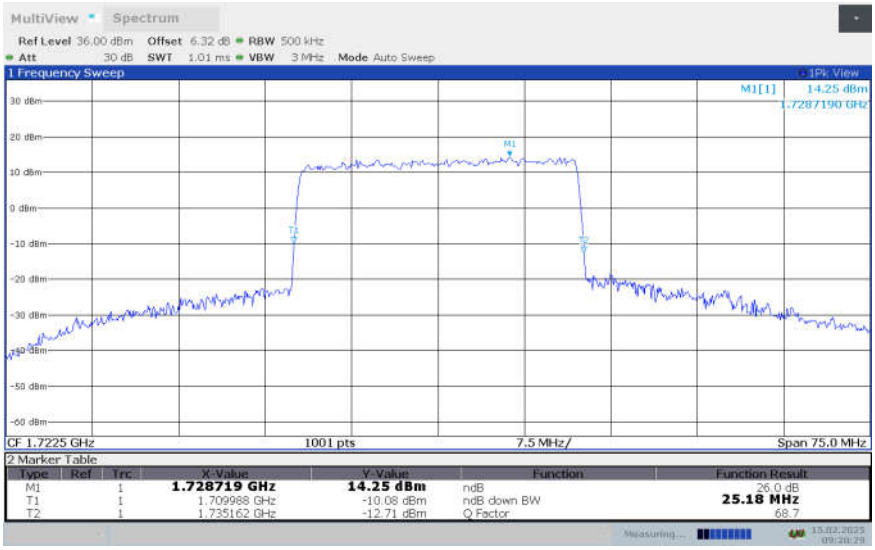
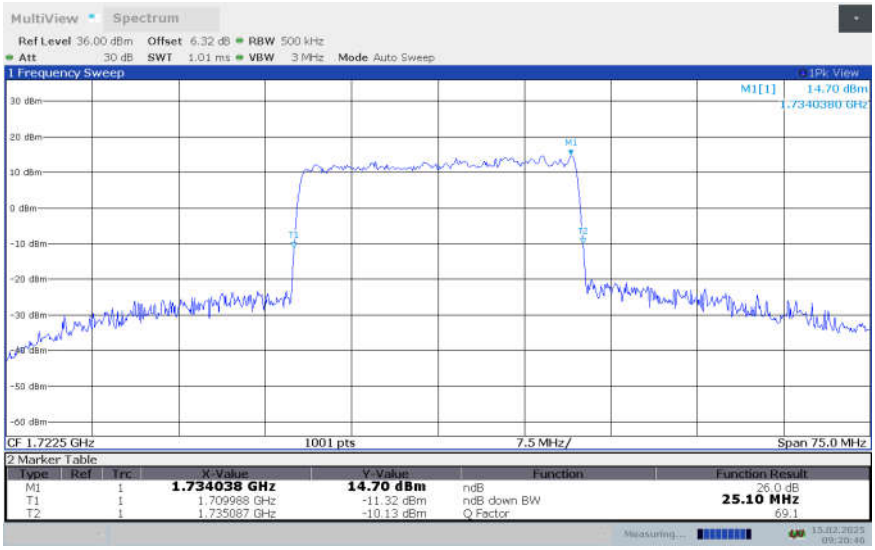


n66,25MHz Bandwidth,CP-64QAM (-26dBc OBW)



n66,25MHz Bandwidth,CP-256QAM (-26dBc OBW)

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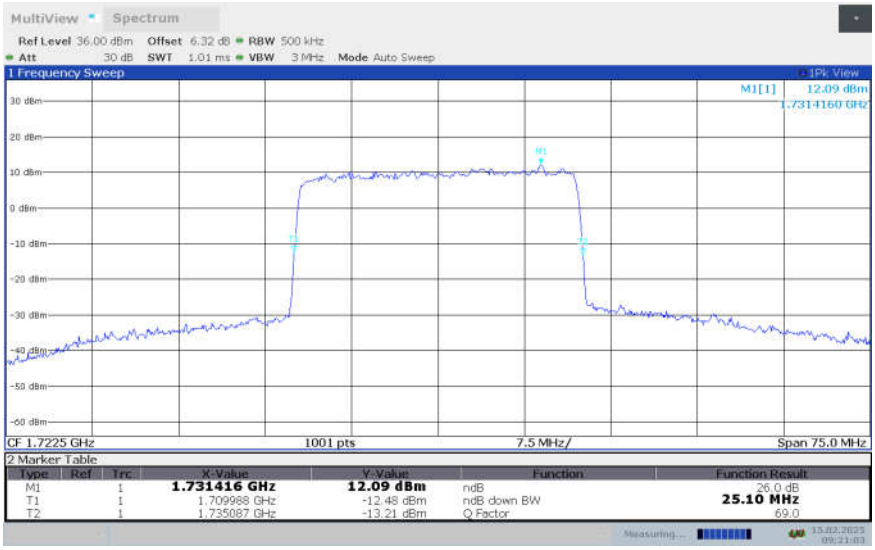
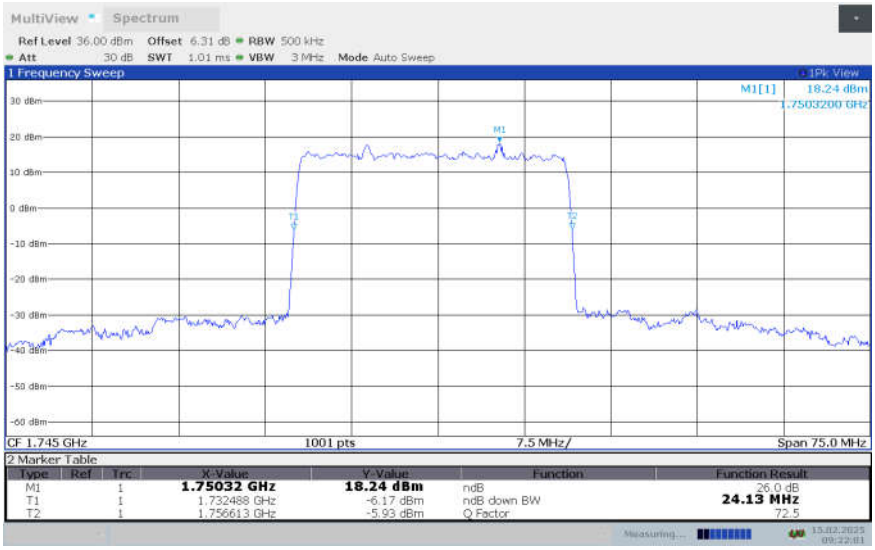


n66,25MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)



n66,25MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)

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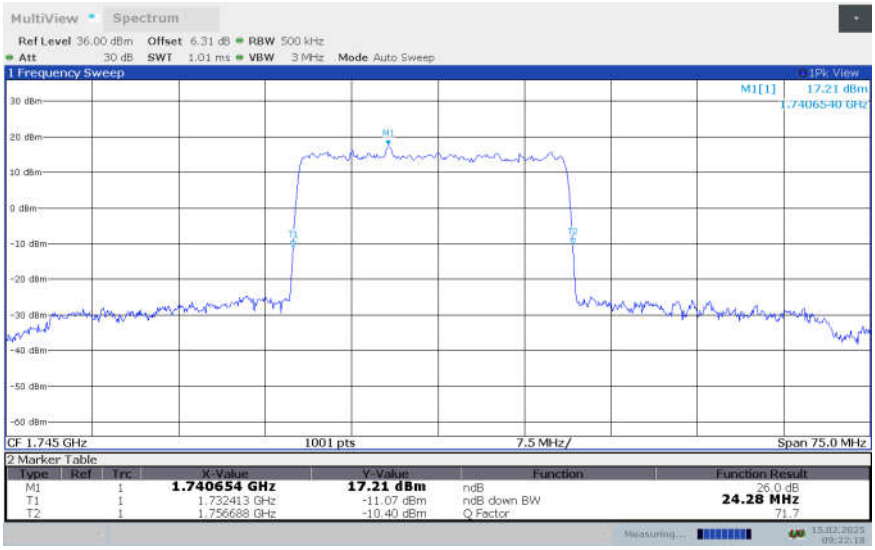

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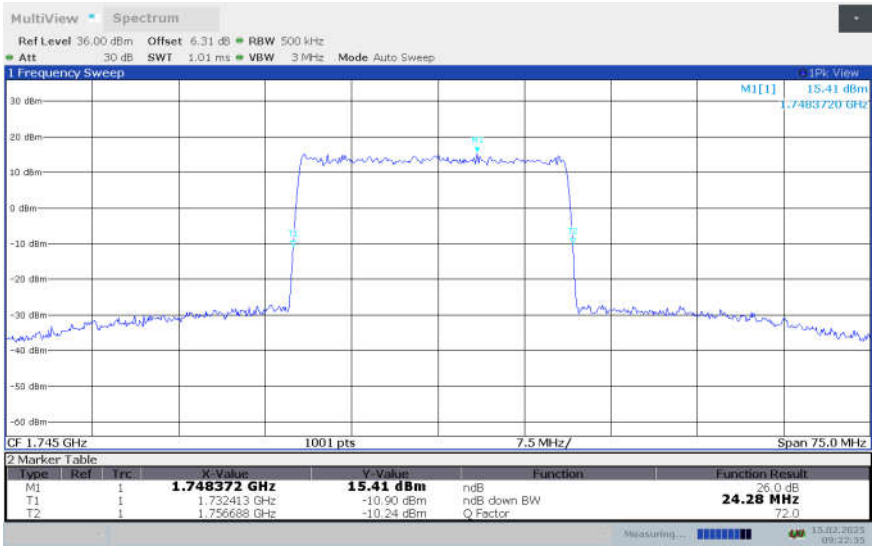

n66,25MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)

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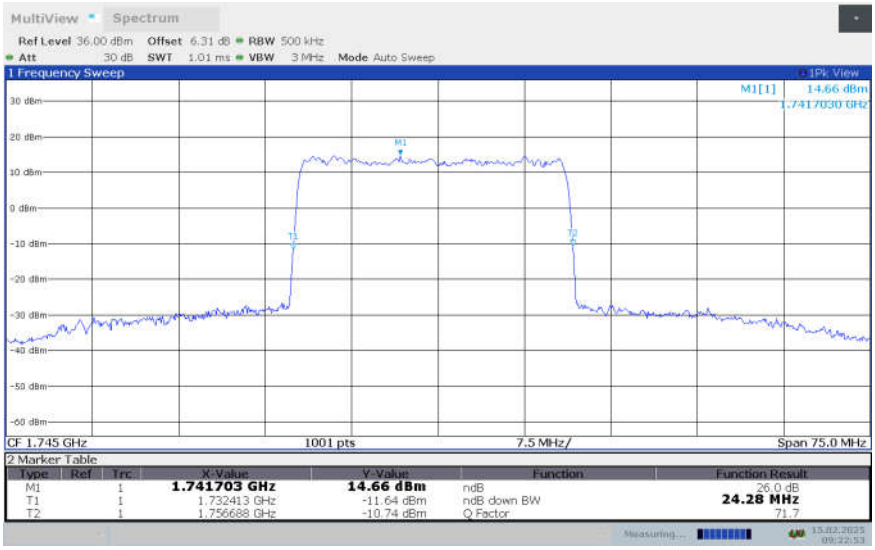
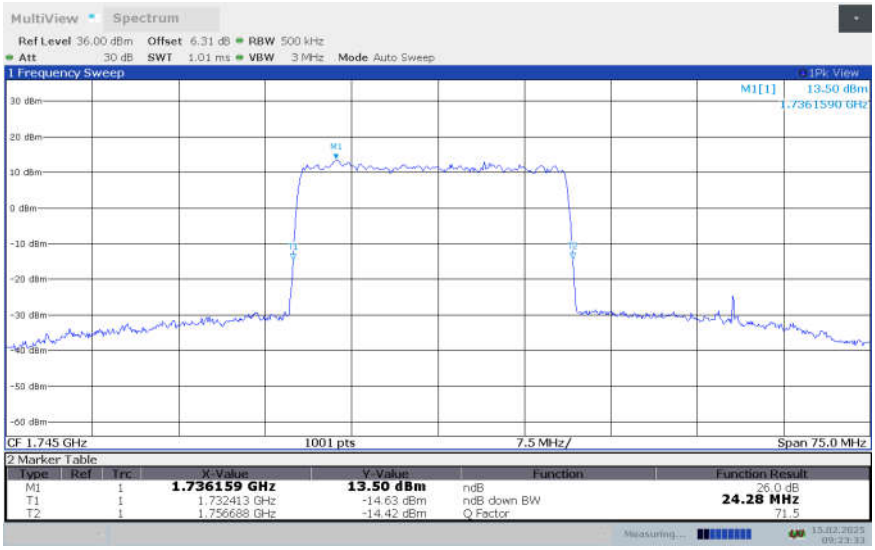


n66,25MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)



n66,25MHz Bandwidth,CP-QPSK (-26dBc OBW)

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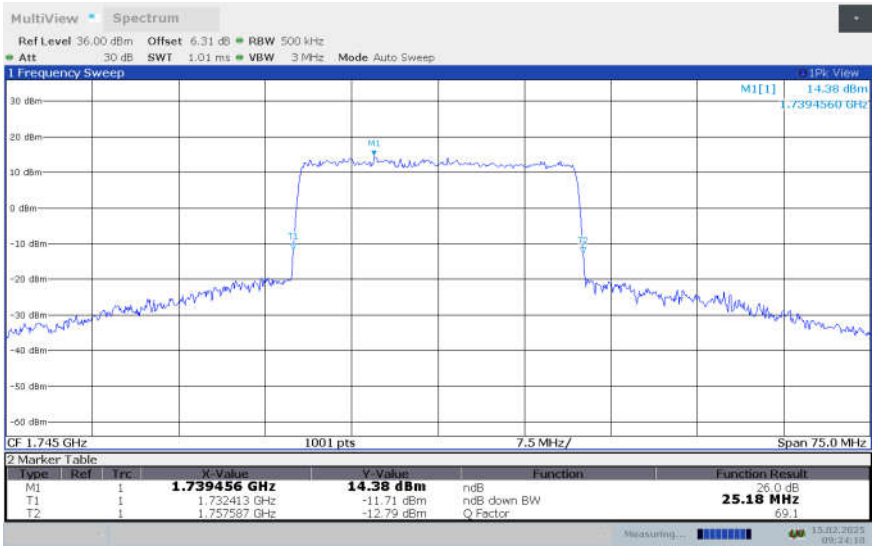
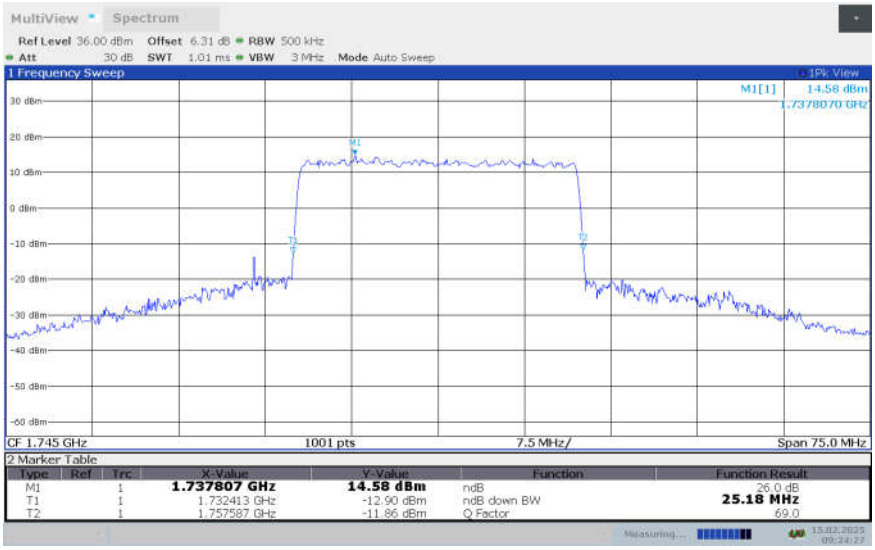


n66,25MHz Bandwidth,CP-16QAM (-26dBc OBW)



n66,25MHz Bandwidth,CP-64QAM (-26dBc OBW)

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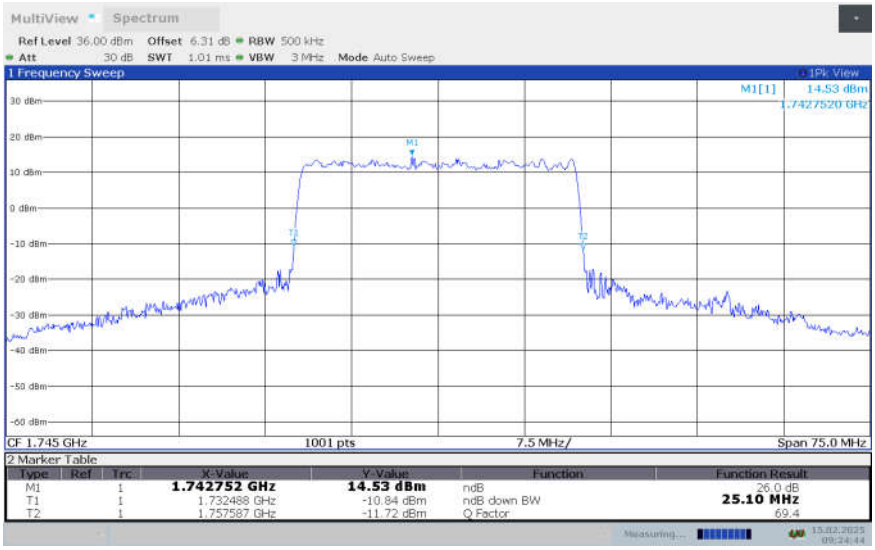

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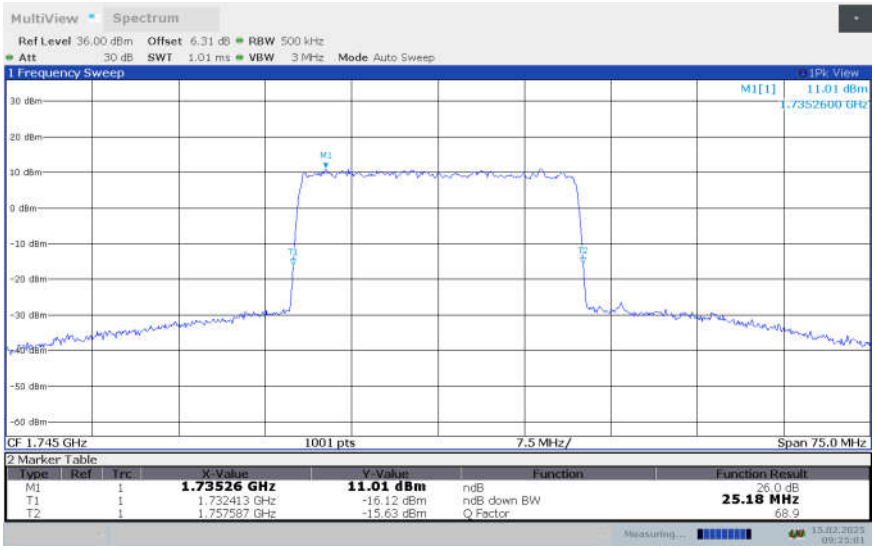

n66,25MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)

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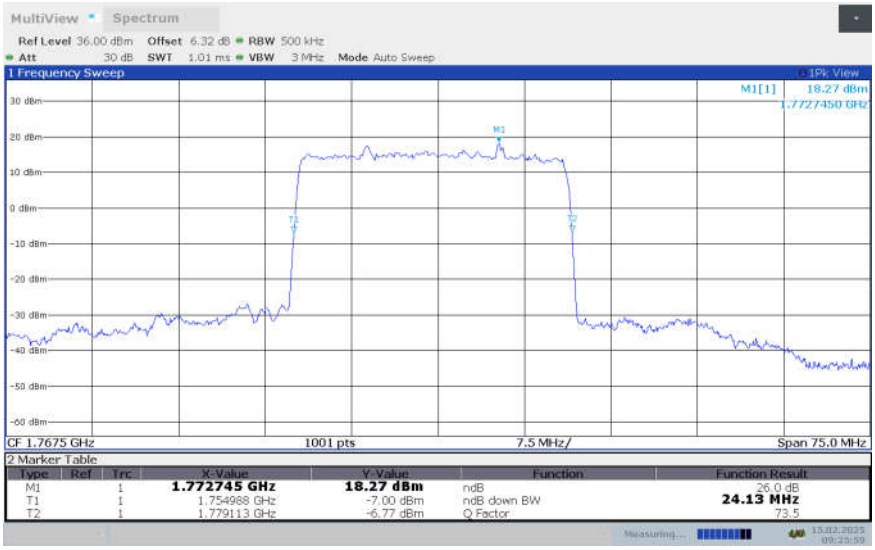
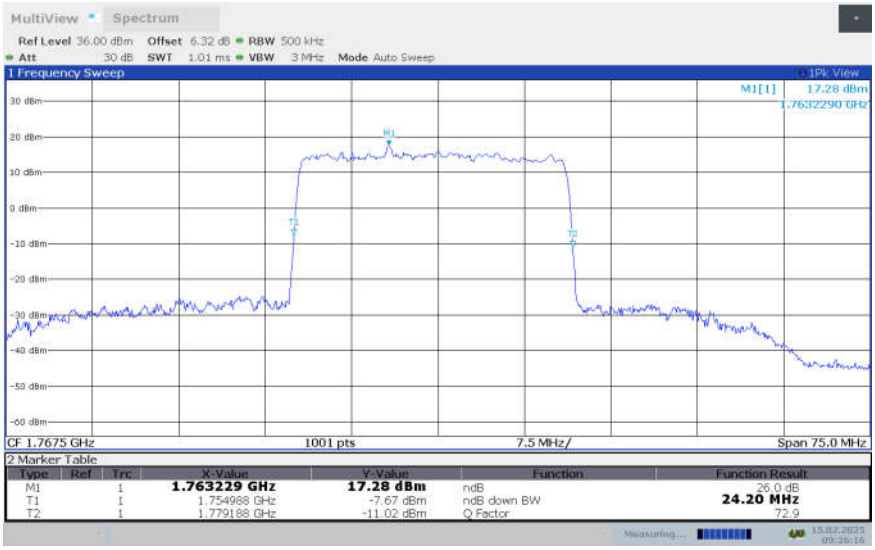


n66,25MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)



n66,25MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)

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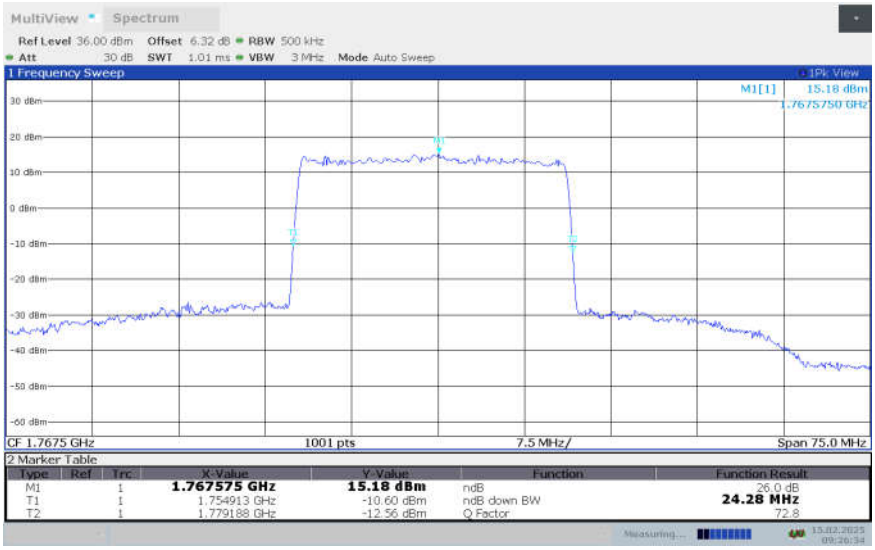
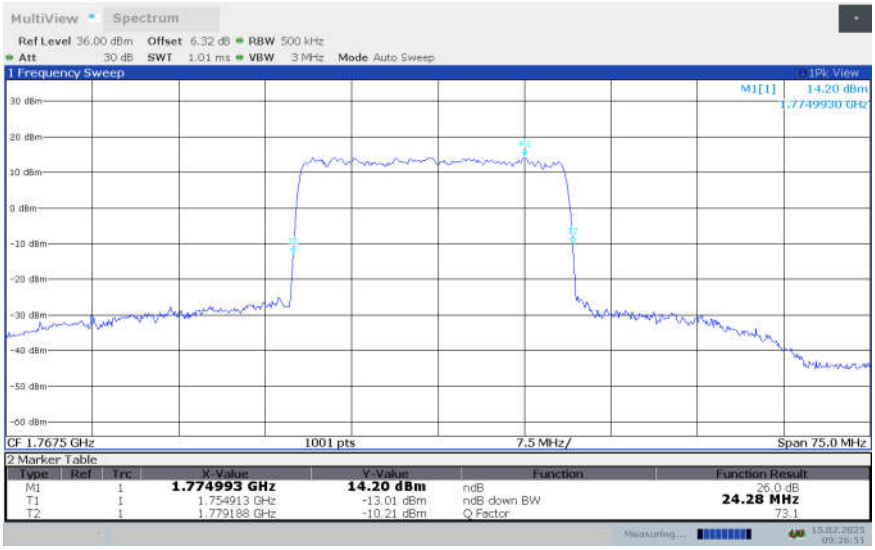


n66,25MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)



n66,25MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)

