

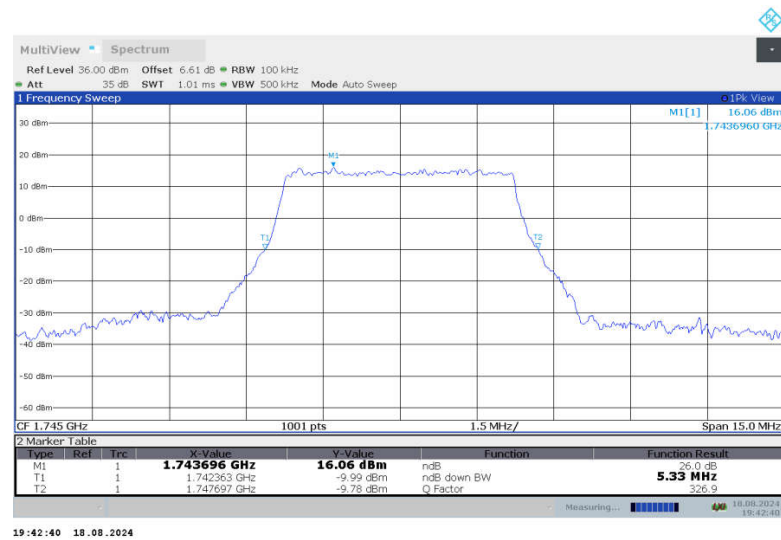


No.24T04N001537-009-RF NR

n66,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)

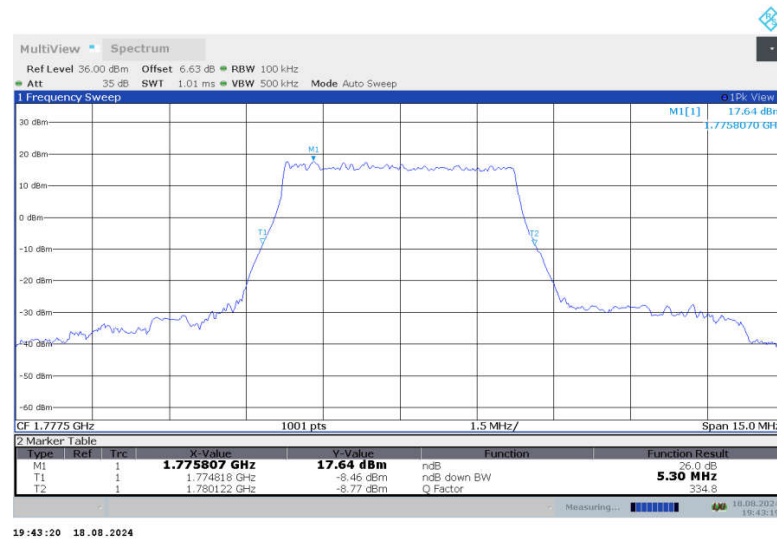


n66,5MHz Bandwidth,CP-QPSK (-26dBc BW)

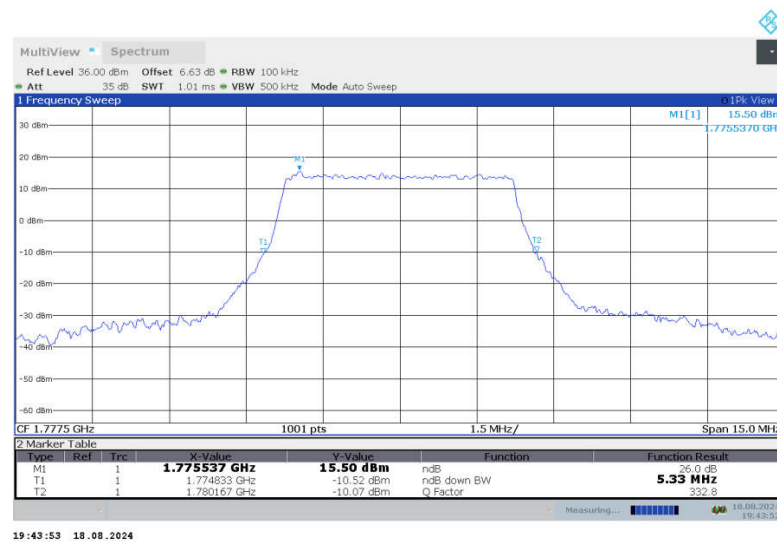




n66,5MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,5MHz Bandwidth,CP-QPSK (-26dBc BW)





n66

n66,10MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1715	9.890	10.310
1745	9.860	10.250
1775	9.800	10.250

n66,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,10MHz Bandwidth,CP-QPSK (-26dBc BW)



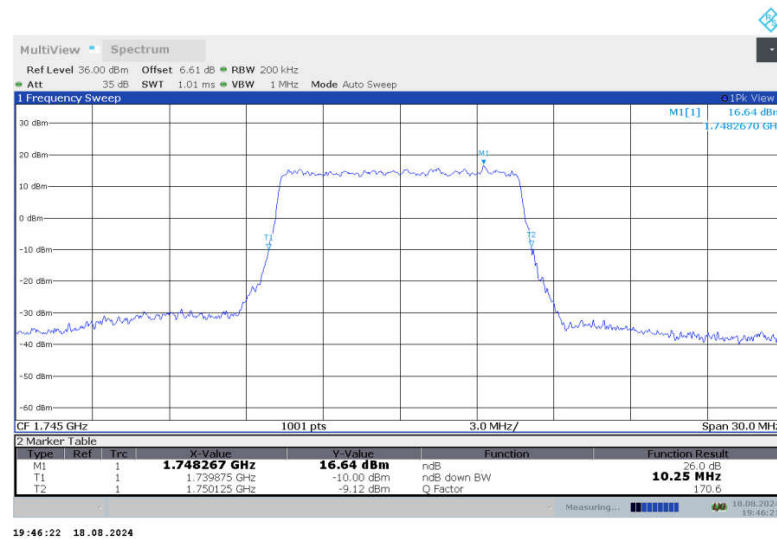


No.24T04N001537-009-RF NR

n66,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)

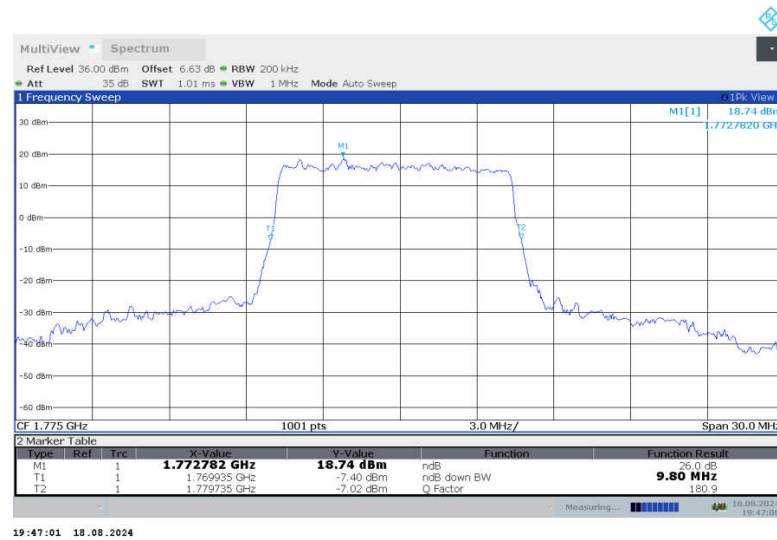


n66,10MHz Bandwidth,CP-QPSK (-26dBc BW)

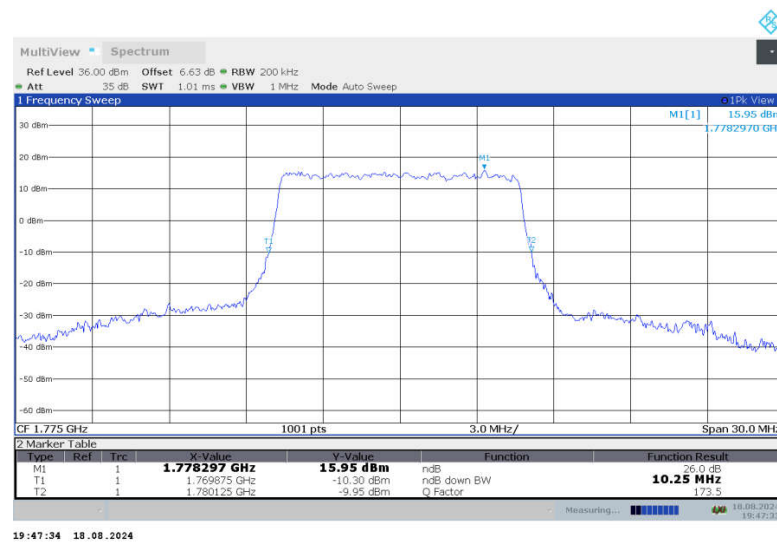




n66,10MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,10MHz Bandwidth,CP-QPSK (-26dBc BW)



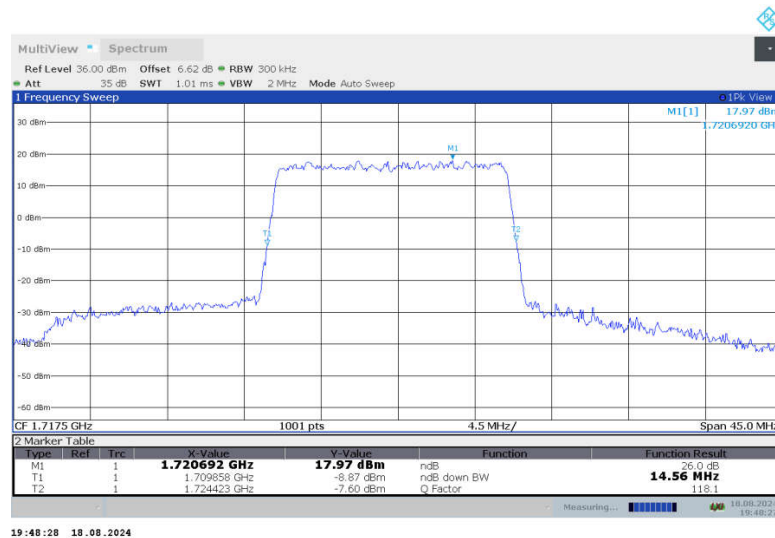


n66

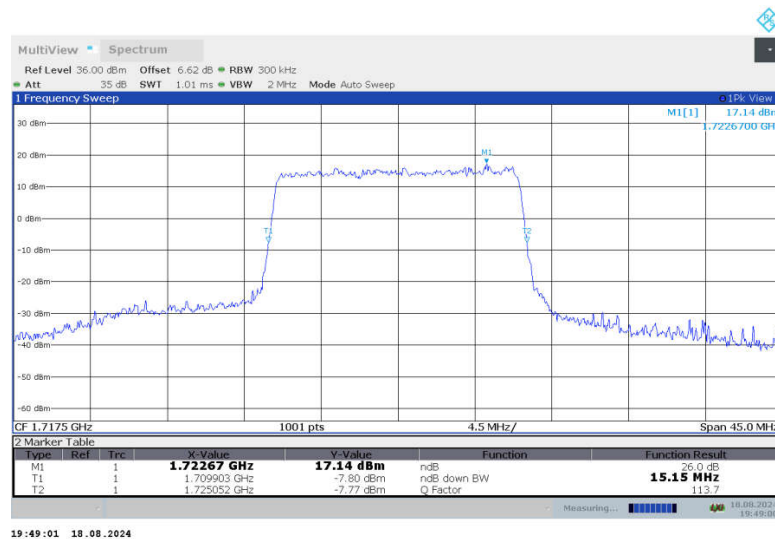
n66,15MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1717.5	14.565	15.150
1745	14.476	15.195
1772.5	14.520	15.285

