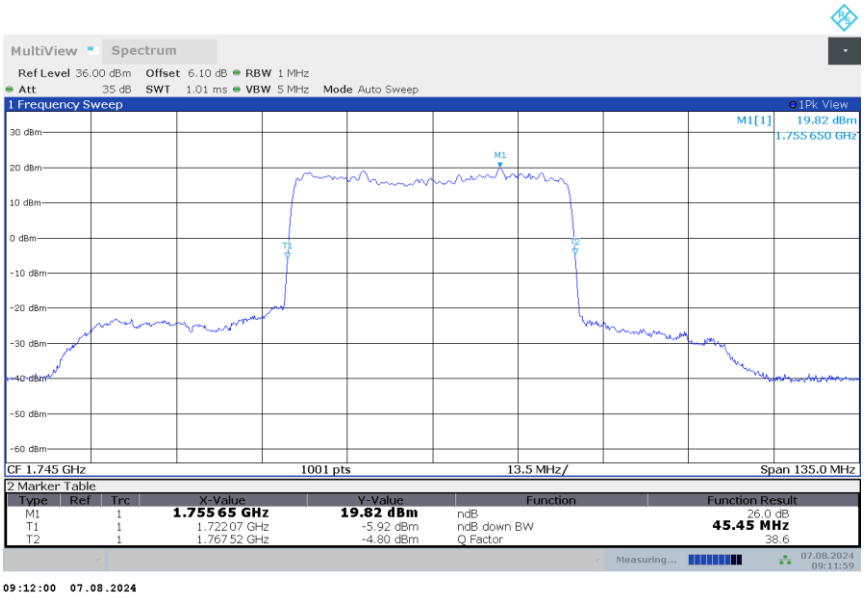
n66

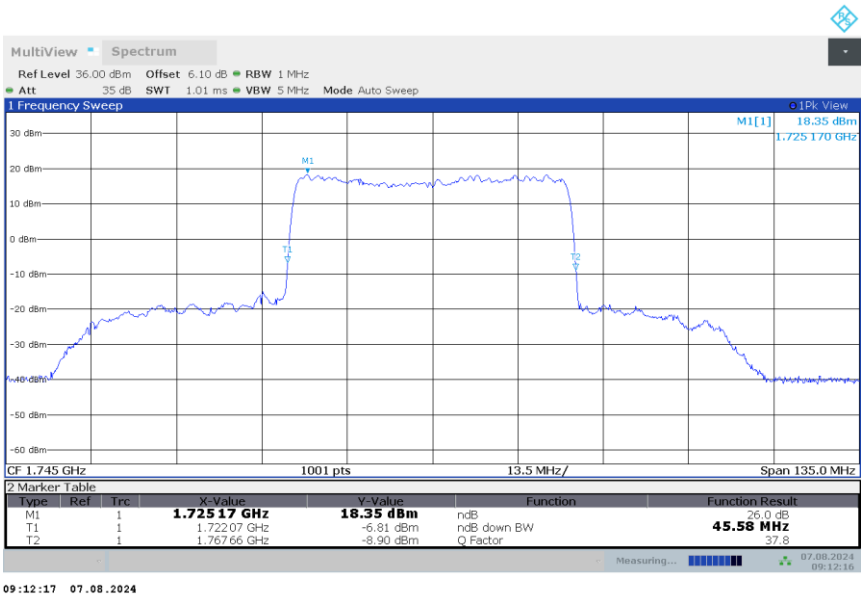
n66,45MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
1745	45.450	45.580

n66,45MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n66,45MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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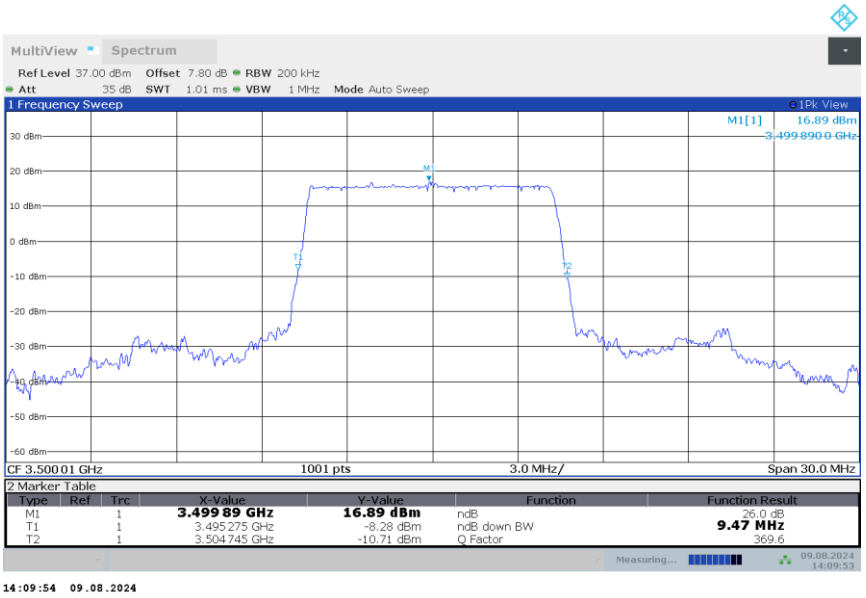
n77L

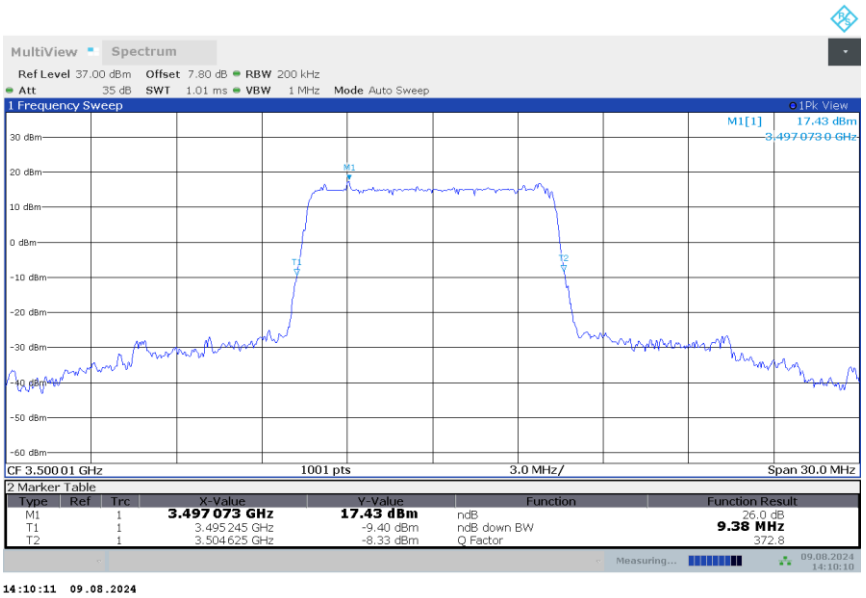
n77L,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	9.471	9.381

n77L,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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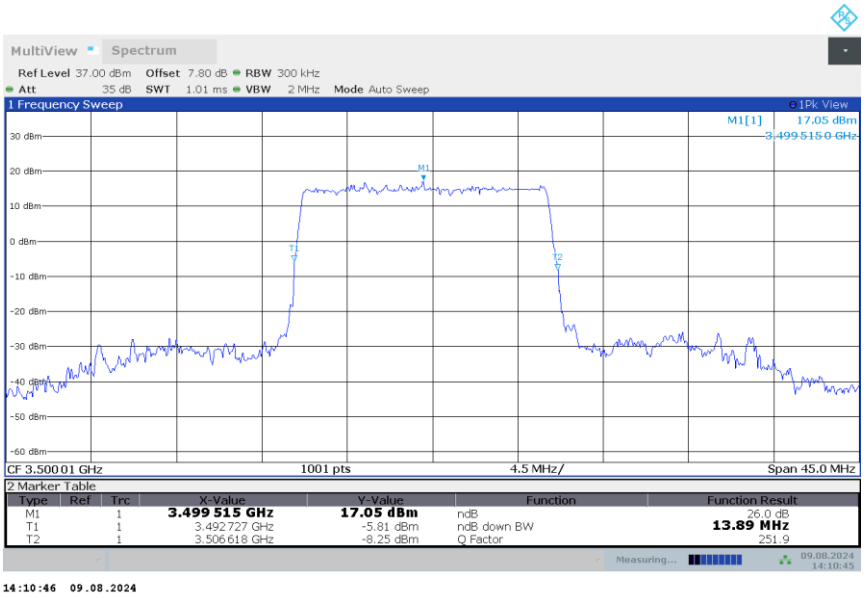
n77L

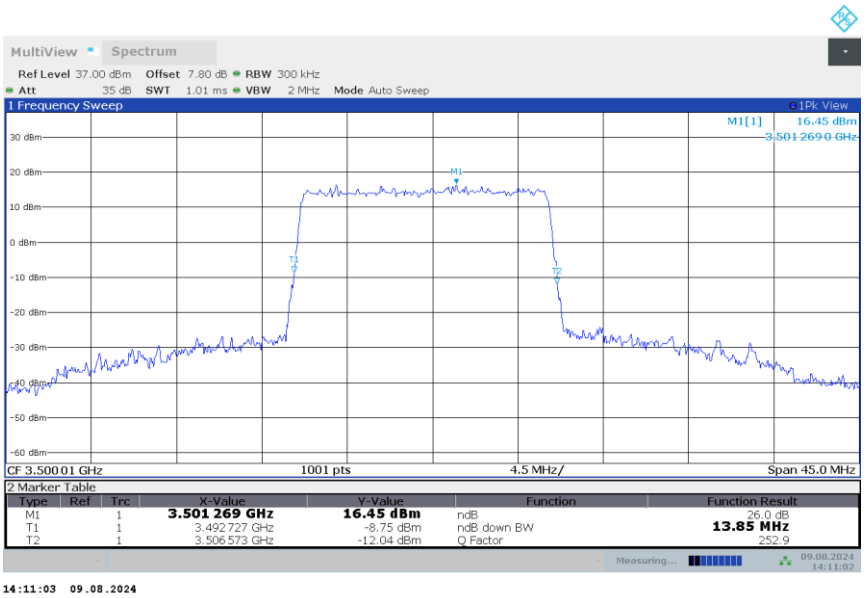
n77L,15MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	13.891	13.846

n77L,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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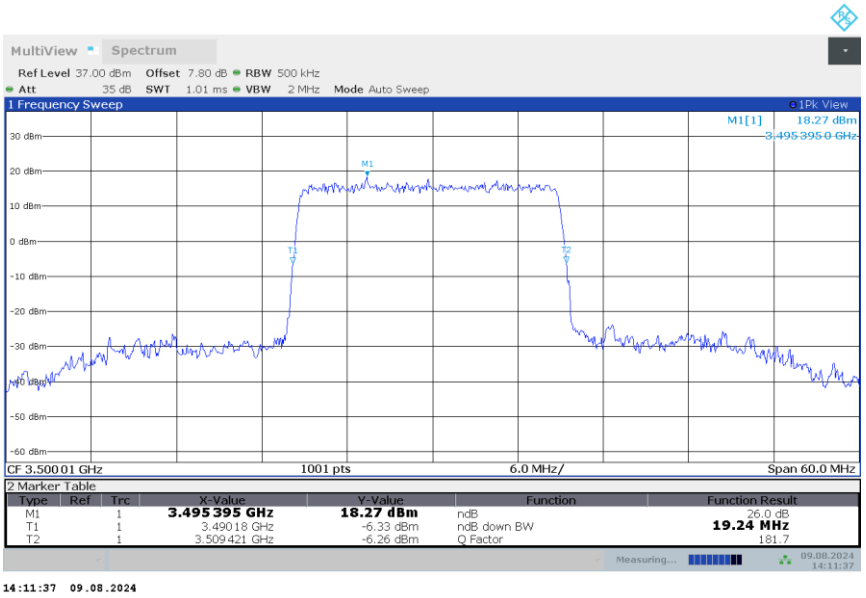
n77L

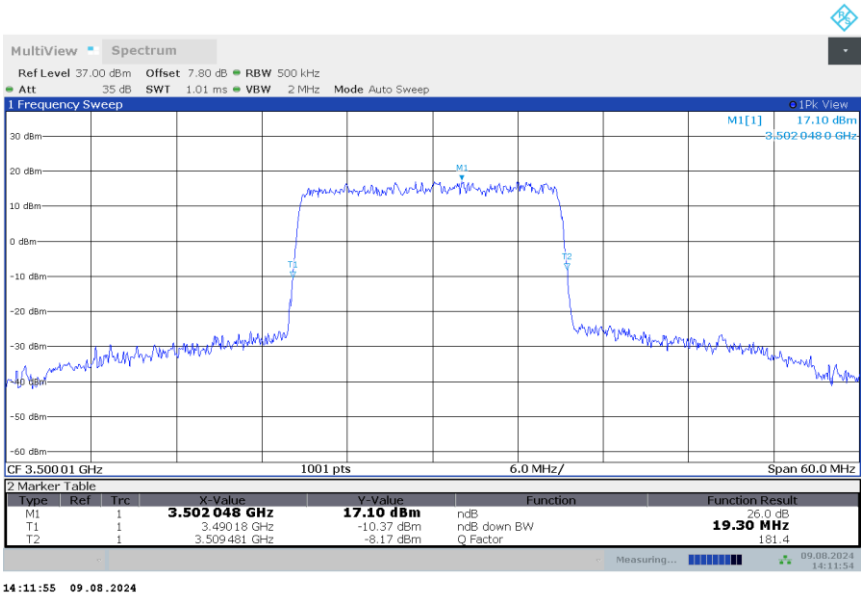
n77L,20MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	19.241	19.301

n77L,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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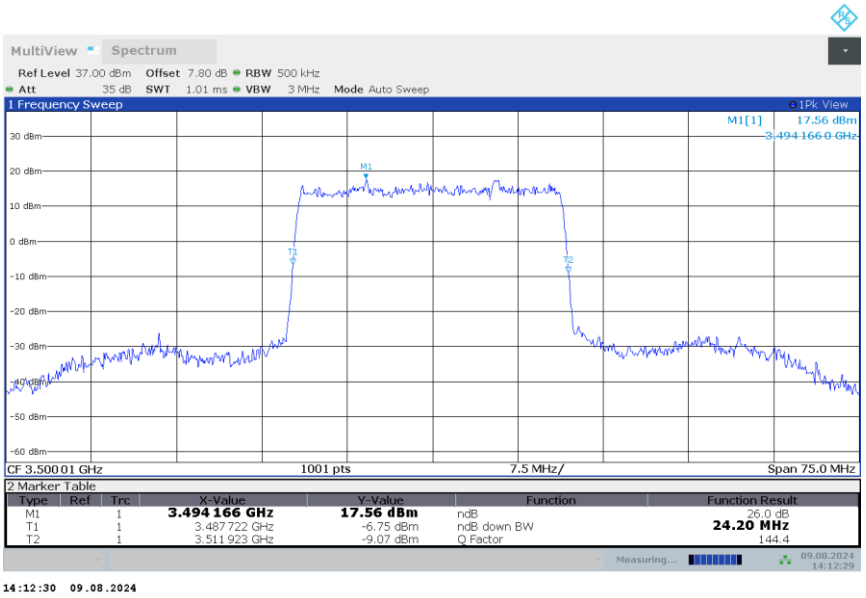
n77L

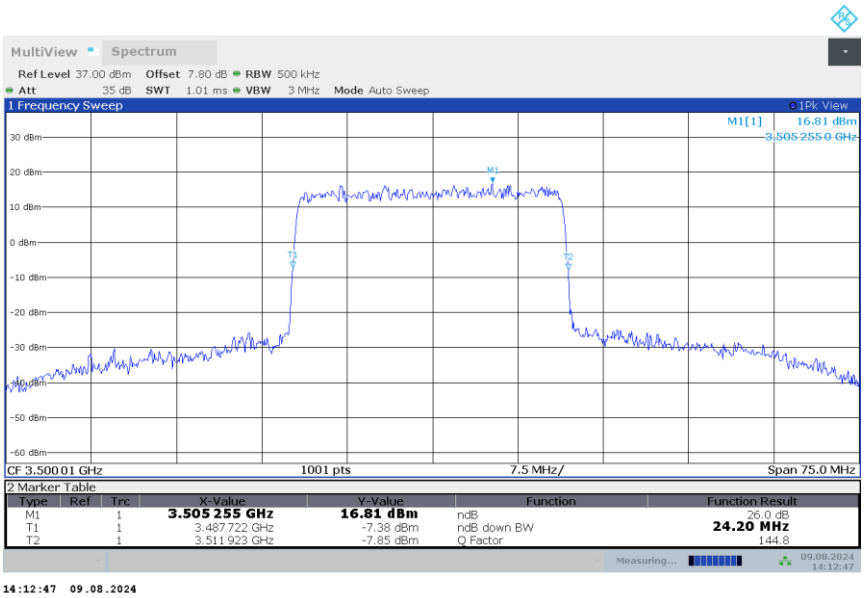
n77L,25MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	24.201	24.201

n77L,25MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,25MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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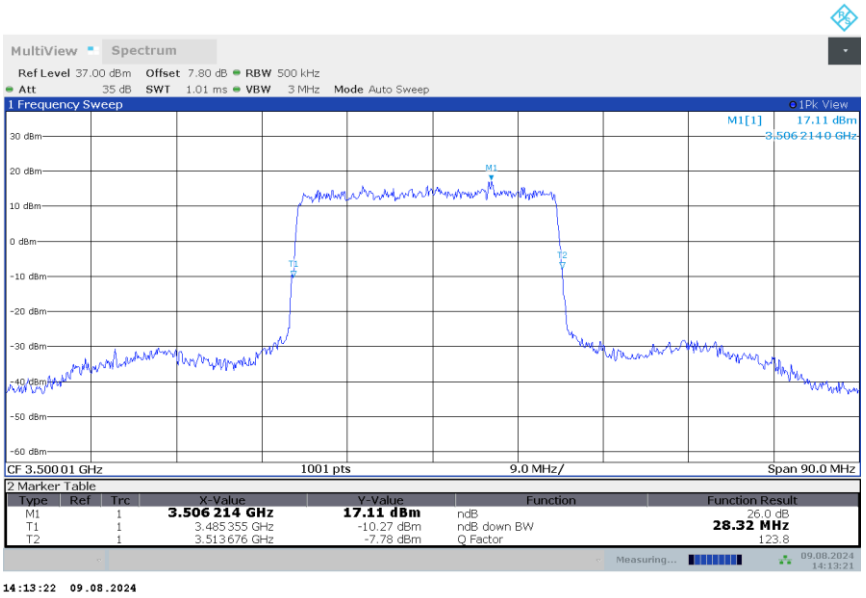
n77L

