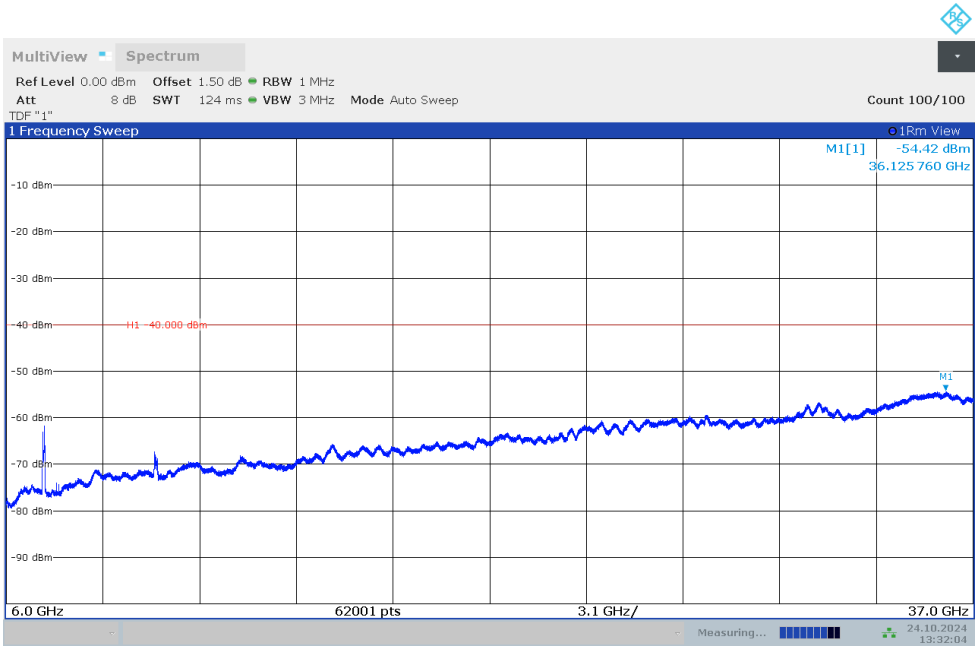
n48

NOTE: peak above the limit line is the carrier frequency.