n66,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



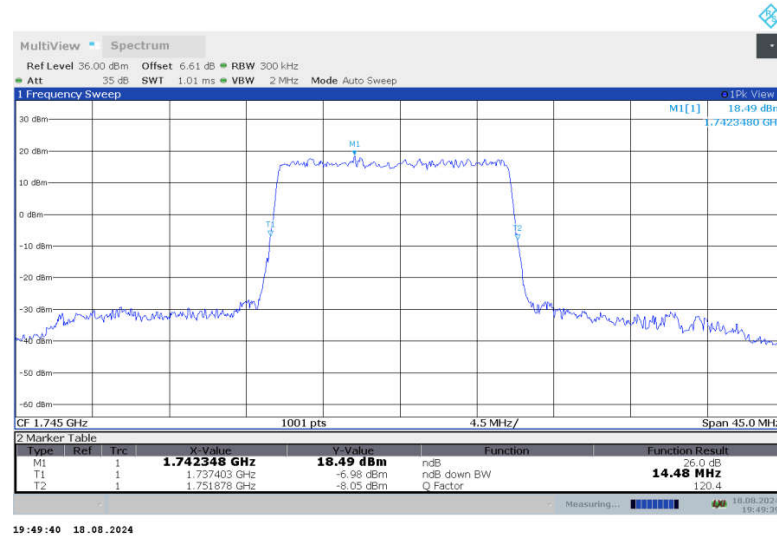
n66,15MHz Bandwidth,CP-QPSK (-26dBc BW)



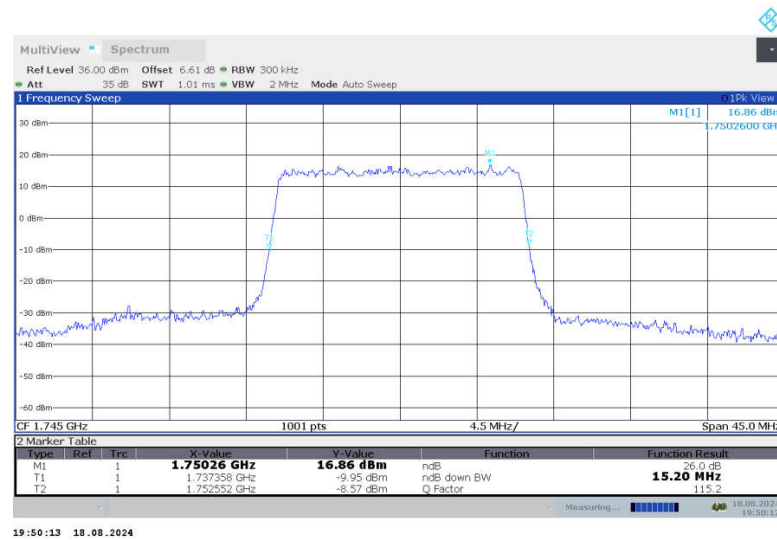


No.24T04N001537-009-RF NR

n66,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



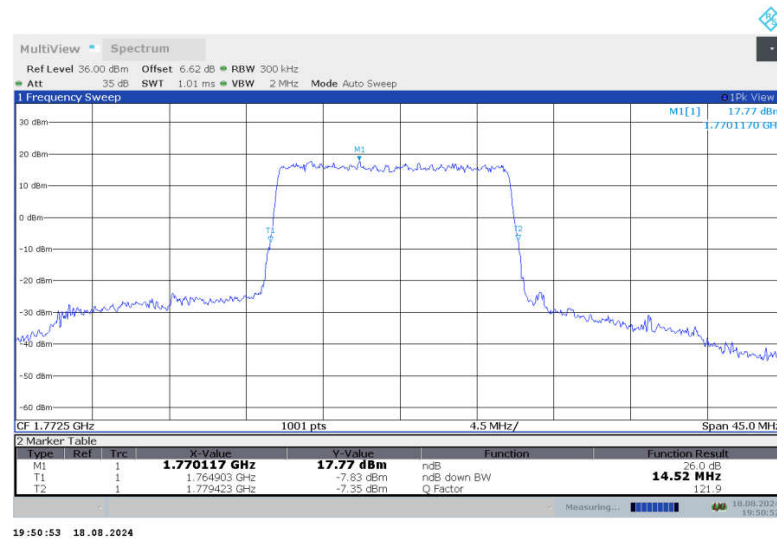
n66,15MHz Bandwidth,CP-QPSK (-26dBc BW)



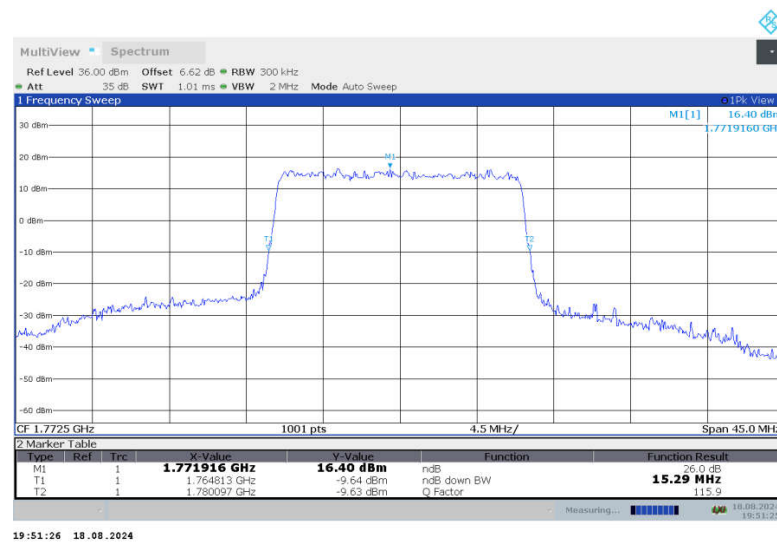


No.24T04N001537-009-RF NR

n66,15MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,15MHz Bandwidth,CP-QPSK (-26dBc BW)



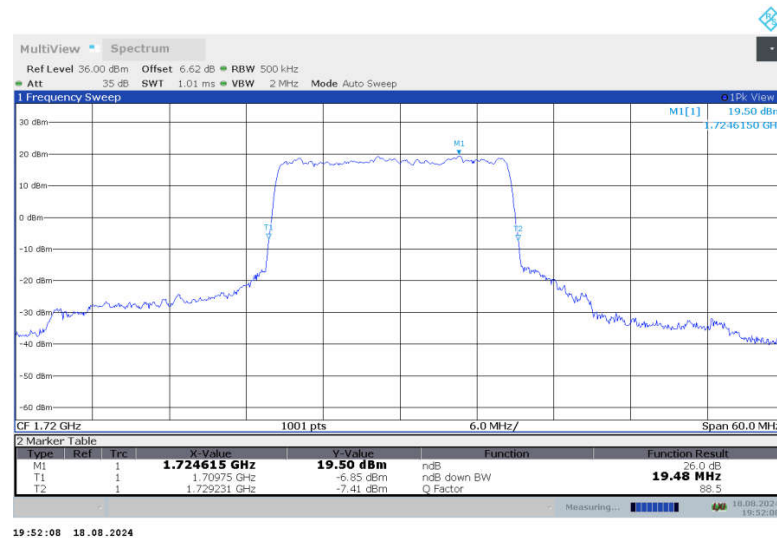


n66

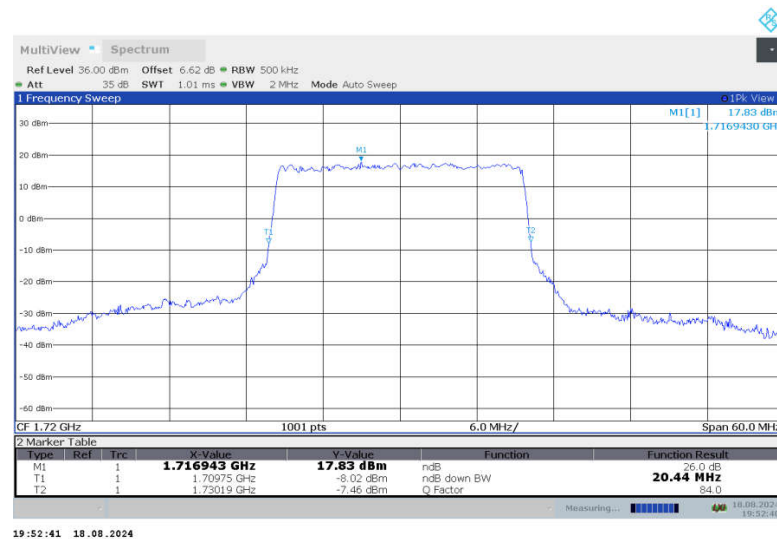
n66,20MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1720	19.481	20.440
1745	19.481	20.500
1770	19.421	20.500

n66,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,20MHz Bandwidth,CP-QPSK (-26dBc BW)