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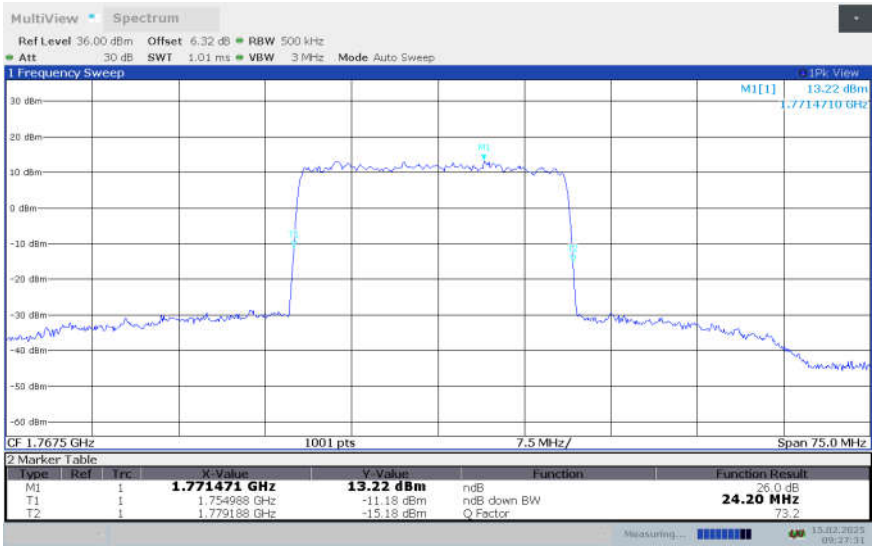
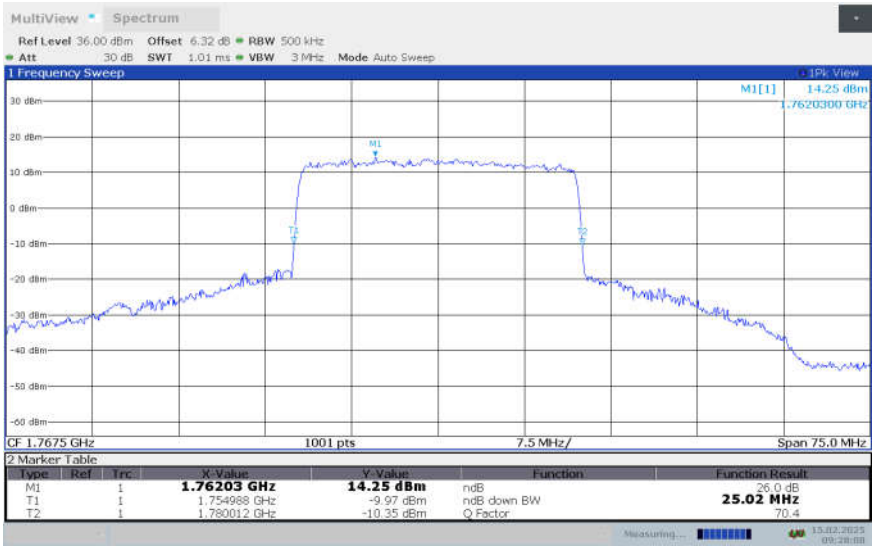


n66,25MHz Bandwidth,CP-QPSK (-26dBc OBW)



n66,25MHz Bandwidth,CP-16QAM (-26dBc OBW)

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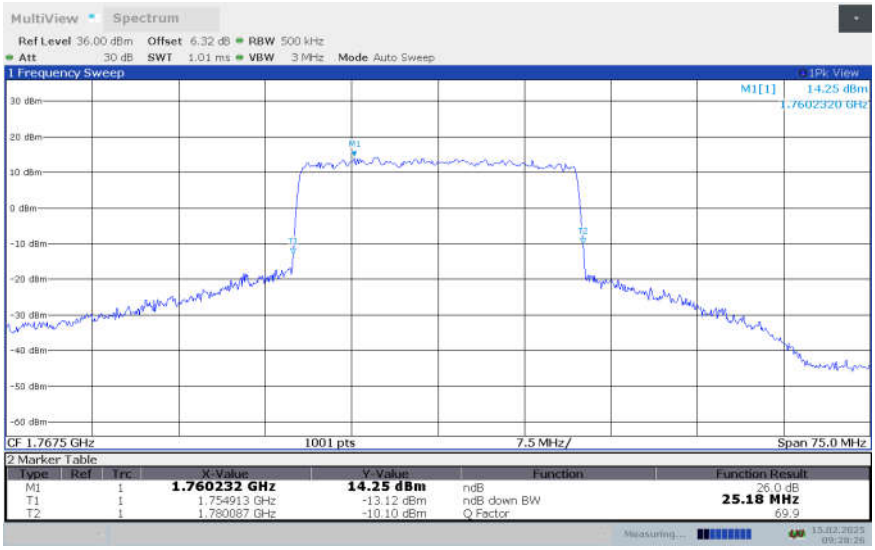
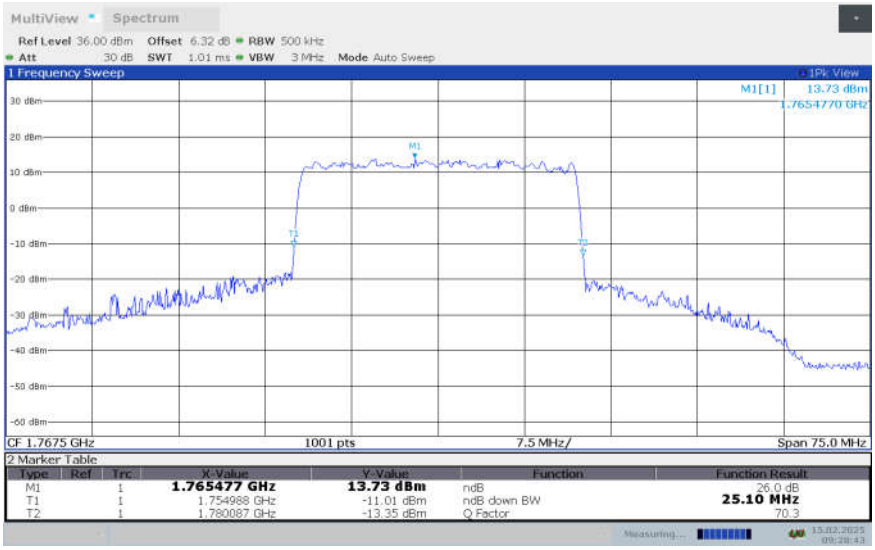


n66,25MHz Bandwidth,CP-64QAM (-26dBc OBW)



n66,25MHz Bandwidth,CP-256QAM (-26dBc OBW)

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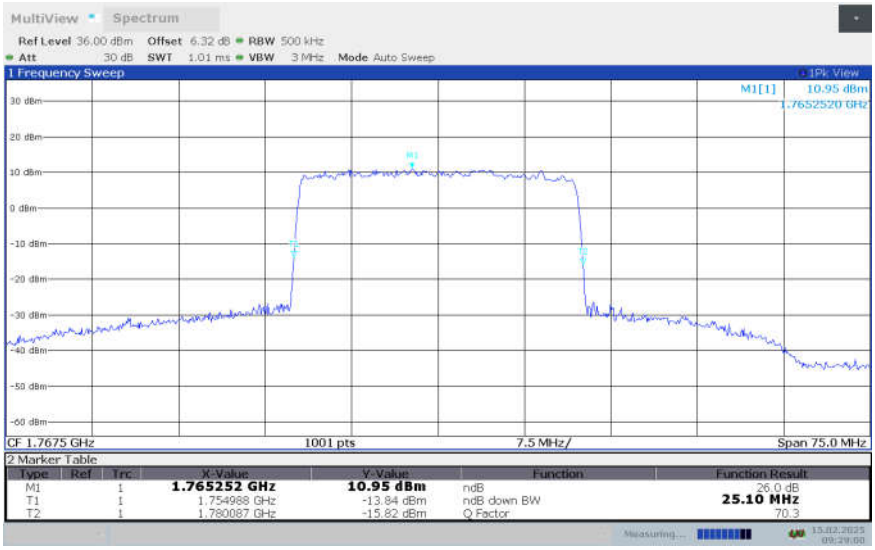

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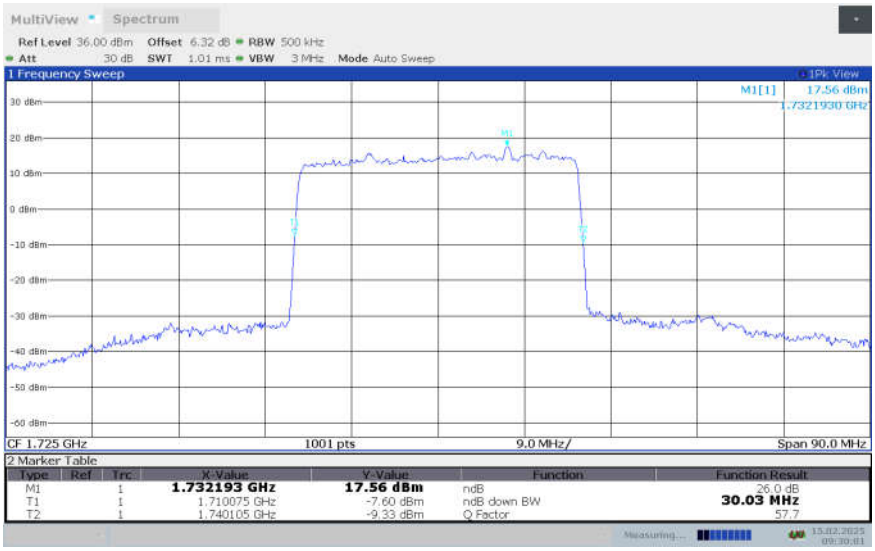
n66

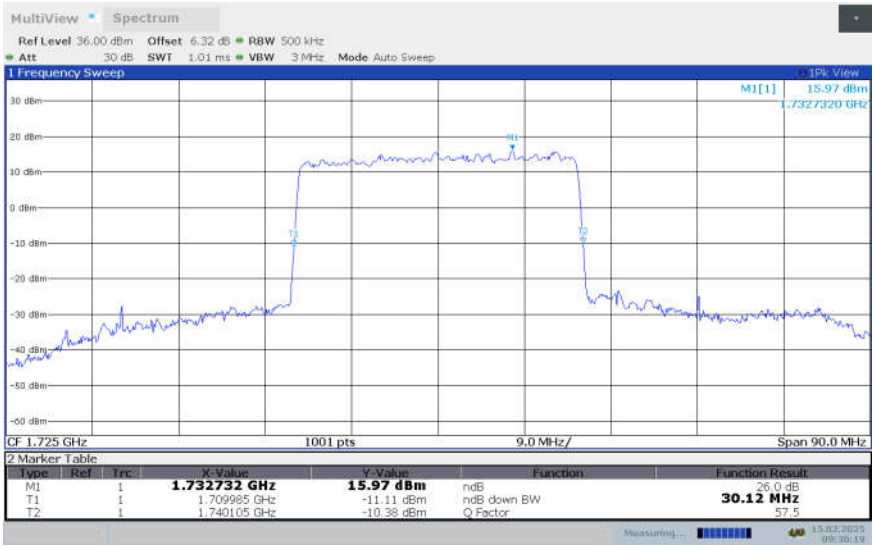
n66,30MHz(-26dBc OBW)

Frequency (MHz)	Emission Bandwidth (-26dBc OBW) (MHz)								
	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
1725	30.030	30.120	30.120	30.120	30.030	30.030	30.120	30.120	30.120
1745	30.030	30.120	30.120	30.210	30.210	30.210	30.120	30.120	30.120
1765	30.030	30.120	30.030	30.120	30.030	30.030	30.120	30.120	30.120

n66,30MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)



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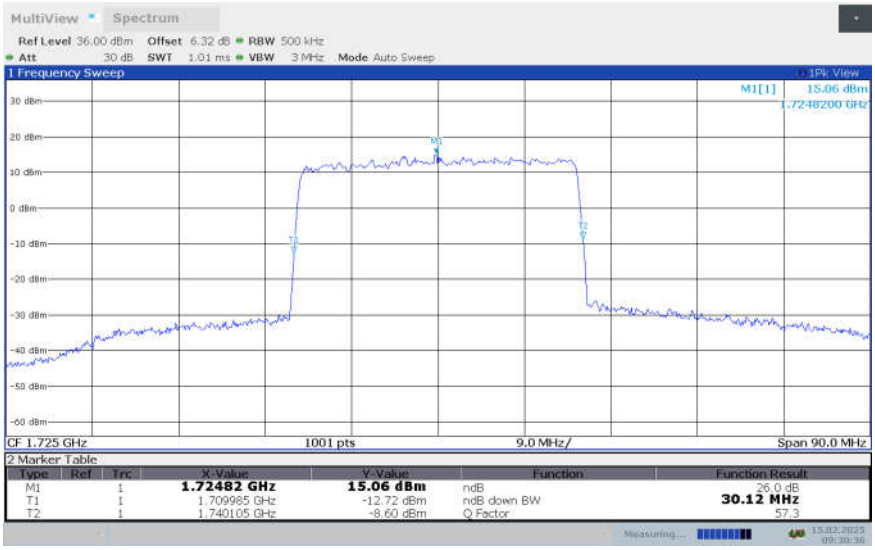
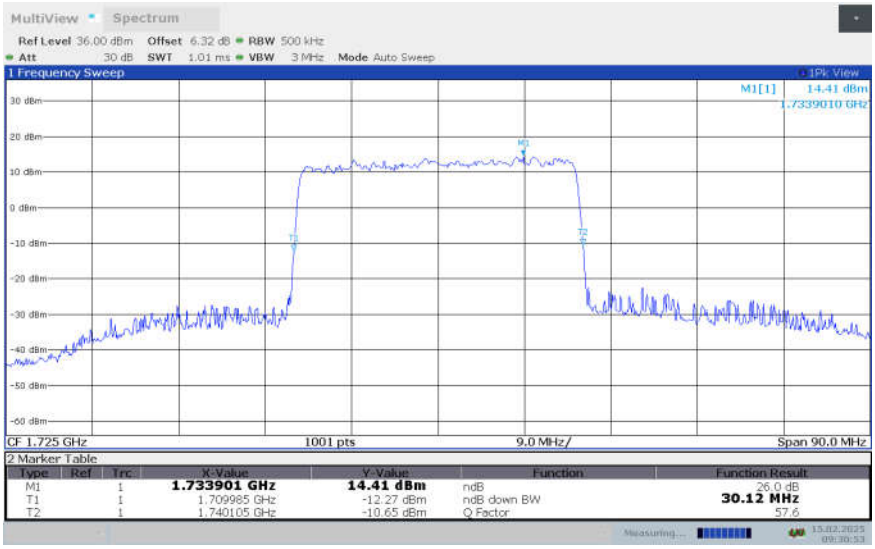
n66,30MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)

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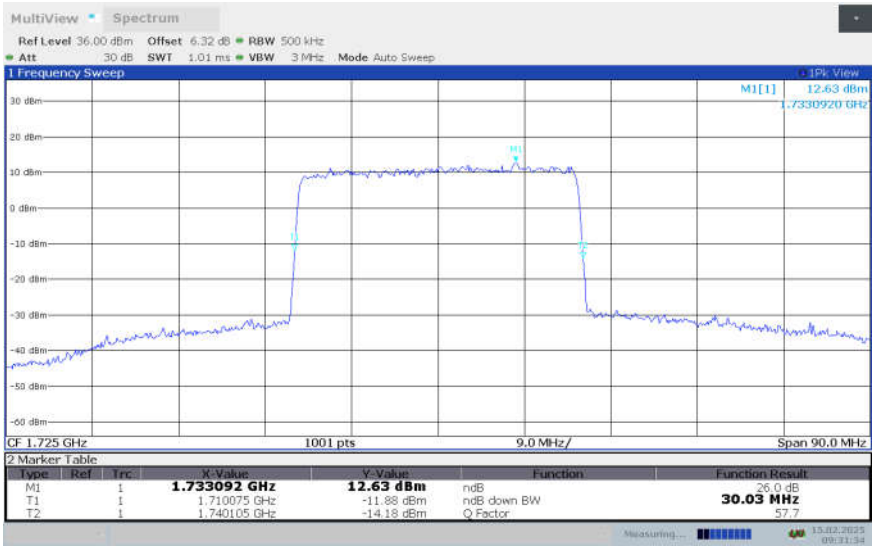
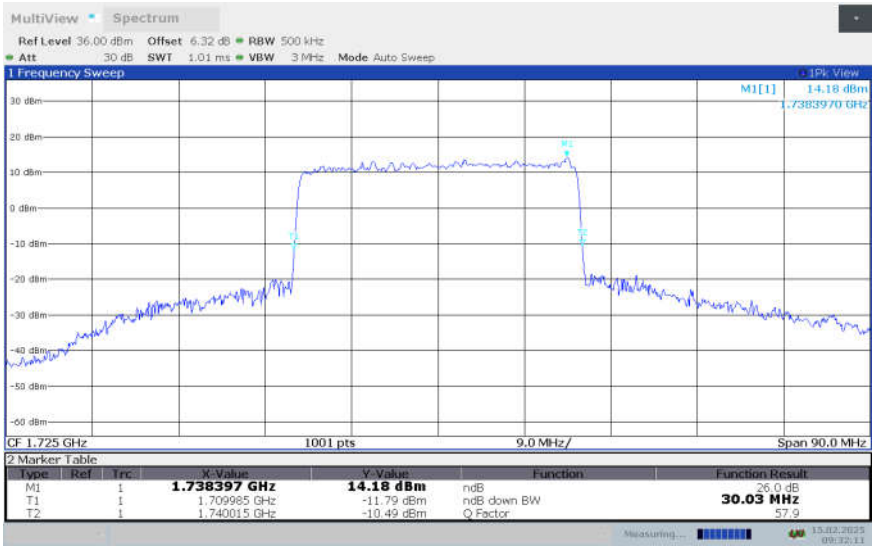


n66,30MHz Bandwidth,CP-QPSK (-26dBc OBW)



n66,30MHz Bandwidth,CP-16QAM (-26dBc OBW)

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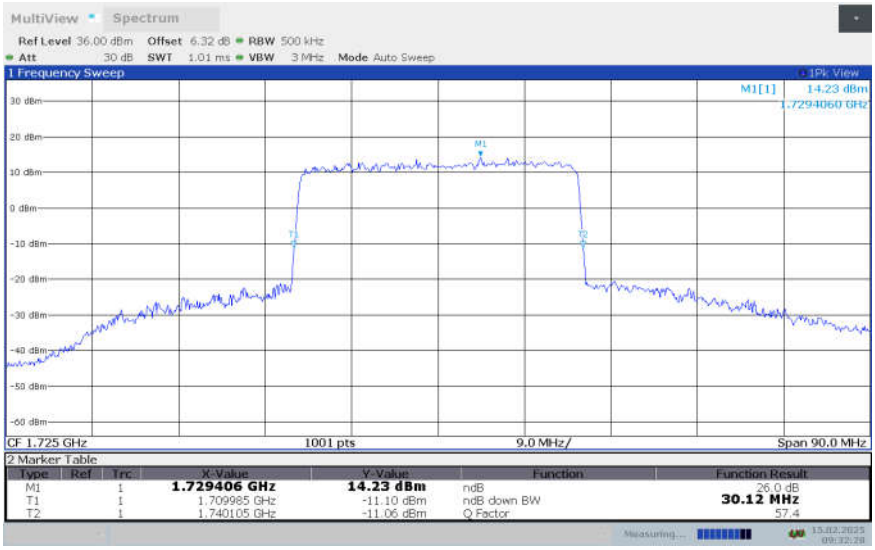
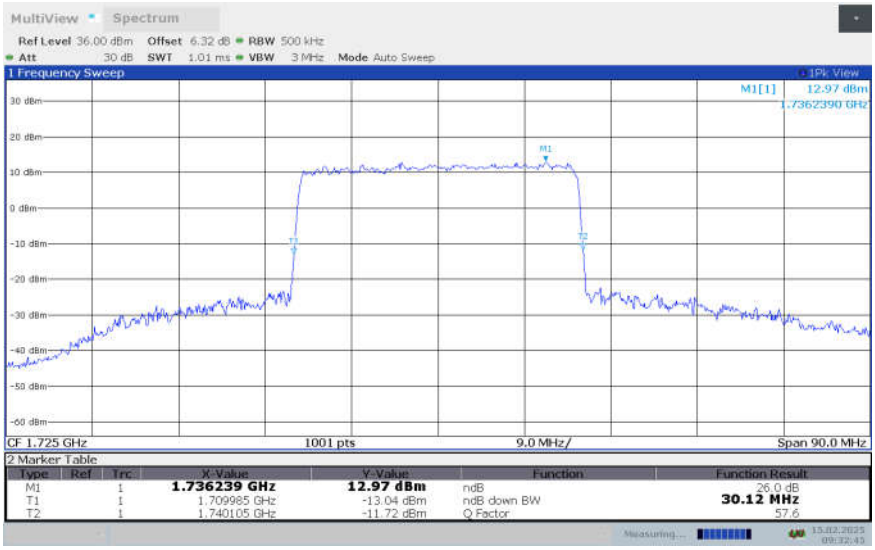


n66,30MHz Bandwidth,CP-64QAM (-26dBc OBW)



n66,30MHz Bandwidth,CP-256QAM (-26dBc OBW)

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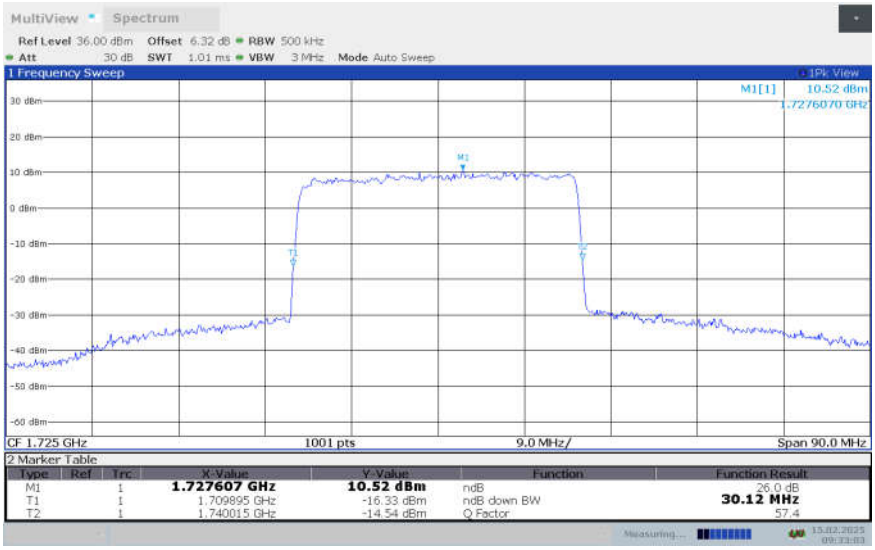
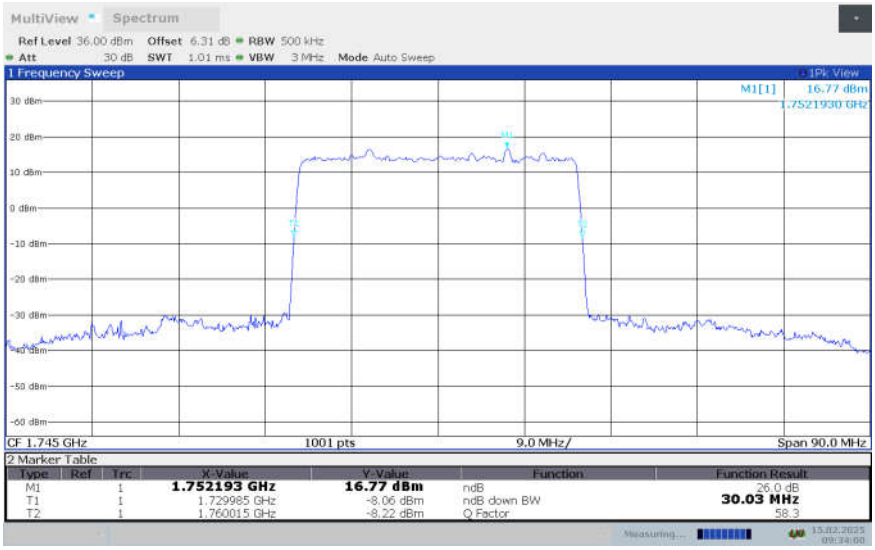


n66,30MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)