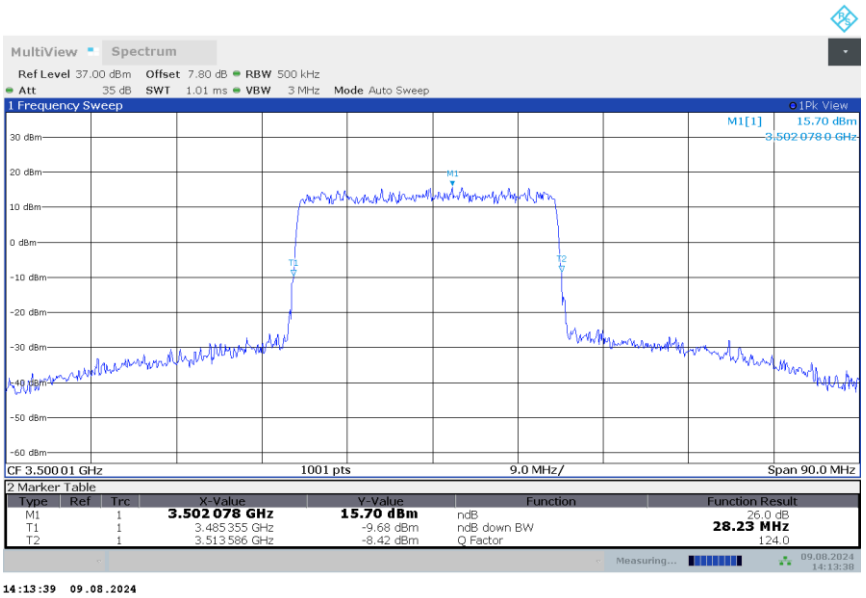
n77L,30MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	28.322	28.232

n77L,30MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,30MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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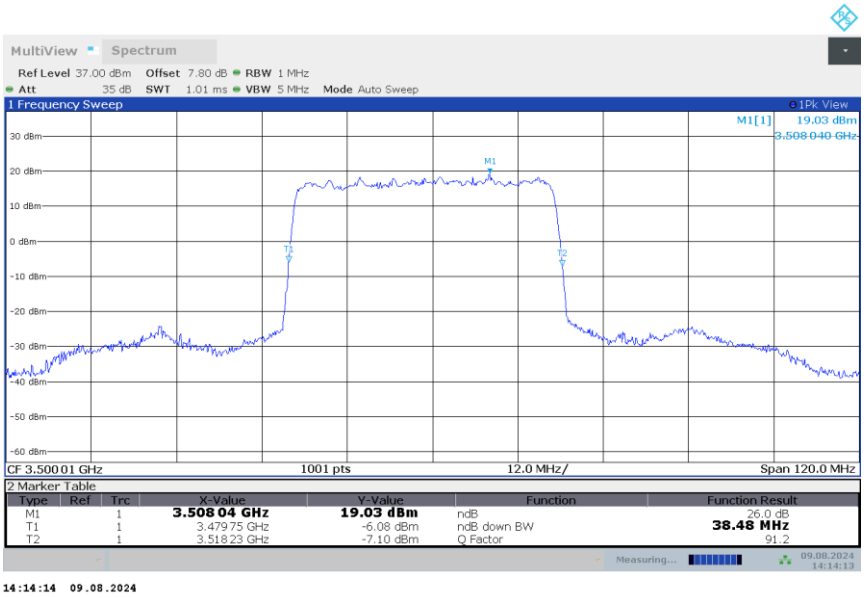
n77L

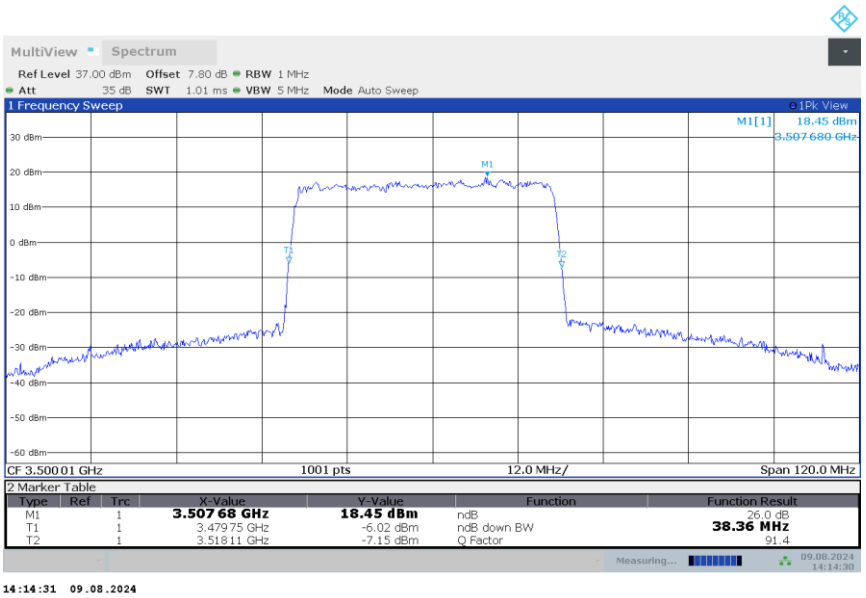
n77L,40MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	38.480	38.360

n77L,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,40MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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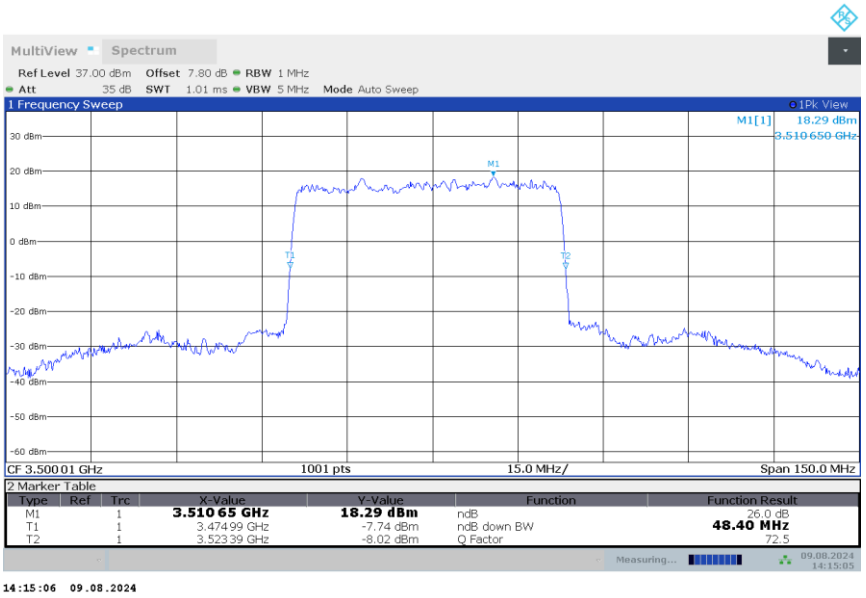
n77L

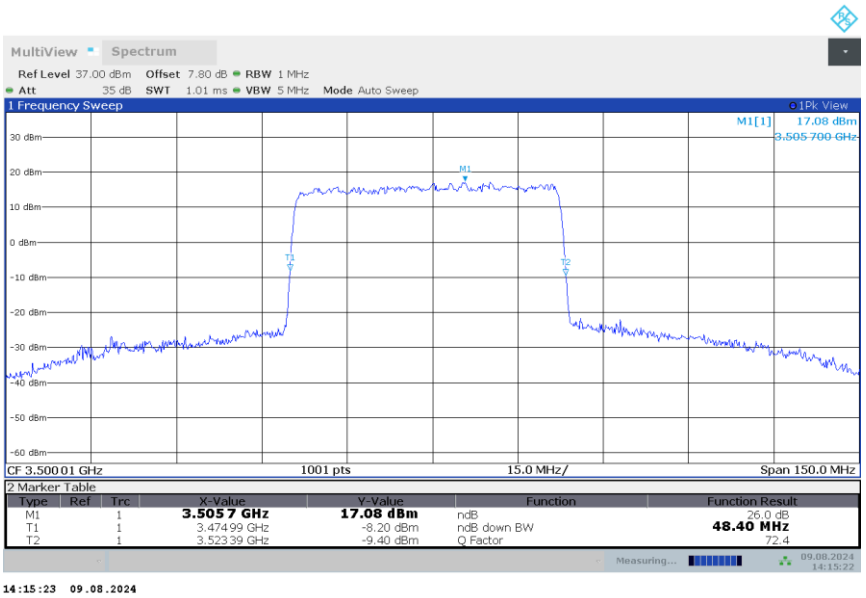
n77L,50MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	48.400	48.400

n77L,50MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,50MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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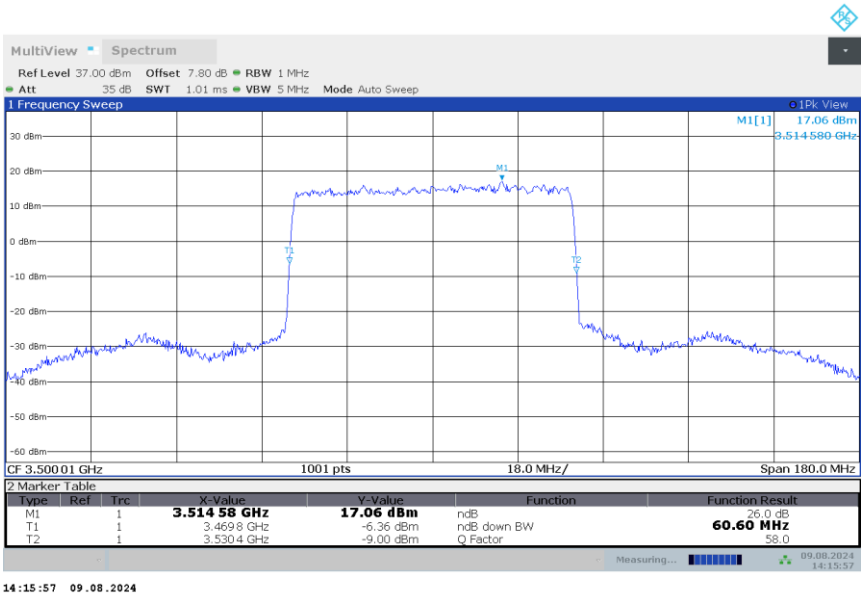
n77L

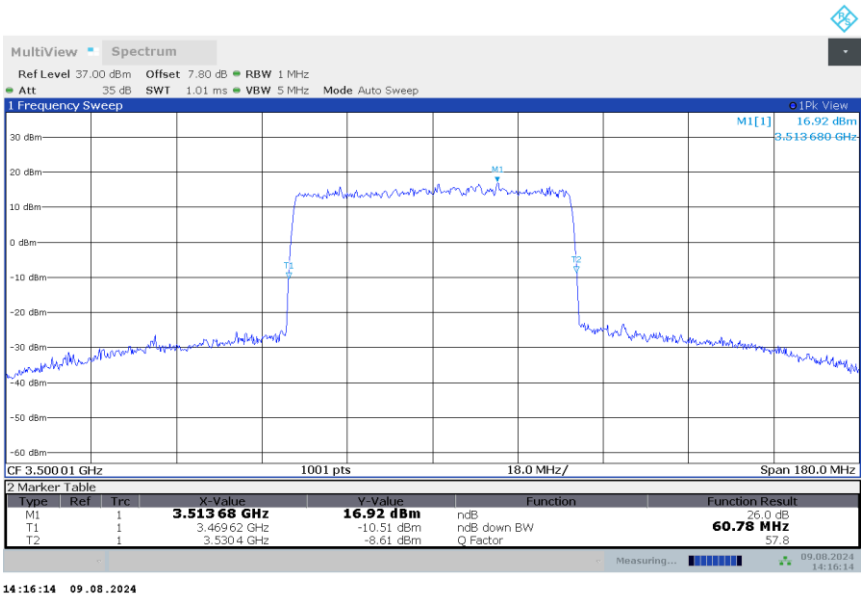
n77L,60MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	60.600	60.780

n77L,60MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,60MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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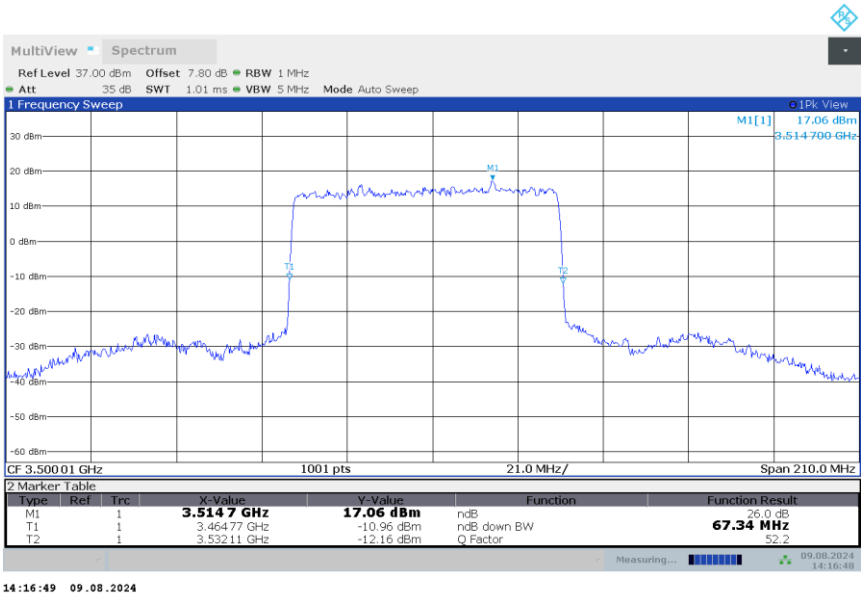
n77L

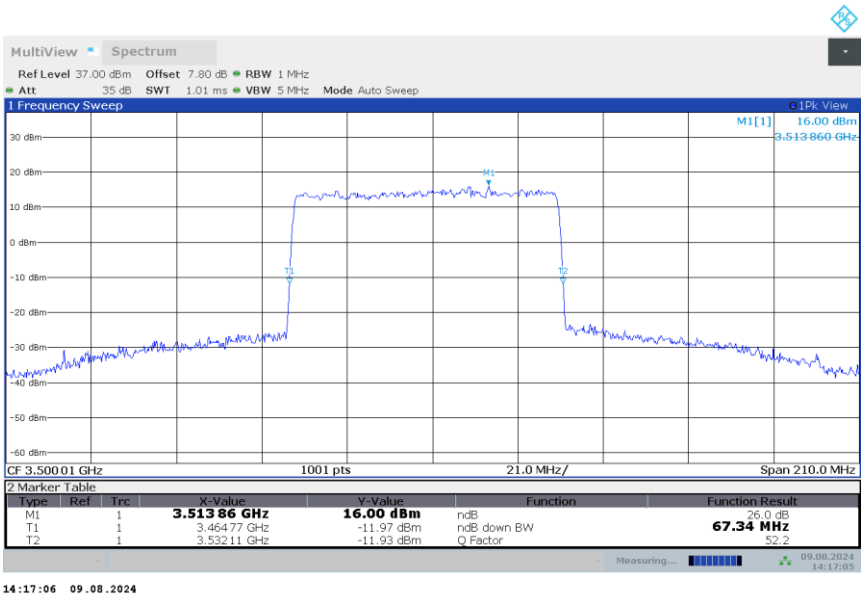
n77L,70MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	67.340	67.340

n77L,70MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,70MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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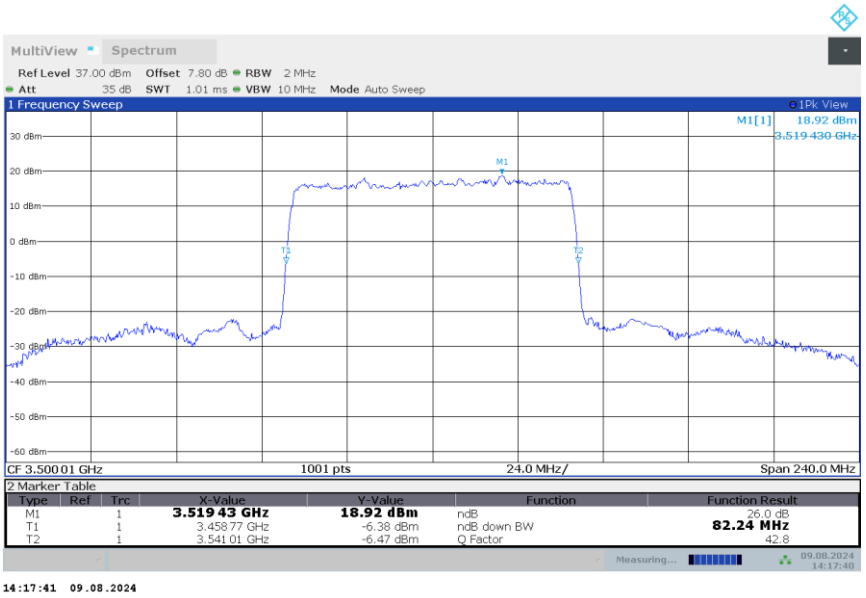
n77L