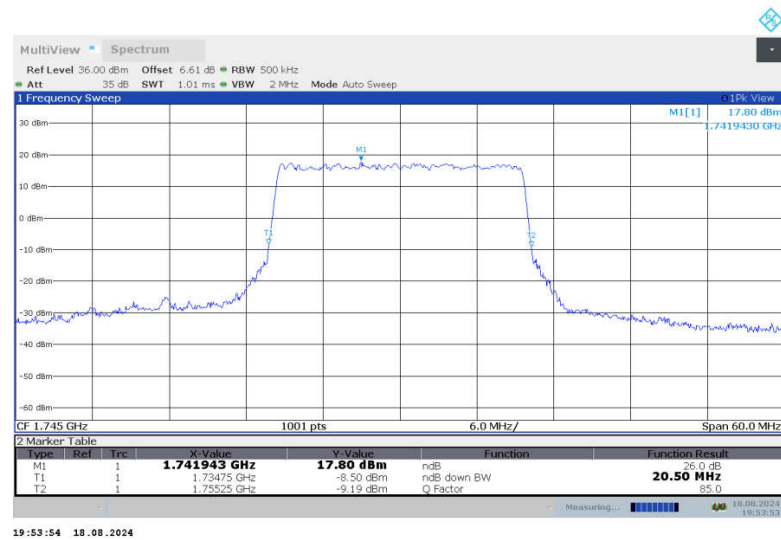


No.24T04N001537-009-RF NR

n66,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



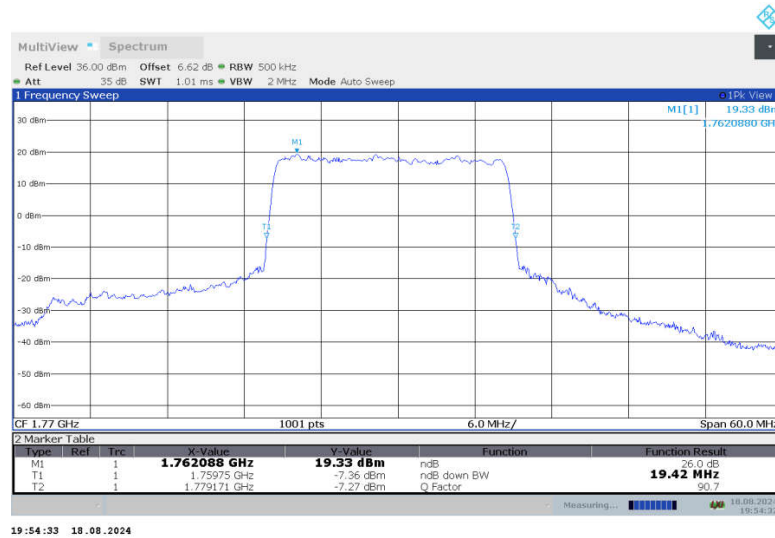
n66,20MHz Bandwidth,CP-QPSK (-26dBc BW)



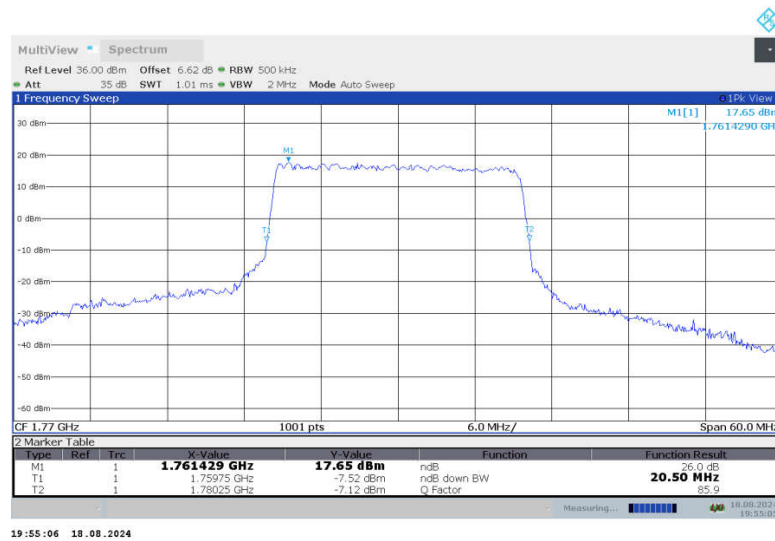


No.24T04N001537-009-RF NR

n66,20MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,20MHz Bandwidth,CP-QPSK (-26dBc BW)





n66

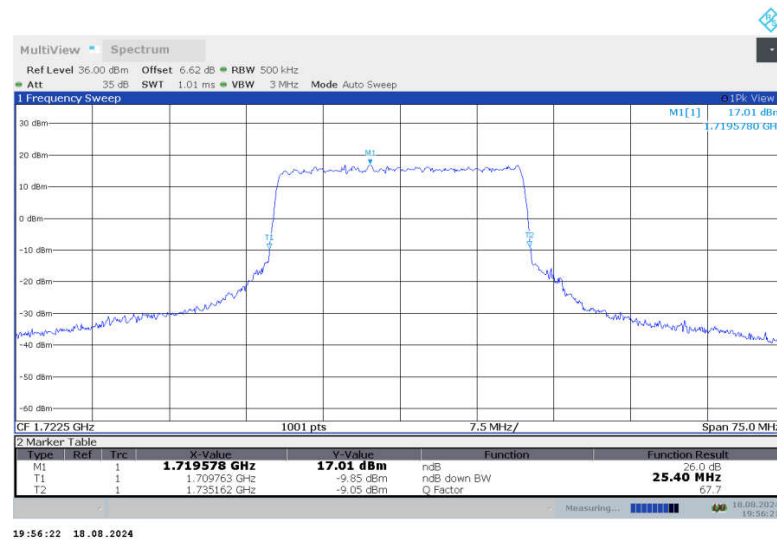
n66,25MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1722.5	24.575	25.400
1745	24.500	25.400
1767.5	24.575	25.475

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



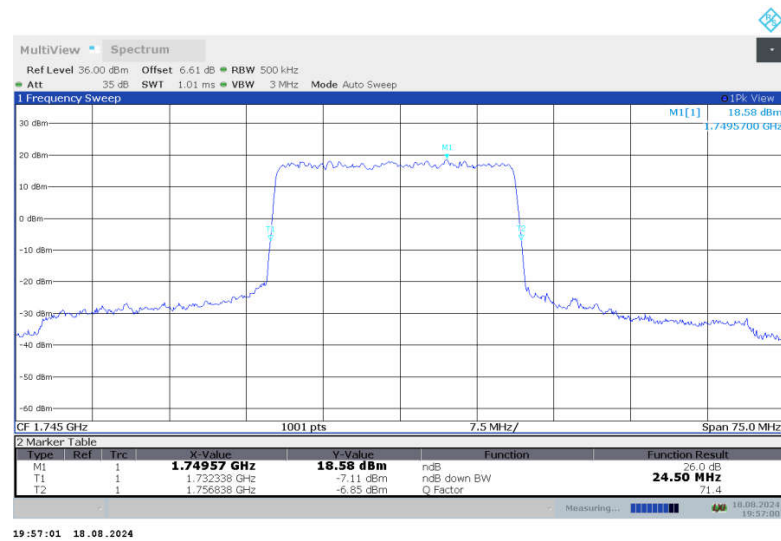
n66,25MHz Bandwidth,CP-QPSK (-26dBc BW)



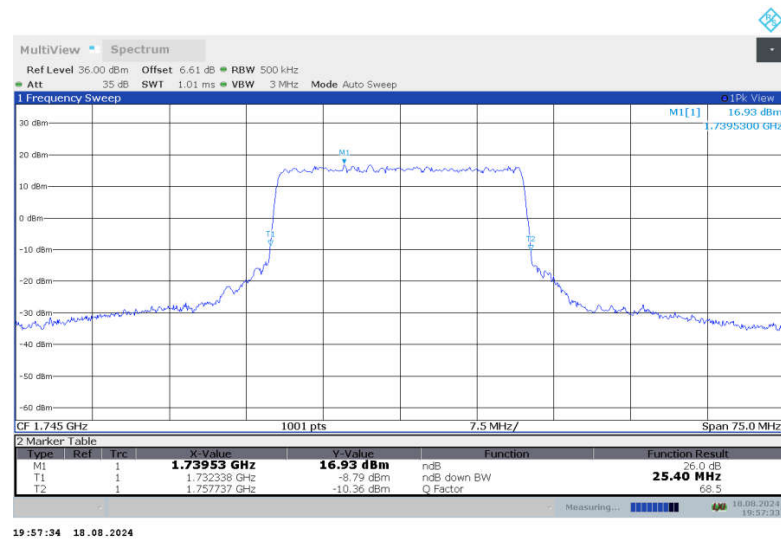


No.24T04N001537-009-RF NR

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



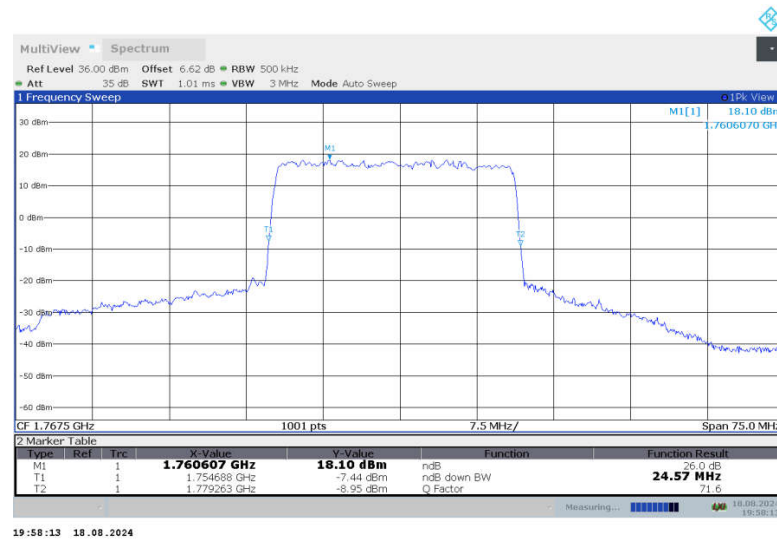
n66,25MHz Bandwidth,CP-QPSK (-26dBc BW)