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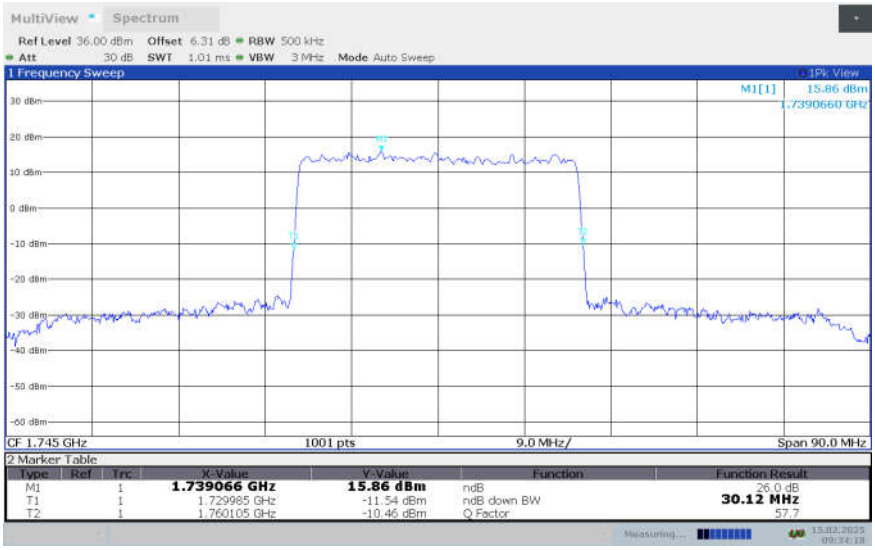
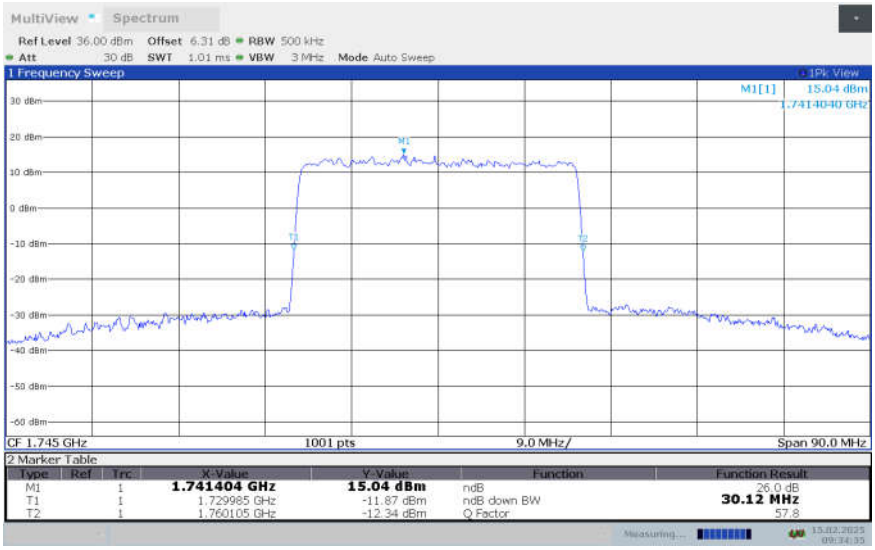


n66,30MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)

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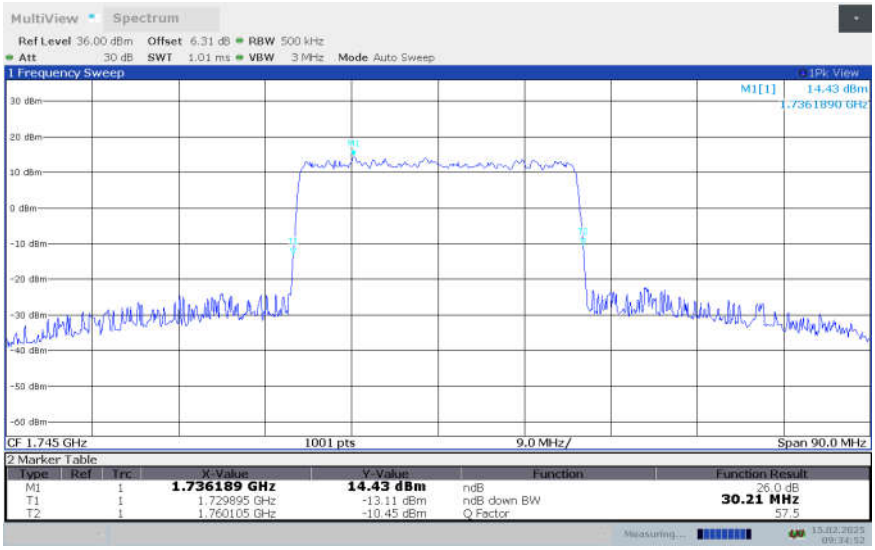
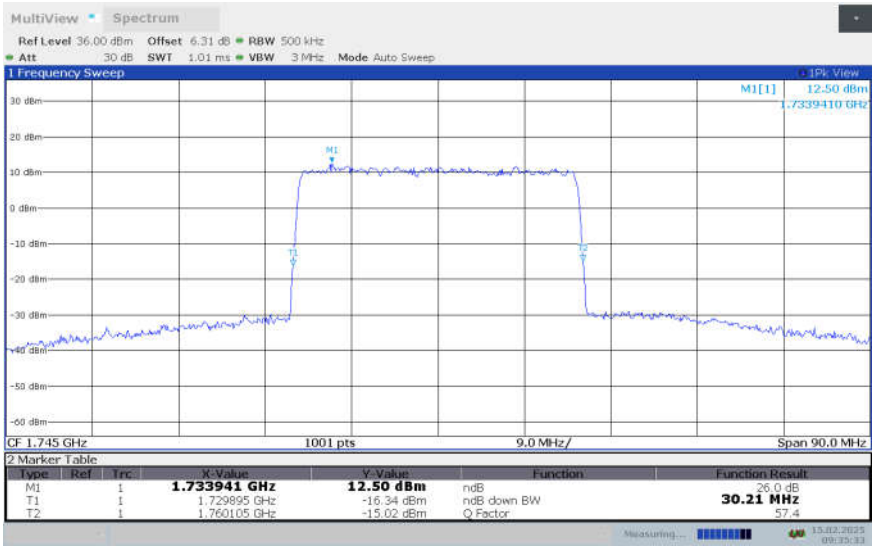


n66,30MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)



n66,30MHz Bandwidth,CP-QPSK (-26dBc OBW)

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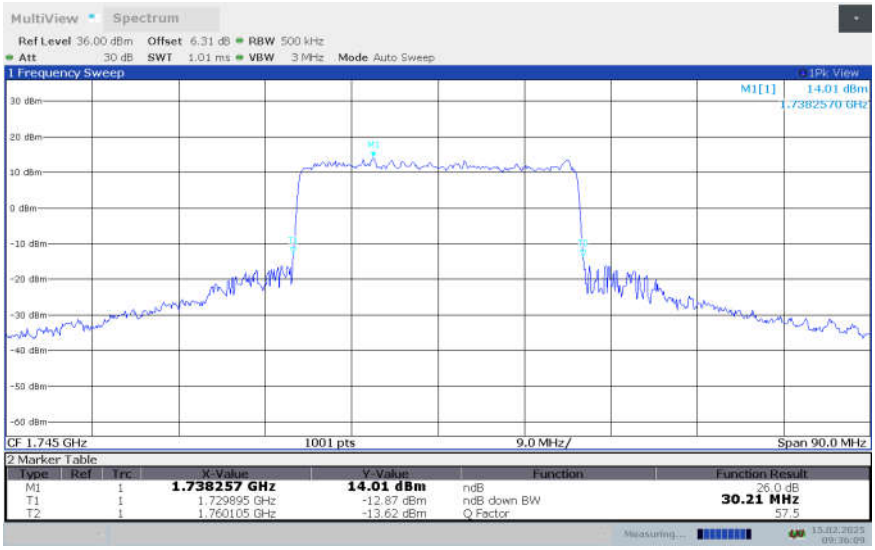
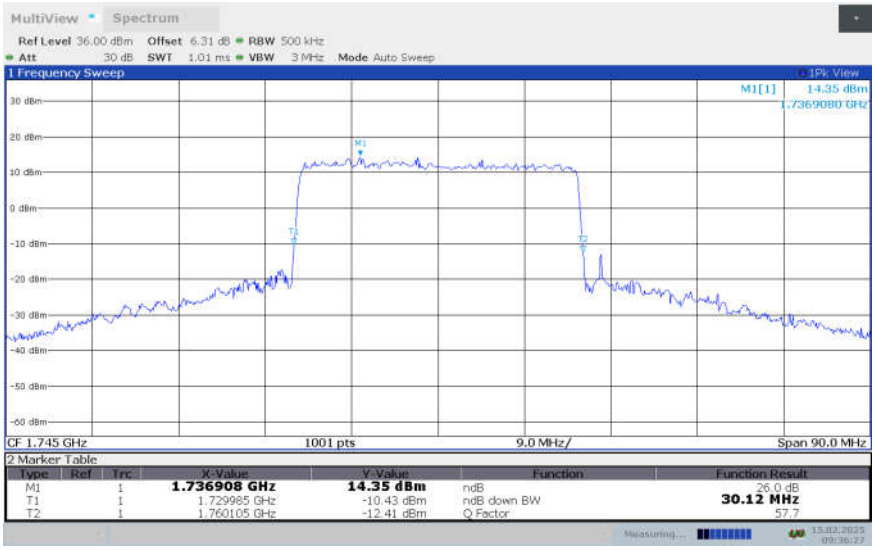


n66,30MHz Bandwidth,CP-16QAM (-26dBc OBW)



n66,30MHz Bandwidth,CP-64QAM (-26dBc OBW)

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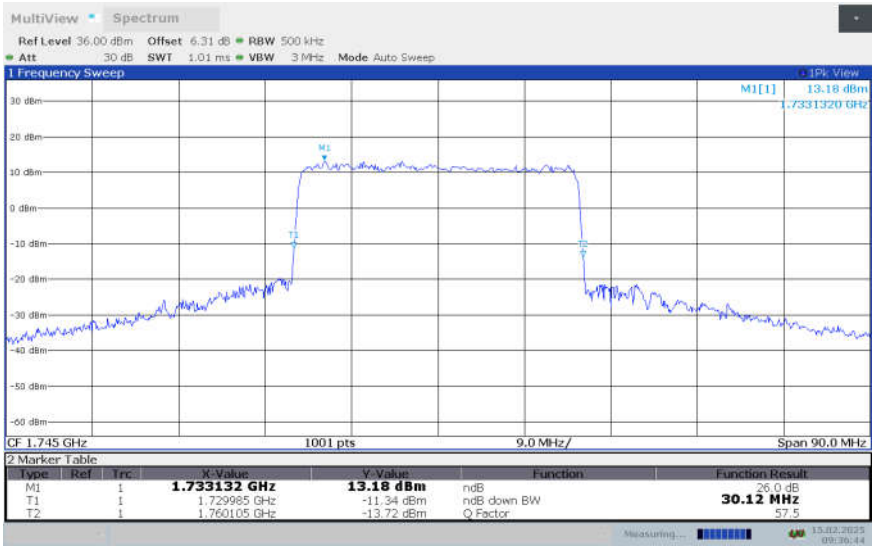

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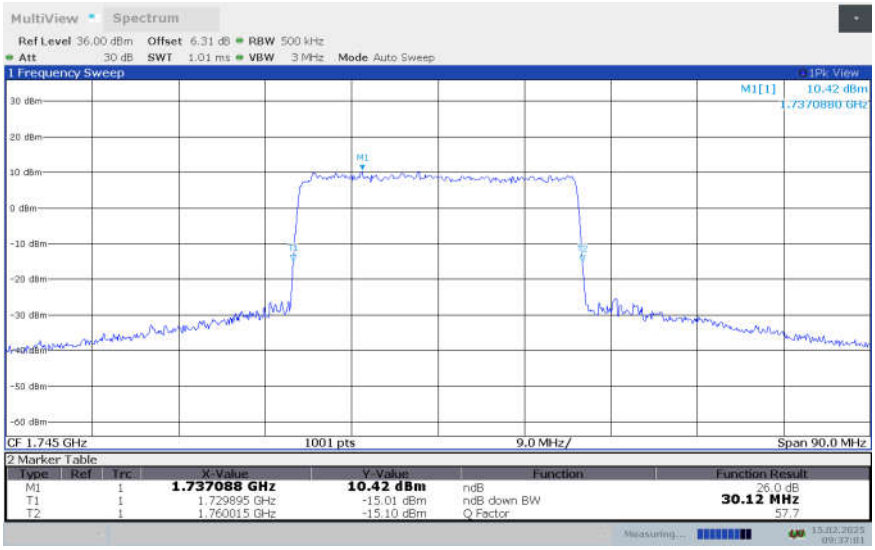

n66,30MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)

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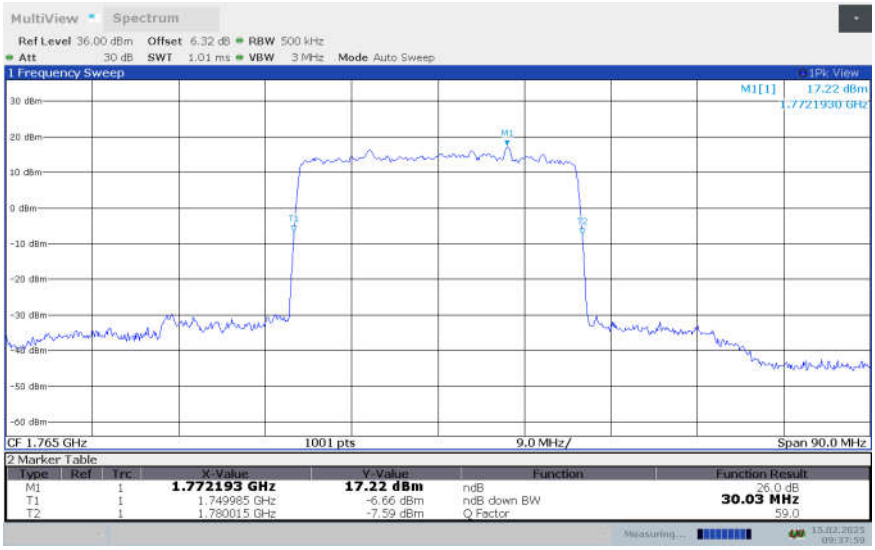
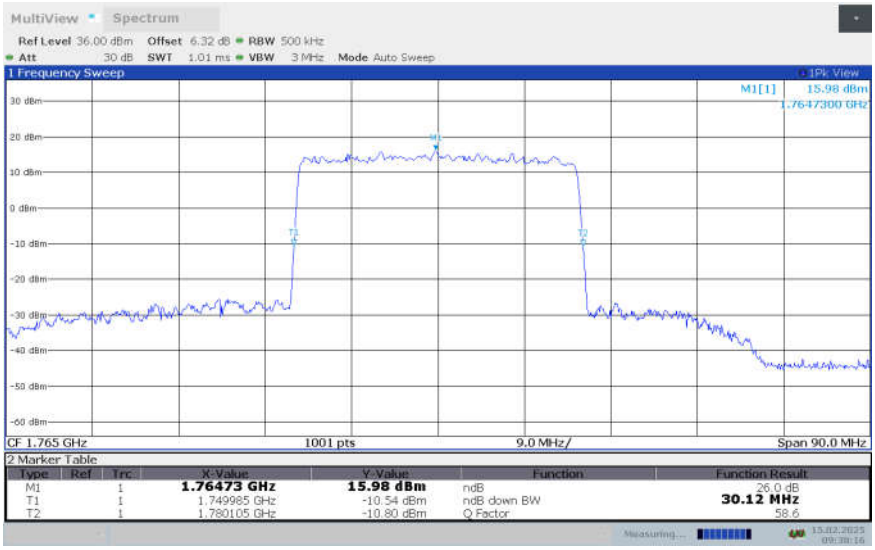


n66,30MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)

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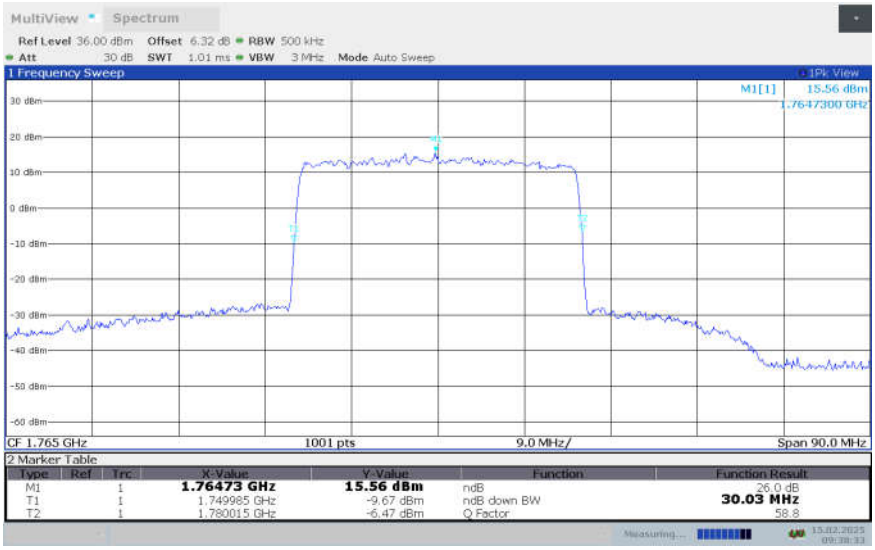
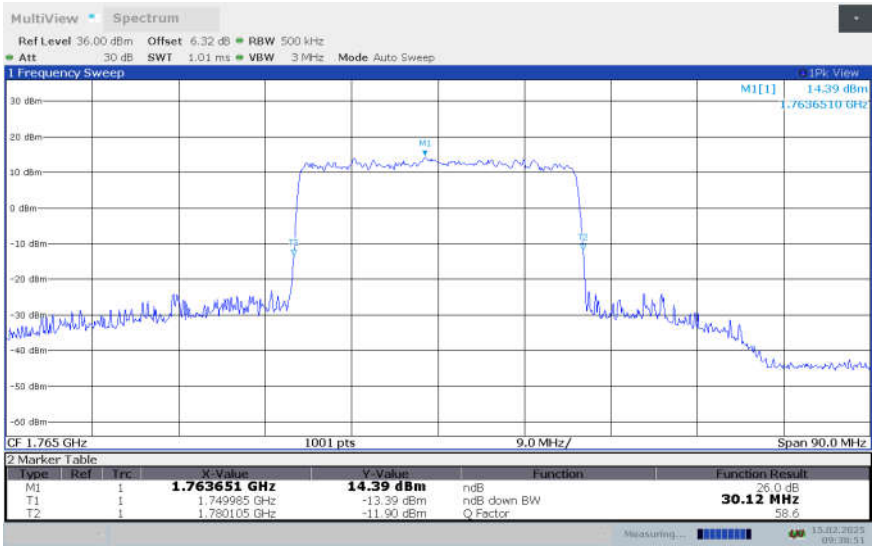


n66,30MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)



n66,30MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)

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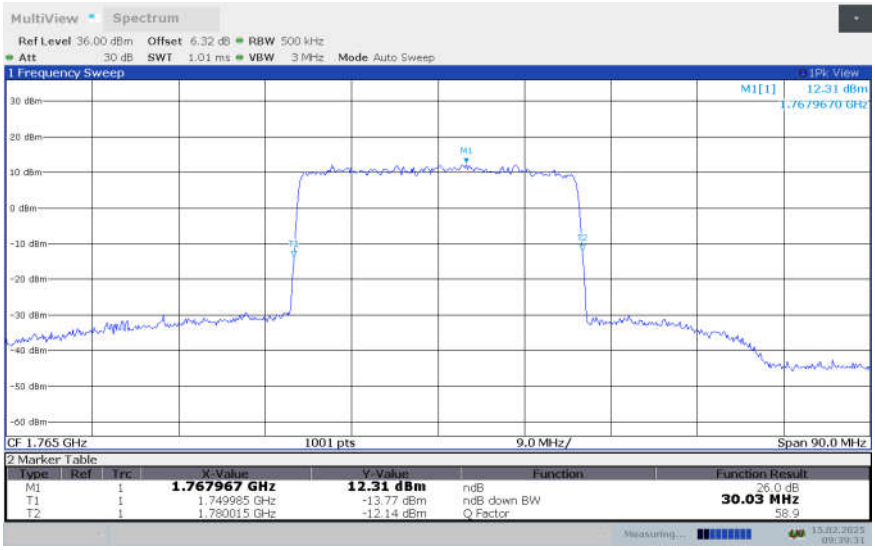
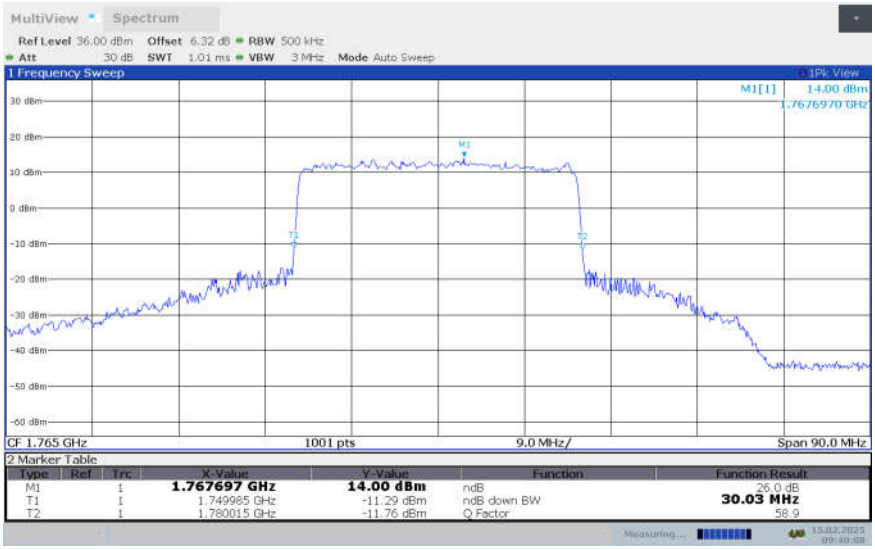


n66,30MHz Bandwidth,CP-QPSK (-26dBc OBW)



n66,30MHz Bandwidth,CP-16QAM (-26dBc OBW)

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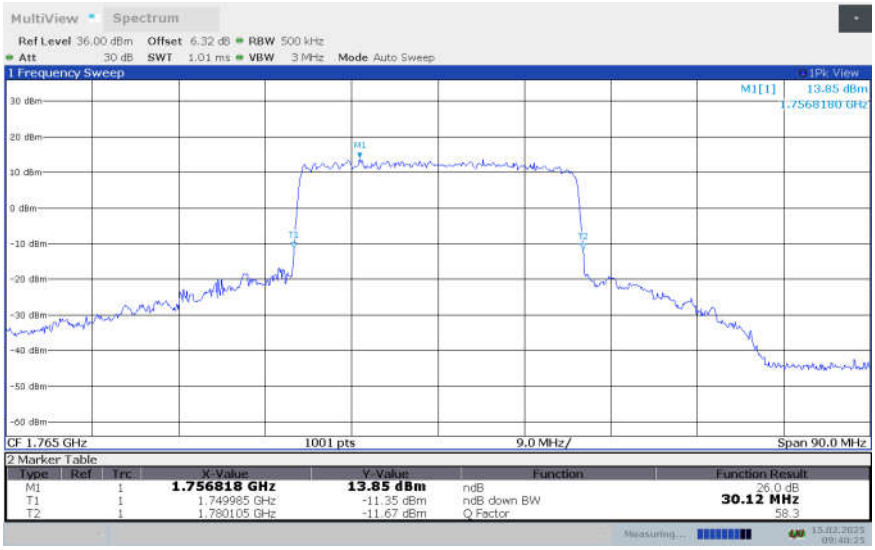
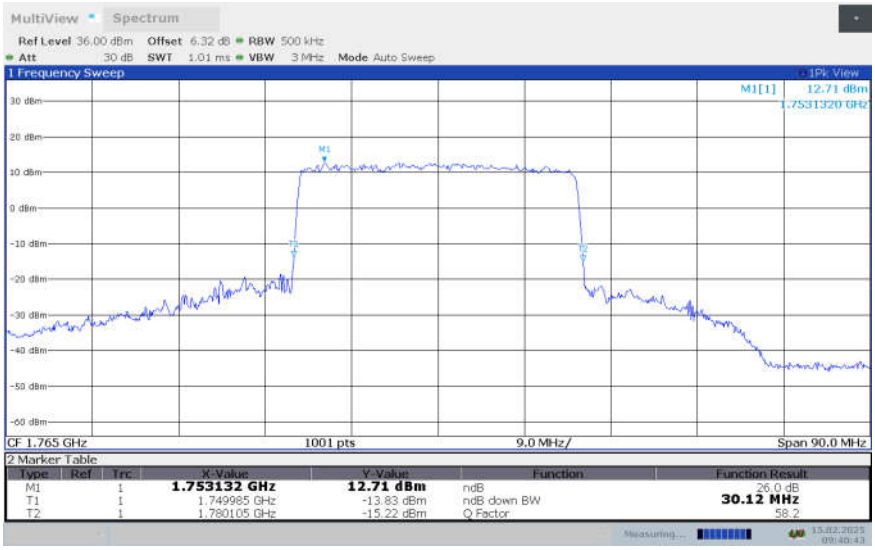


n66,30MHz Bandwidth,CP-64QAM (-26dBc OBW)



n66,30MHz Bandwidth,CP-256QAM (-26dBc OBW)