13:29:35 24.10.2024



13:32:05 24.10.2024

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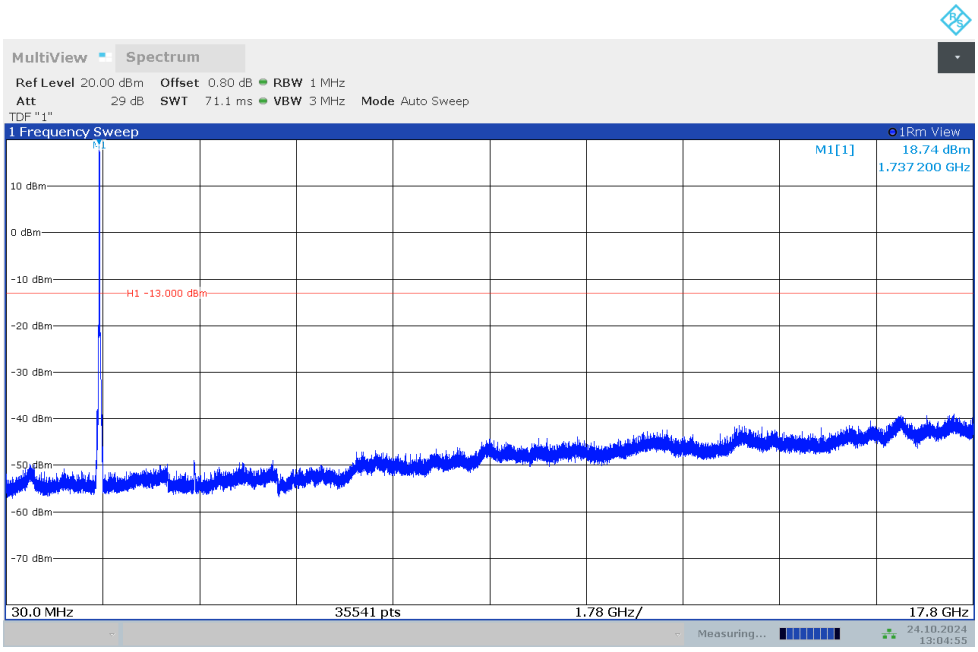
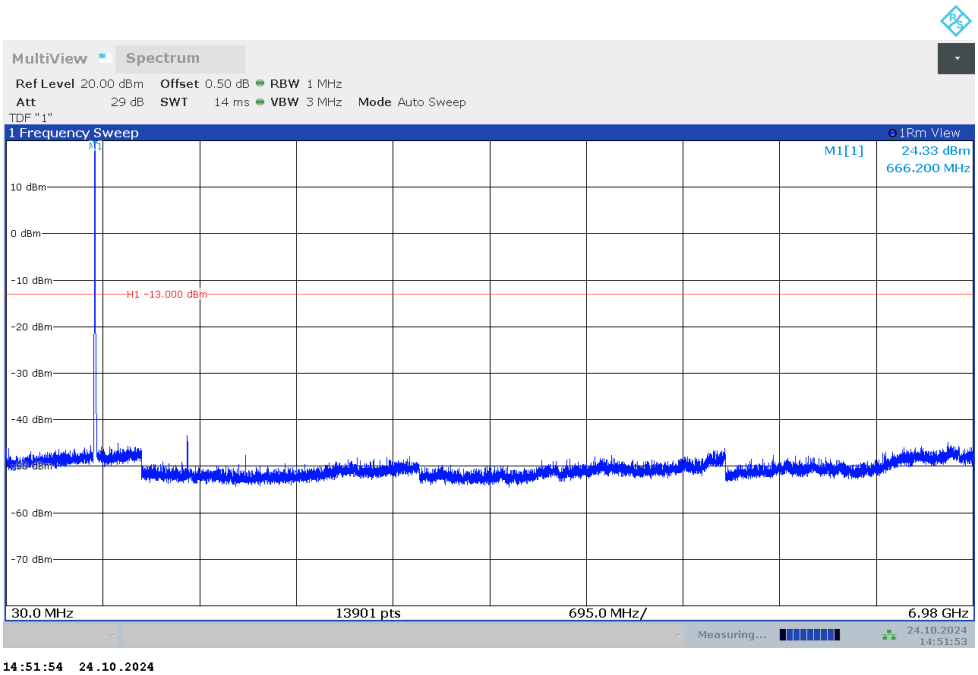
n66

NOTE: peak above the limit line is the carrier frequency.



n71

NOTE: peak above the limit line is the carrier frequency.