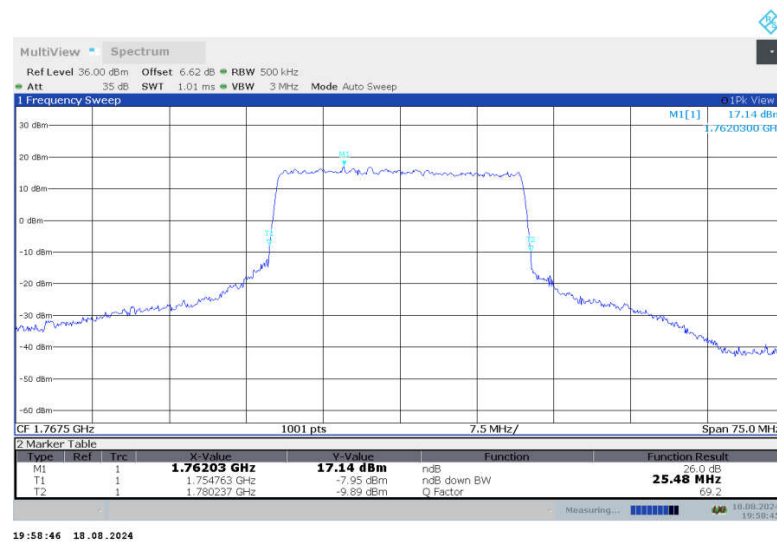


No.24T04N001537-009-RF NR

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



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



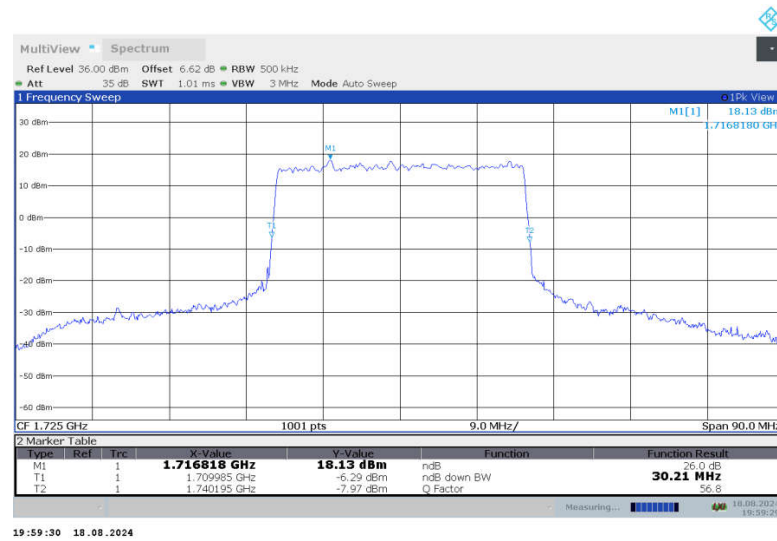


n66

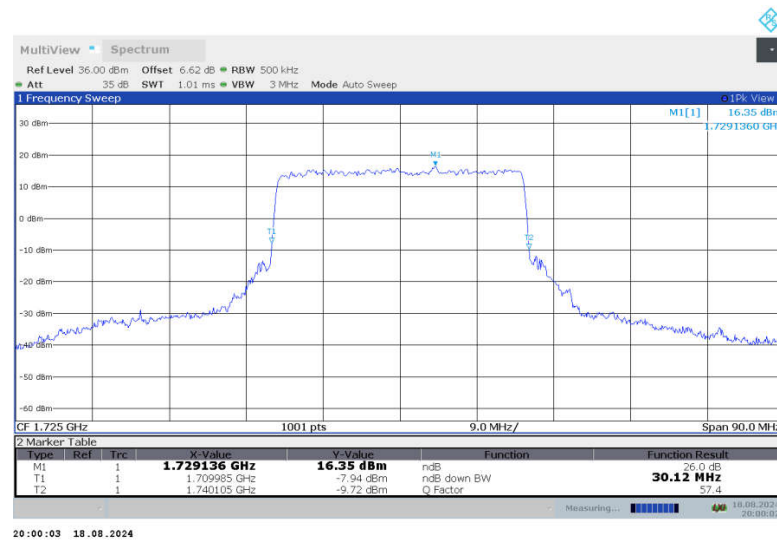
n66,30MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1725	30.210	30.120
1745	30.300	30.210
1765	30.300	30.210

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



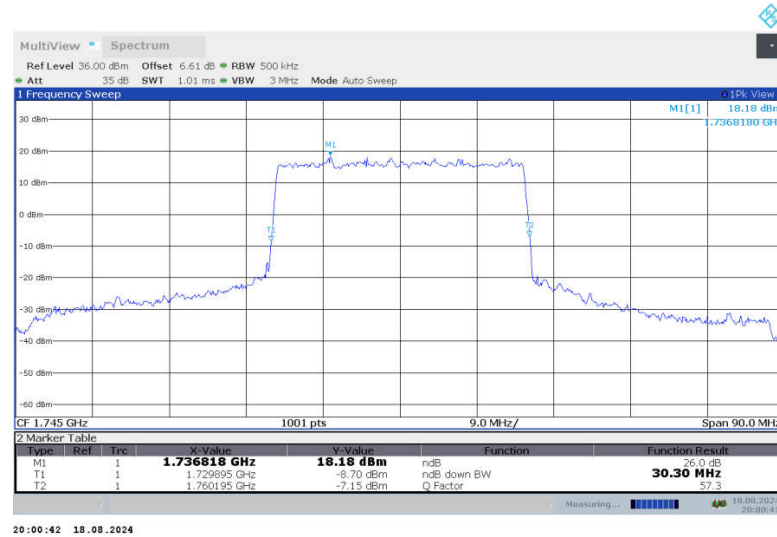
n66,30MHz Bandwidth,CP-QPSK (-26dBc BW)



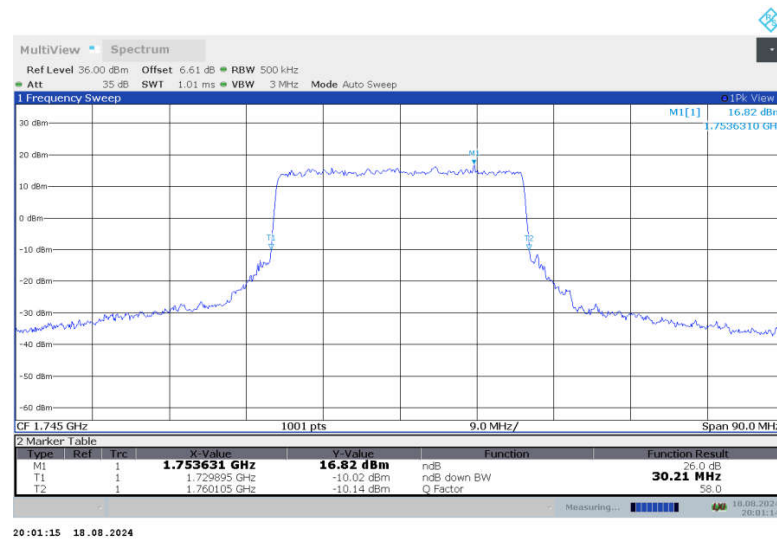


No.24T04N001537-009-RF NR

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

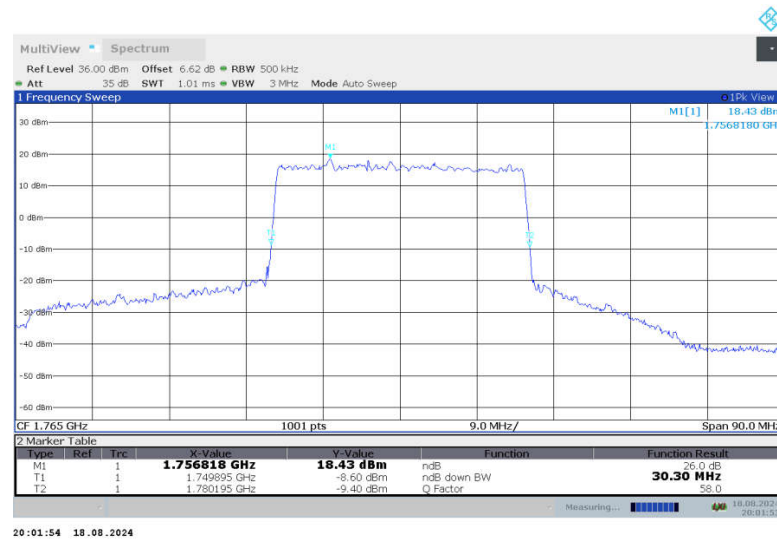


n66,30MHz Bandwidth,CP-QPSK (-26dBc BW)

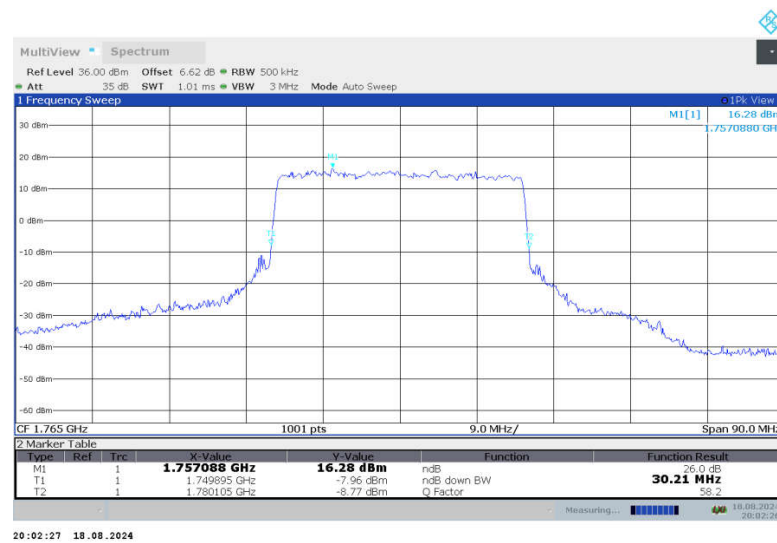




n66,30MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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



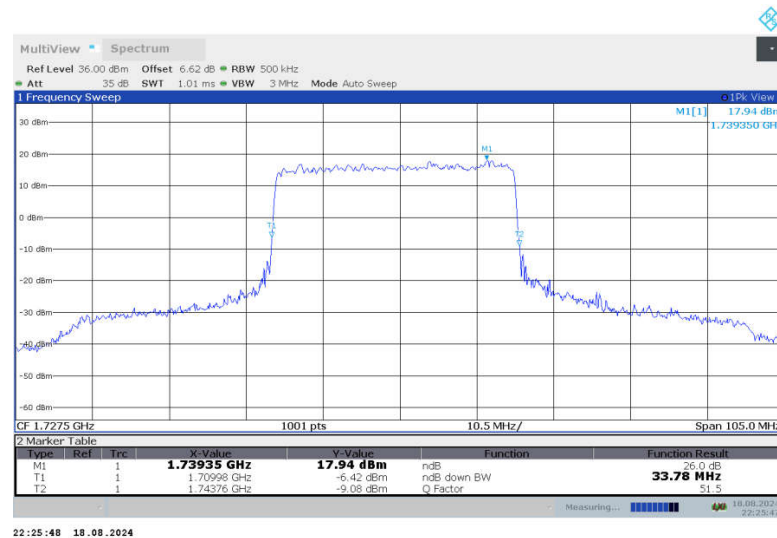


n66

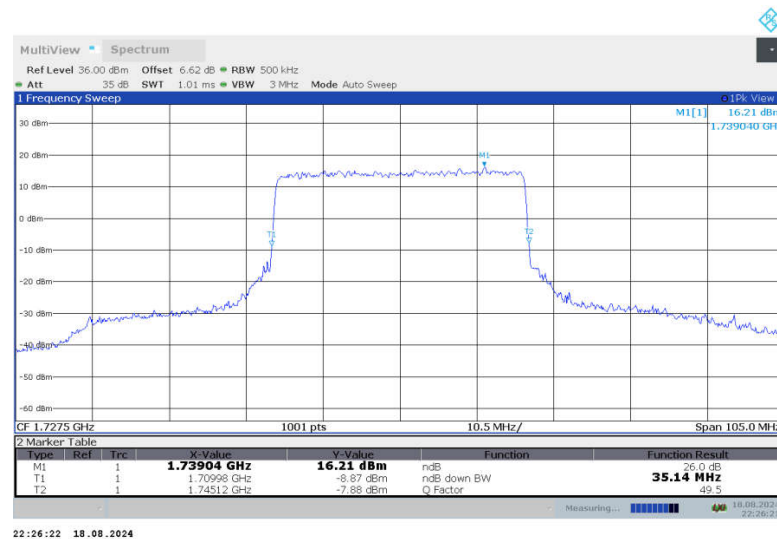
n66,35MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1727.5	33.780	35.140
1745	33.780	35.140
1762.5	33.780	35.240