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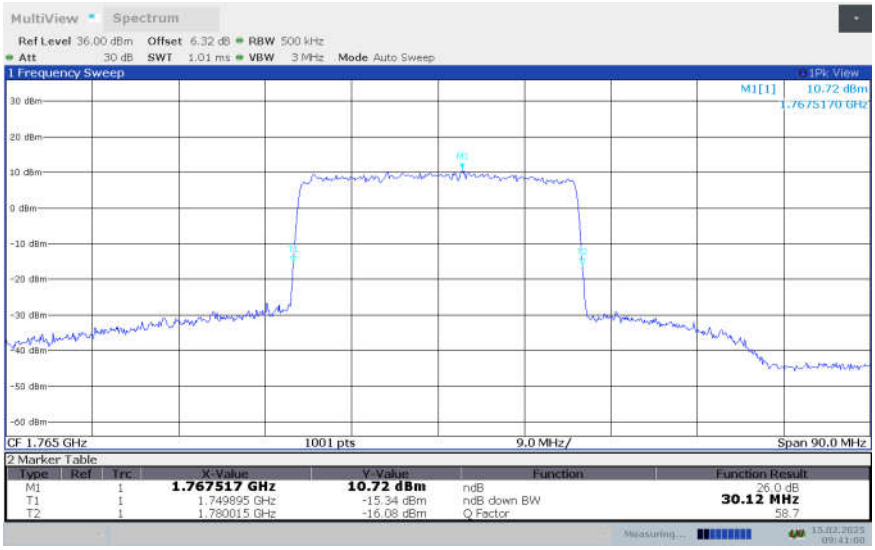

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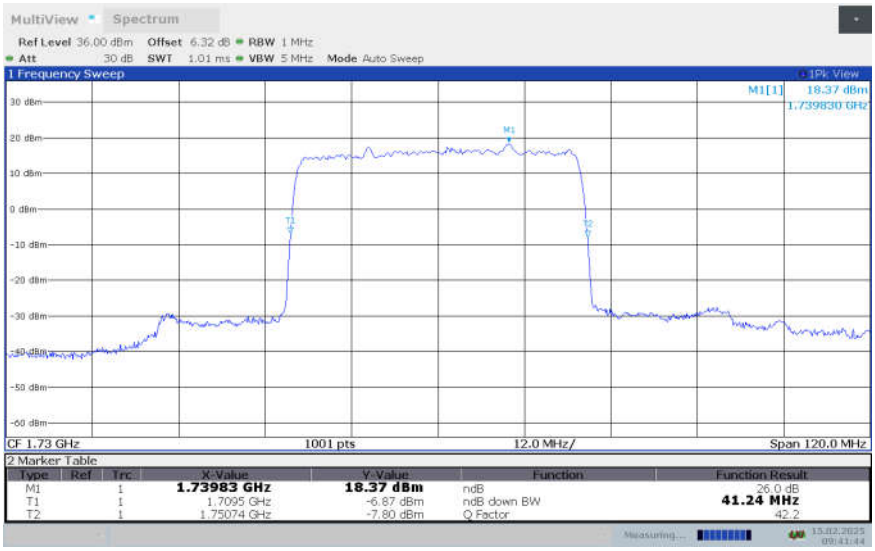
n66

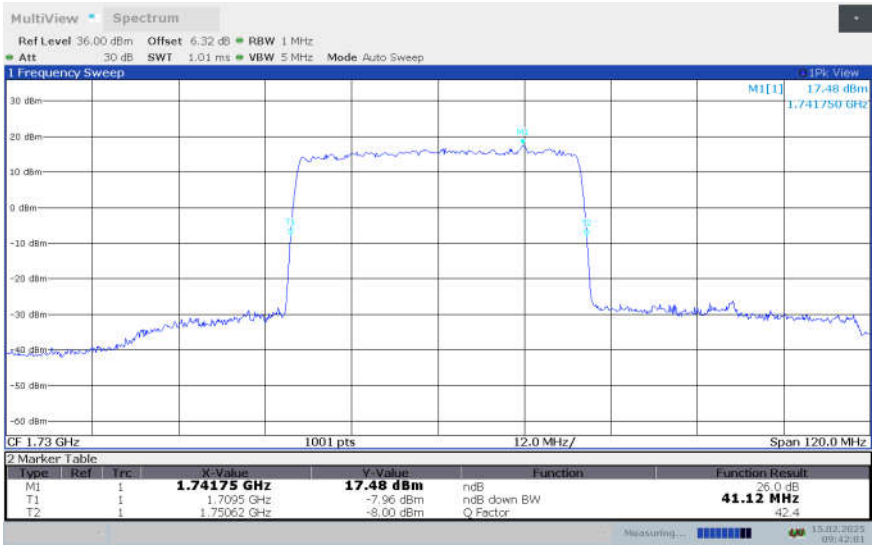
n66,40MHz(-26dBc OBW)

Frequency (MHz)	Emission Bandwidth (-26dBc OBW) (MHz)								
	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
1730	41.240	41.120	41.120	41.120	41.120	41.120	41.120	41.120	41.120
1745	41.360	41.360	41.240	41.240	41.360	41.240	41.240	41.120	41.120
1760	41.240	41.240	41.240	41.240	41.240	41.120	41.240	41.120	41.240

n66,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)



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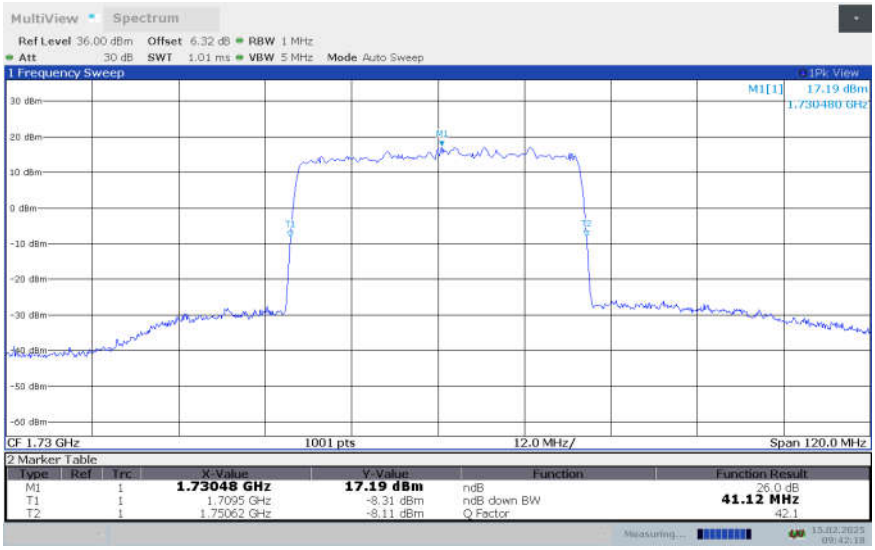
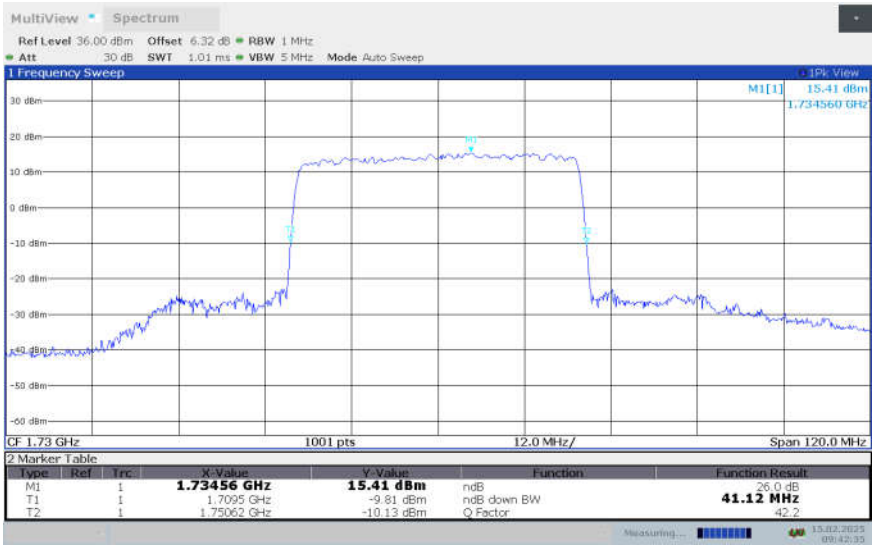
n66,40MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)

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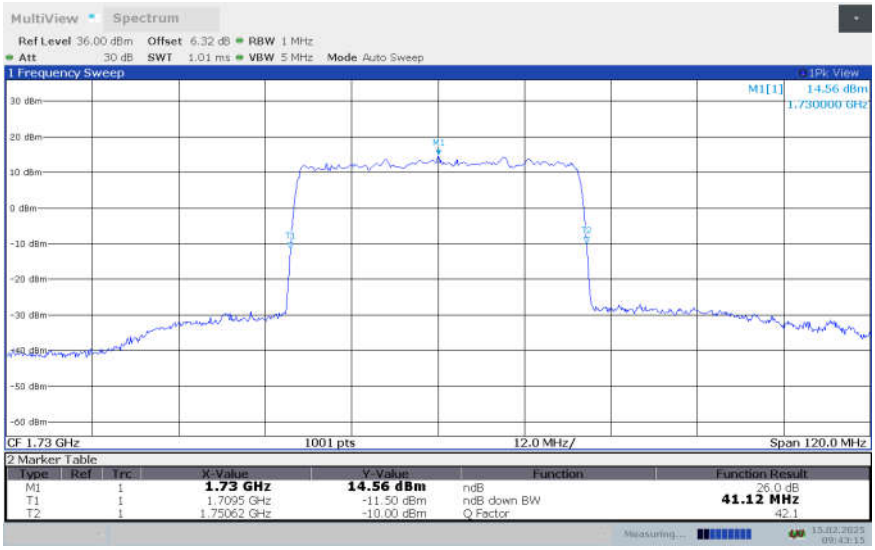
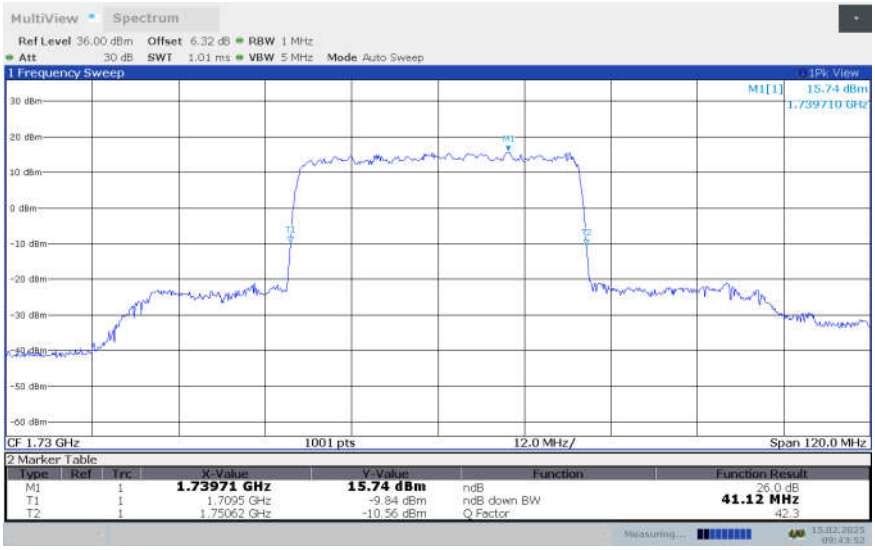


n66,40MHz Bandwidth,CP-QPSK (-26dBc OBW)



n66,40MHz Bandwidth,CP-16QAM (-26dBc OBW)

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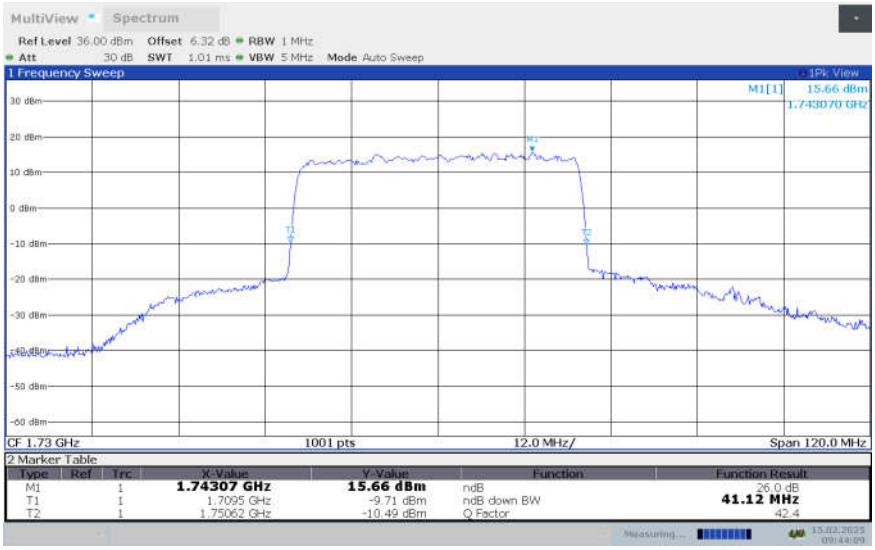
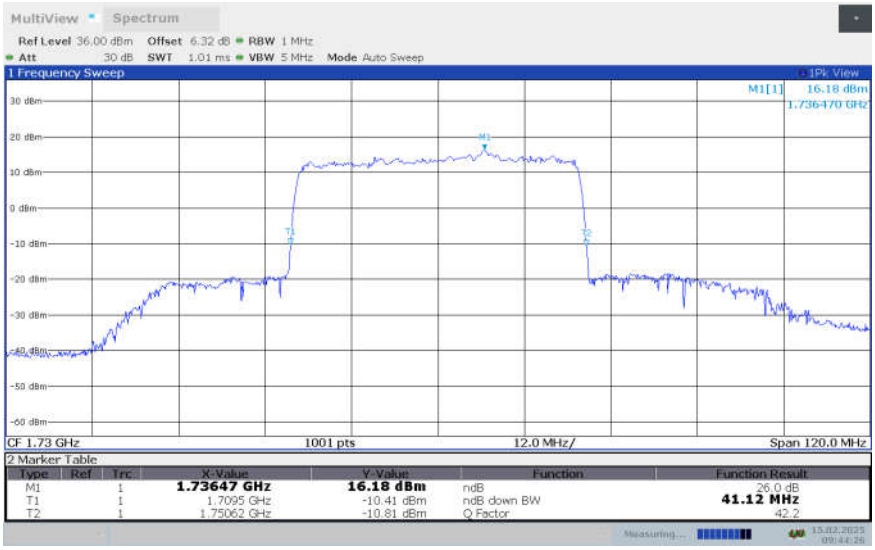


n66,40MHz Bandwidth,CP-64QAM (-26dBc OBW)



n66,40MHz Bandwidth,CP-256QAM (-26dBc OBW)

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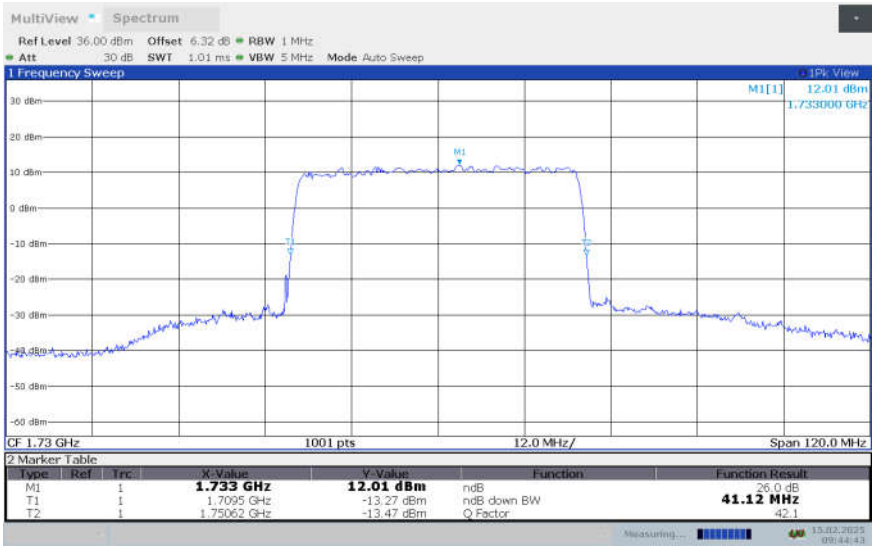
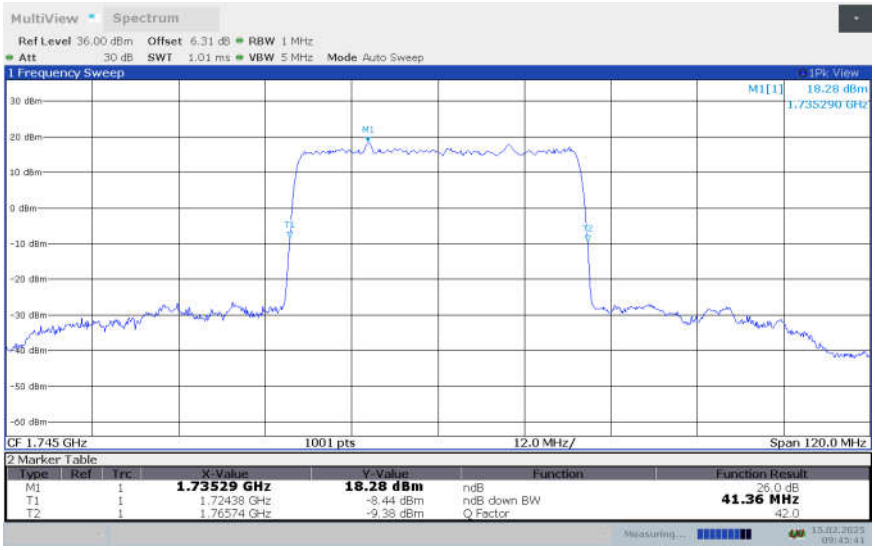


n66,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)

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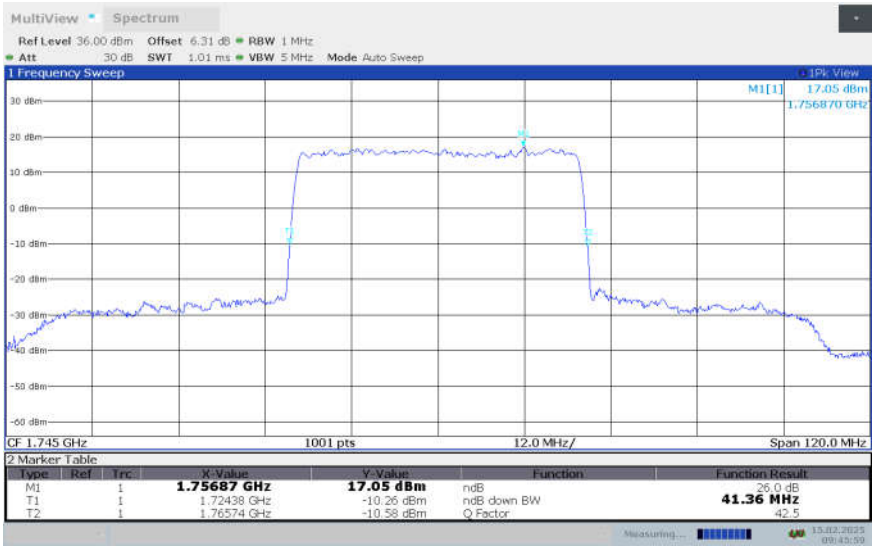
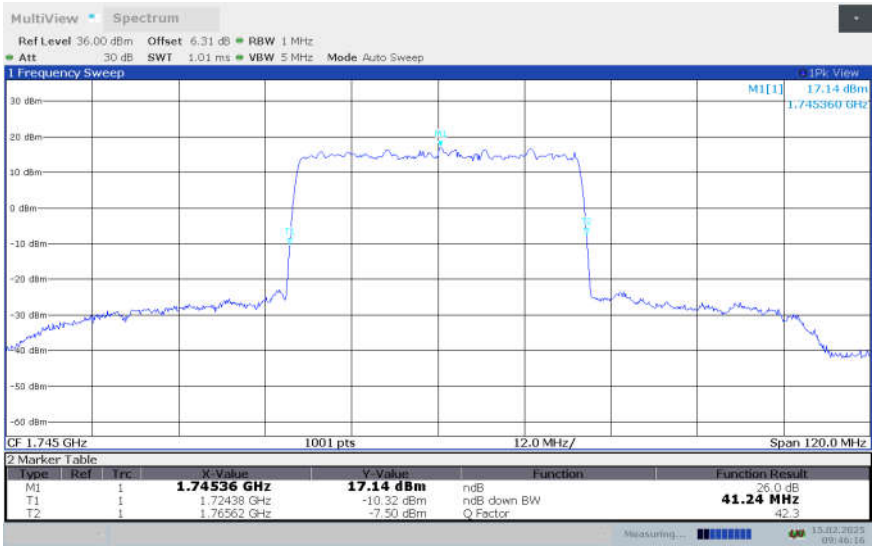


n66,40MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)

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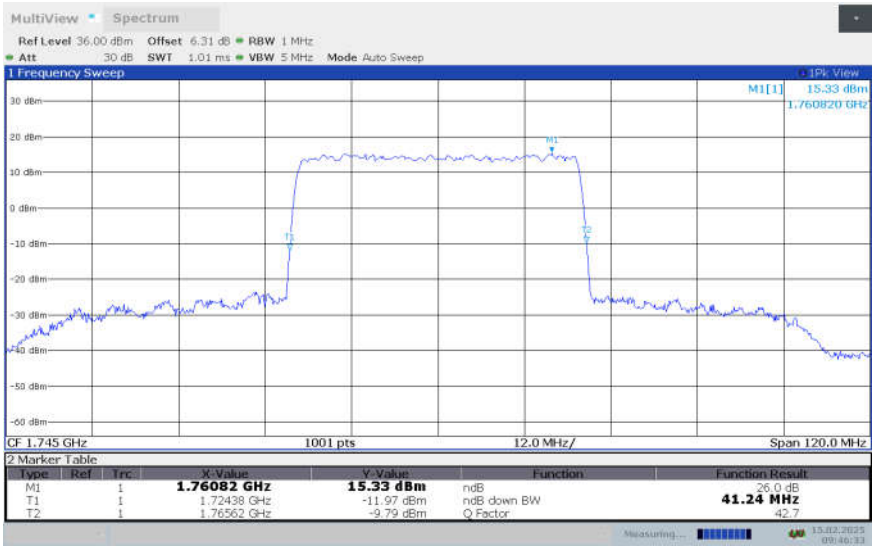
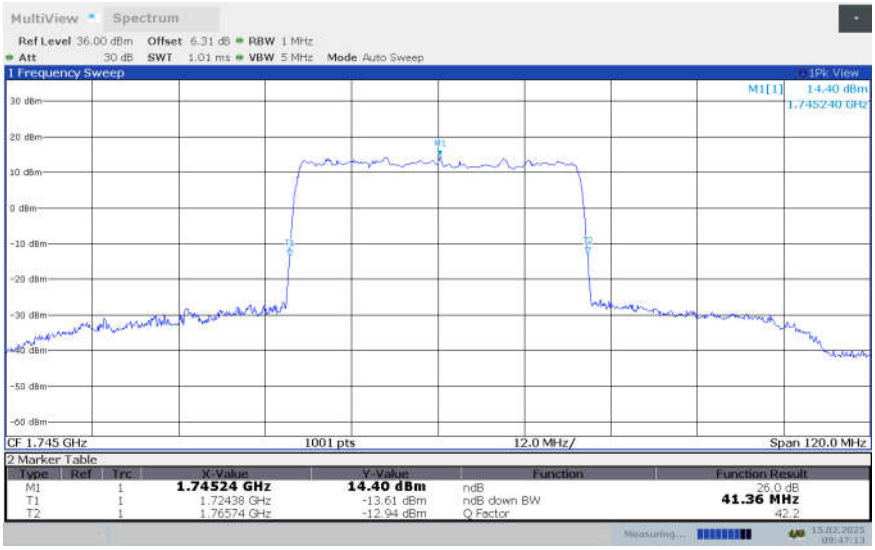


n66,40MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)



n66,40MHz Bandwidth,CP-QPSK (-26dBc OBW)