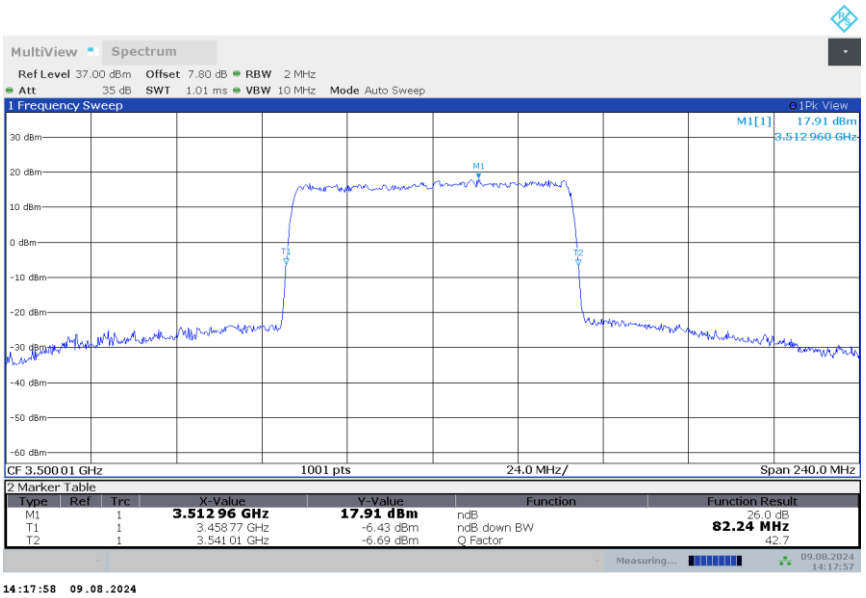
n77L,80MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	82.240	82.240

n77L,80MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,80MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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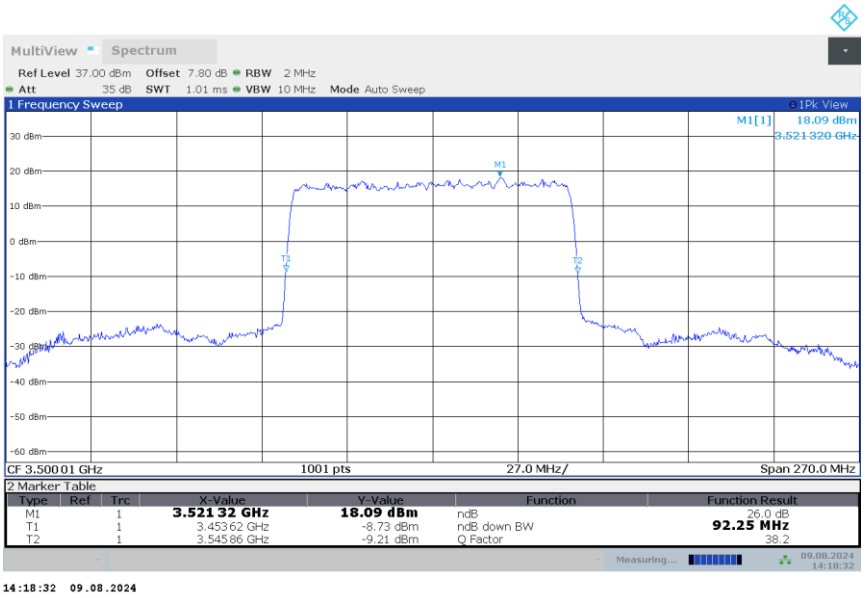
n77L

n77L,90MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	92.250	92.250

n77L,90MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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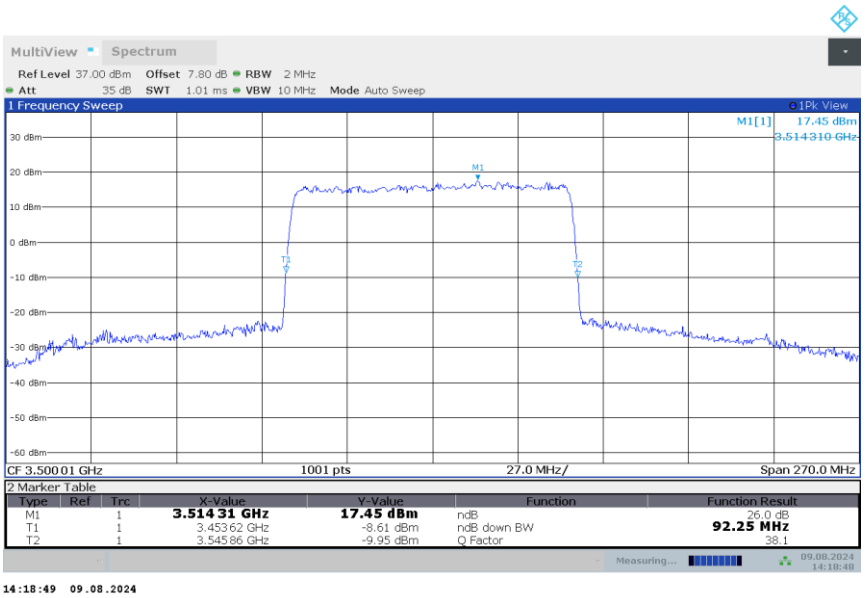
n77L,90MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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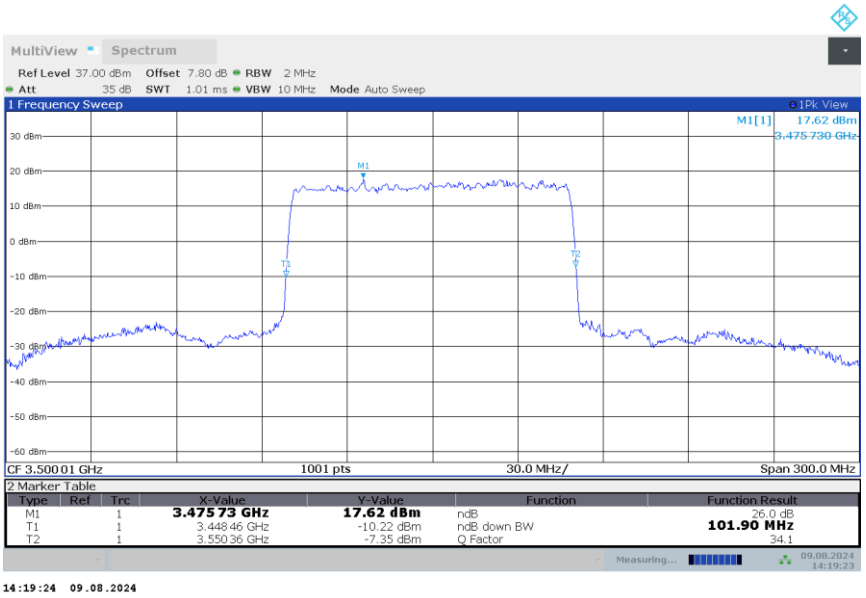
n77L

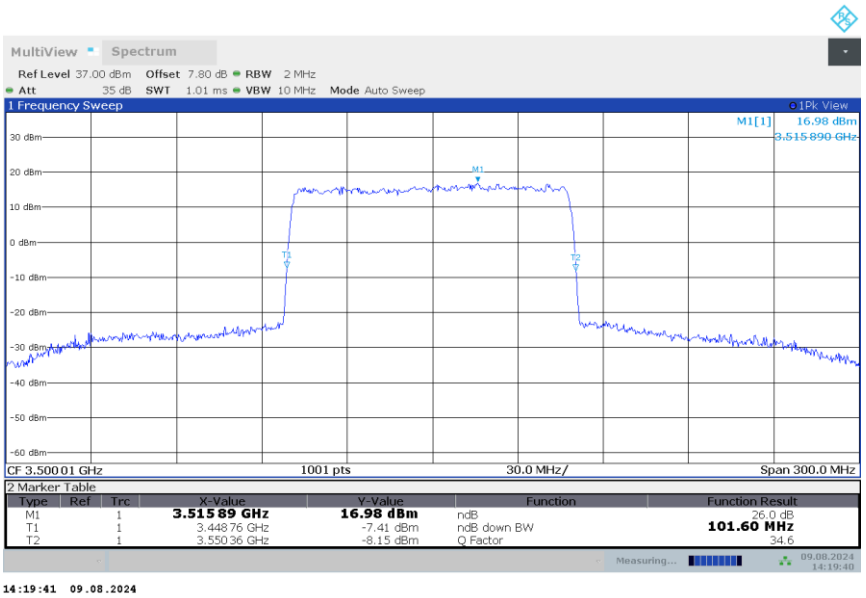
n77L,100MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3500.01	101.900	101.600

n77L,100MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77L,100MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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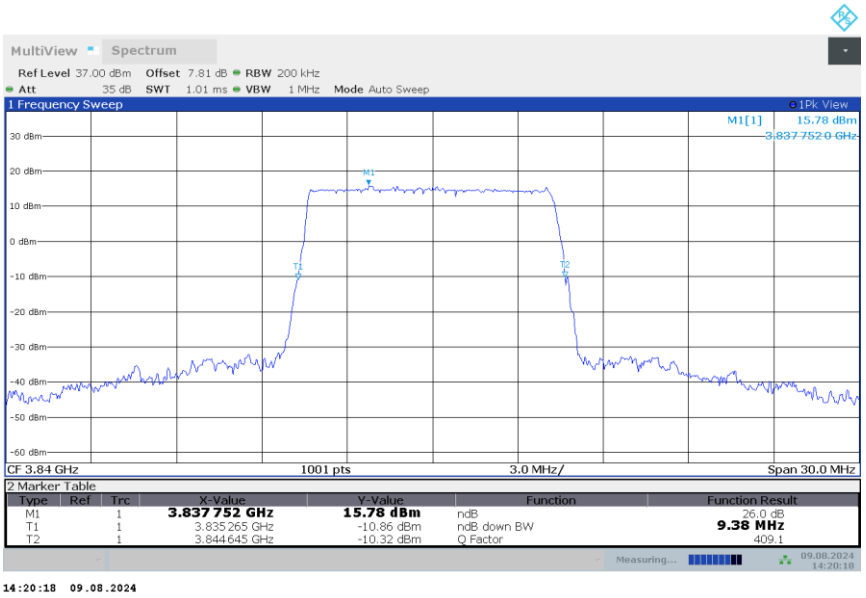
n77H

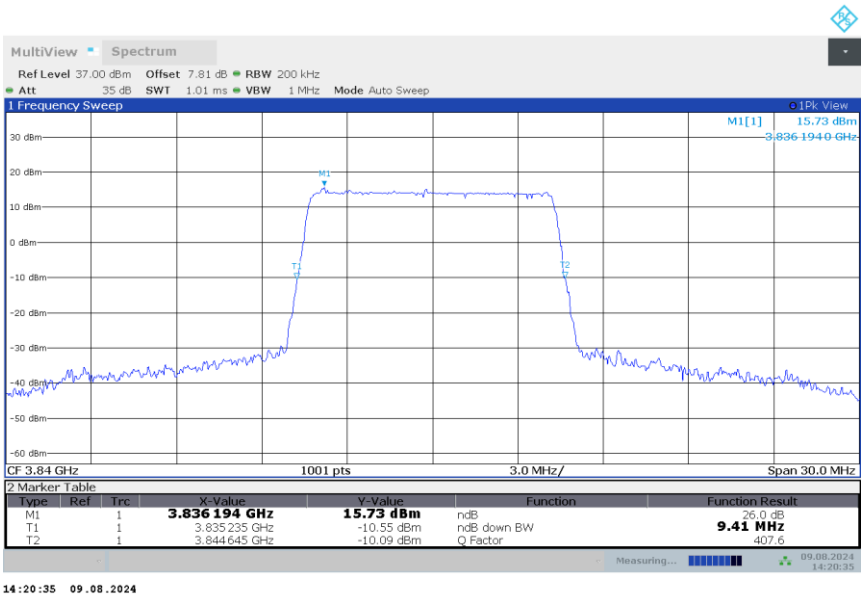
n77H,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	9.381	9.411

n77H,10MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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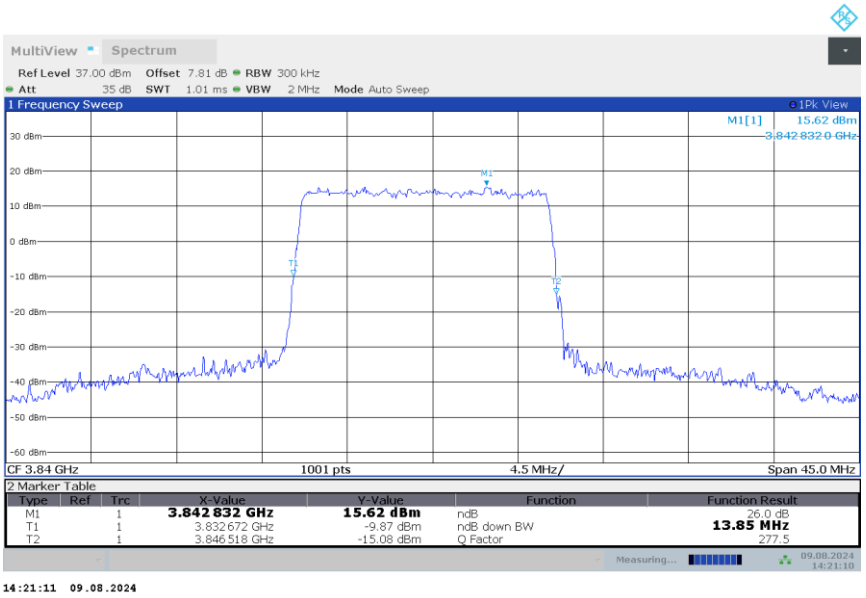
n77H

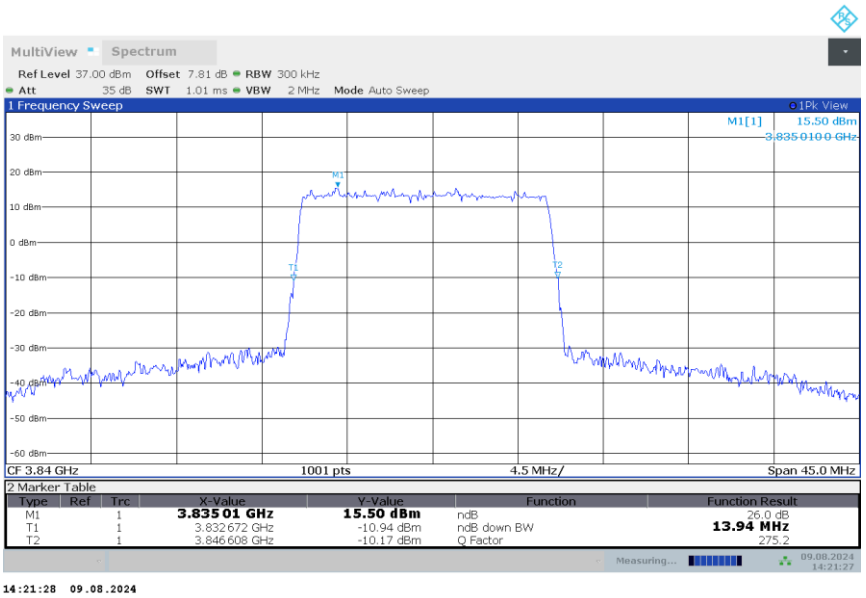
n77H,15MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	13.846	13.936

n77H,15MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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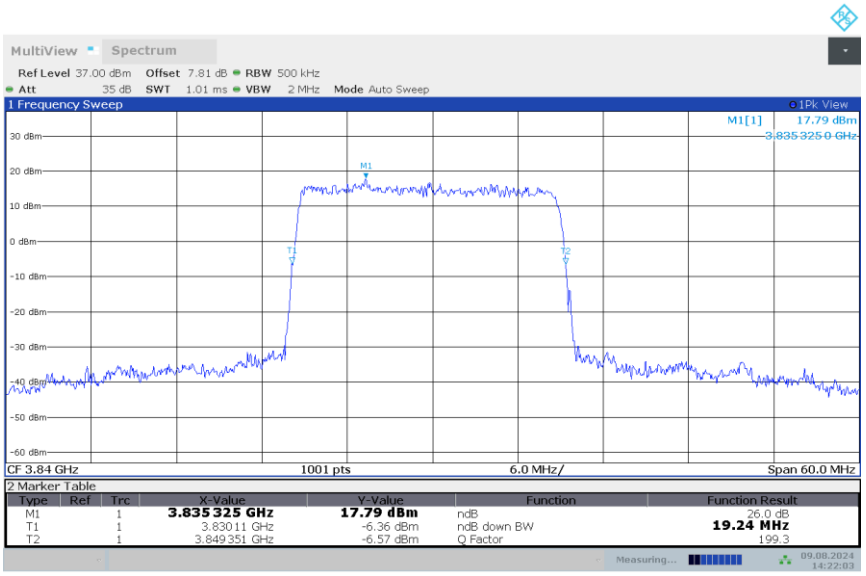
n77H