n66,35MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



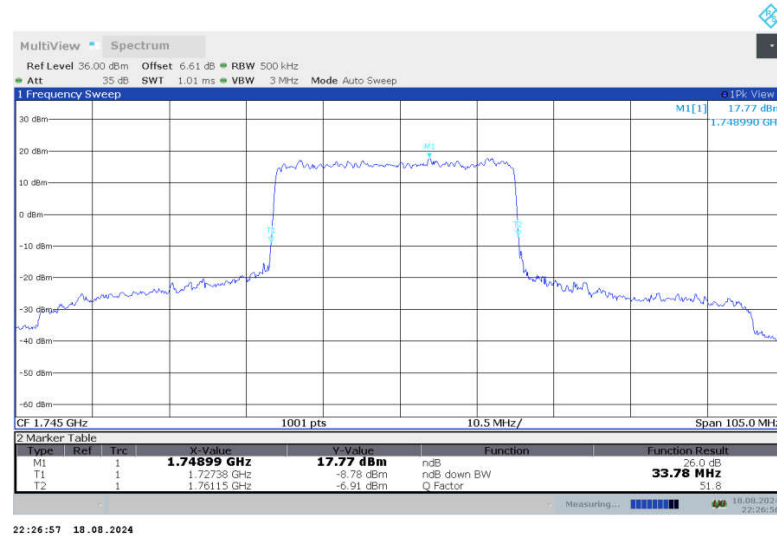
n66,35MHz Bandwidth,CP-QPSK (-26dBc BW)



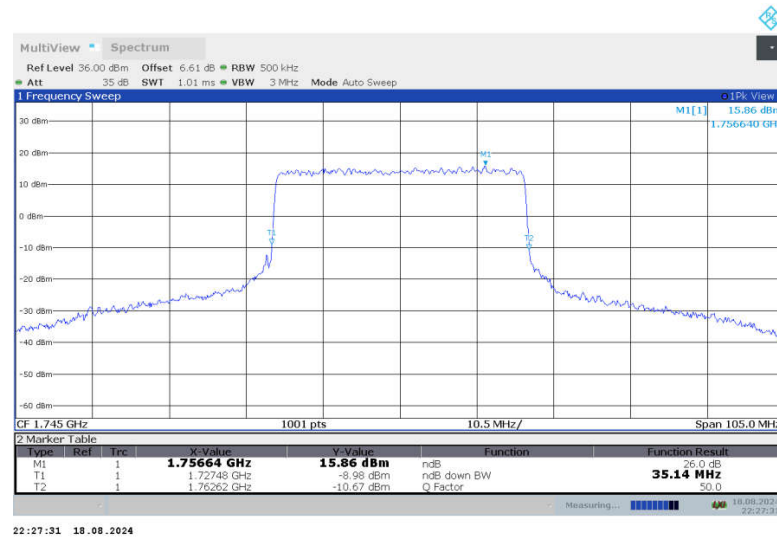


No.24T04N001537-009-RF NR

n66,35MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



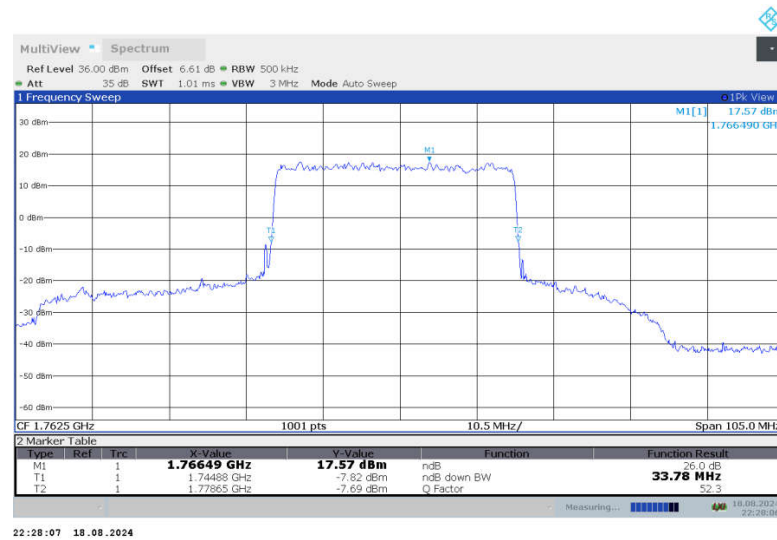
n66,35MHz Bandwidth,CP-QPSK (-26dBc BW)



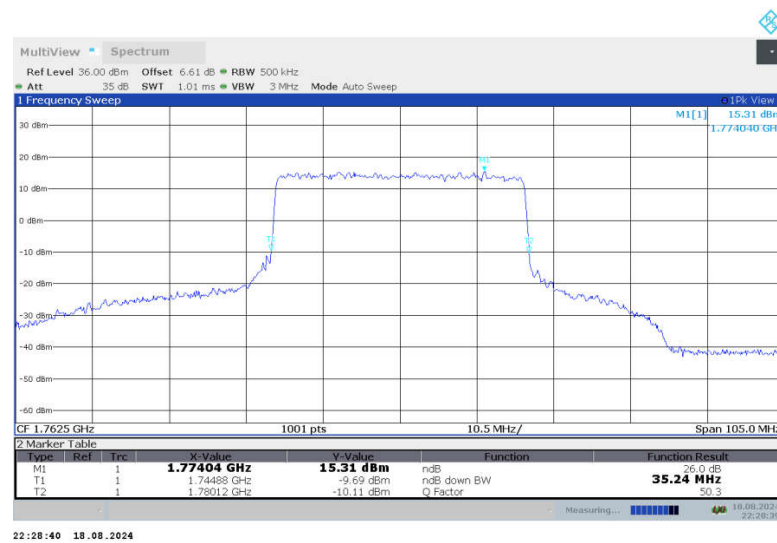


No.24T04N001537-009-RF NR

n66,35MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



n66,35MHz Bandwidth,CP-QPSK (-26dBc BW)



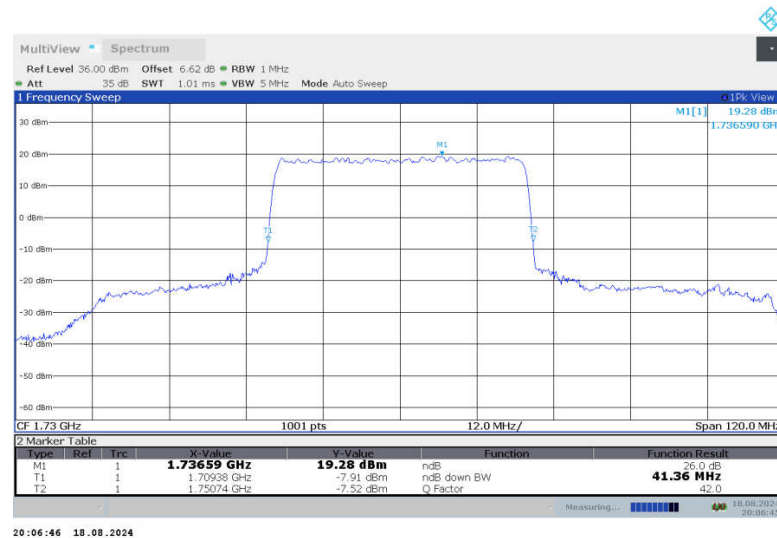


n66

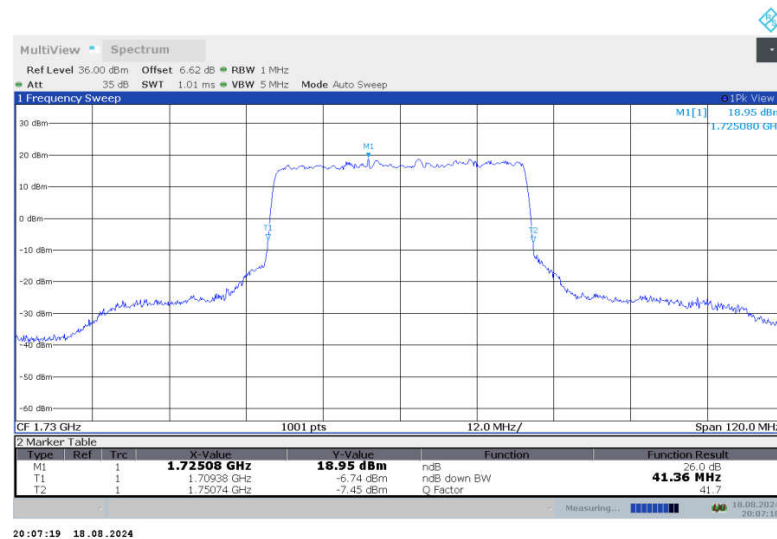
n66,40MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1730	41.360	41.360
1745	41.360	41.360
1760	41.240	41.240

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



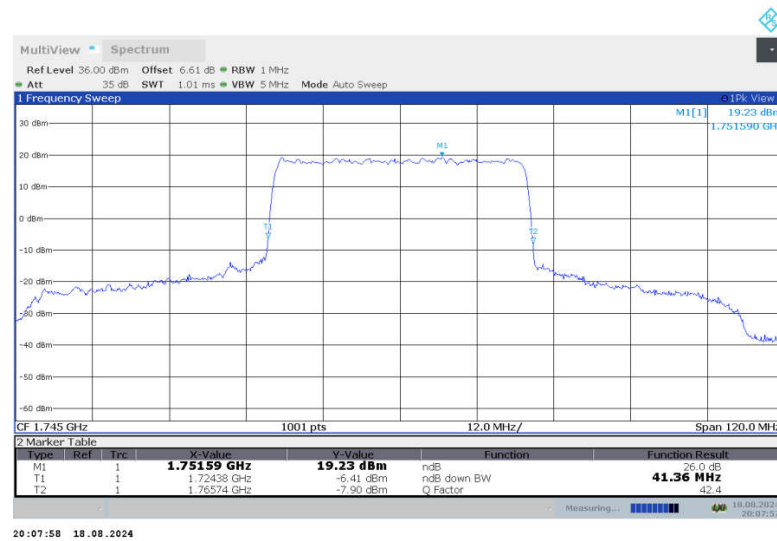
n66,40MHz Bandwidth,CP-QPSK (-26dBc BW)