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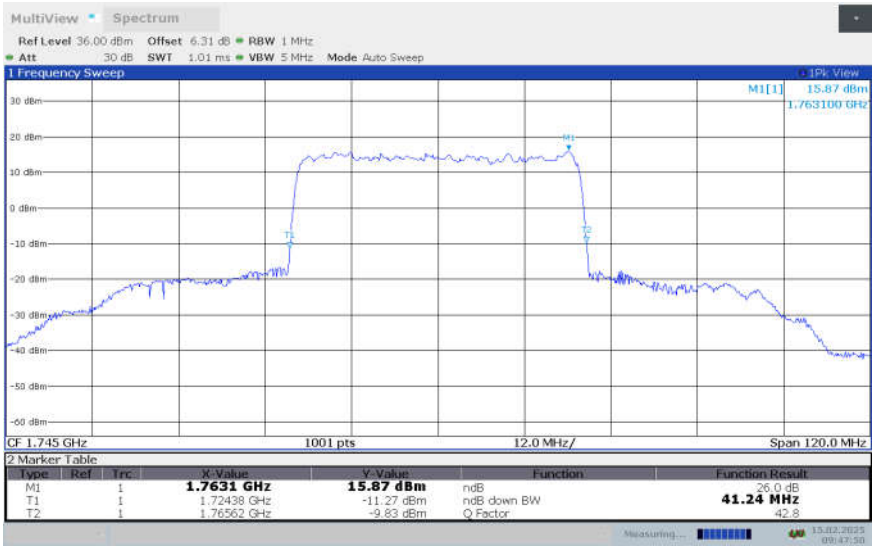
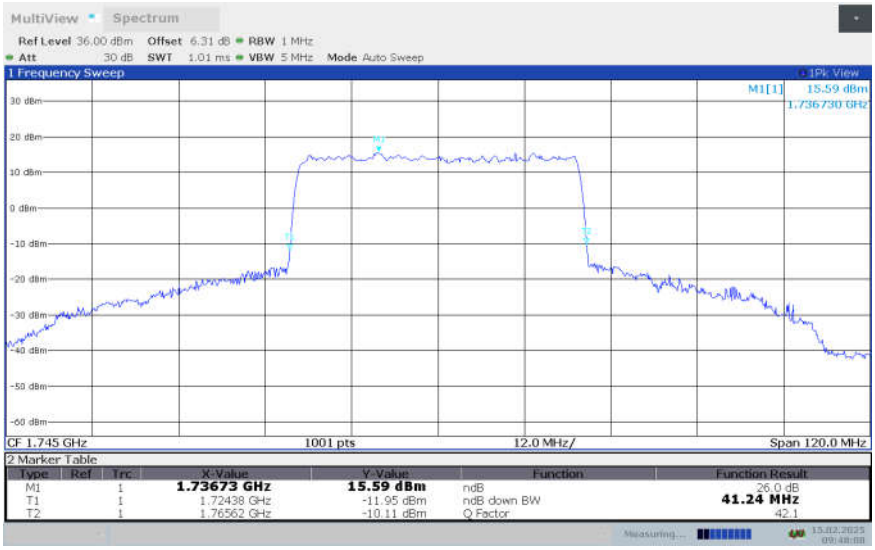


n66,40MHz Bandwidth,CP-16QAM (-26dBc OBW)



n66,40MHz Bandwidth,CP-64QAM (-26dBc OBW)

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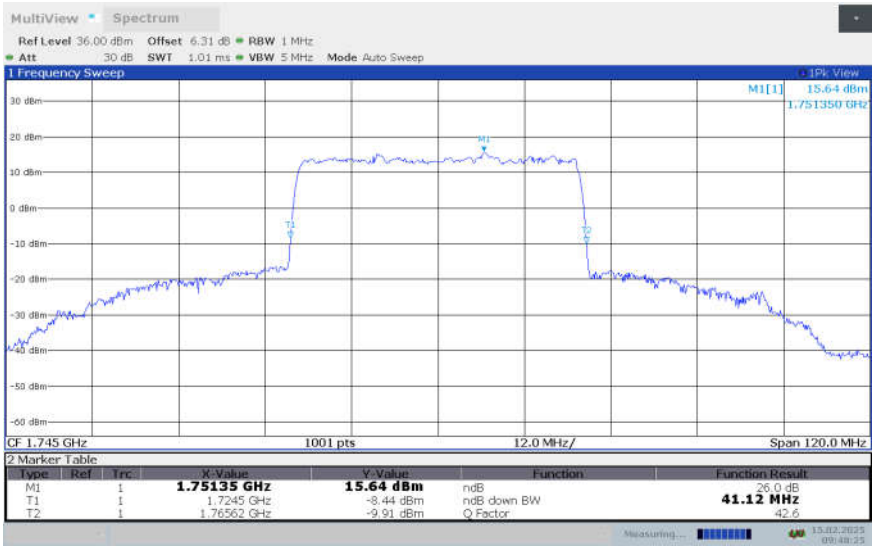
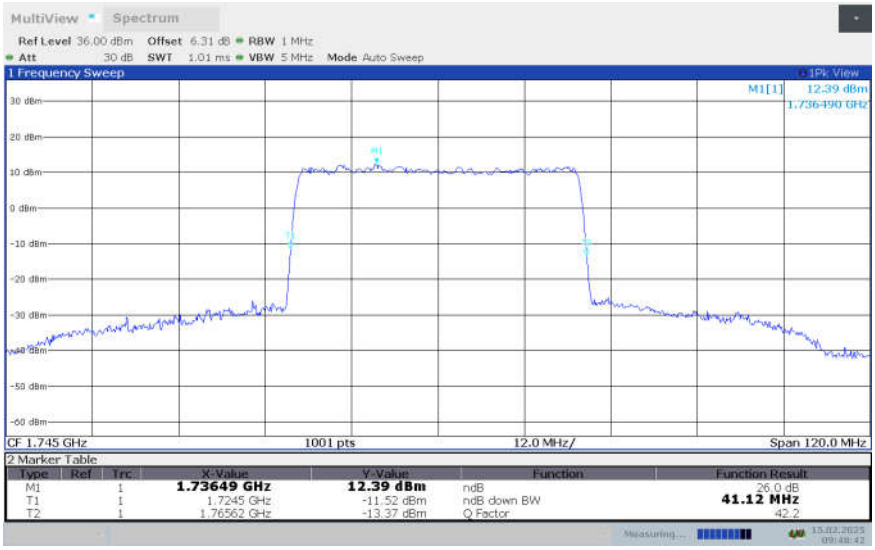


n66,40MHz Bandwidth,CP-256QAM (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-pi/2 BPSK (-26dBc OBW)

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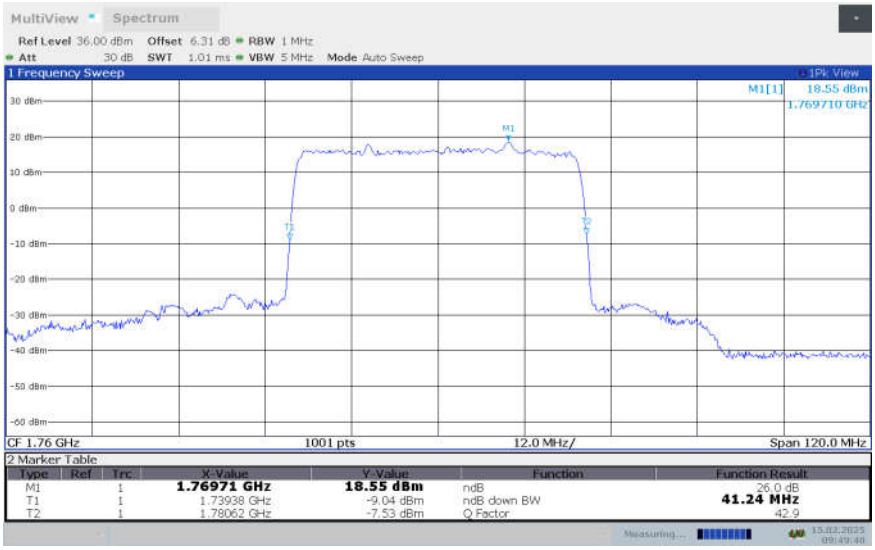
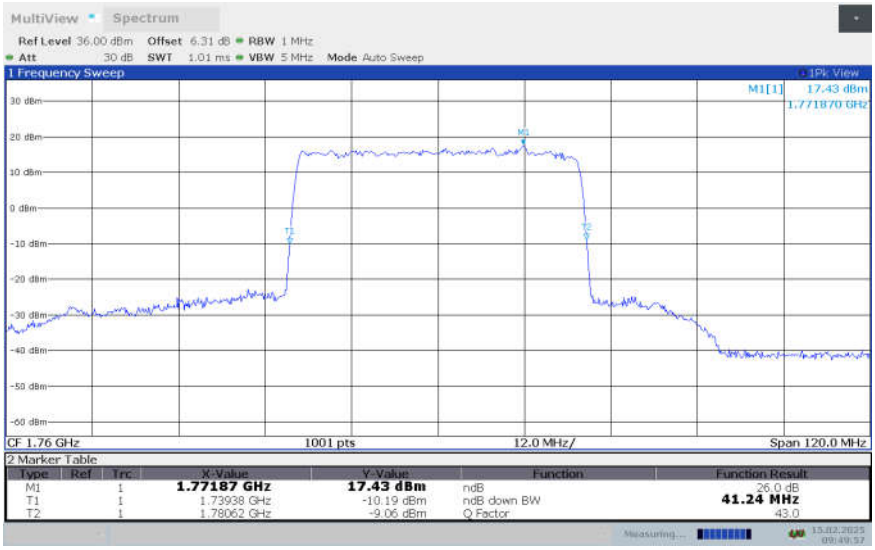


n66,40MHz Bandwidth,DFT-s-QPSK (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-16QAM (-26dBc OBW)

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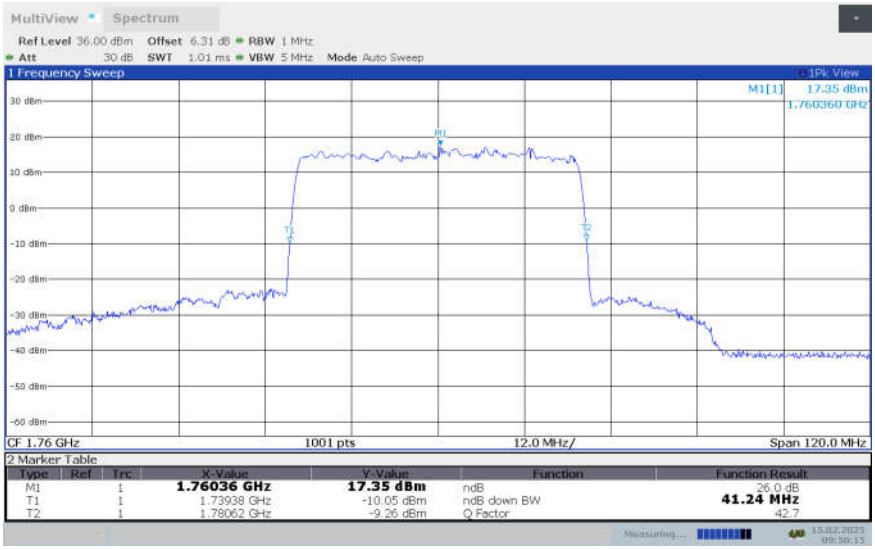
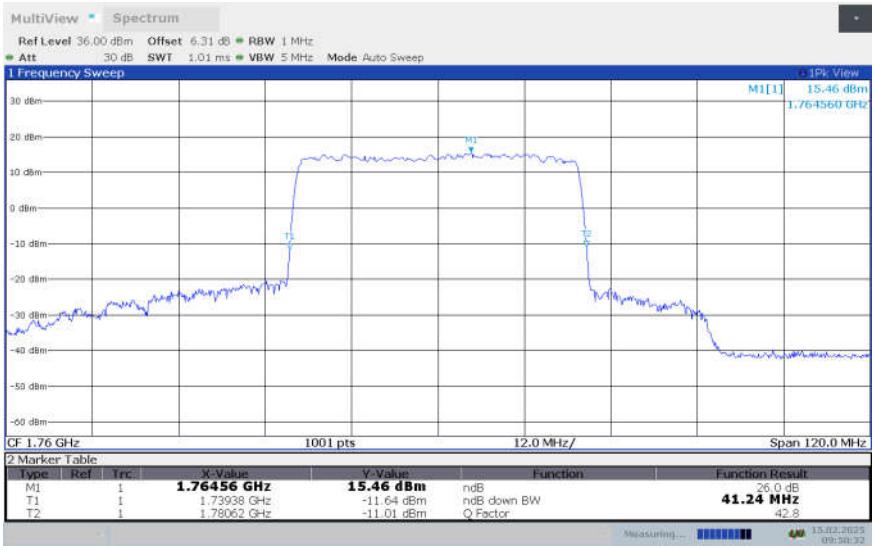


n66,40MHz Bandwidth,DFT-s-64QAM (-26dBc OBW)



n66,40MHz Bandwidth,DFT-s-256QAM (-26dBc OBW)

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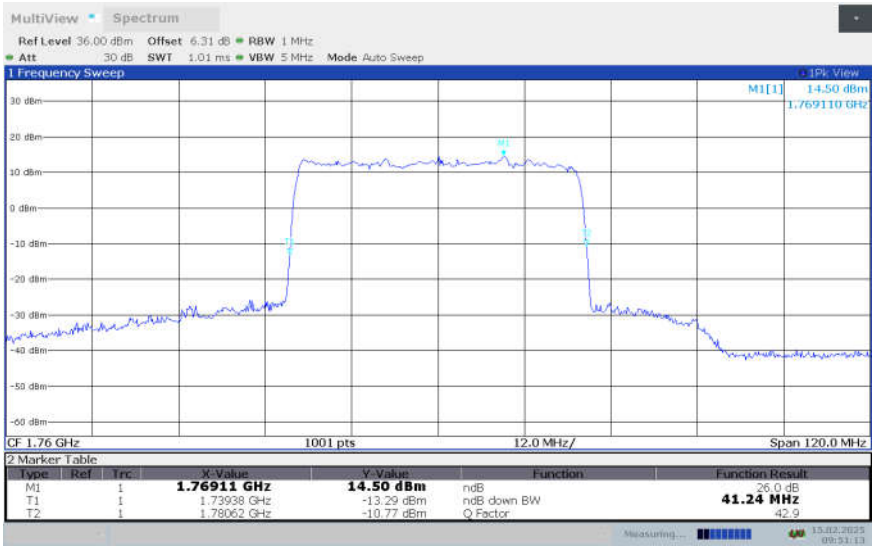
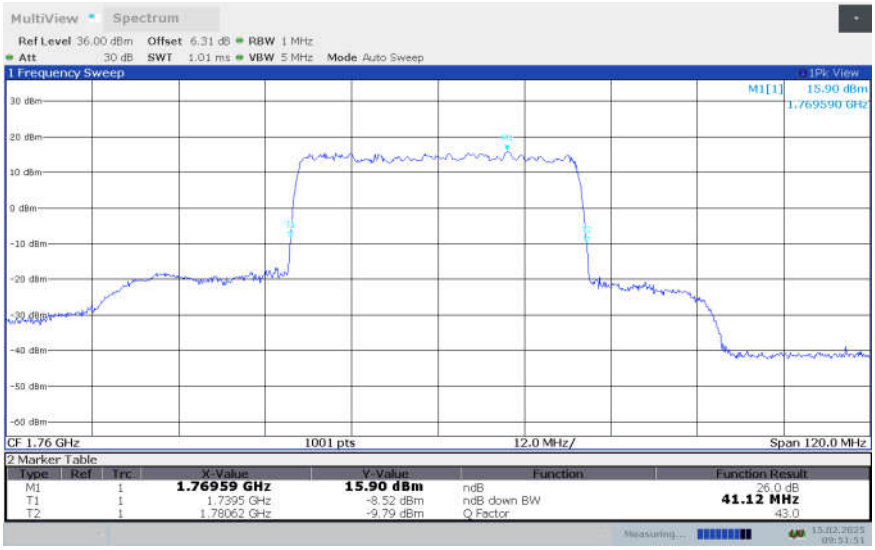


n66,40MHz Bandwidth,CP-QPSK (-26dBc OBW)



n66,40MHz Bandwidth,CP-16QAM (-26dBc OBW)

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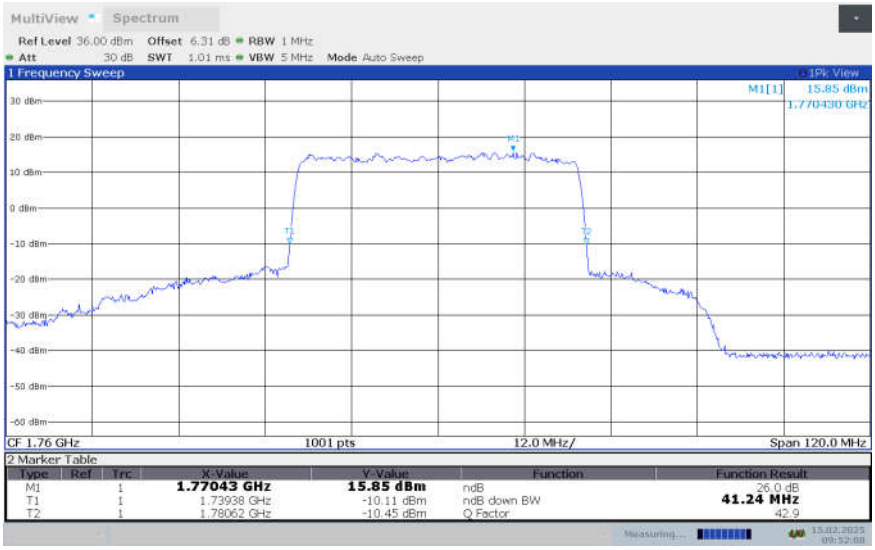
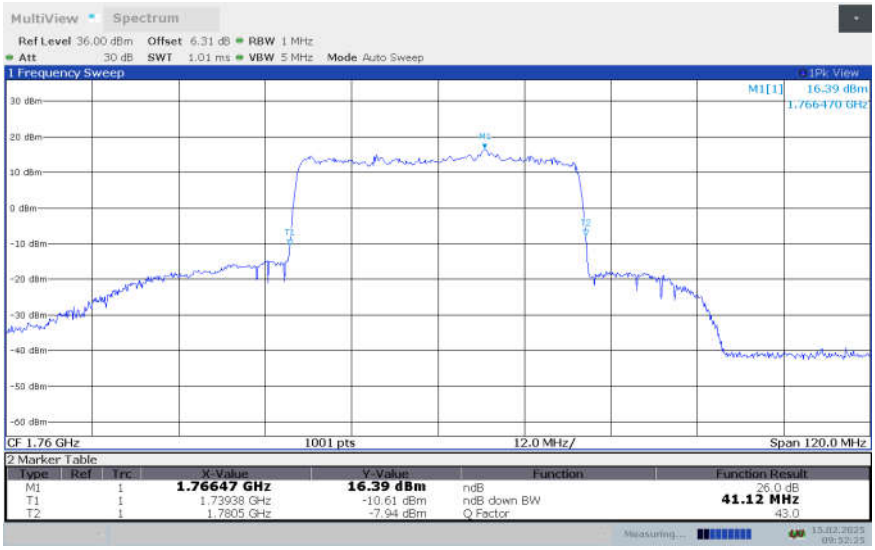


n66,40MHz Bandwidth,CP-64QAM (-26dBc OBW)



n66,40MHz Bandwidth,CP-256QAM (-26dBc OBW)

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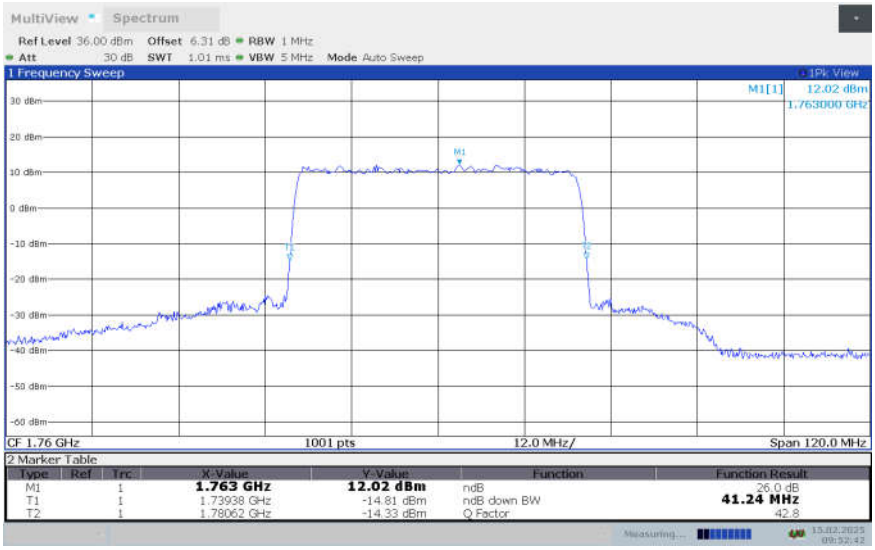

Note: Expanded measurement uncertainty is U = 0.49dB(100KHz-2GHz)/1.21dB(2GHz-26.5GHz), k = 1.96

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A.6 BAND EDGE COMPLIANCE

A.6.1 Measurement limit

Part 22.917 and Part 24.238 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(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 + 10log (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.

The spectrum analyzer readings are corrected by [10 log (1/duty cycle)] for the non-continuous transmitting scenario.

A.6.2 Measurement result

Only worst case result is given below

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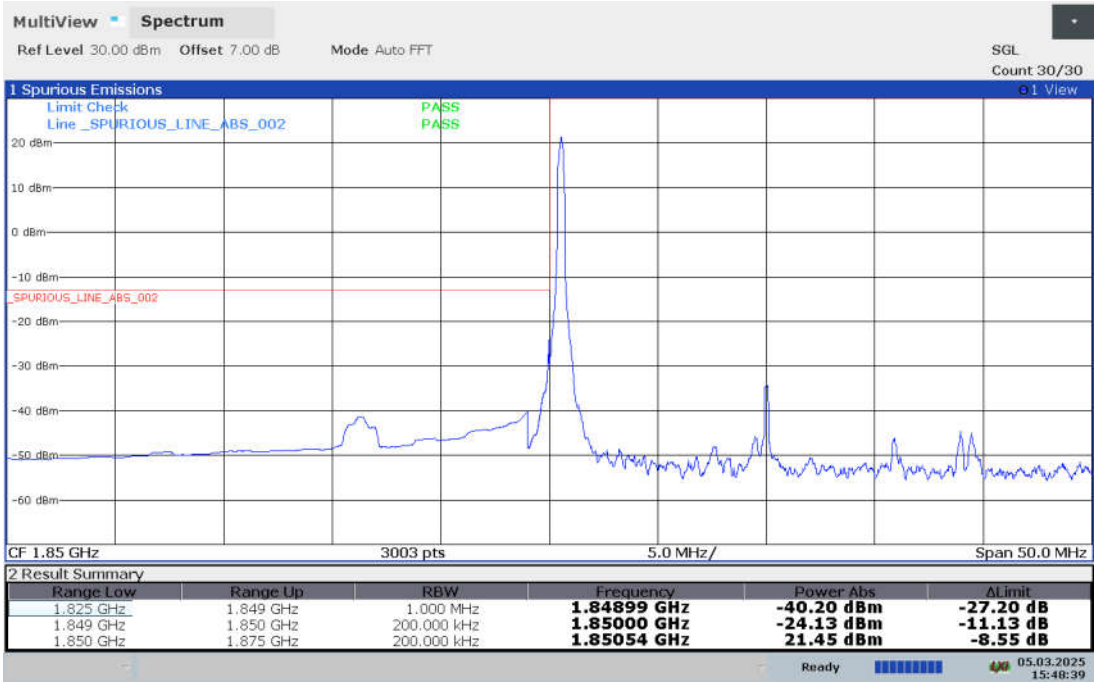
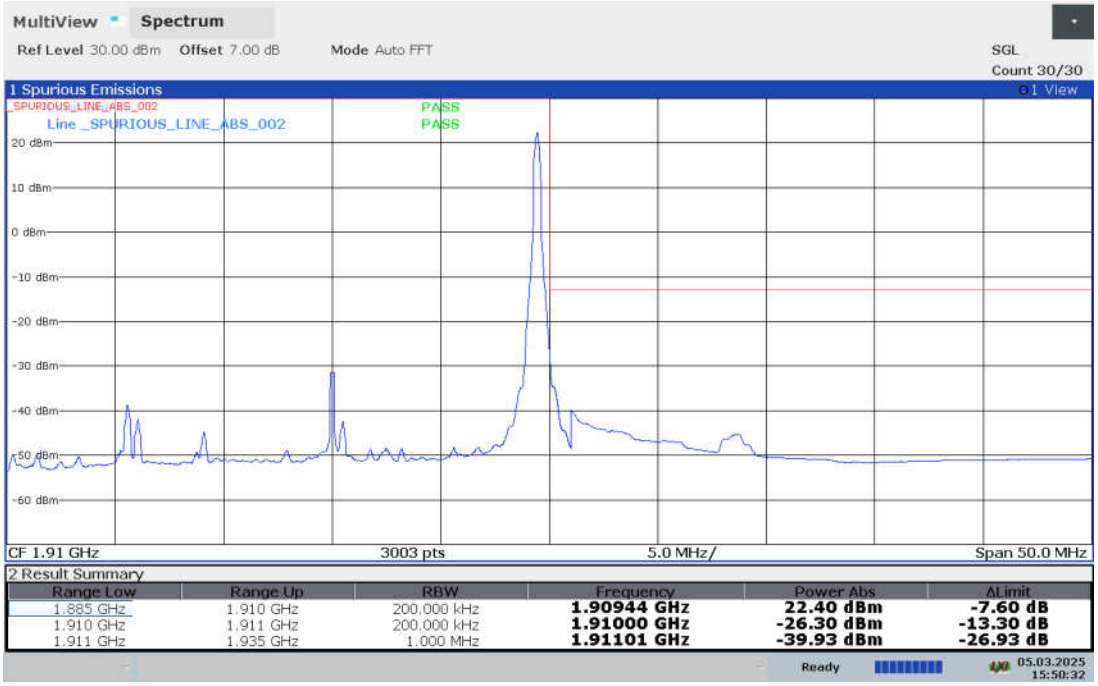
n2