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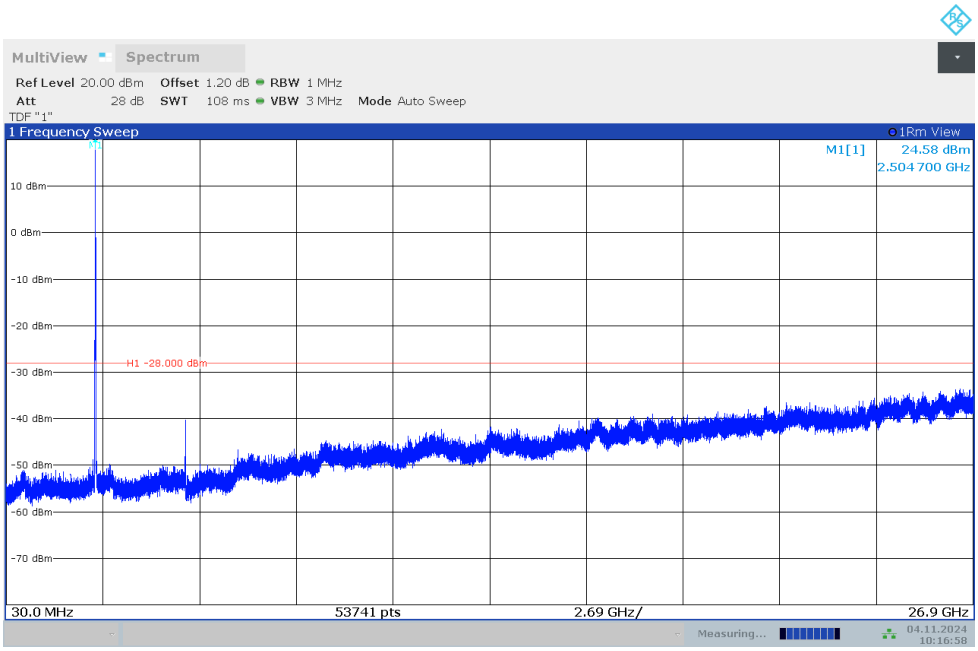
n41

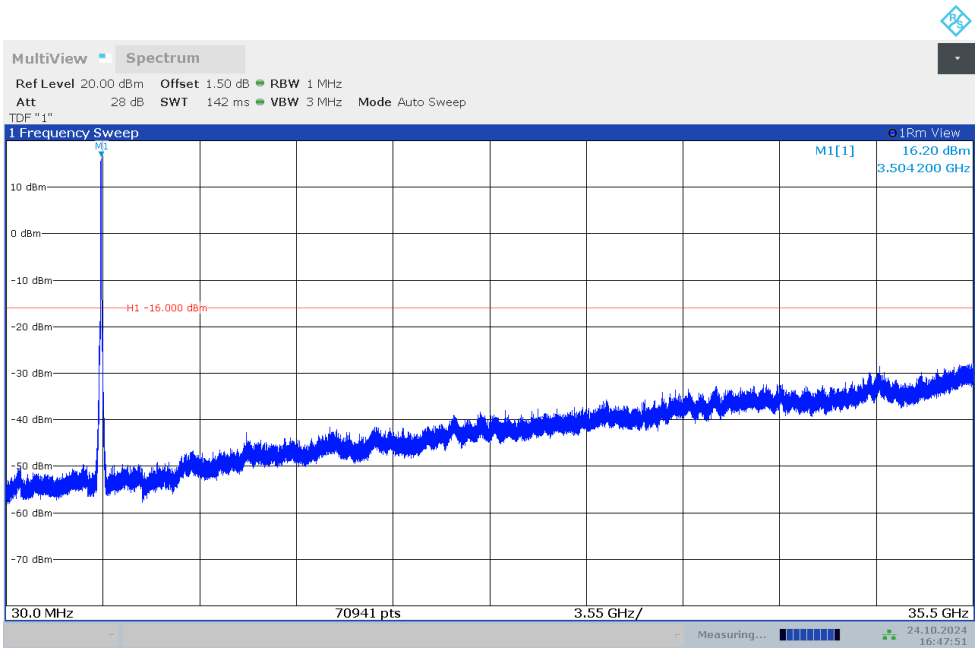
NOTE: peak above the limit line is the carrier frequency.



10:16:58 04.11.2024

n77L

NOTE: peak above the limit line is the carrier frequency.