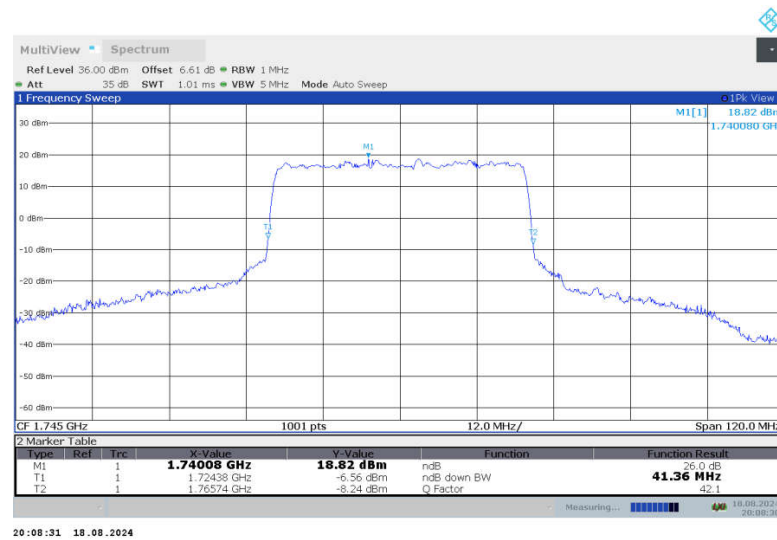


No.24T04N001537-009-RF NR

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

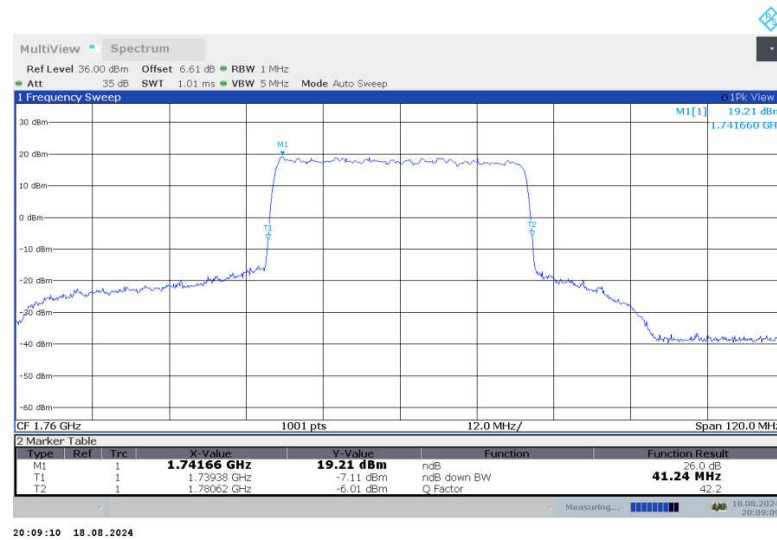


n66,40MHz Bandwidth,CP-QPSK (-26dBc BW)

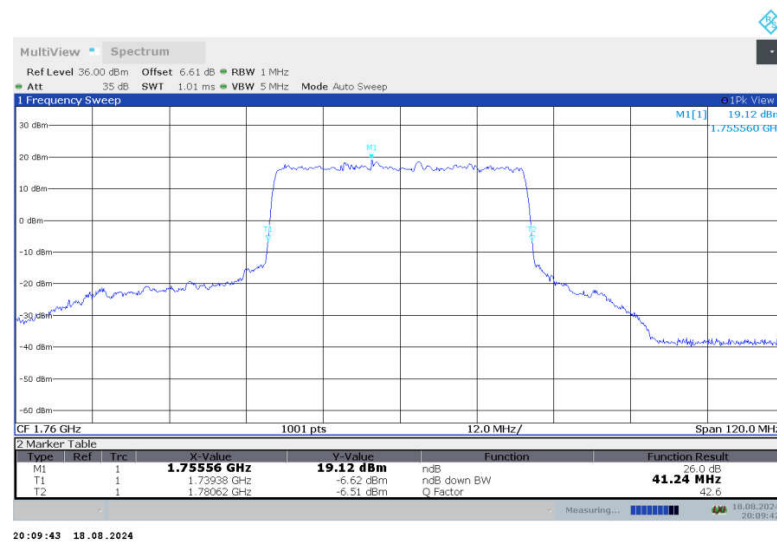




n66,40MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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



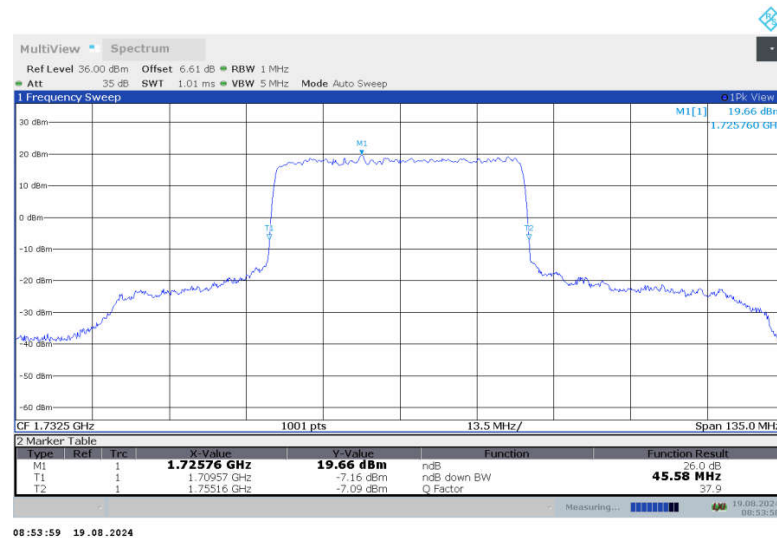


n66

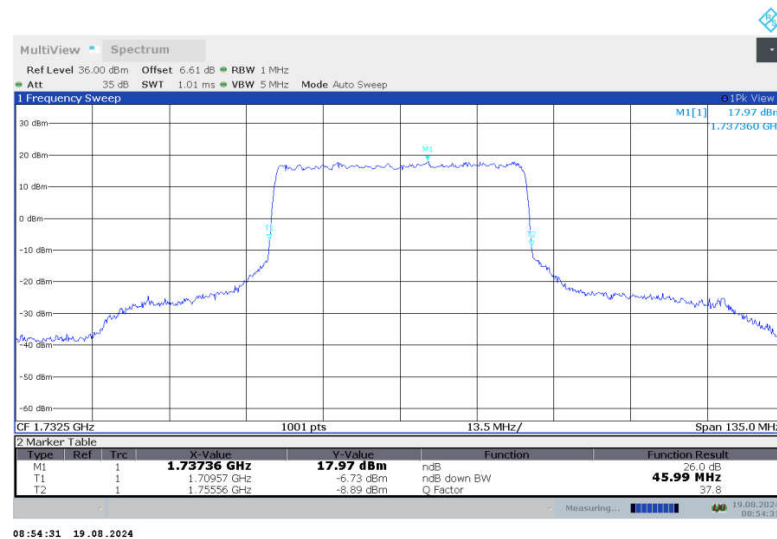
n66,45MHz(-26dBc)

Frequency (MHz)	Emission Bandwidth (-26dBc) (MHz)	
	DFT-s-QPSK	CP-QPSK
1732.5	45.580	45.990
1745	45.580	46.120
1757.5	45.580	46.120

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



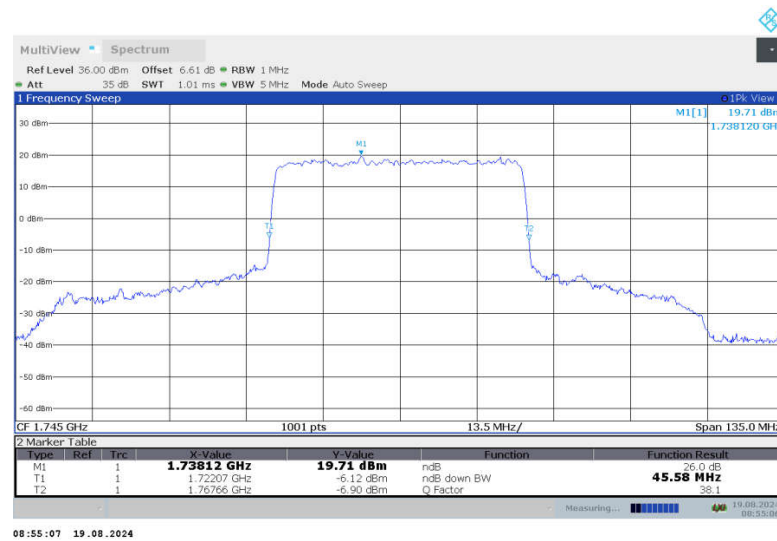
n66,45MHz Bandwidth,CP-QPSK (-26dBc BW)



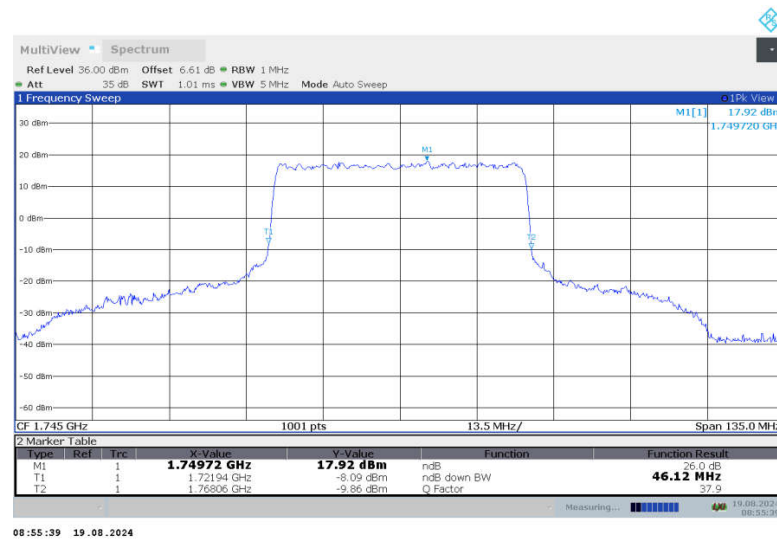


No.24T04N001537-009-RF NR

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



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

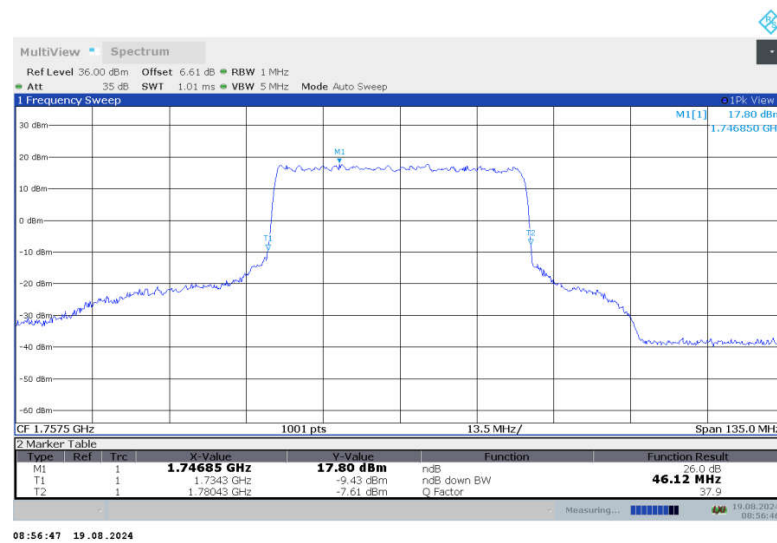




n66,45MHz Bandwidth,DFT-s-QPSK (-26dBc BW)



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



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 than $43 + 10 \log(P)$ 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.