LOW BAND EDGE BLOCK-20M-1RB-LOW_offset



HIGH BAND EDGE BLOCK-20M-1RB-HIGH_offset



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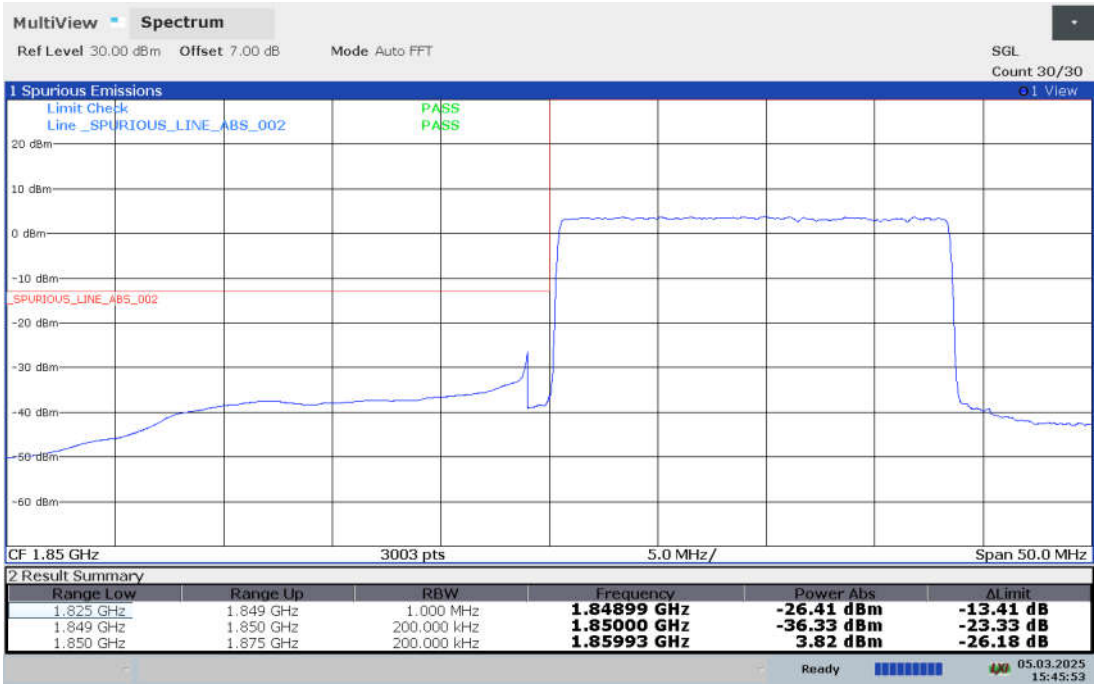
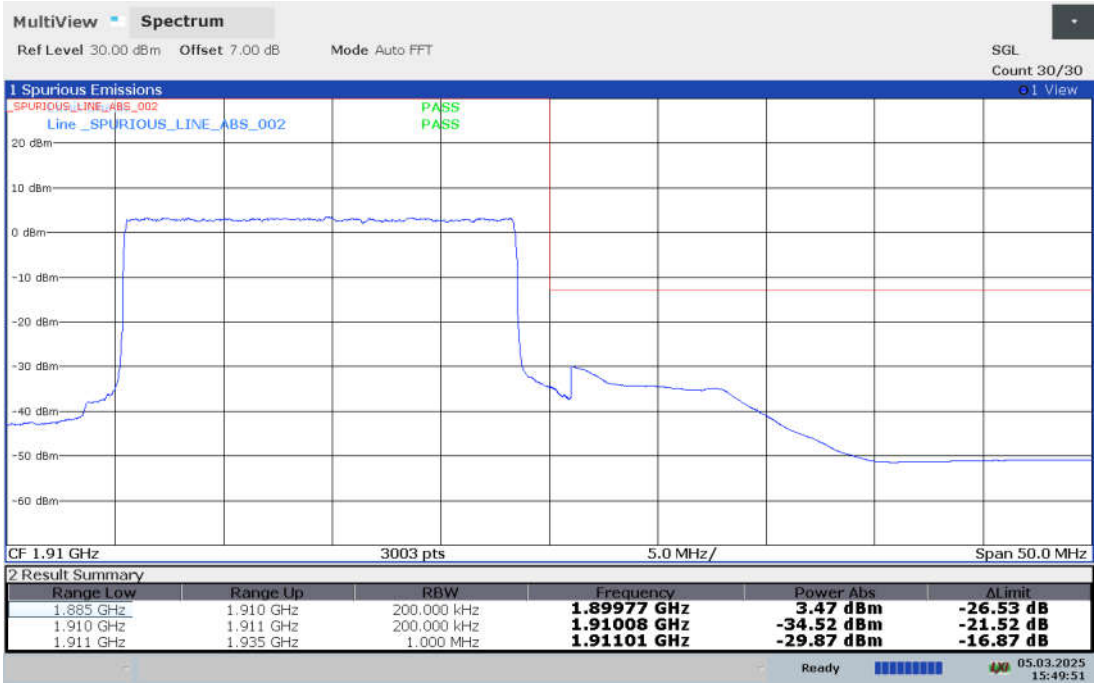
LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB



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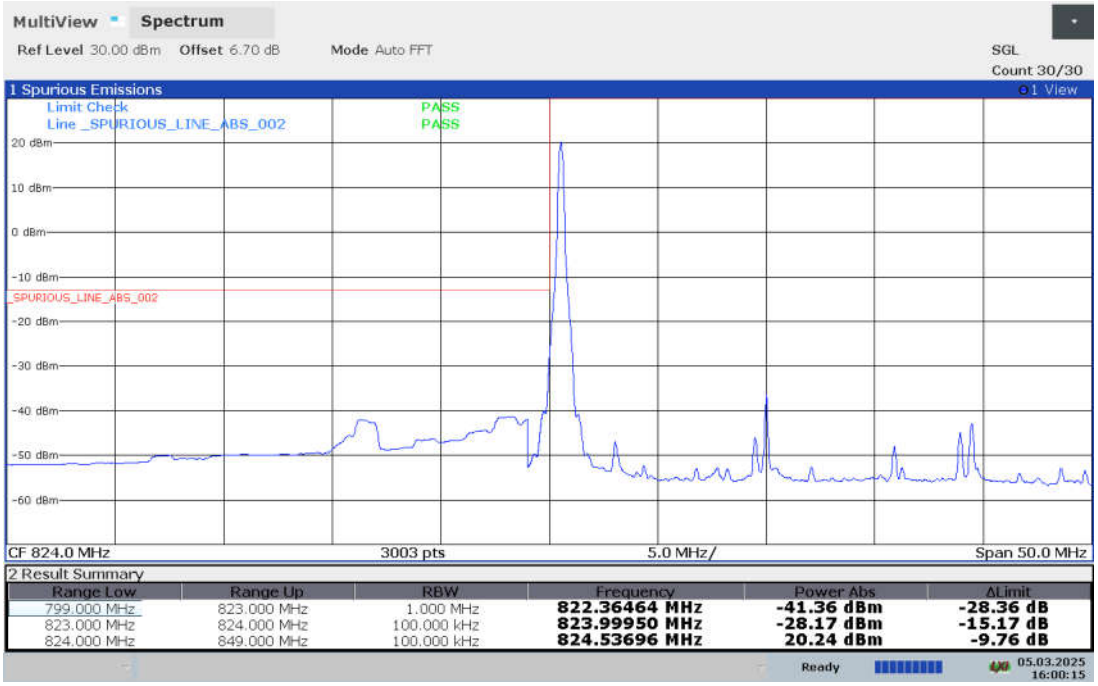
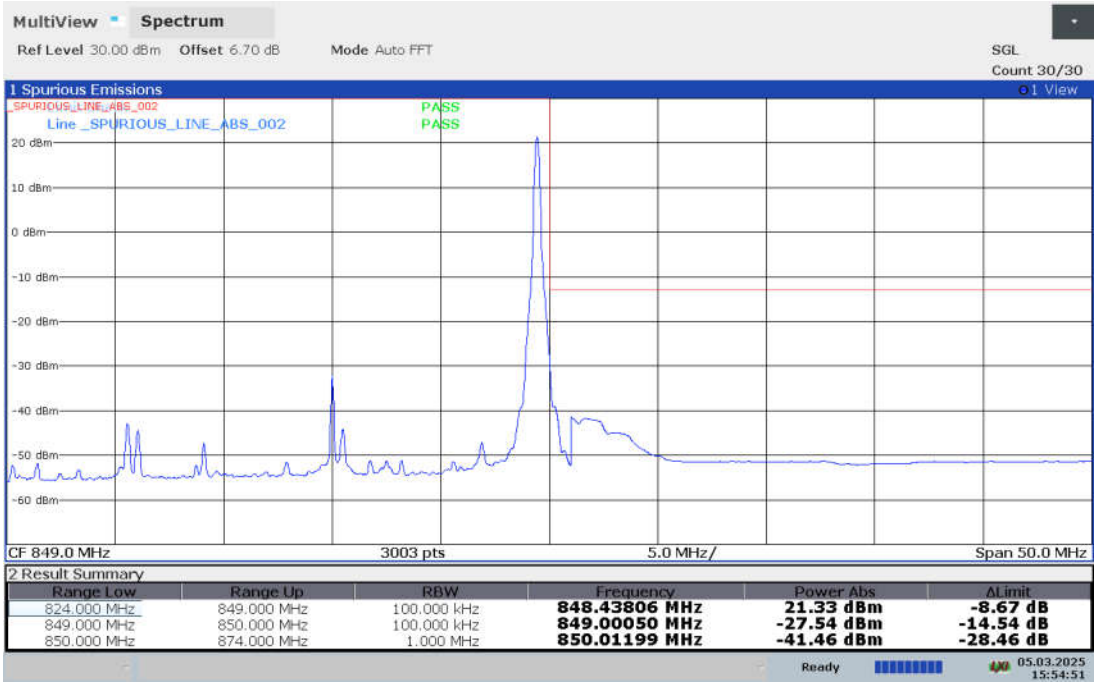
n5

LOW BAND EDGE BLOCK-20M-1RB-LOW_offset



HIGH BAND EDGE BLOCK-20M-1RB-HIGH_offset



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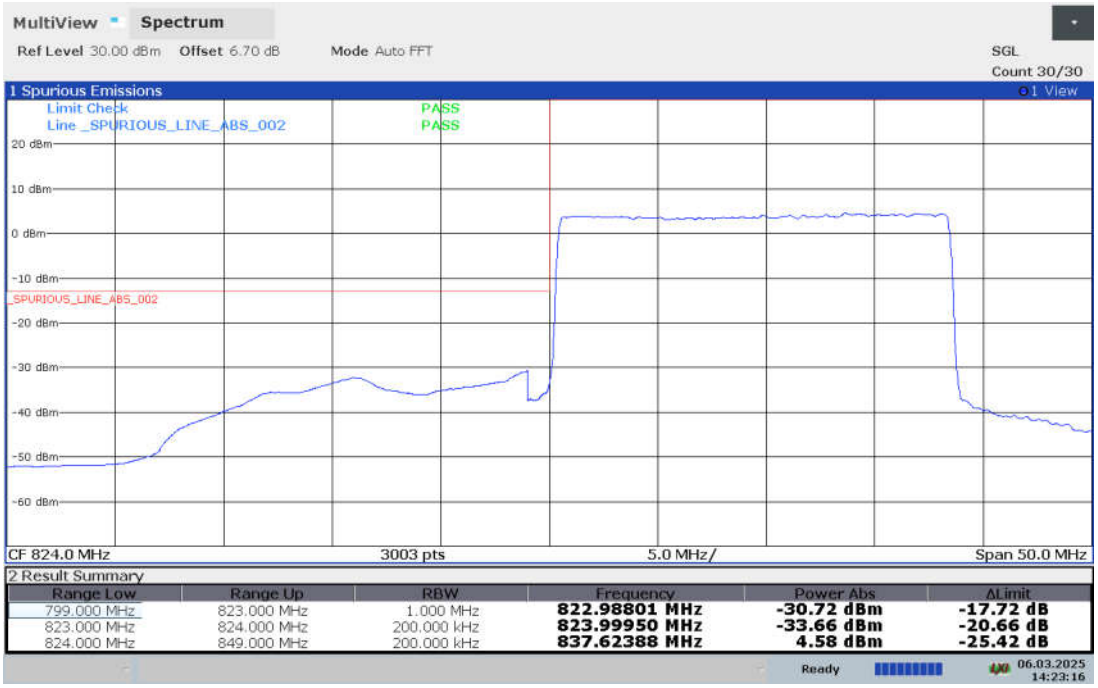
LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB

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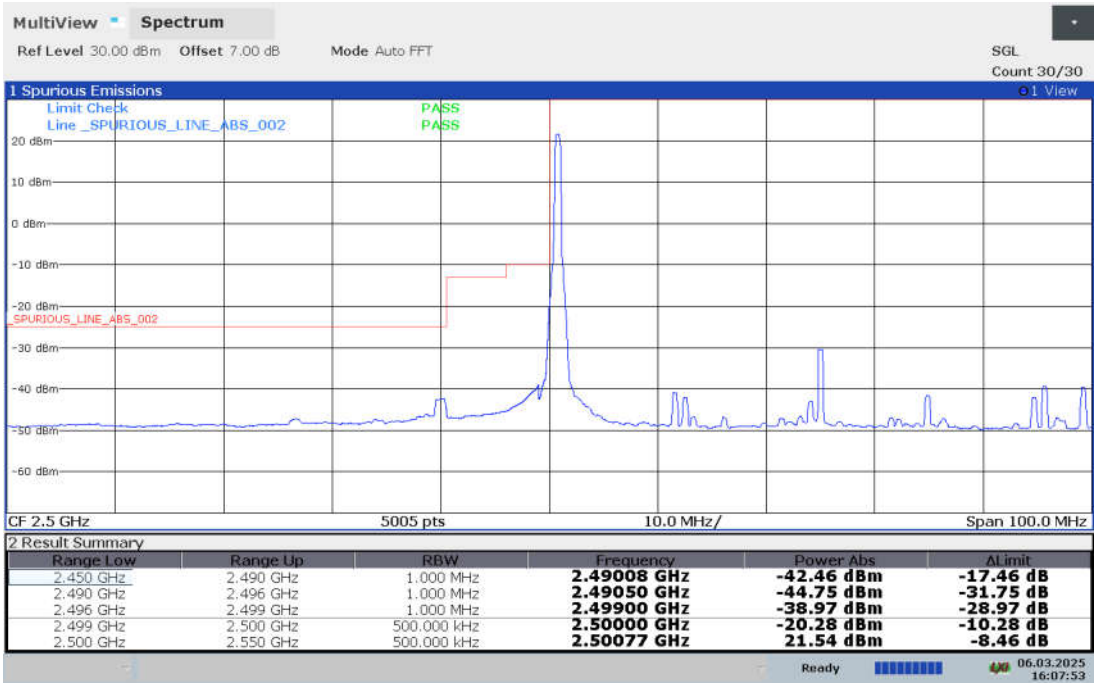
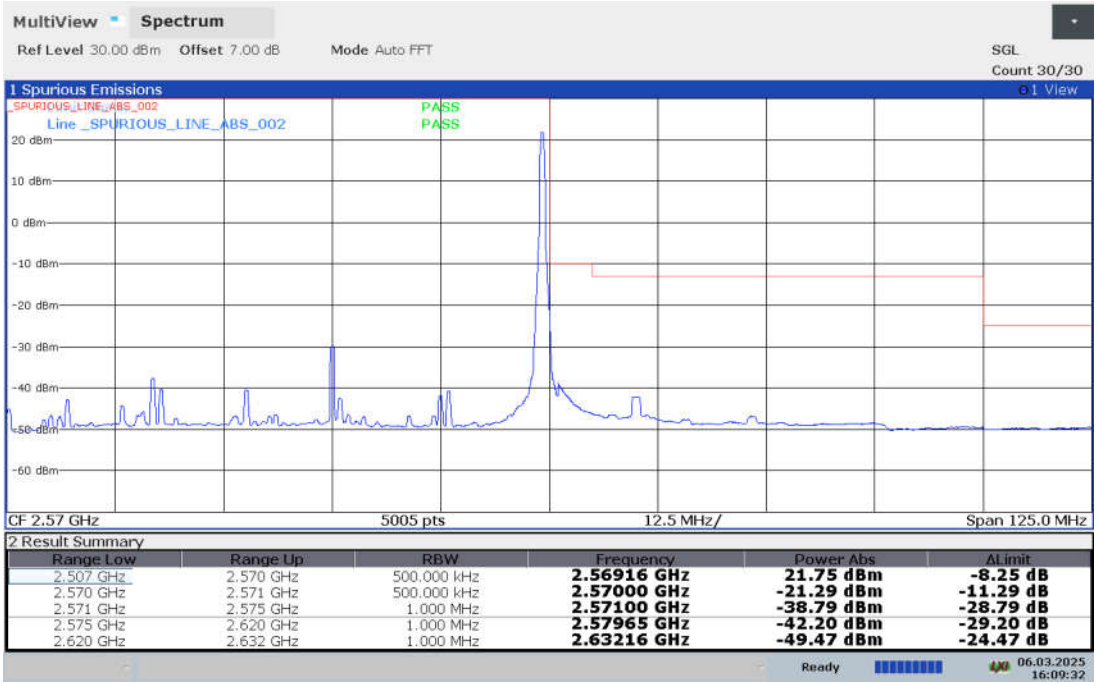
n7

LOW BAND EDGE BLOCK-50M-1RB-LOW_offset



HIGH BAND EDGE BLOCK-50M-1RB-HIGH_offset



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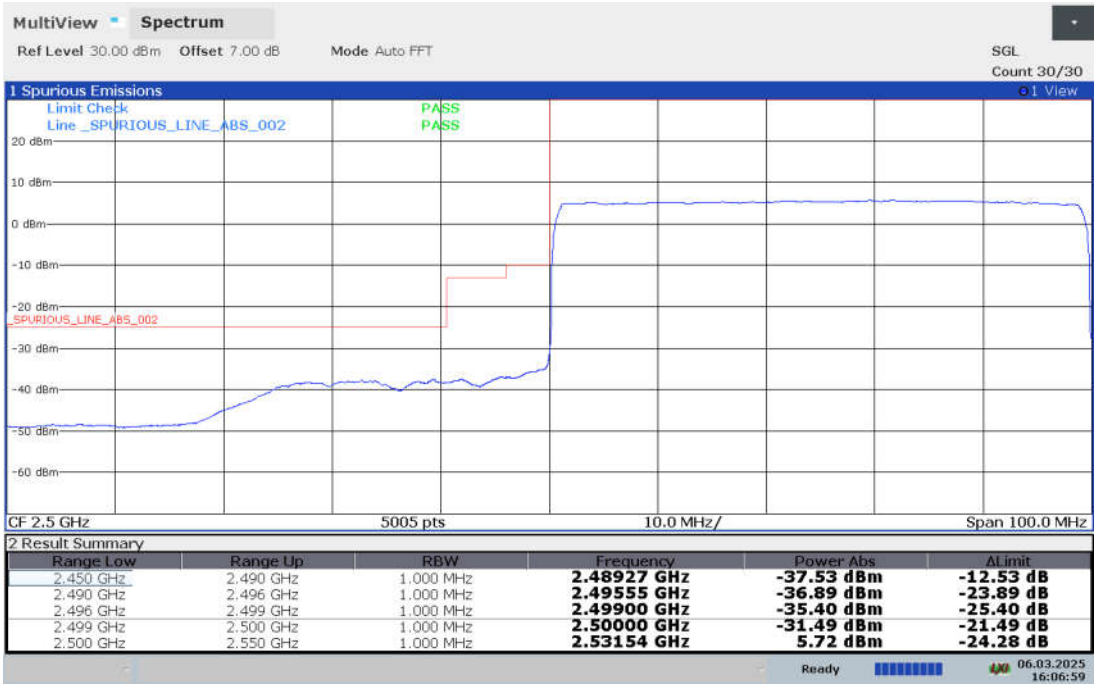
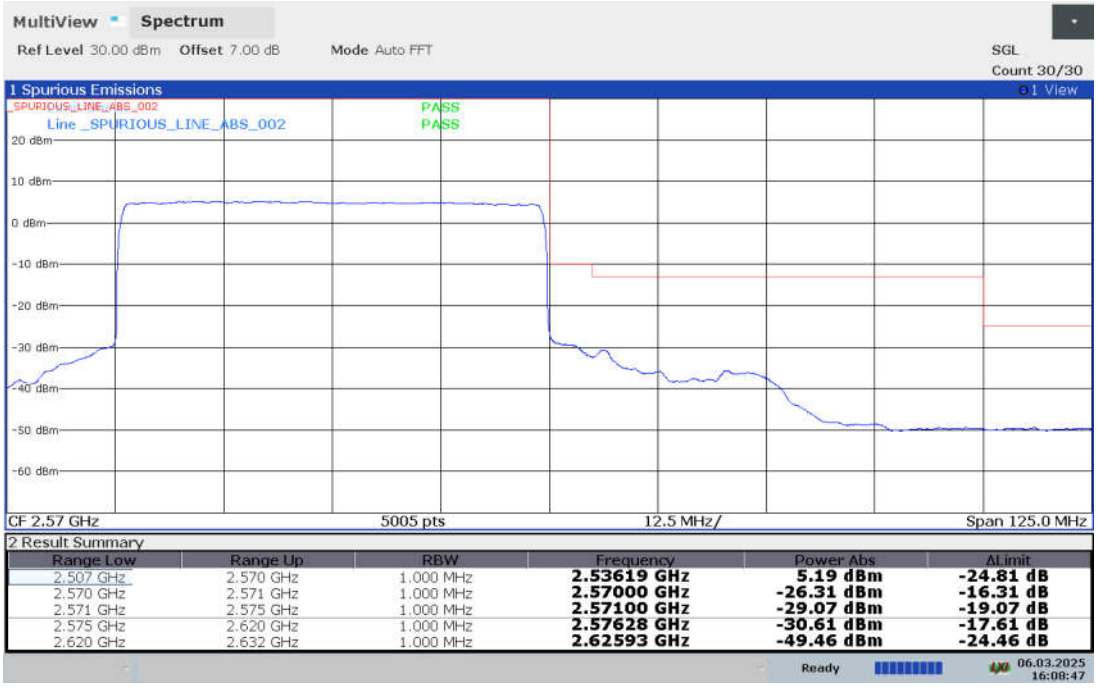
LOW BAND EDGE BLOCK-50M-100%RB



HIGH BAND EDGE BLOCK-50M-100%RB



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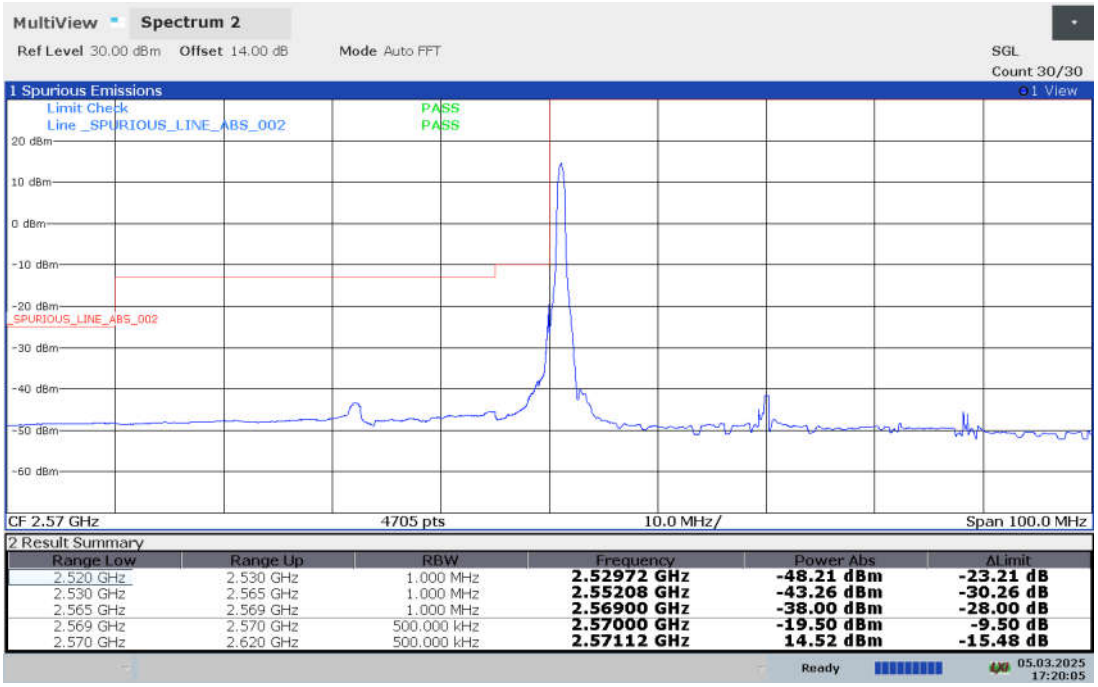
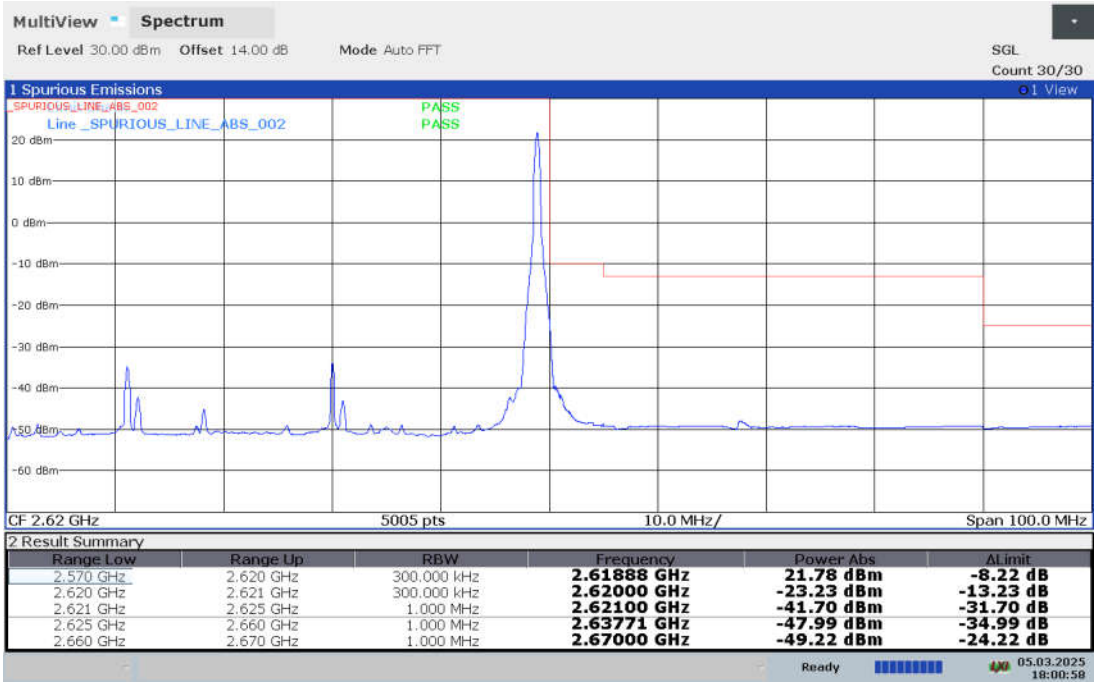
n38