n77H,20MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	19.241	19.181

n77H,20MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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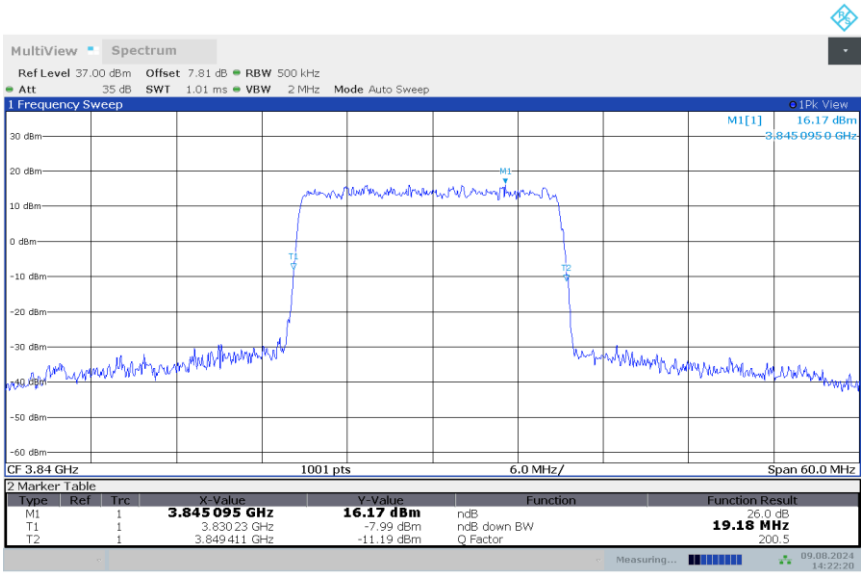
n77H,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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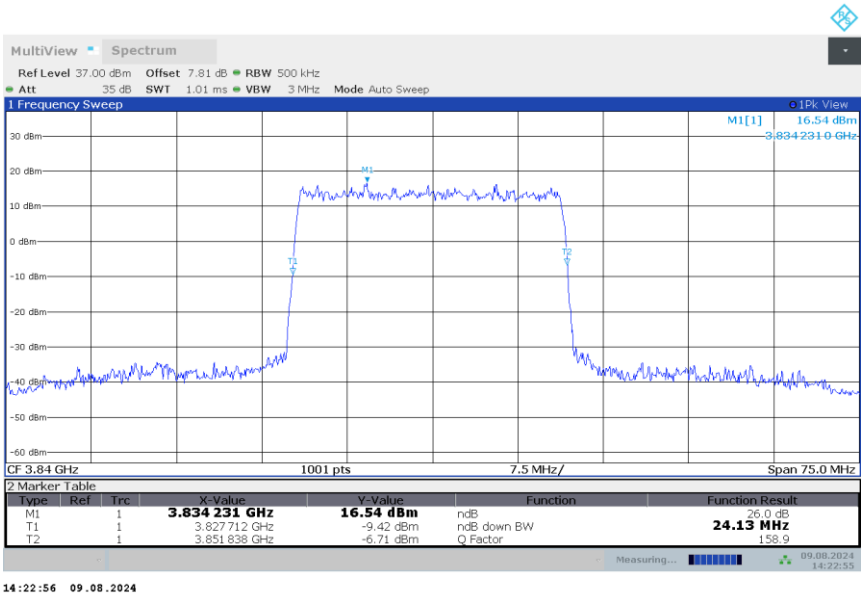
n77H

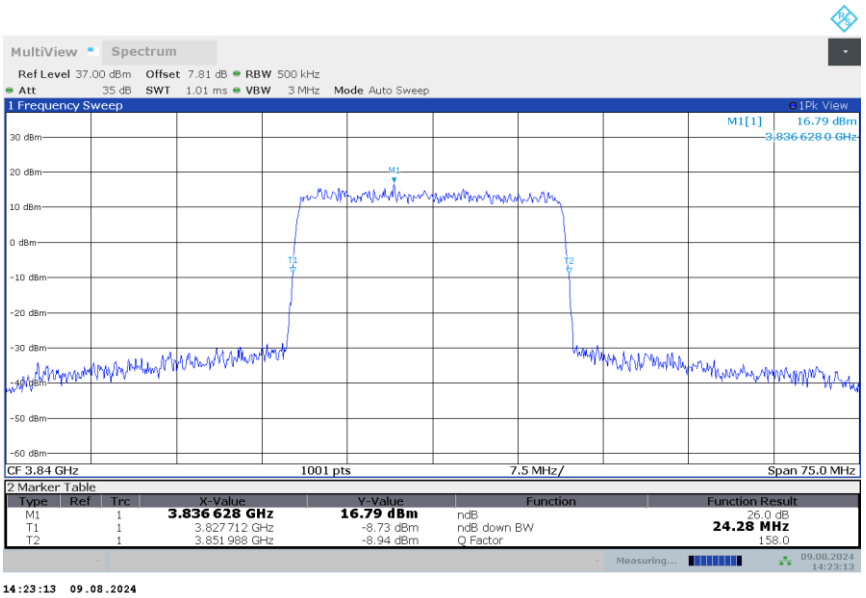
n77H,25MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	24.126	24.276

n77H,25MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,25MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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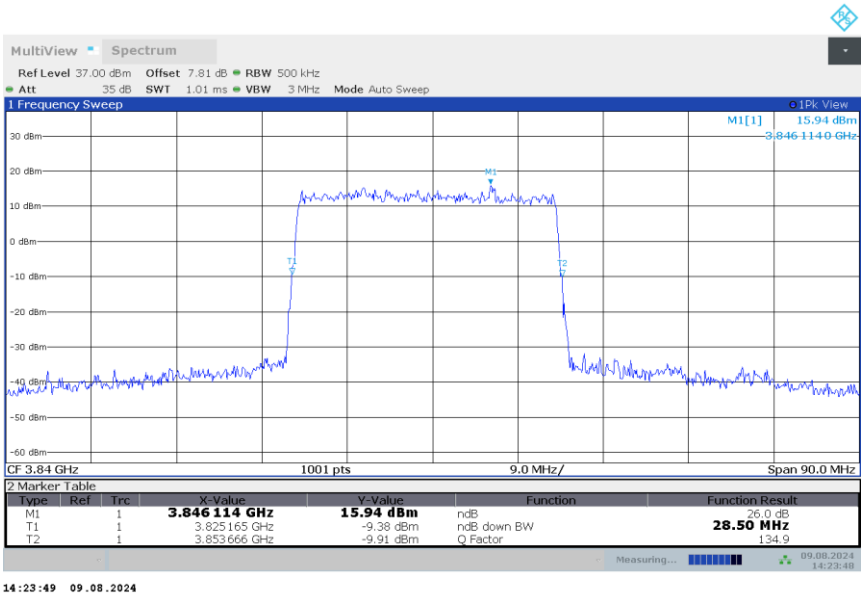
n77H

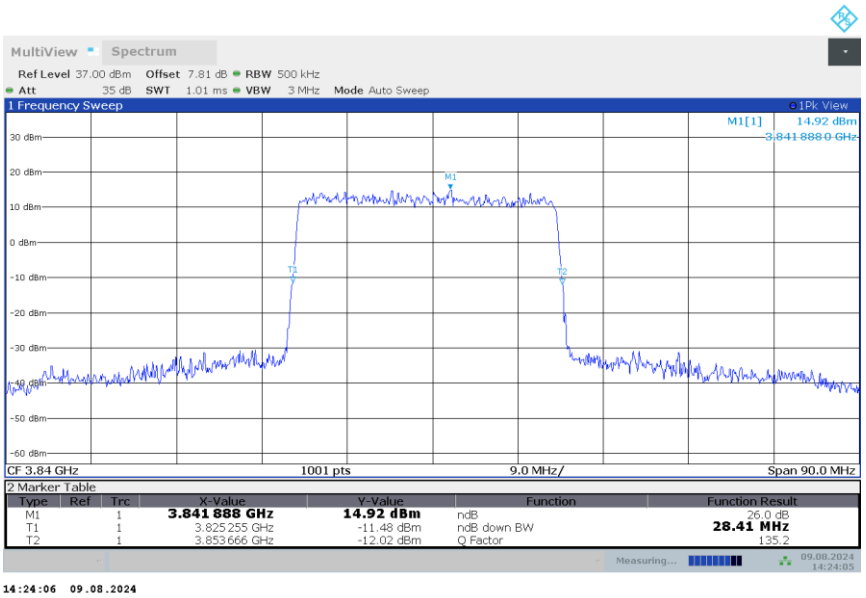
n77H,30MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	28.501	28.412

n77H,30MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,30MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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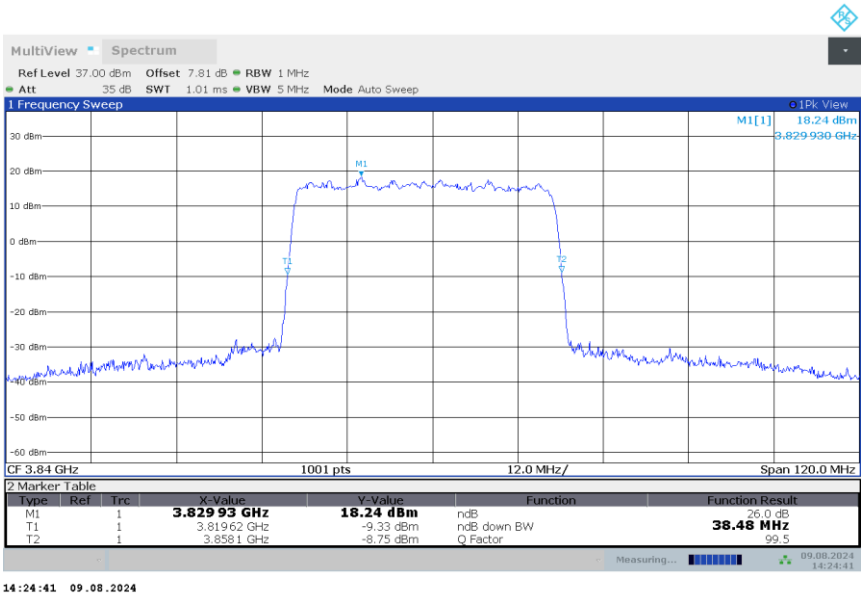
n77H

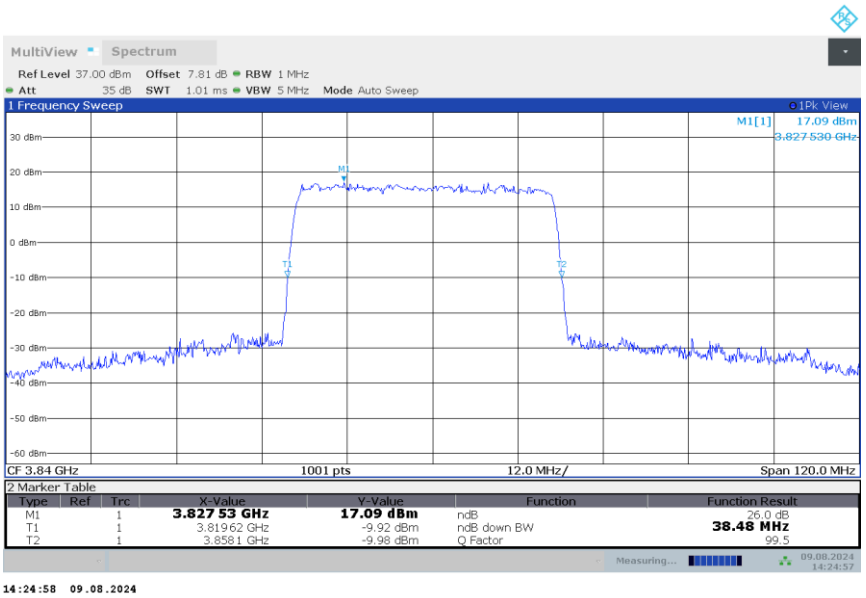
n77H,40MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	38.480	38.480

n77H,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,40MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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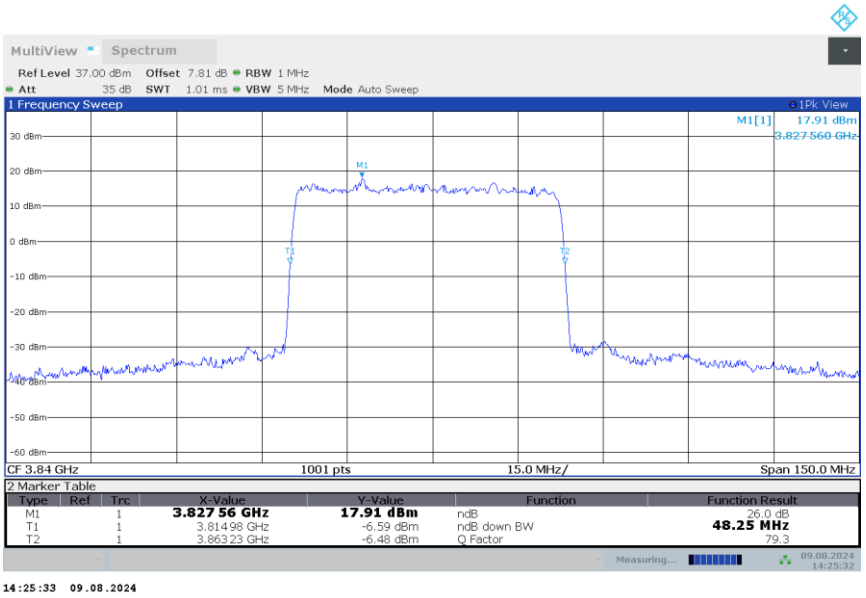
n77H

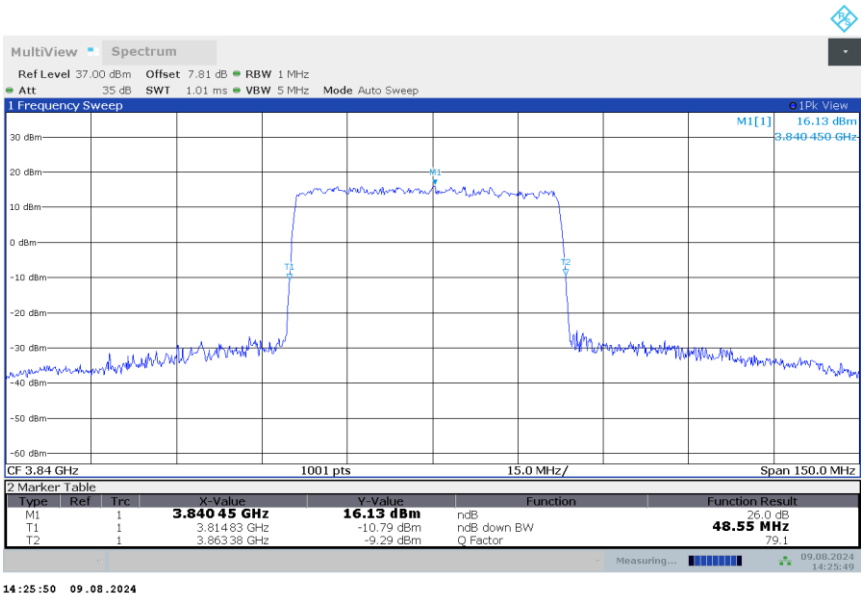
n77H,50MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	48.250	48.550

n77H,50MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,50MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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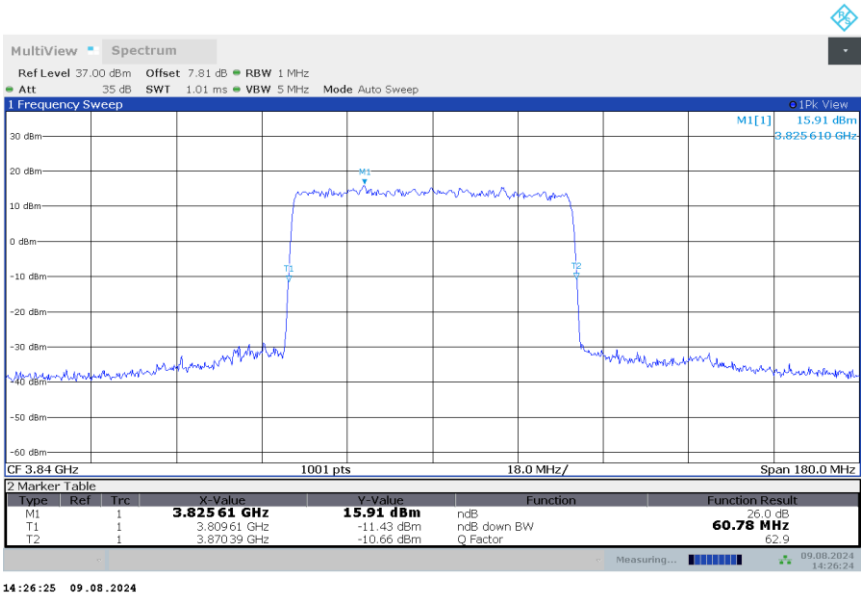
n77H