16:47:51 24.10.2024

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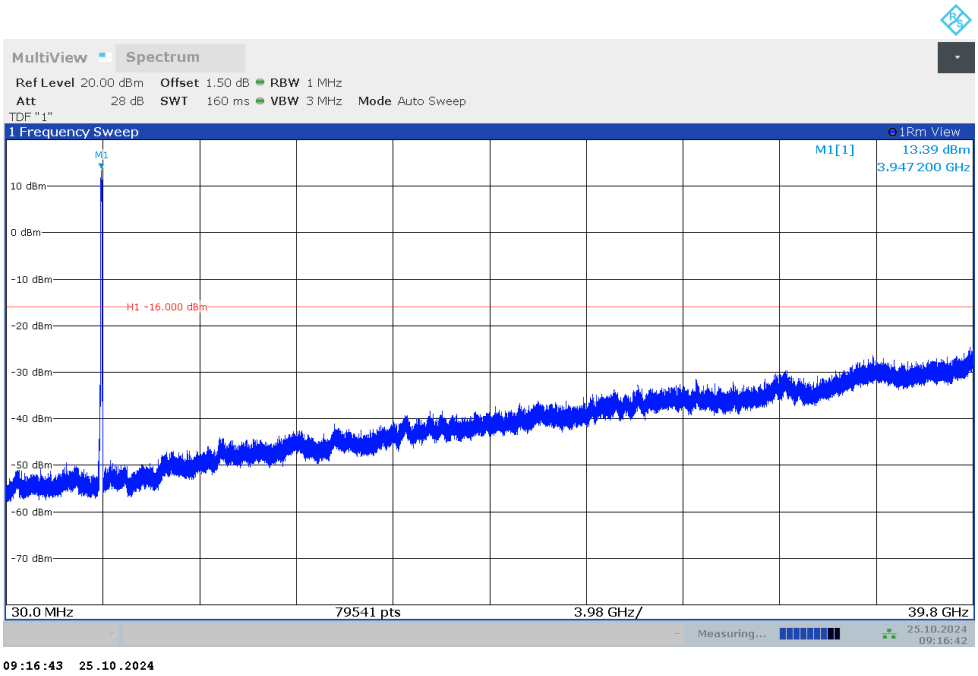
n77H

NOTE: peak above the limit line is the carrier frequency.



Note: The maximum value of expanded measurement uncertainty for this test item is U = 0.372 dB, *k* = 2.

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A.8 Peak-to-Average Power Ratio

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Record the maximum PAPR level associated with a probability of 0.1%.

Measurement results

Measurement Results from UT14a:

n14,10MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
793	4.14	5.08	5.84	6.24	6.70	7.50	7.48	7.78	8.46

n26_Part22,20MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
836.5	4.50	5.36	6.16	6.40	6.68	8.04	8.02	8.04	8.48

n26_Part90,10MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
819	4.50	5.34	6.10	6.52	6.70	7.78	7.94	8.08	8.44

Measurement Results from 24T04Z102806:

n12,15MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
707.5	4.36	5.28	6.14	6.36	6.40	8.02	7.86	7.98	8.54

Reference Measurement Results from 24T04Z102259:

n25,45MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
1882.5	4.77	5.58	6.36	6.51	6.59	8.42	8.41	8.49	8.49

n30,10MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
2310	4.46	5.46	6.10	6.50	6.80	7.76	7.82	7.98	8.64

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n48,100MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3624.99	5.36	6.61	7.48	7.07	7.20	9.32	8.88	9.05	8.78

n66,45MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
1745	4.59	5.28	5.99	6.25	6.56	7.83	7.79	7.97	8.35

n71,35MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
680.5	4.90	5.39	6.12	6.43	6.81	7.70	7.80	7.92	8.77

n41,100MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
2592.99	5.75	6.06	6.16	6.48	7.23	8.22	7.98	8.66	8.76

n77L,100MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3500.01	5.88	6.32	6.56	7.66	7.55	8.60	9.32	8.53	8.99

n77H,100MHz

Frequency (MHz)	PAPR (dB)								
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
3840	5.70	6.83	6.97	7.36	7.07	9.21	9.08	8.87	8.98

Note: The maximum value of expanded measurement uncertainty for this test item is U = 0.356 dB, k = 2.

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Annex B: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, People's Republic of China

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 23rd day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.

*****END OF REPORT*****

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