LOW BAND EDGE BLOCK-40M-1RB-LOW_offset



HIGH BAND EDGE BLOCK-40M-1RB-HIGH_offset



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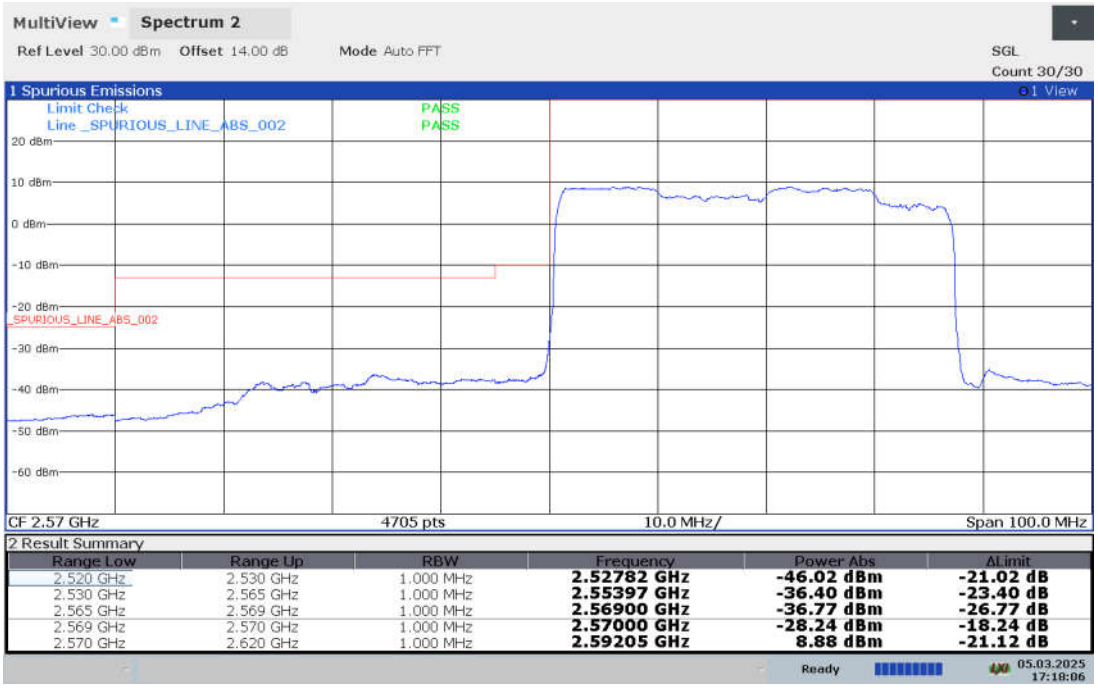
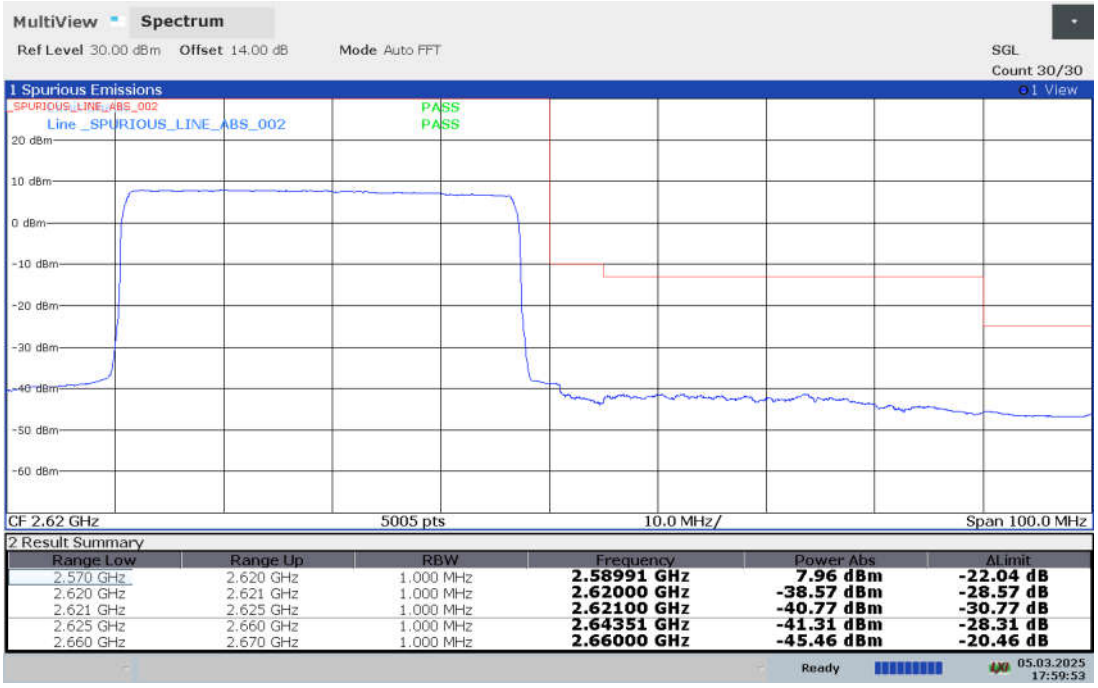
LOW BAND EDGE BLOCK-40M-100%RB



HIGH BAND EDGE BLOCK-40M-100%RB



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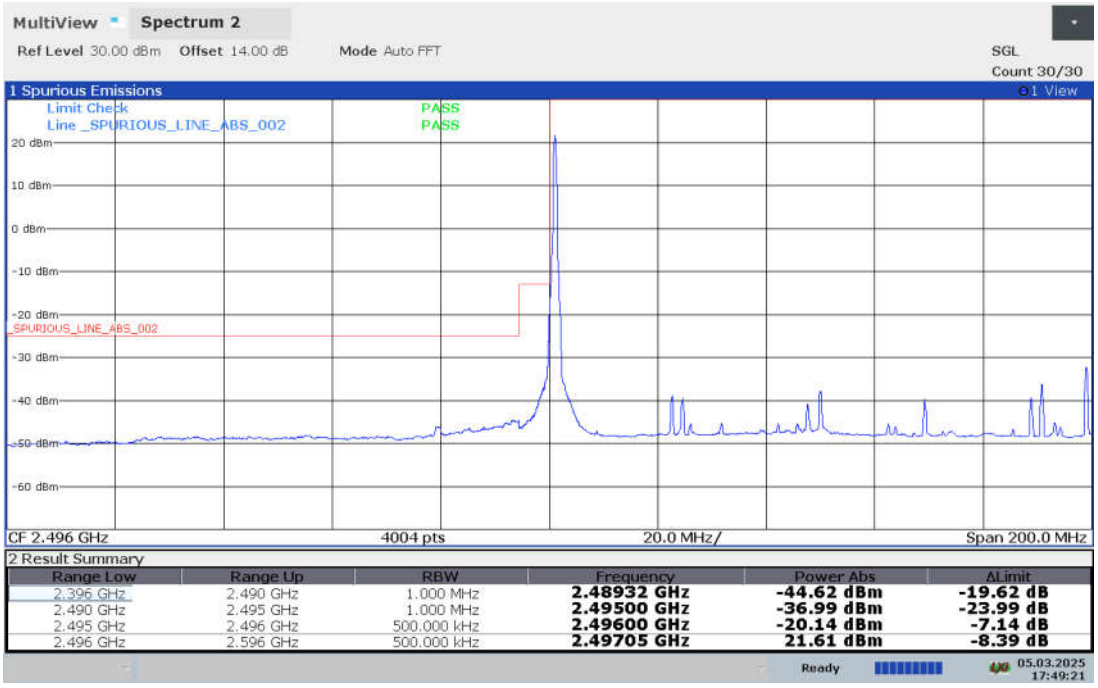
n41

LOW BAND EDGE BLOCK-100M-1RB-LOW_offset



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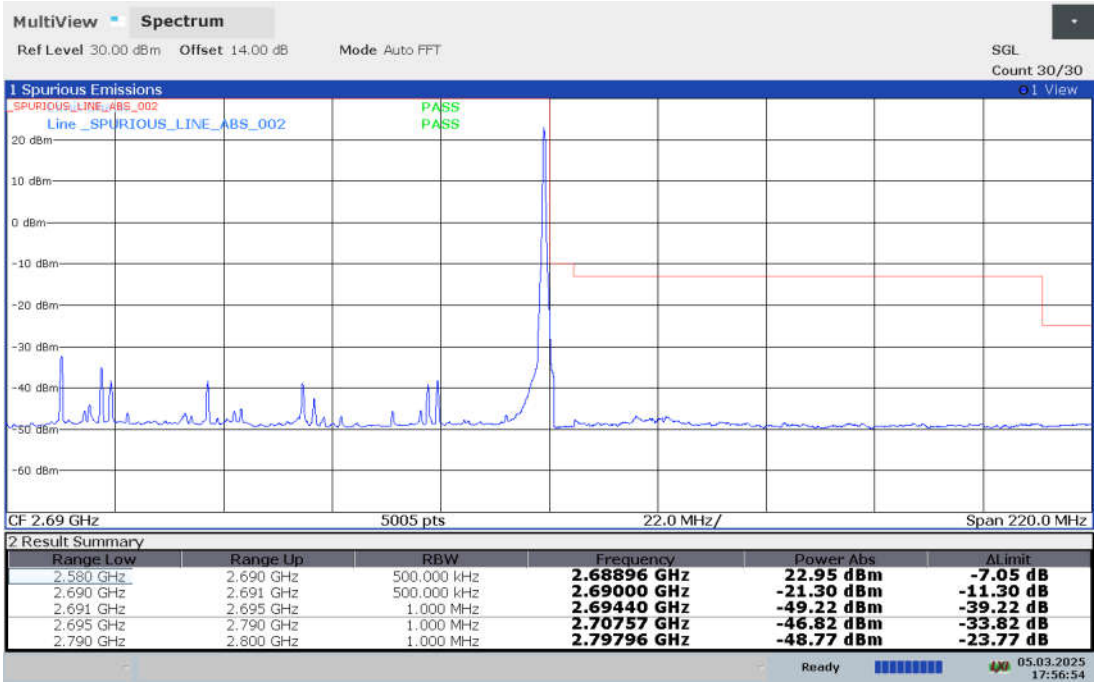

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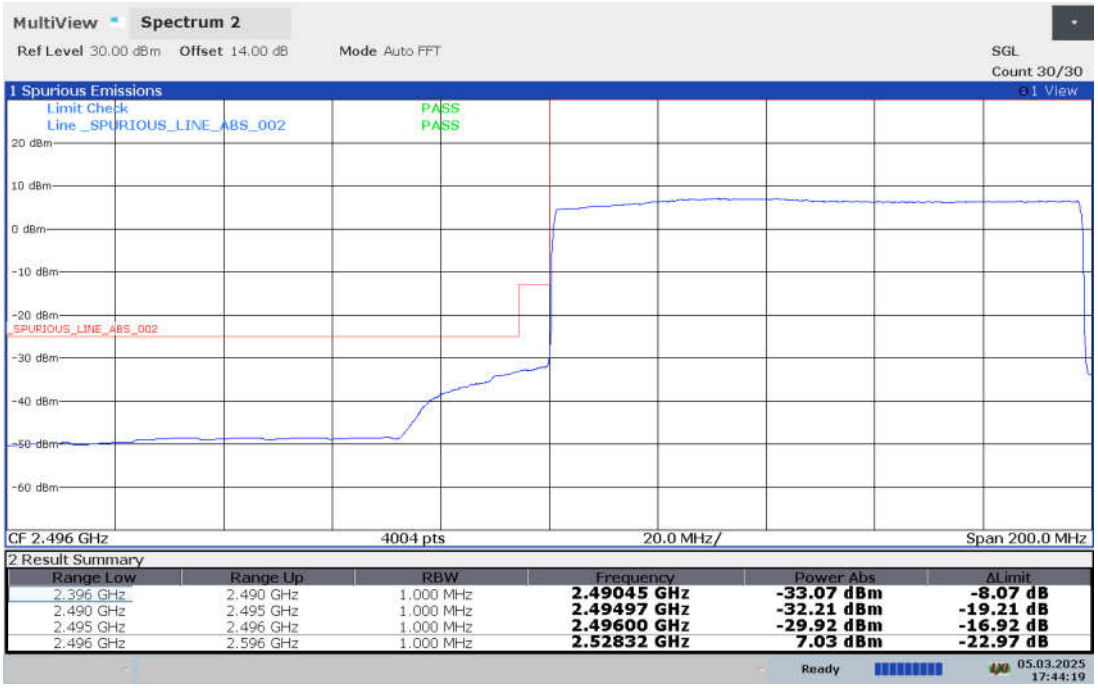
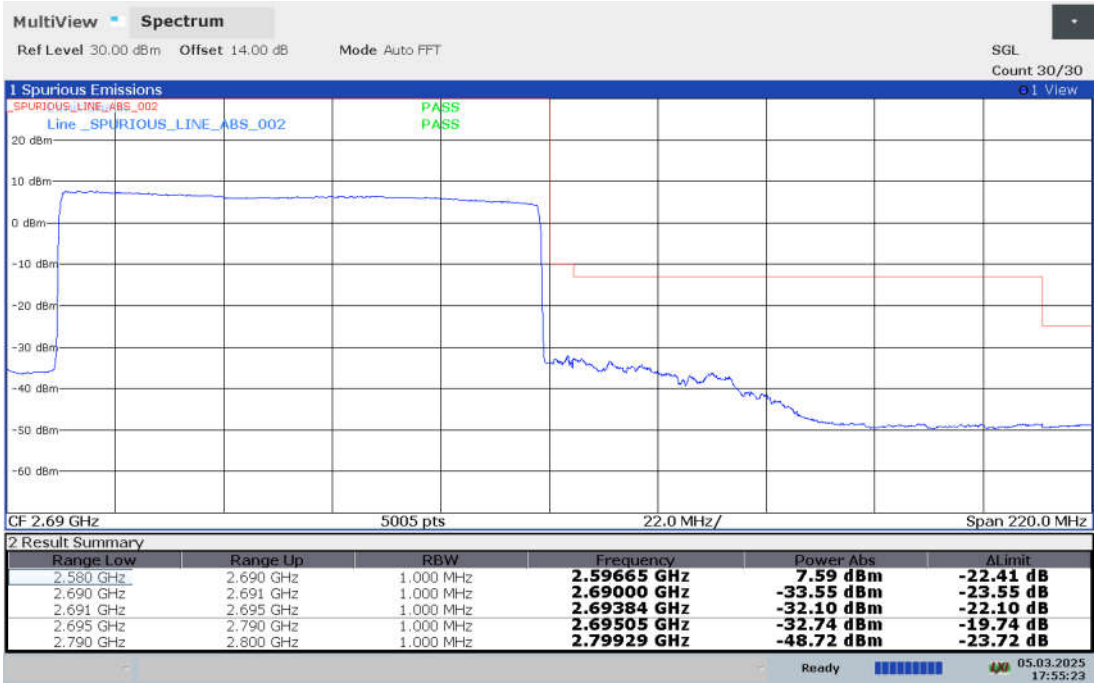
LOW BAND EDGE BLOCK-100M-100%RB



HIGH BAND EDGE BLOCK-100M-100%RB



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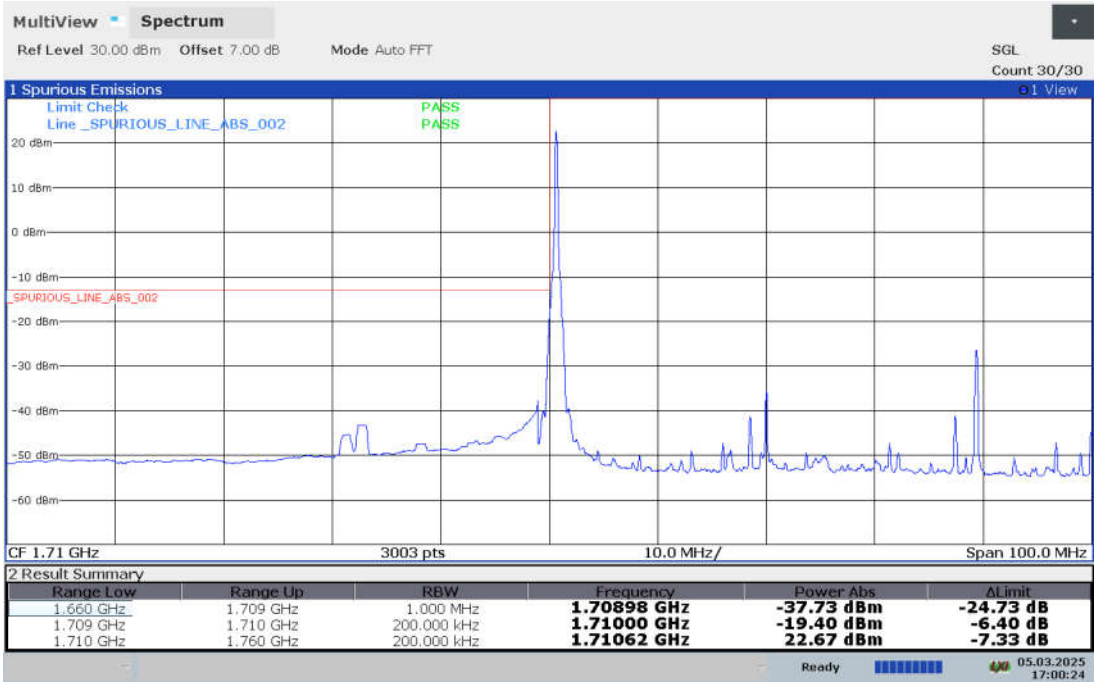
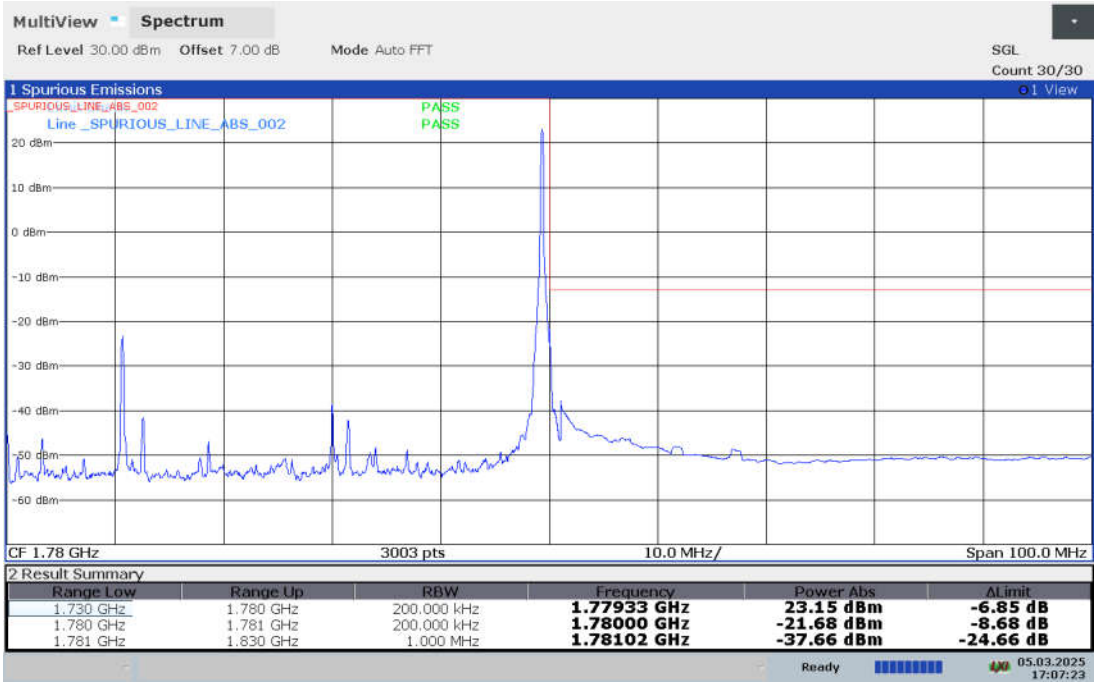
n66

LOW BAND EDGE BLOCK-40M-1RB-LOW_offset



HIGH BAND EDGE BLOCK-40M-1RB-HIGH_offset



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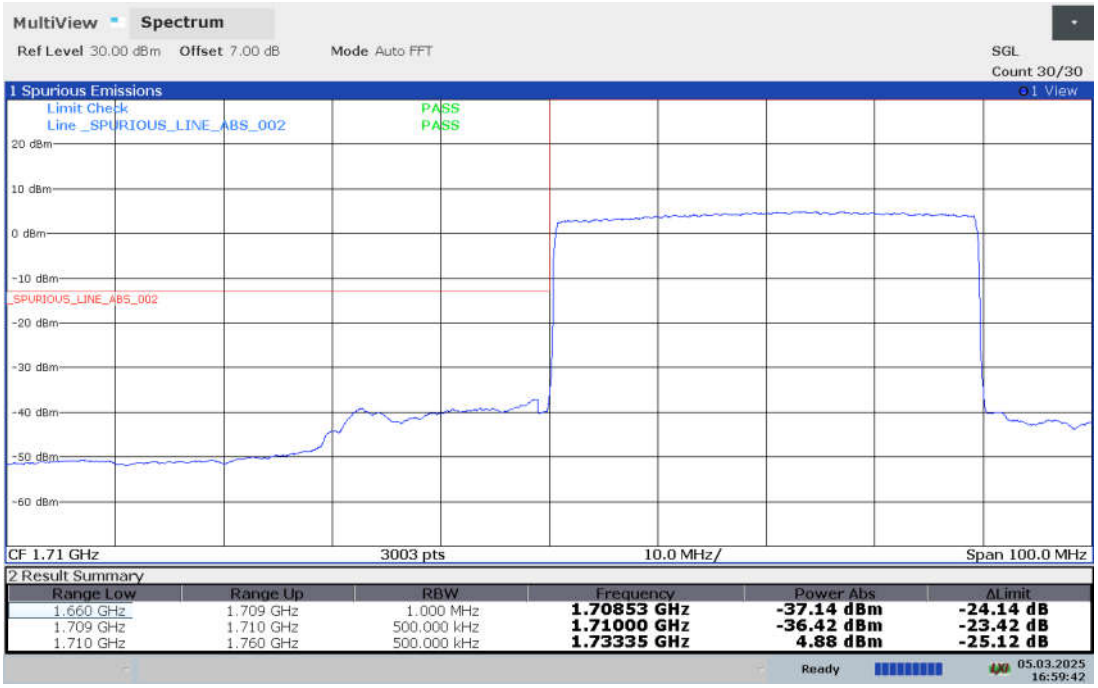
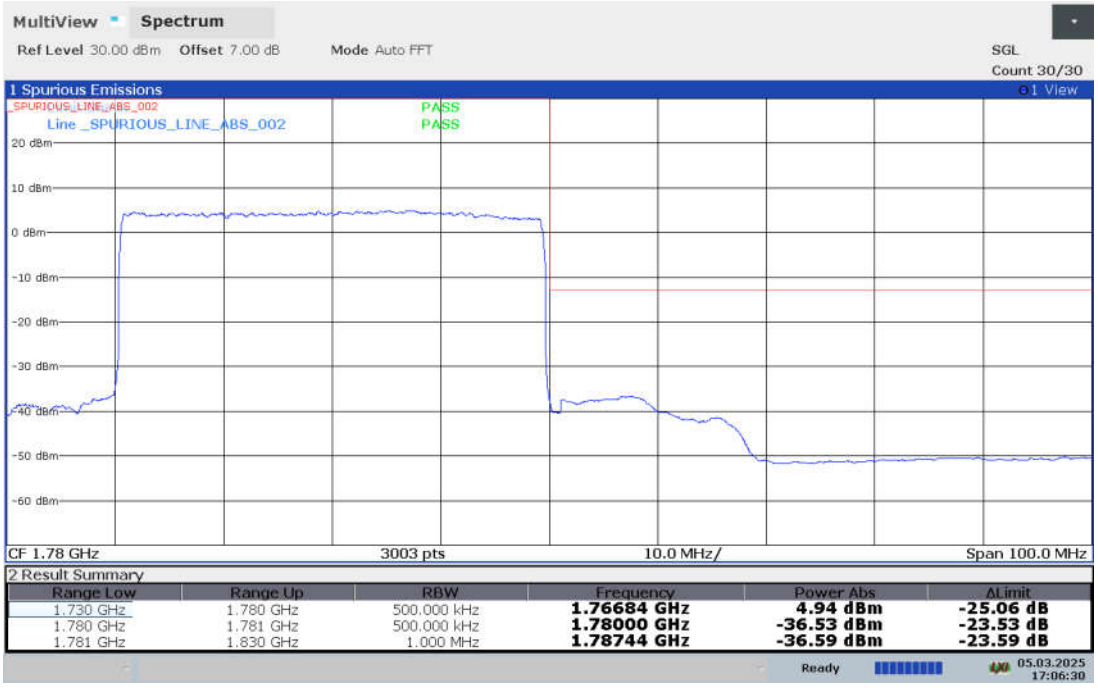
LOW BAND EDGE BLOCK-40M-100%RB



HIGH BAND EDGE BLOCK-40M-100%RB



Note: Expanded measurement uncertainty is U = 0.49dB(100KHz-2GHz)/1.21dB(2GHz-26.5GHz), k = 1.96

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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 and Part 24.238 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(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 + 10log (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.