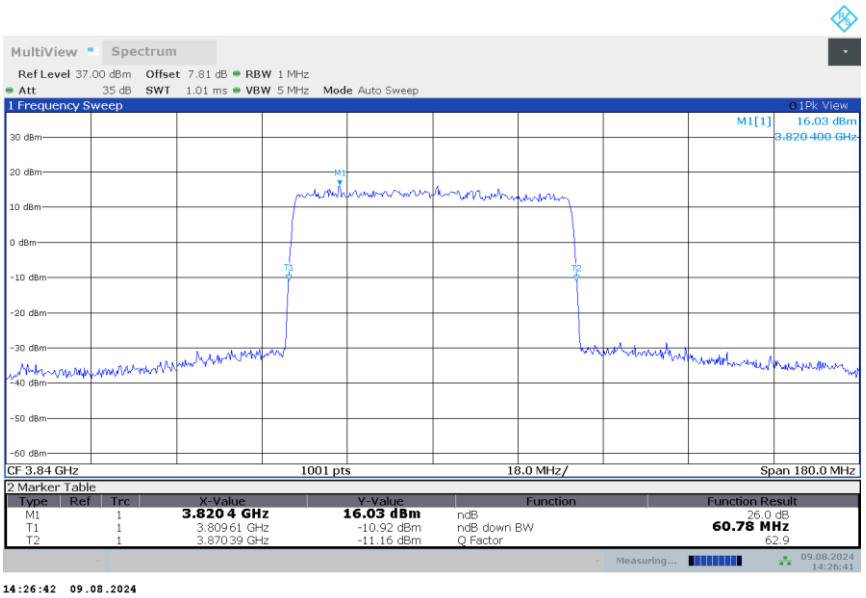
n77H,60MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	60.780	60.780

n77H,60MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,60MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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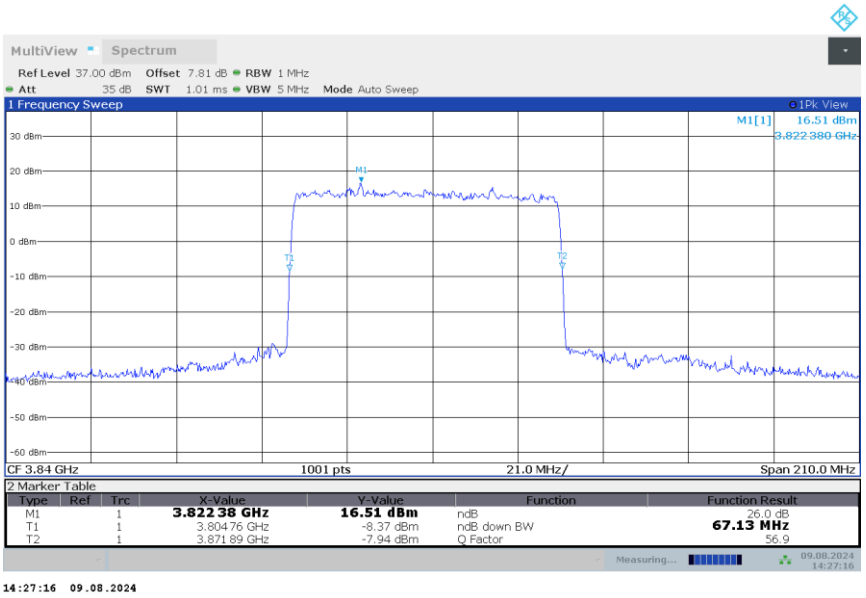
n77H

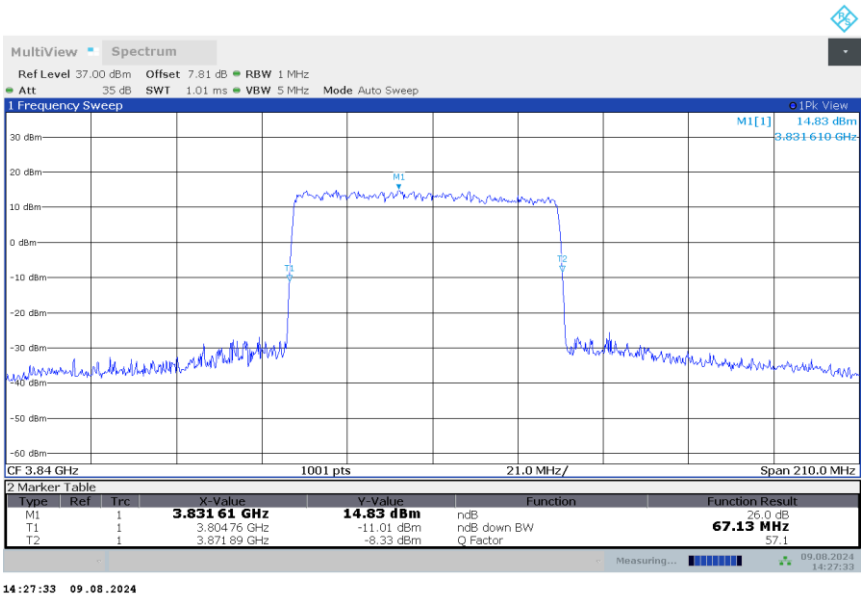
n77H,70MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	67.130	67.130

n77H,70MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



n77H,70MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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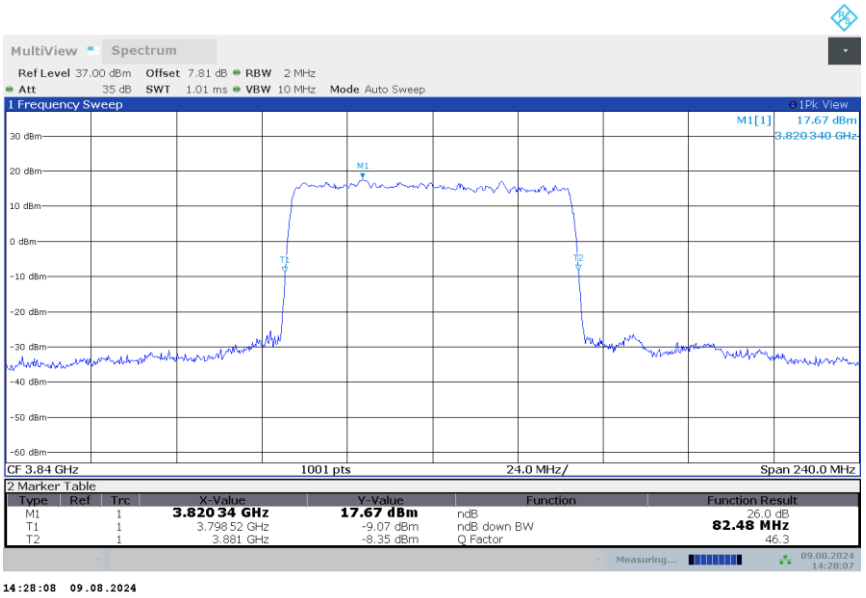
n77H

n77H,80MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	82.480	82.240

n77H,80MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc BW)



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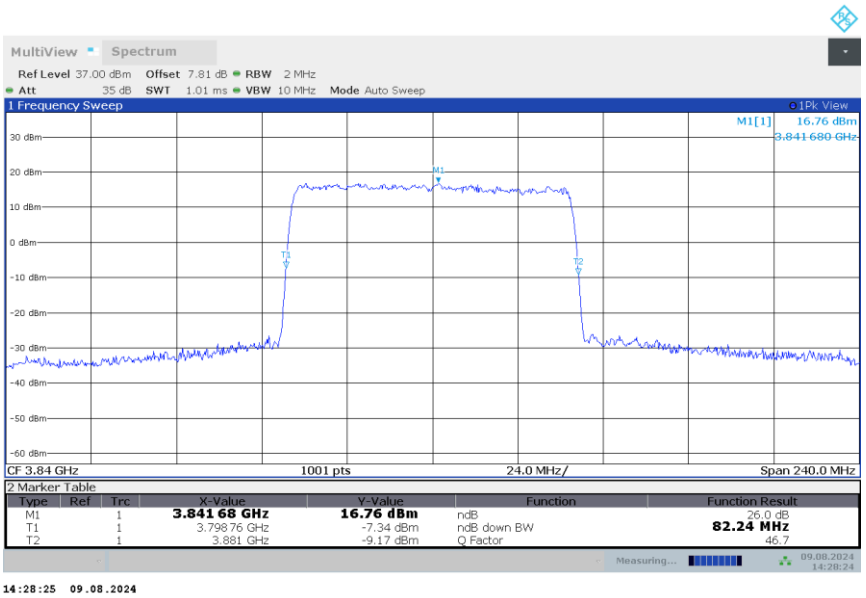
n77H,80MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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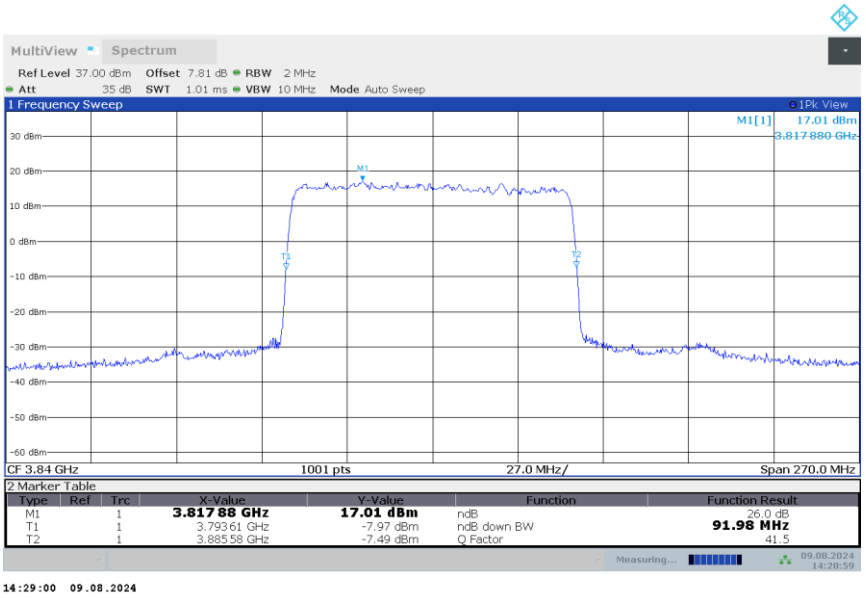
n77H

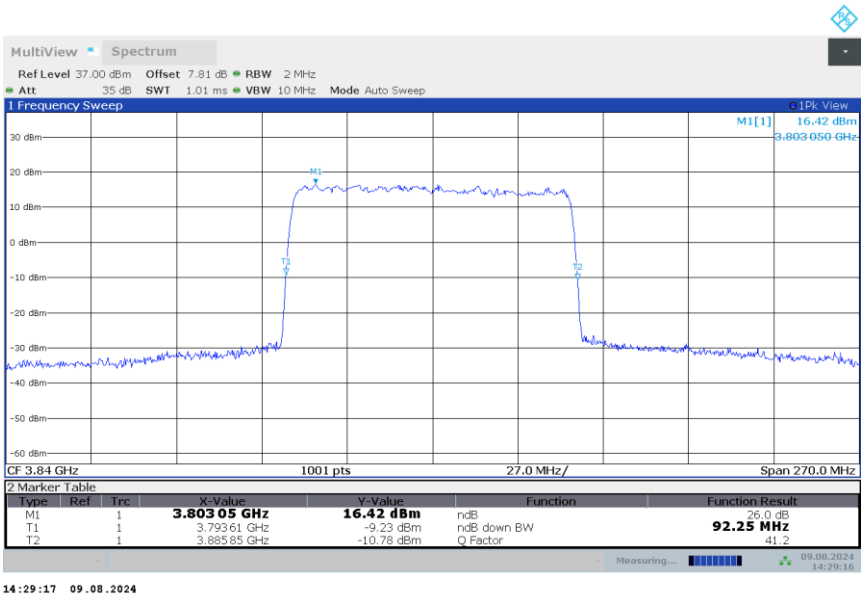
n77H,90MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-pi/2 BPSK	DFT-s-QPSK
3840	91.980	92.250

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



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



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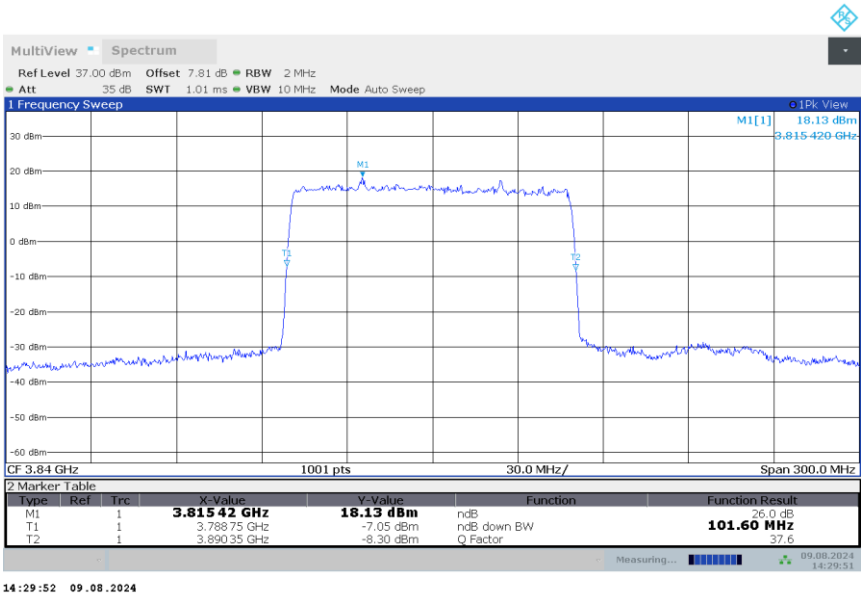
n77H

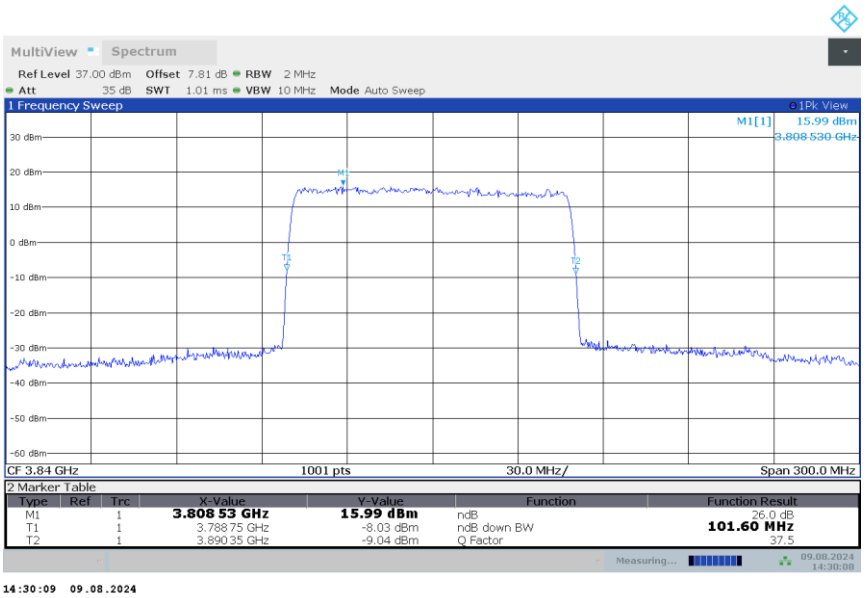
n77H,100MHz(-26dBc)

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

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 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 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 116Log10(f/6.1) decibels or 50 + 10 Log10(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 + 10Log10(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

NR n5

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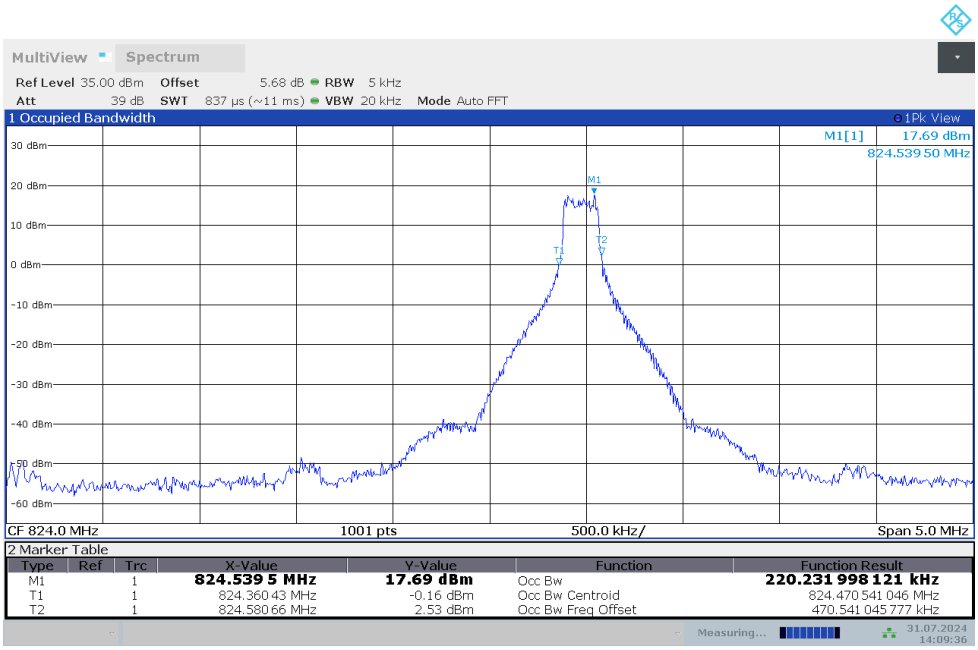

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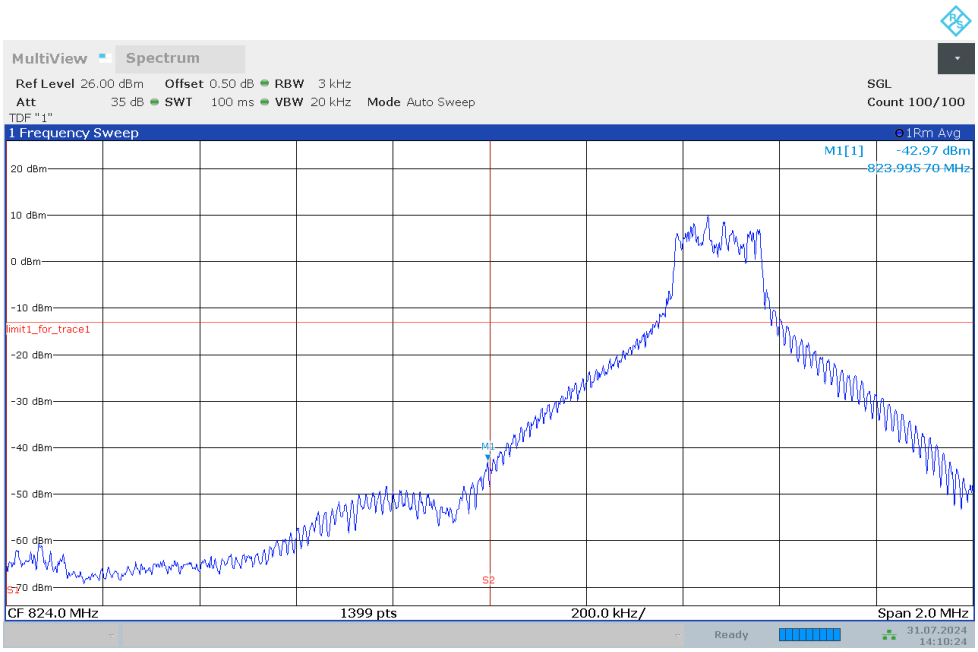