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

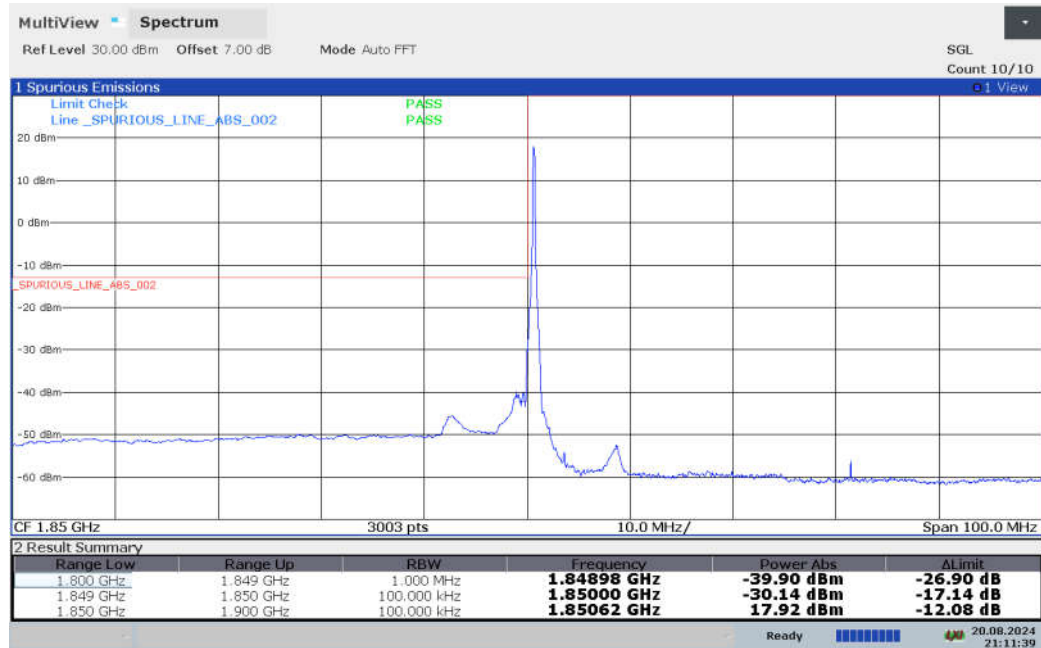
A.6.2 Measurement result

Only worst case result is given below

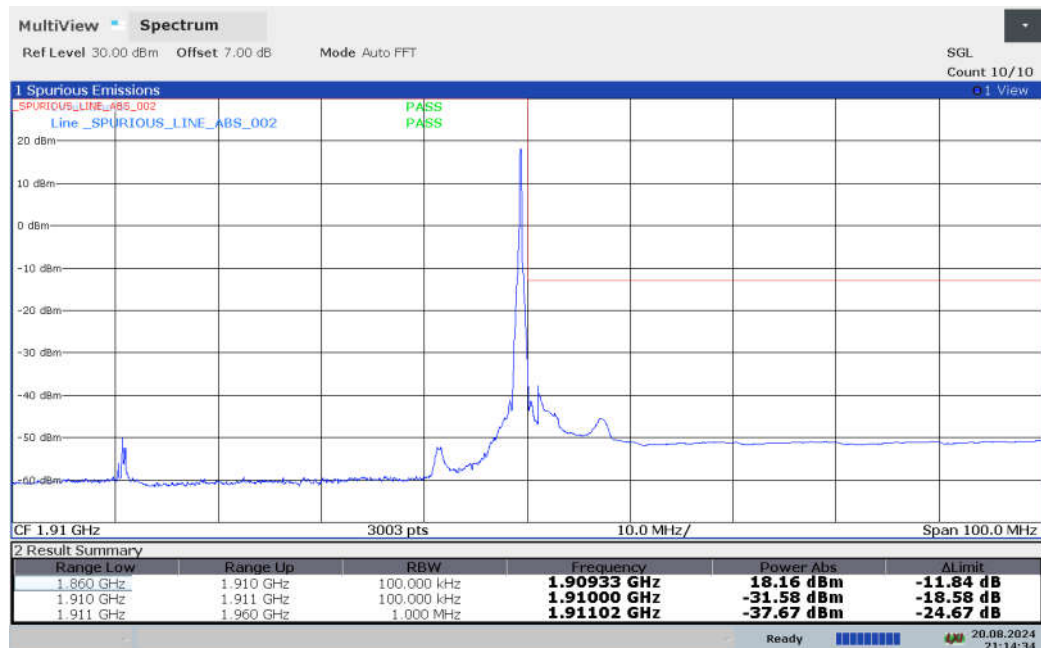


n2

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



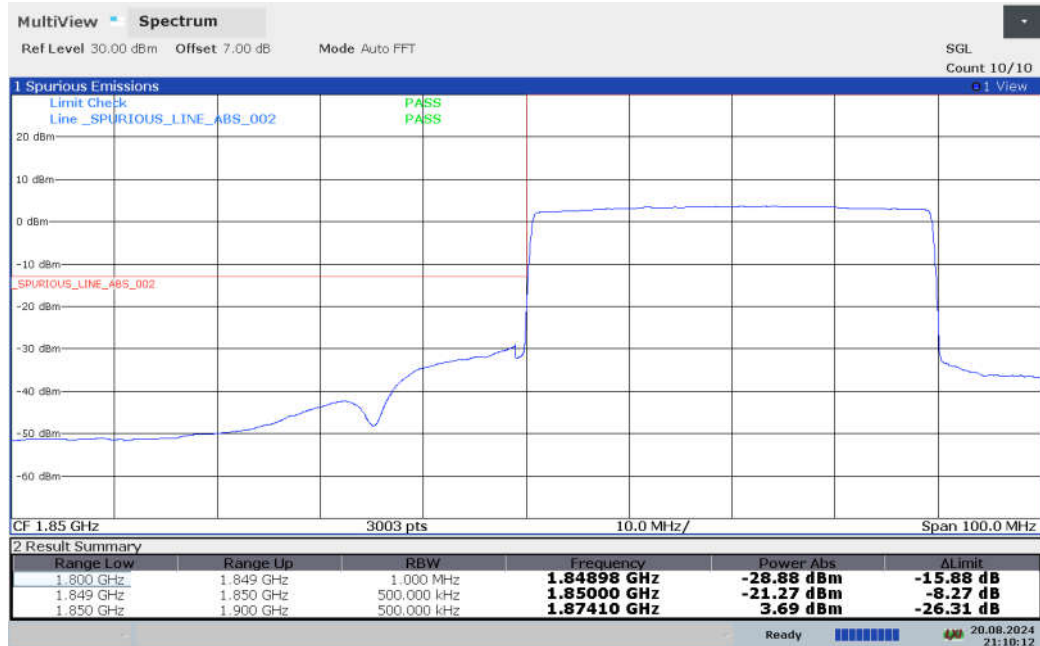
HIGH BAND EDGE BLOCK-40M-1RB-HIGH_offset