A.7.3 Measurement result

Only worst case result is given below

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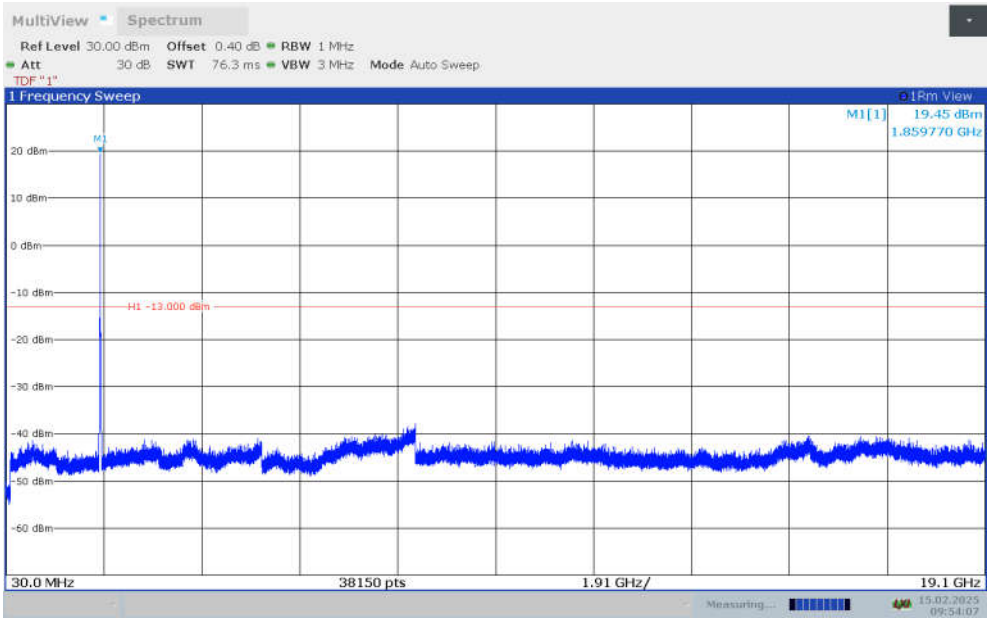
n2

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



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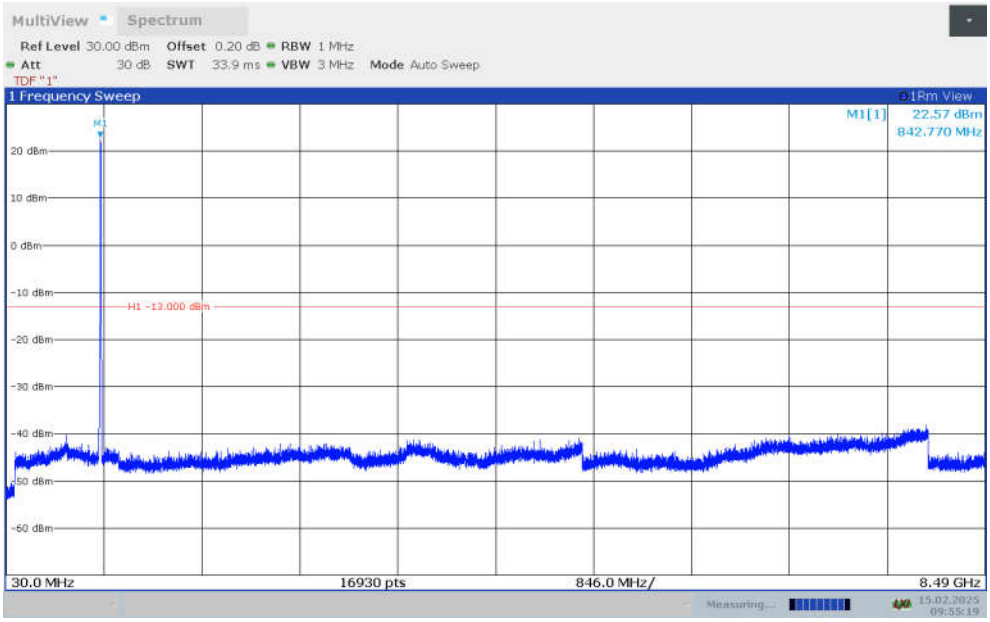
n5

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



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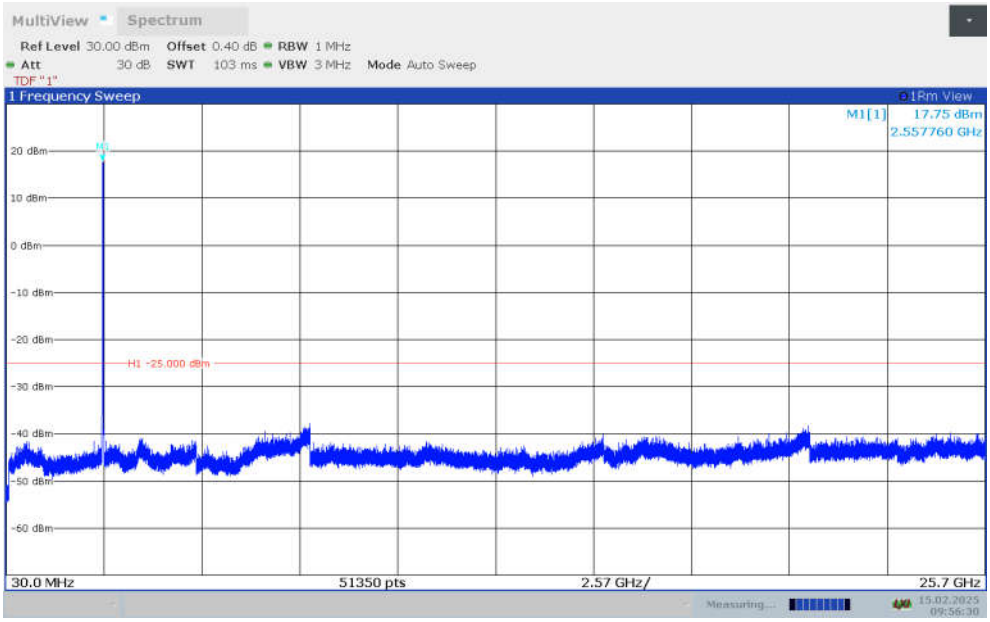
n7

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



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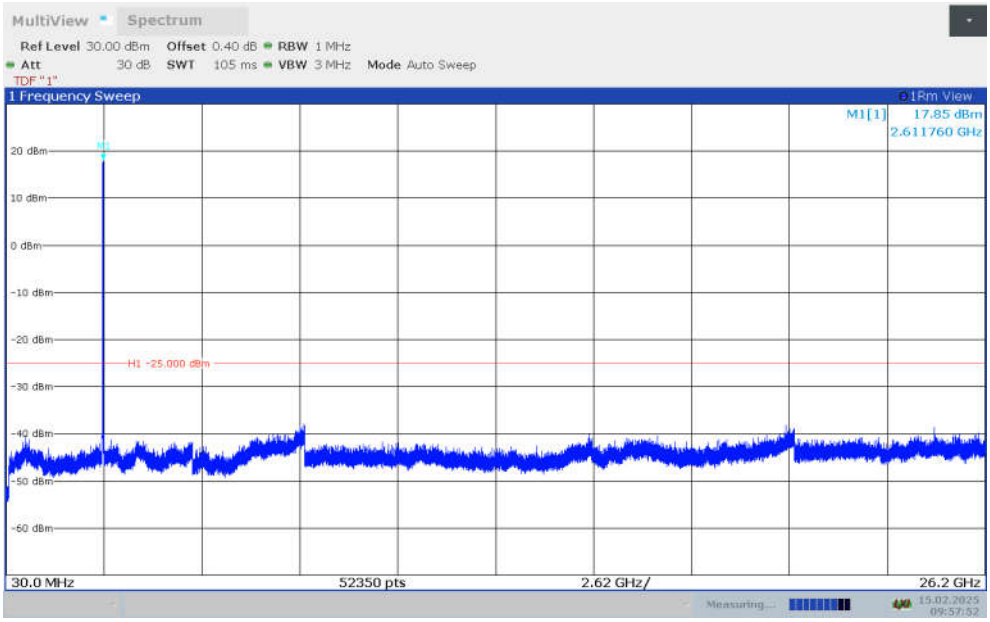
n38

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



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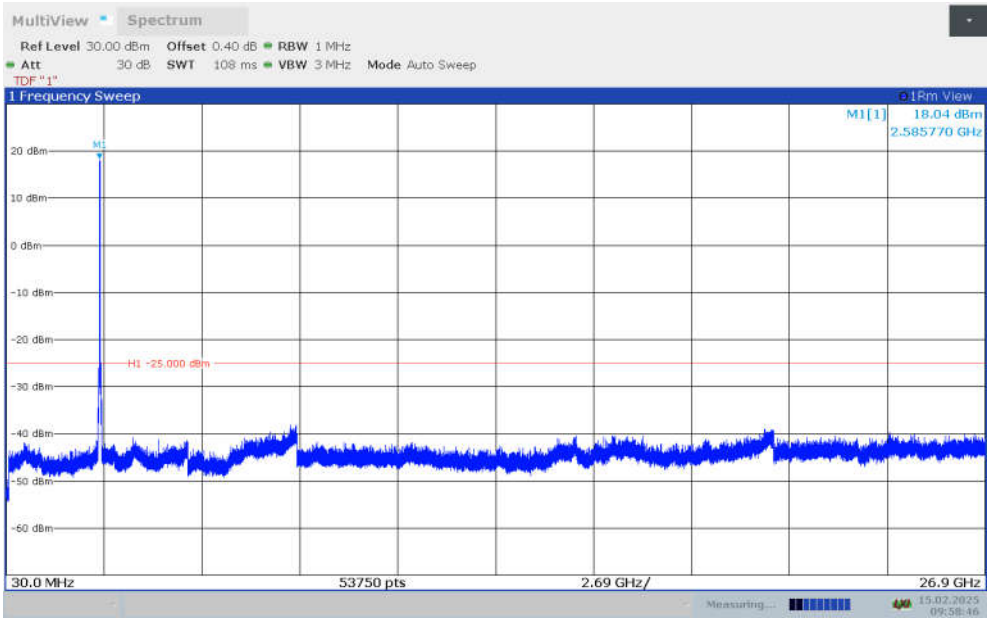
n41

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



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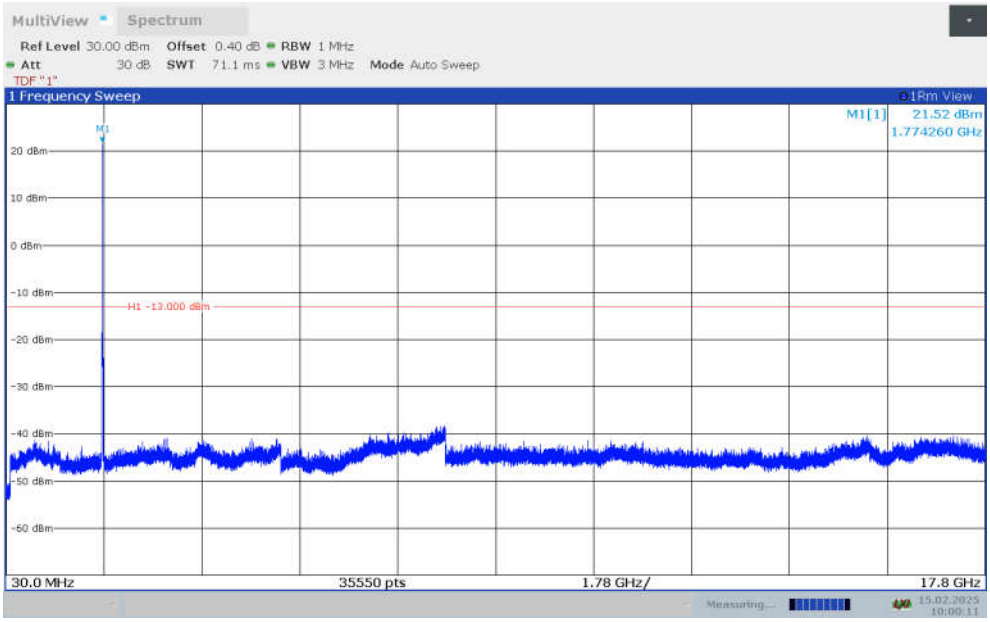
n66

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



Note: Expanded measurement uncertainty is U = 0.49dB(100KHz-2GHz)/1.21dB(2GHz-26.5GHz), k = 1.96

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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%.

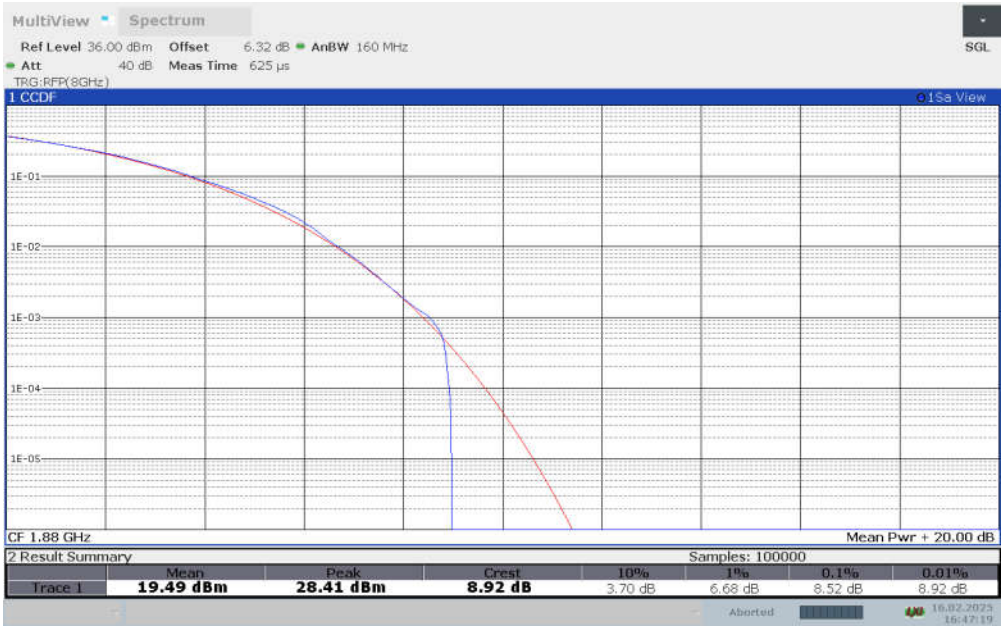
Measurement results

Only worst case result is given below

n2,5MHz

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
1880	4.14	5.54	6.06	6.56	6.72	7.76	8.52	8.24	8.66

n2, CP-16QAM (PAPR)



n2, CP-64QAM (PAPR)

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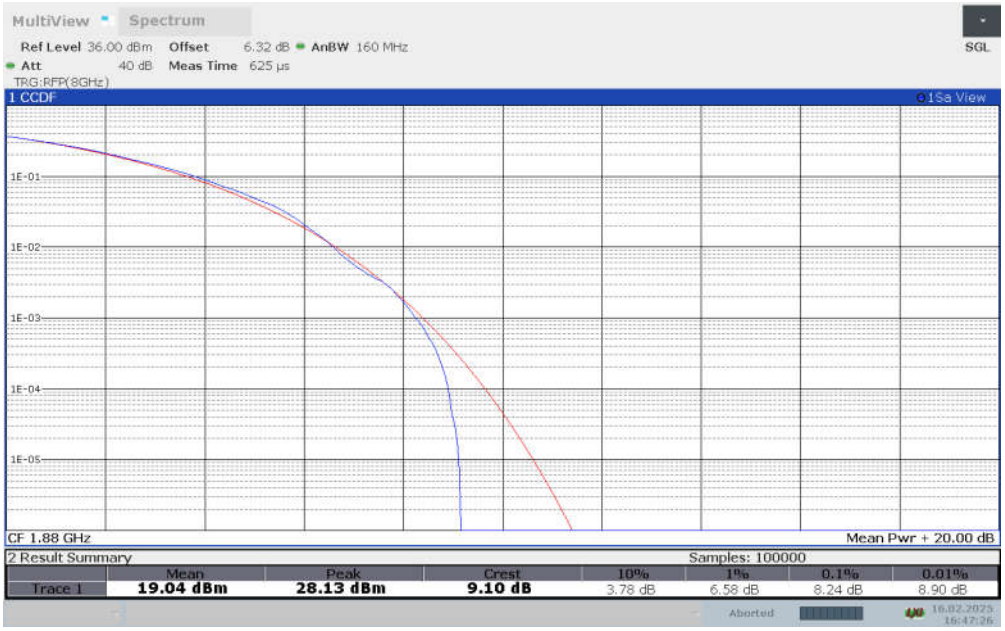
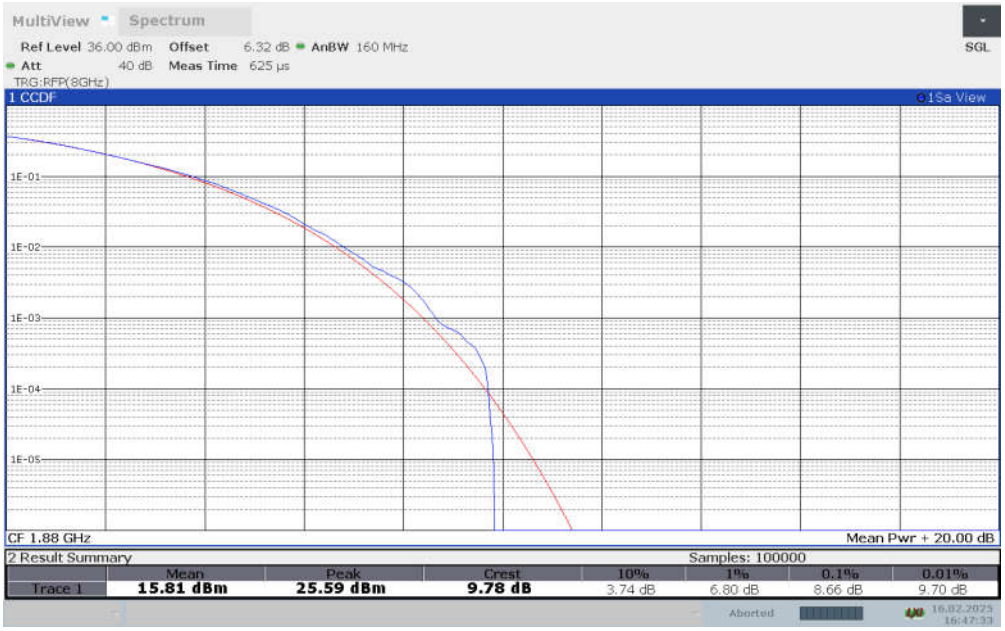


n2, CP-256QAM (PAPR)



n2, CP-QPSK (PAPR)

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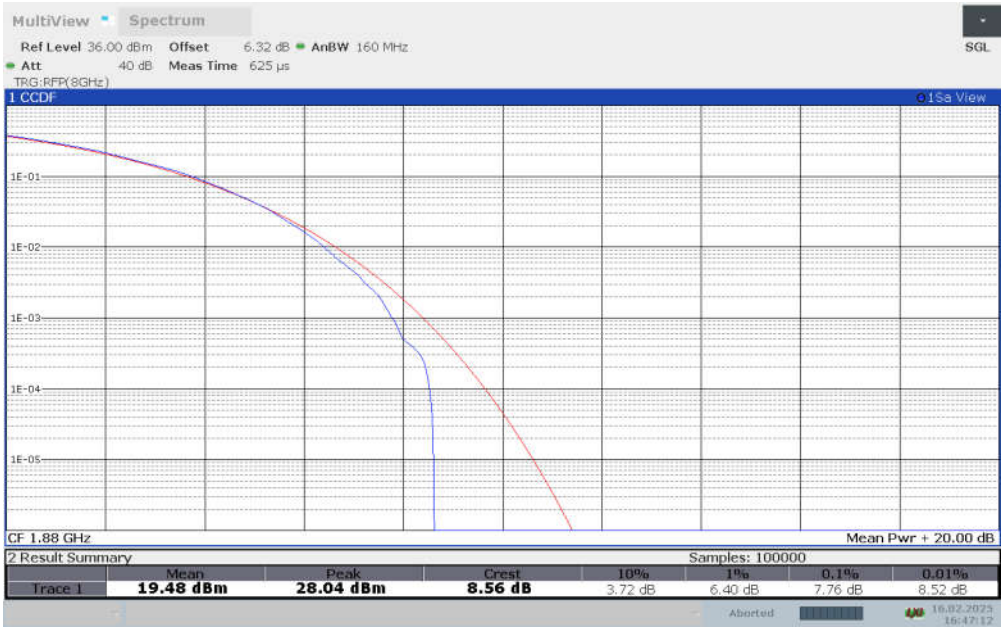
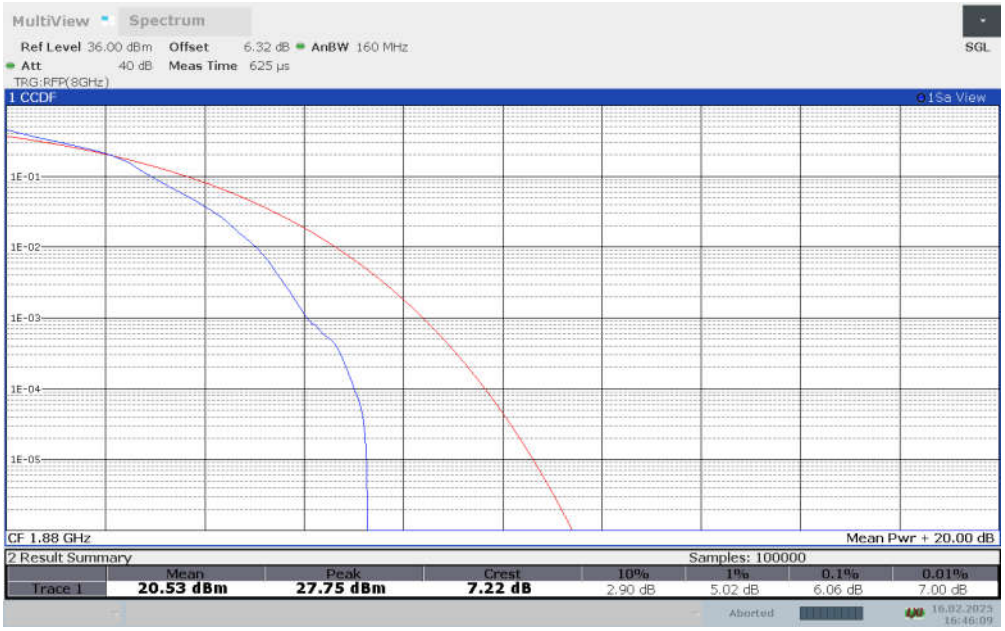


n2, DFT-s-16QAM (PAPR)



n2, DFT-s-64QAM (PAPR)

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