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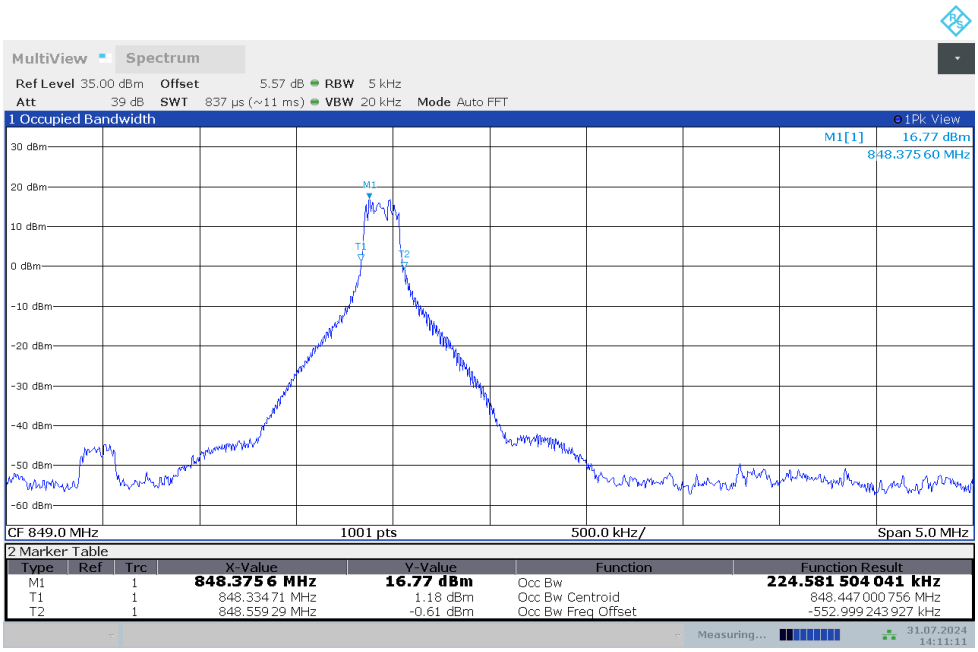

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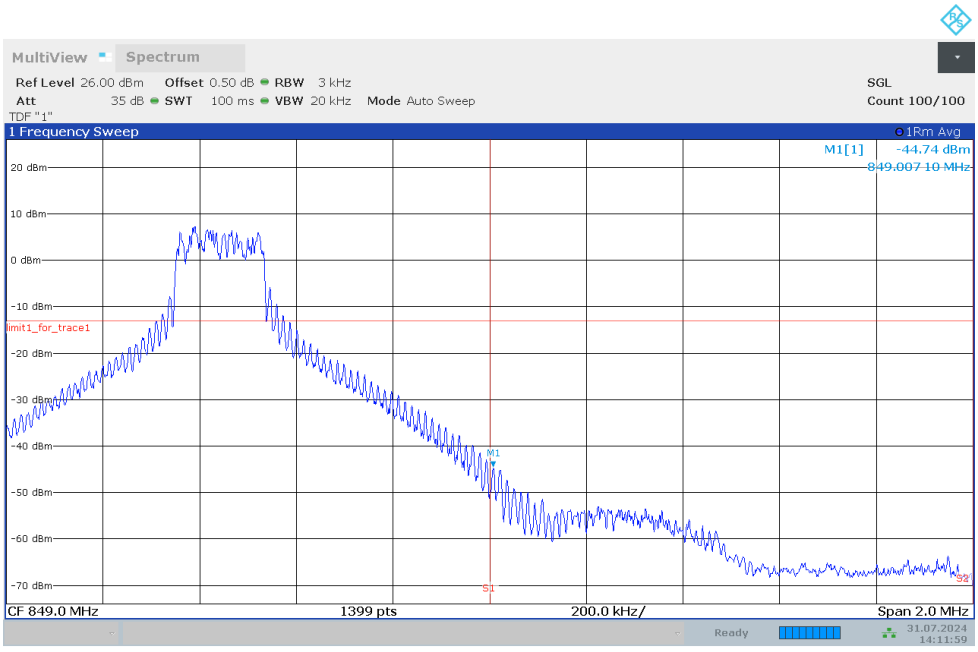

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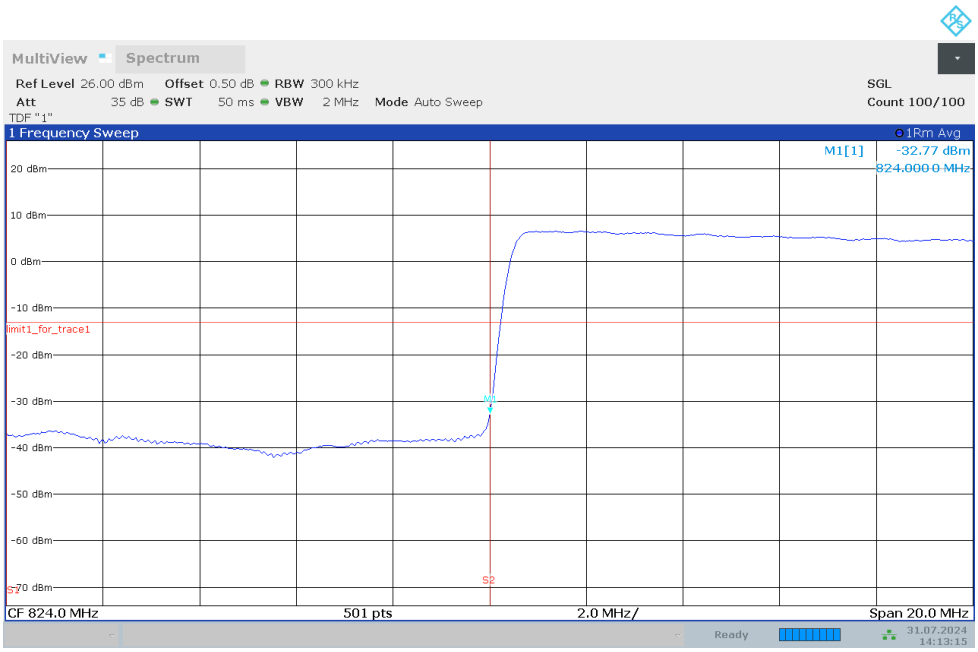
LOW BAND EDGE BLOCK-25MHZ-100%RB



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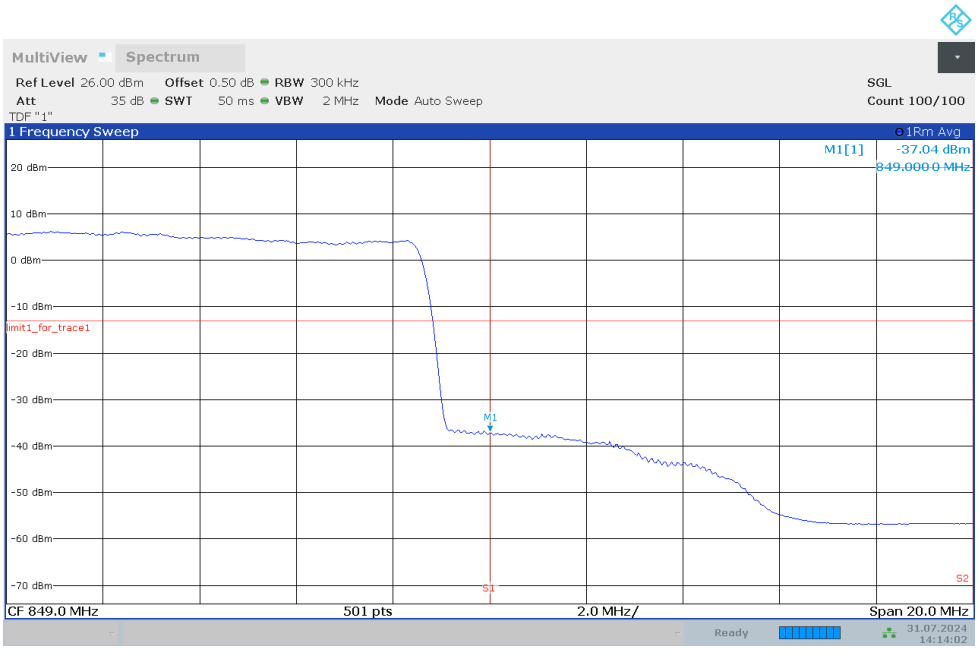

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NR n7

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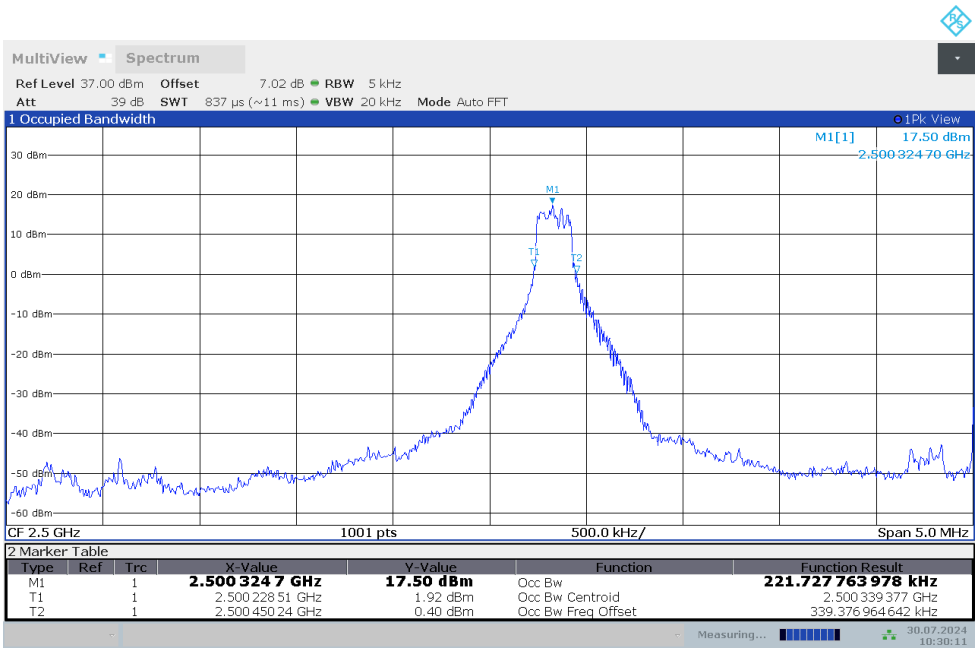

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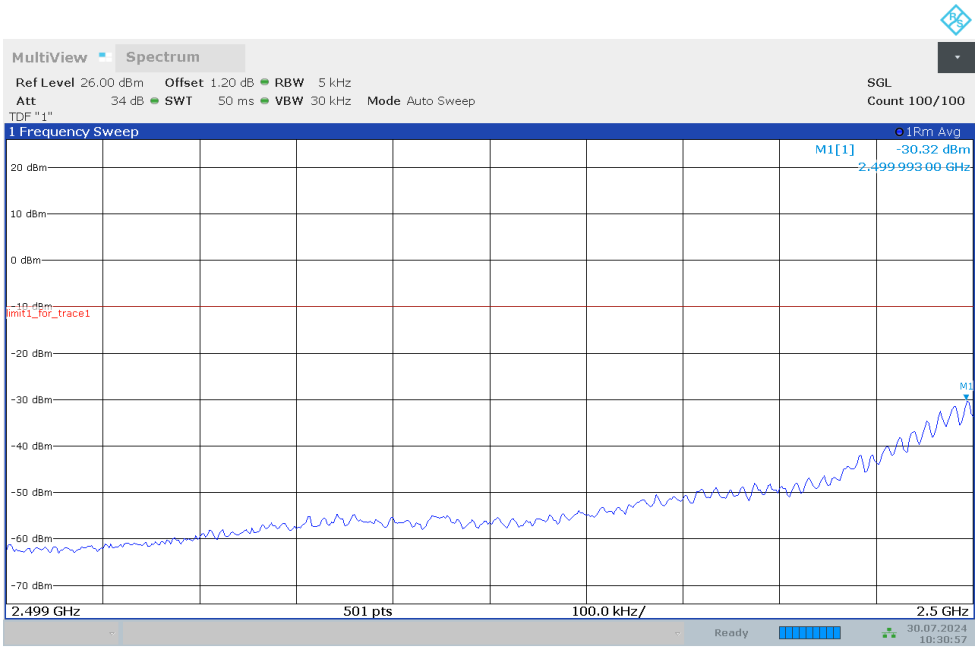

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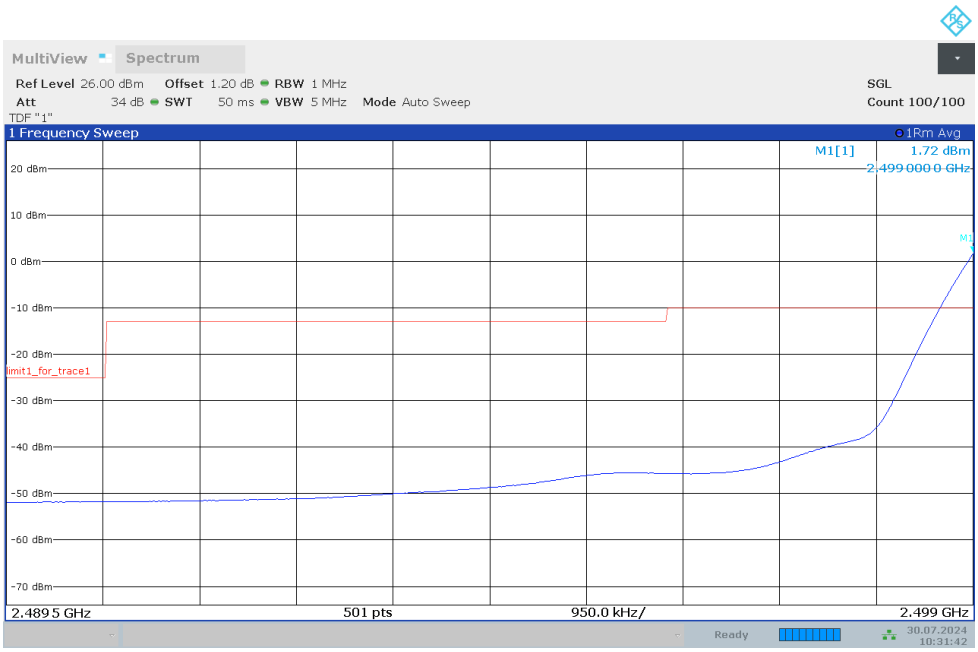

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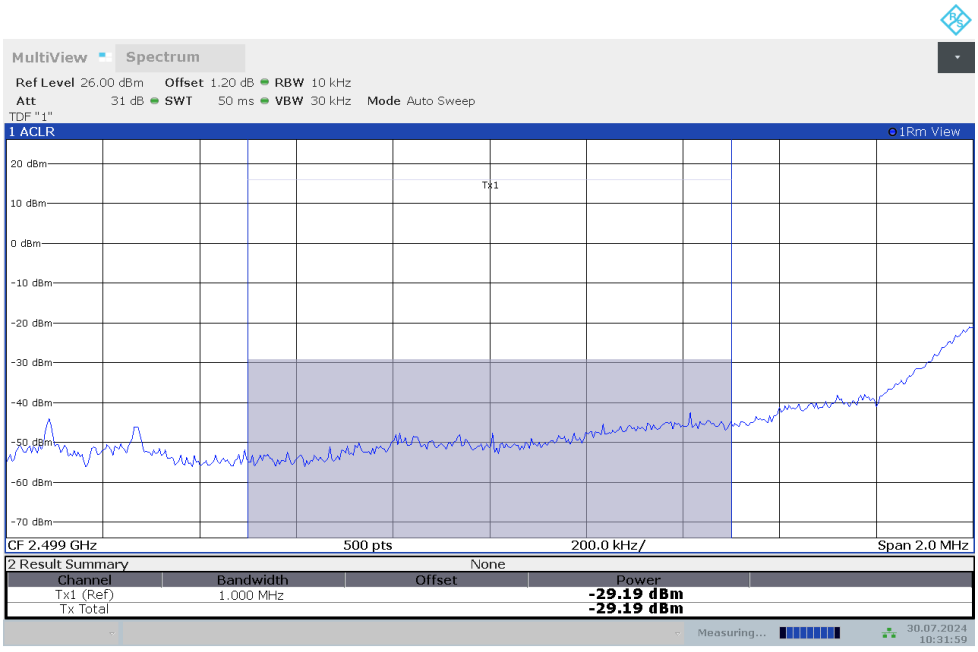
Channel power



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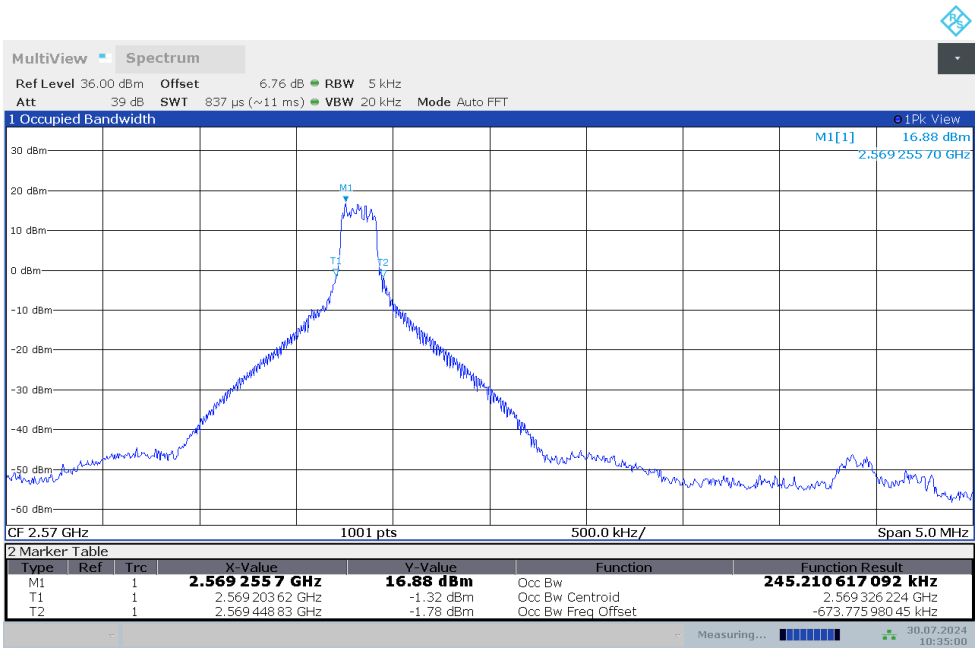

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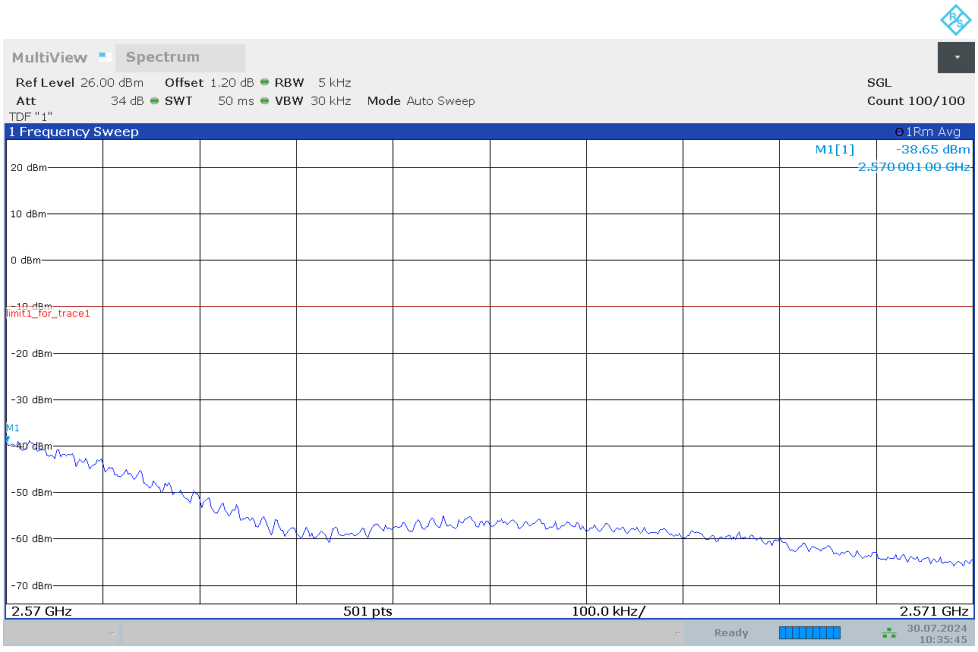

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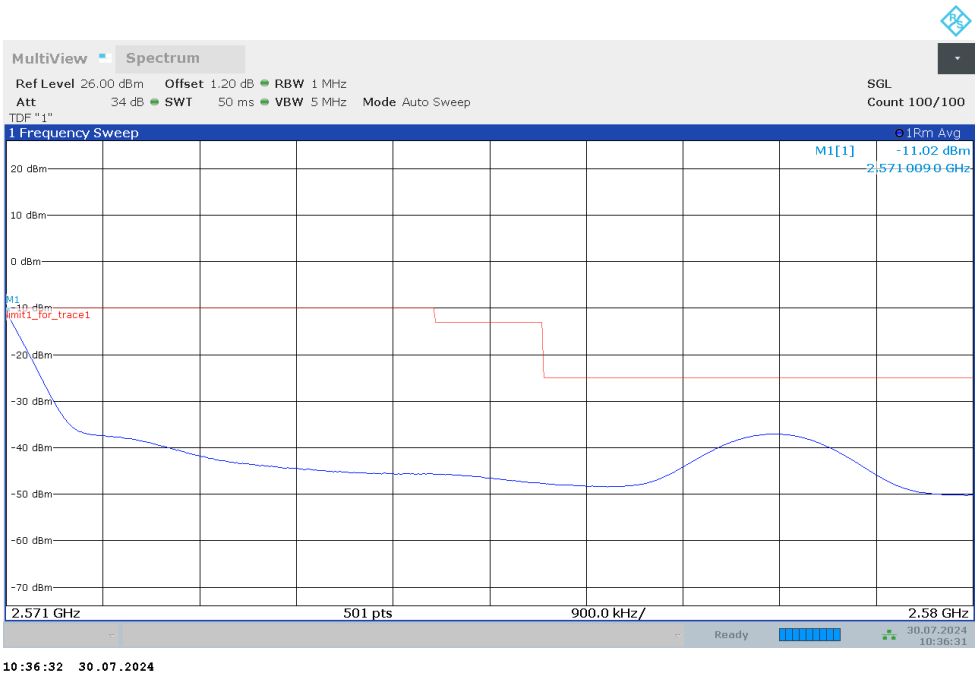

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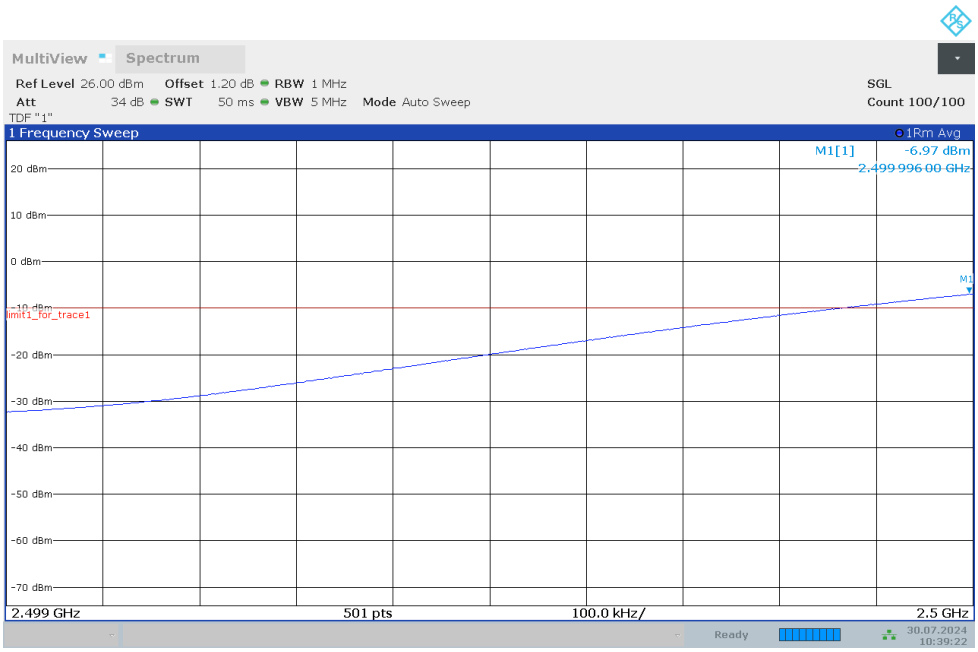
LOW BAND EDGE BLOCK-50MHZ-100%RB



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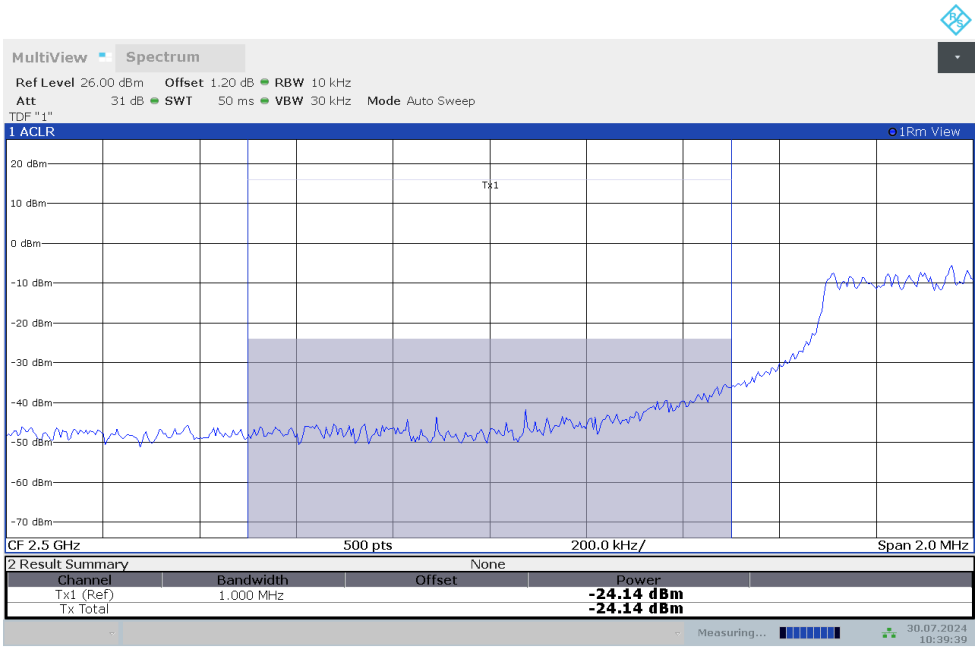
Channel power



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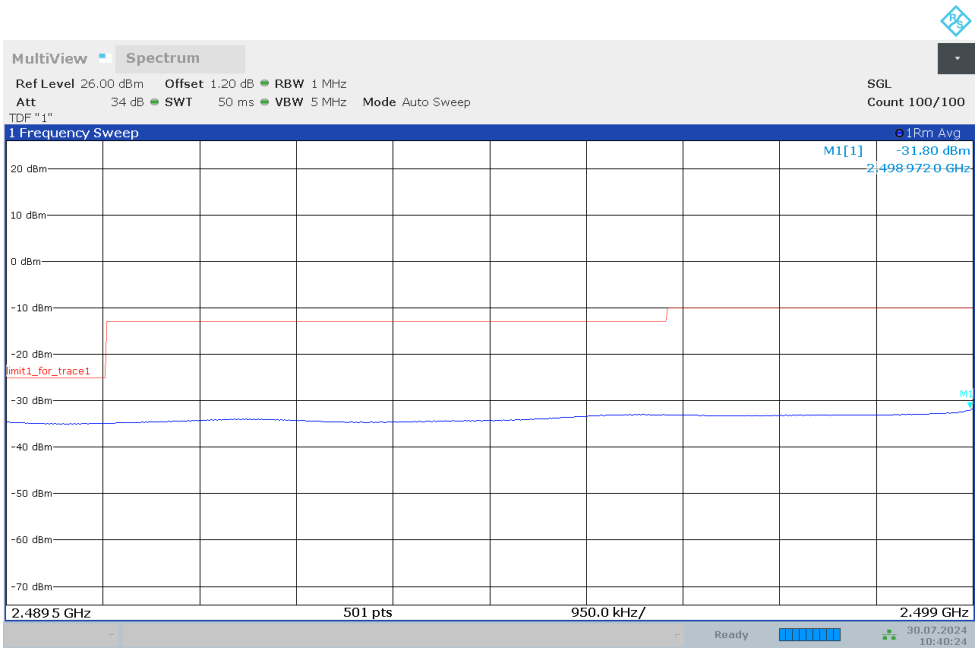
LOW BAND EDGE BLOCK-50MHZ-100%RB



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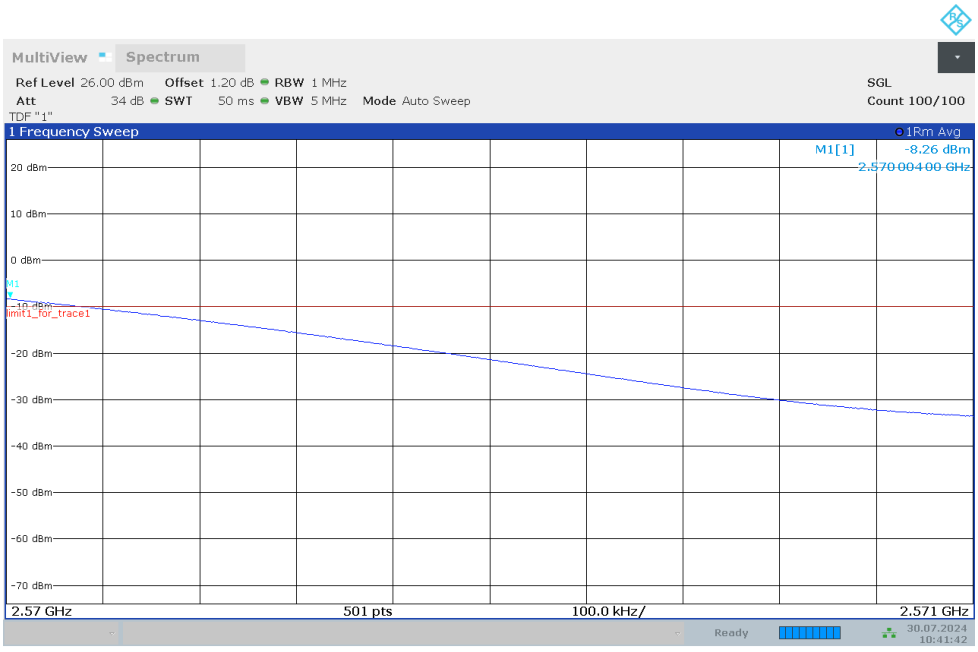
HIGH BAND EDGE BLOCK-50MHZ-100%RB



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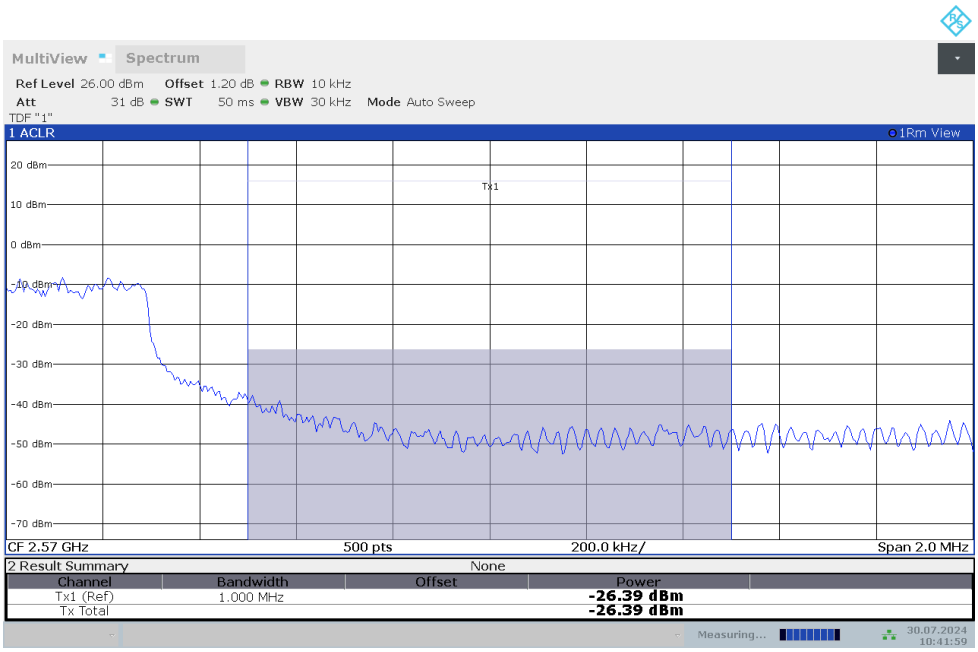
Channel power



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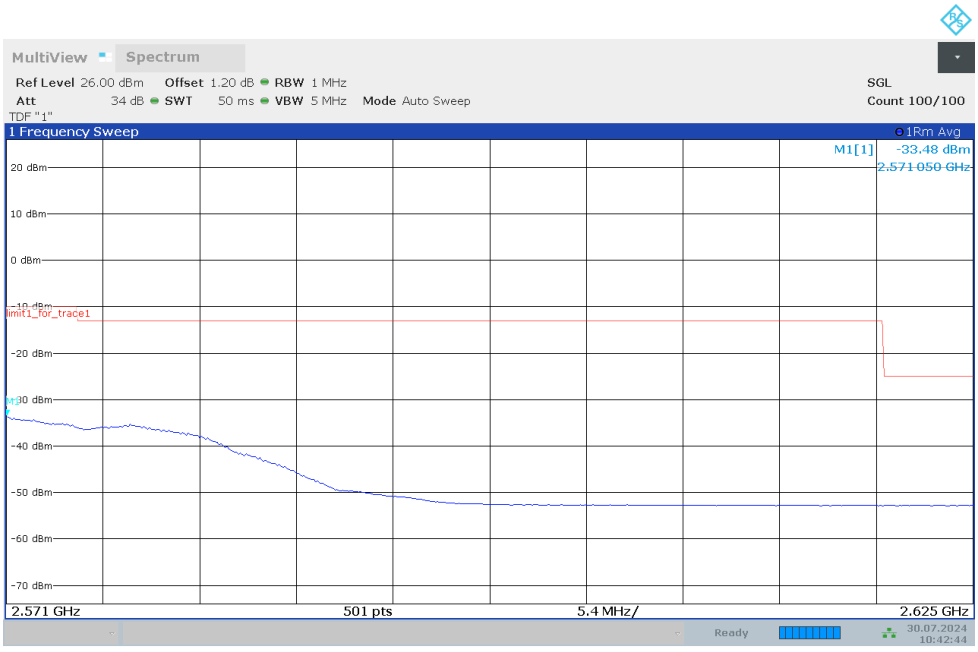

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NR n26_Part22

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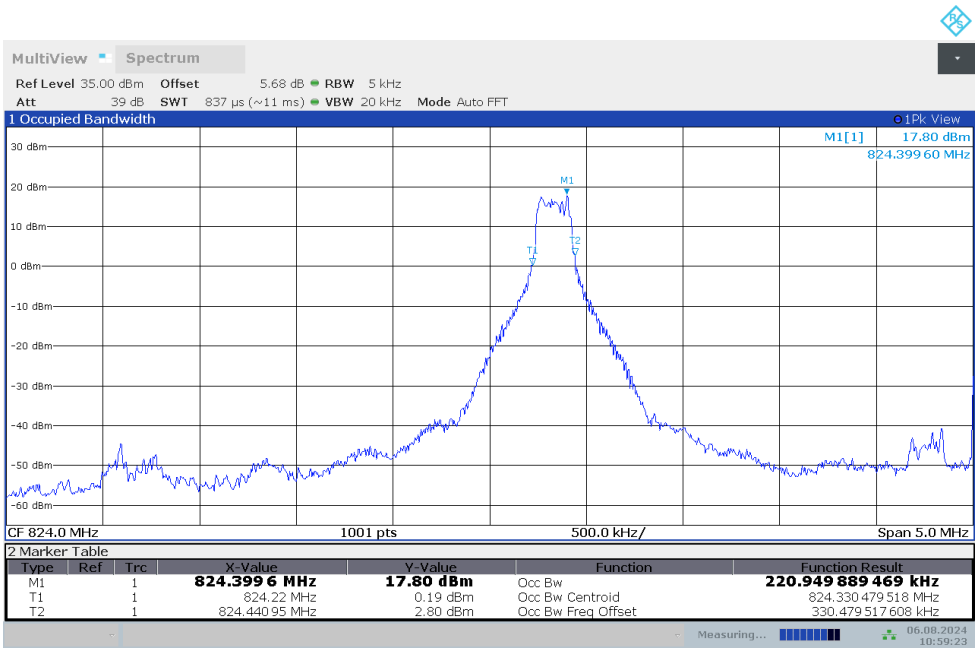

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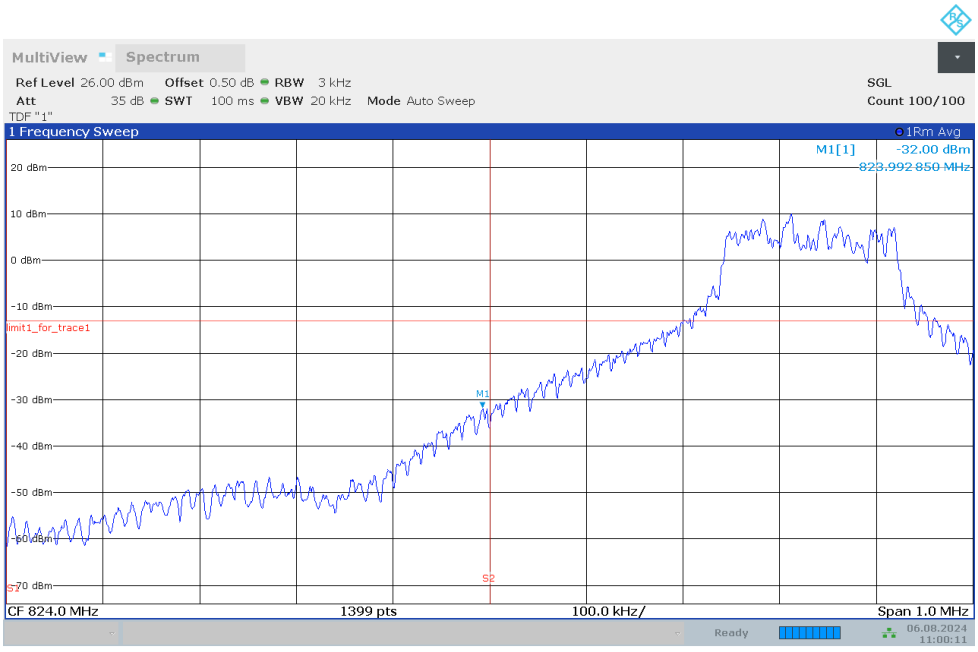

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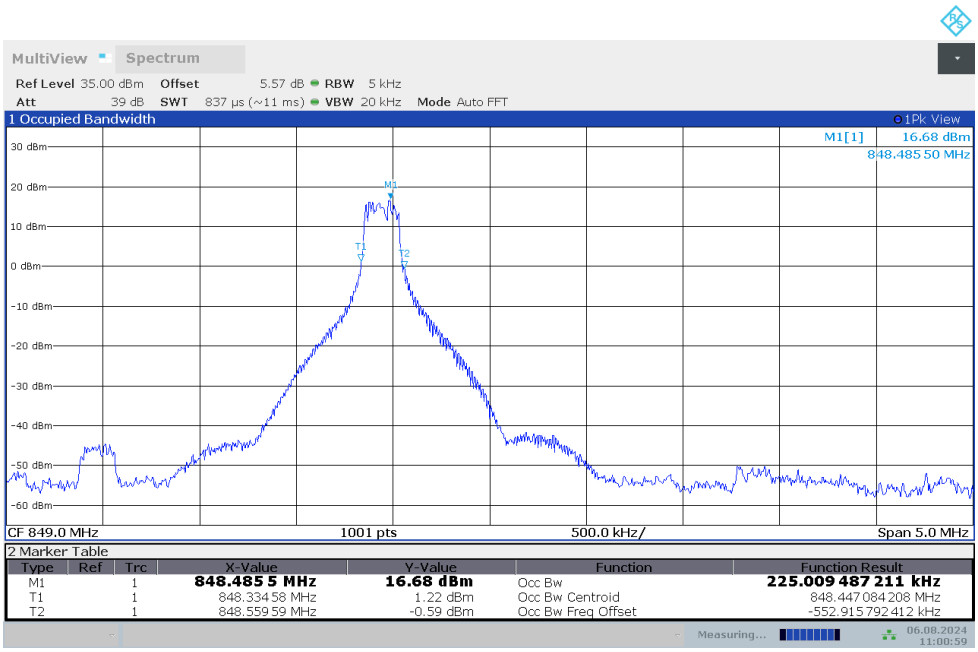

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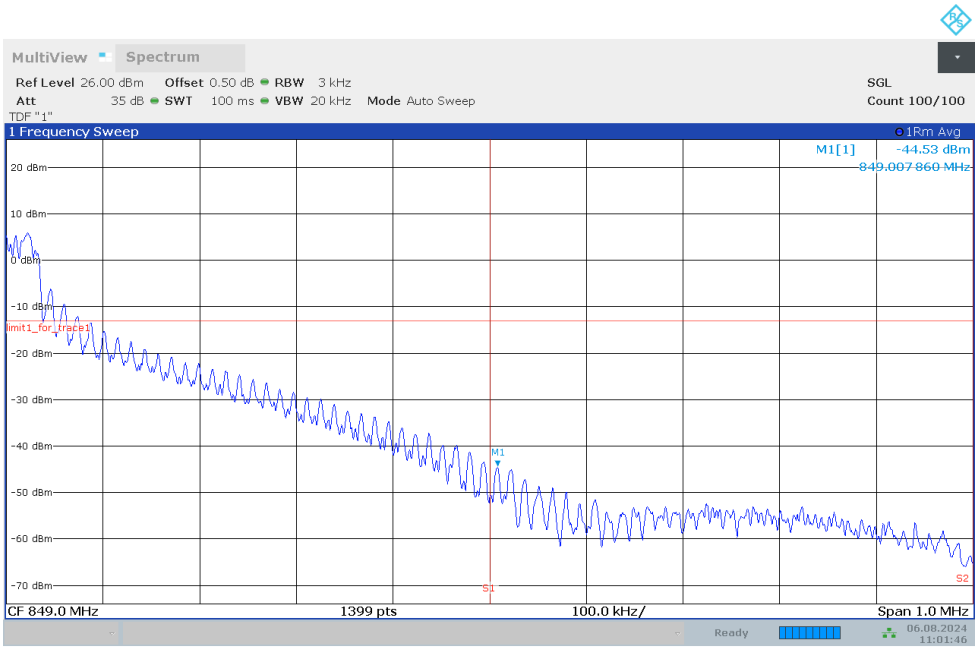

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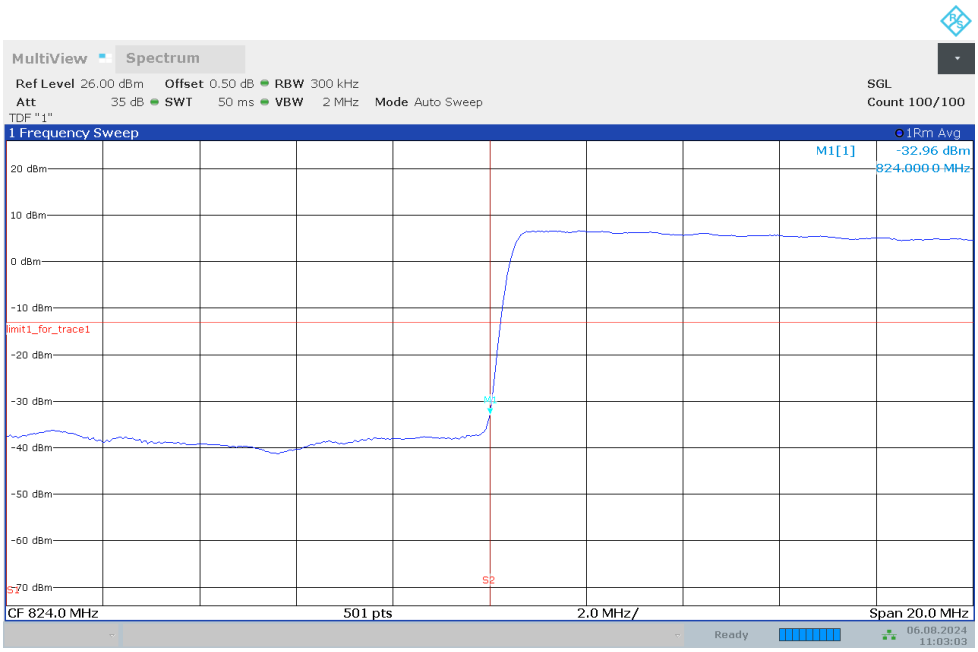
LOW BAND EDGE BLOCK-25MHZ-100%RB



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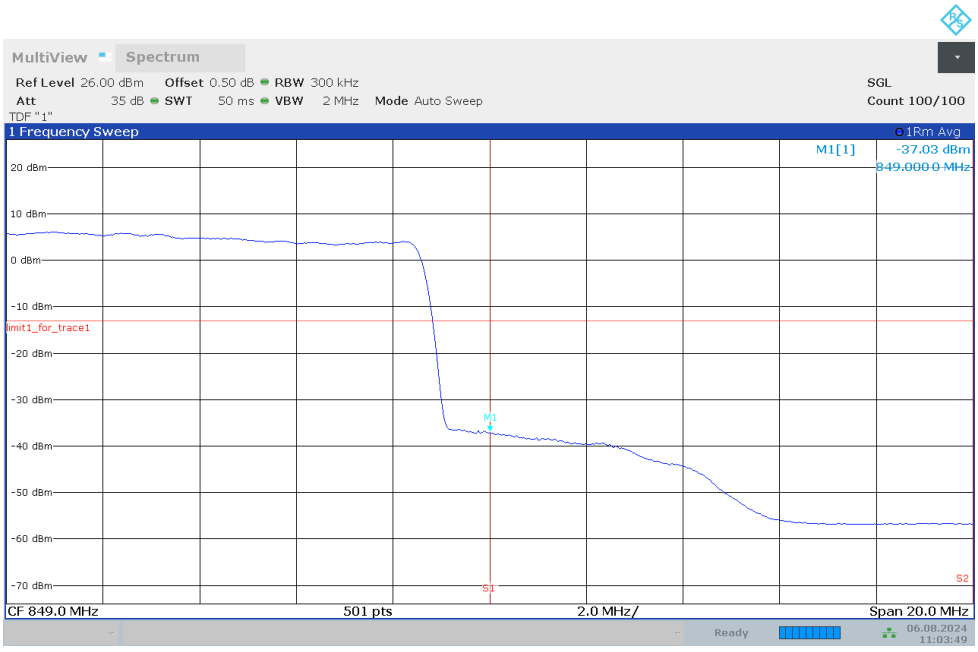
HIGH BAND EDGE BLOCK-25MHZ-100%RB



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NR n26_Part90

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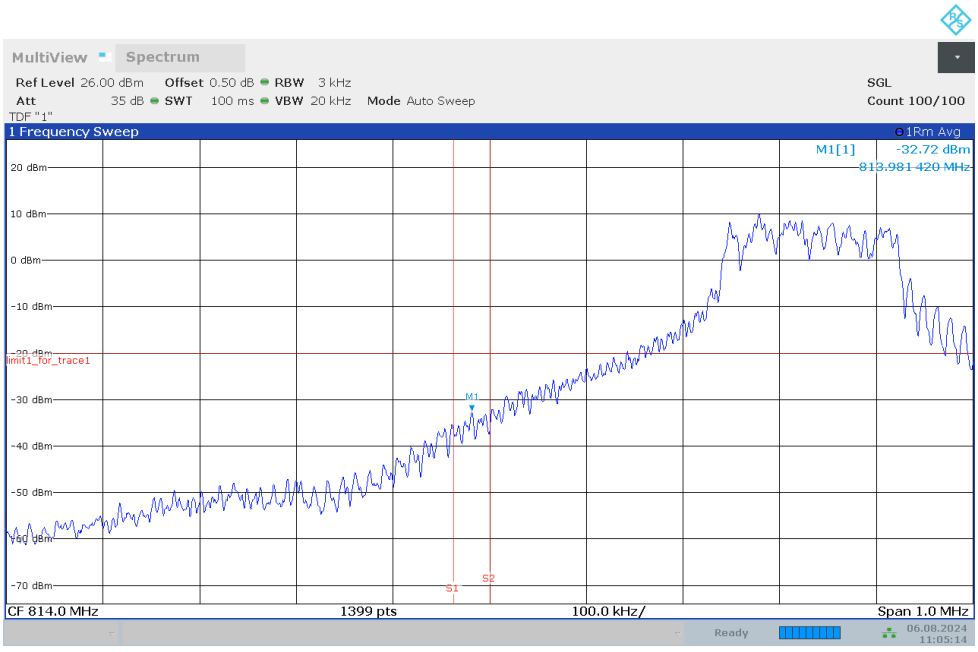

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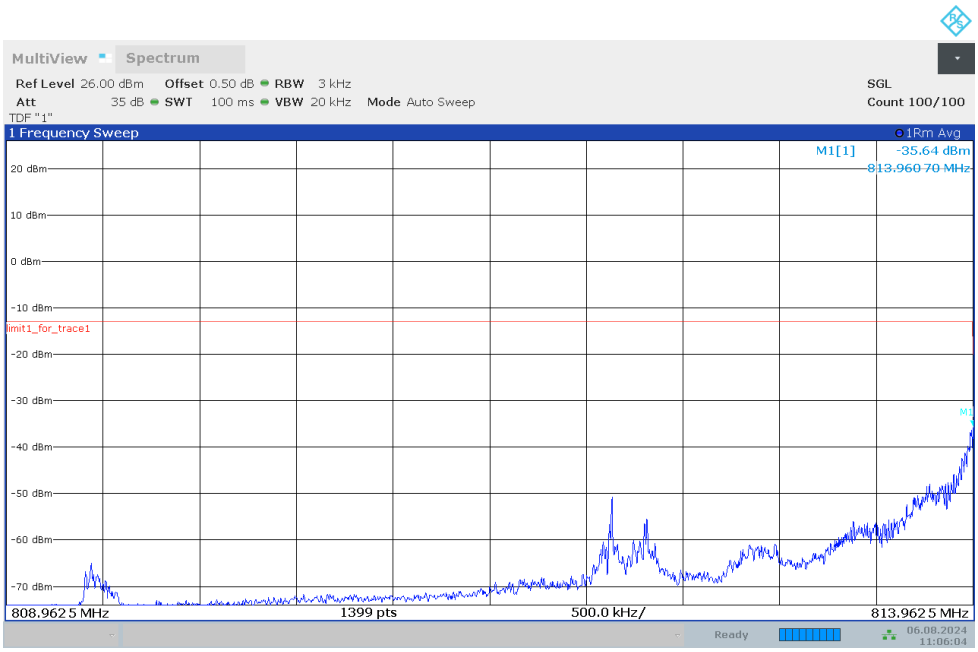
LOW BAND EDGE BLOCK-1RB-LOW_offset



11:06:05 06.08.2024

OBW: 1RB-HIGH_offset

11:06:48 06.08.2024

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