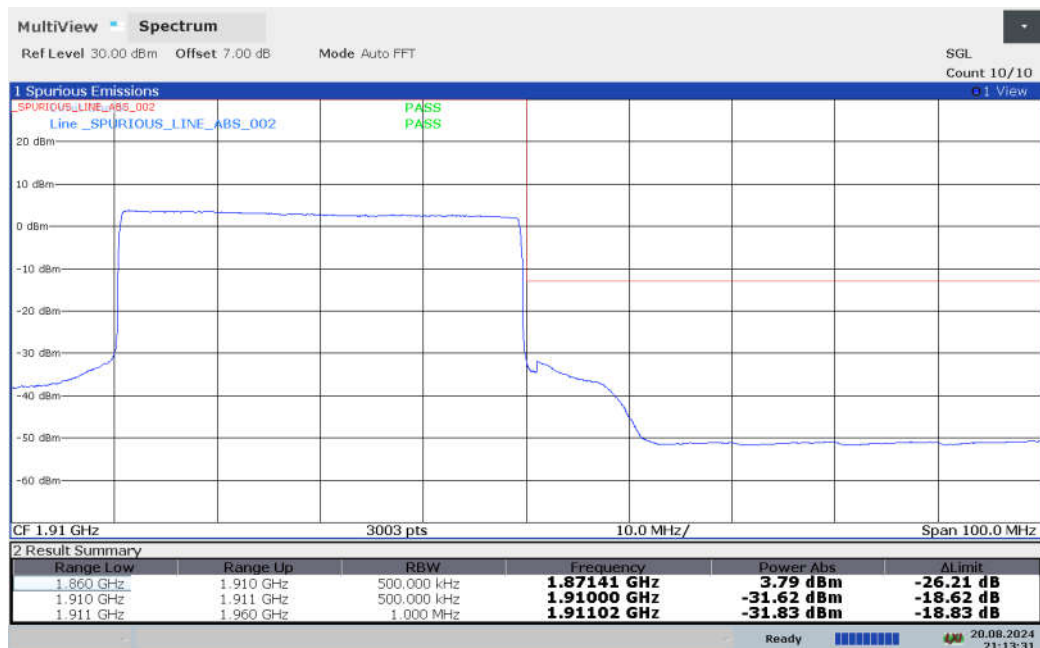


No.24T04N001537-009-RF NR

LOW BAND EDGE BLOCK-40M-100%RB



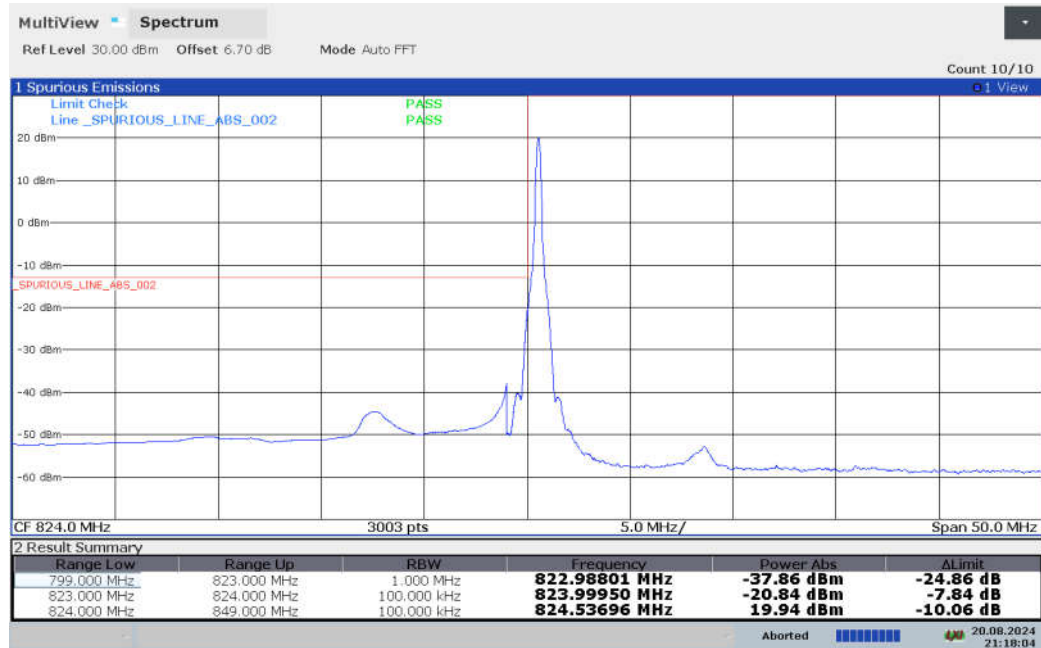
HIGH BAND EDGE BLOCK-40M-100%RB



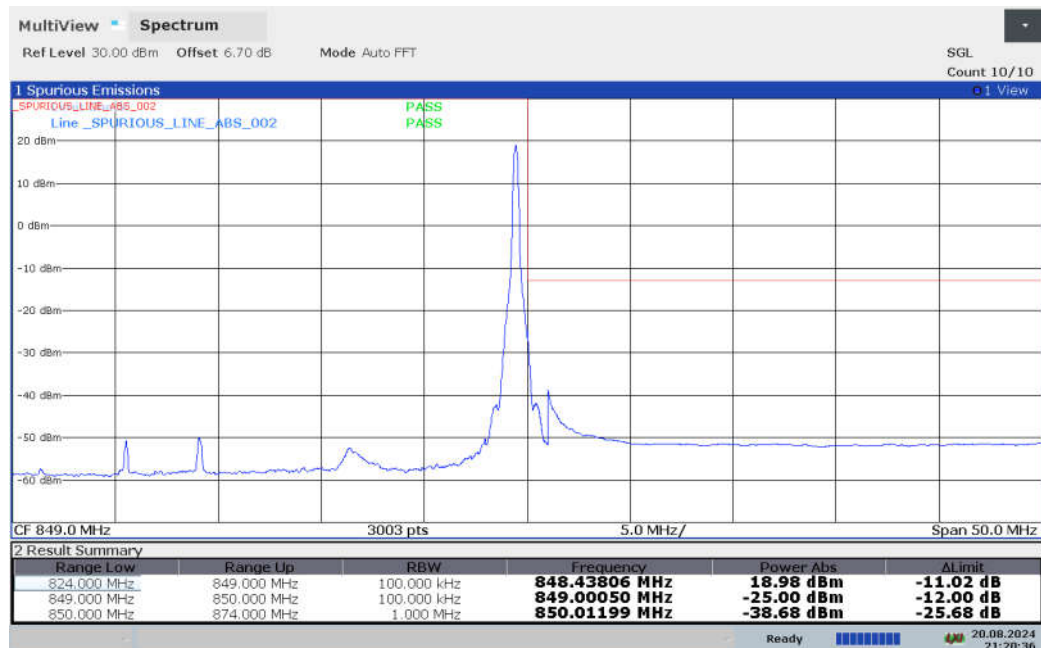


n5

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



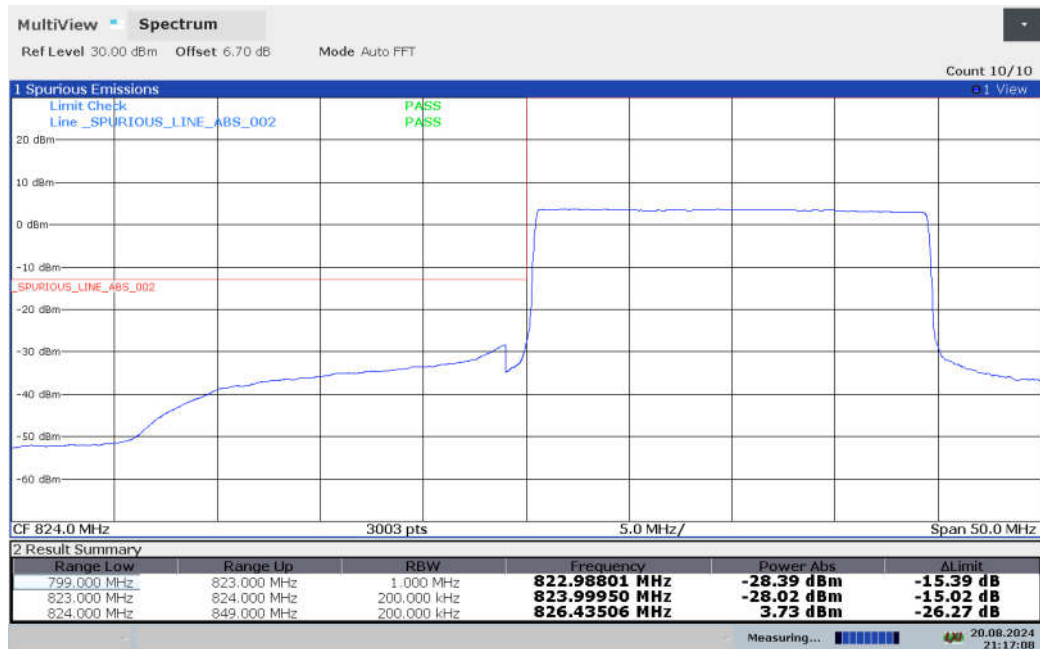
HIGH BAND EDGE BLOCK-20M-1RB-HIGH_offset





No.24T04N001537-009-RF NR

LOW BAND EDGE BLOCK-20M-100%RB



HIGH BAND EDGE BLOCK-20M-100%RB



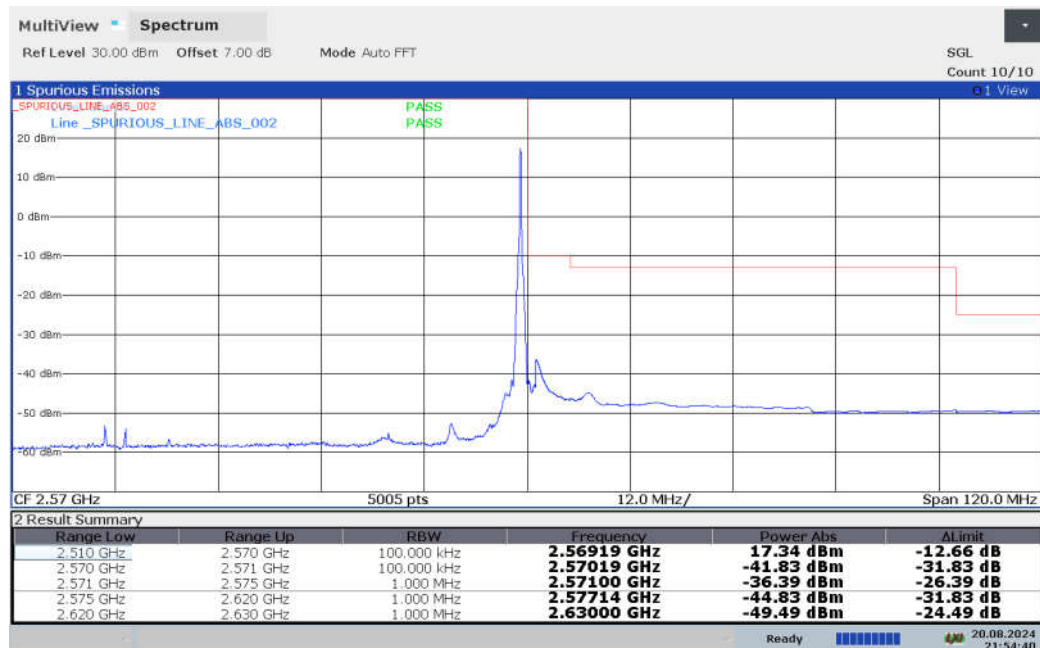


n7

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



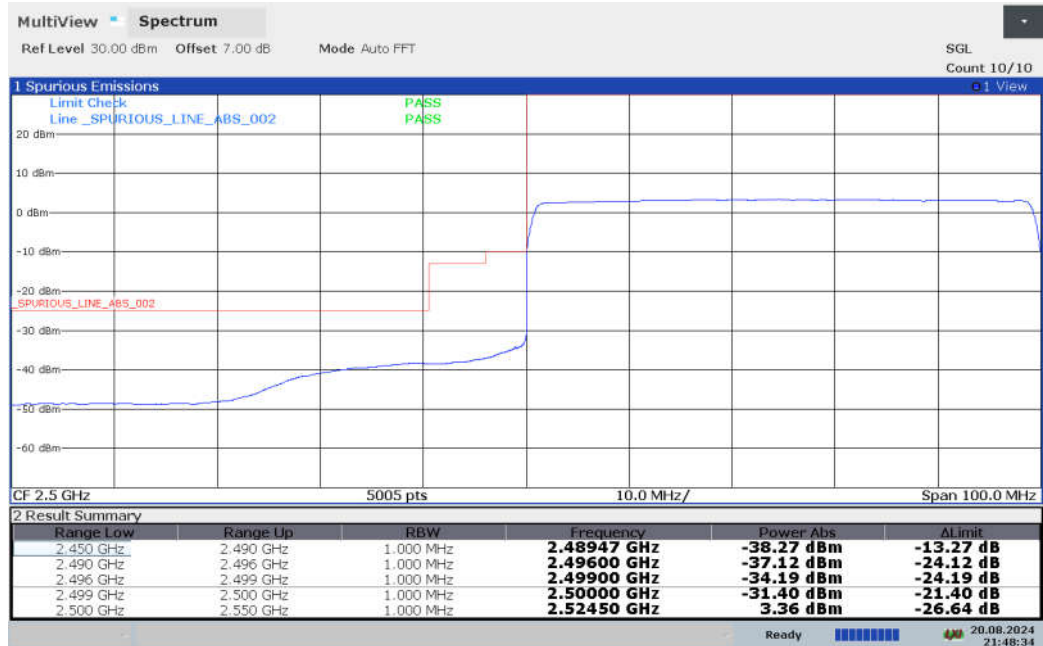
HIGH BAND EDGE BLOCK-50M-1RB-HIGH_offset



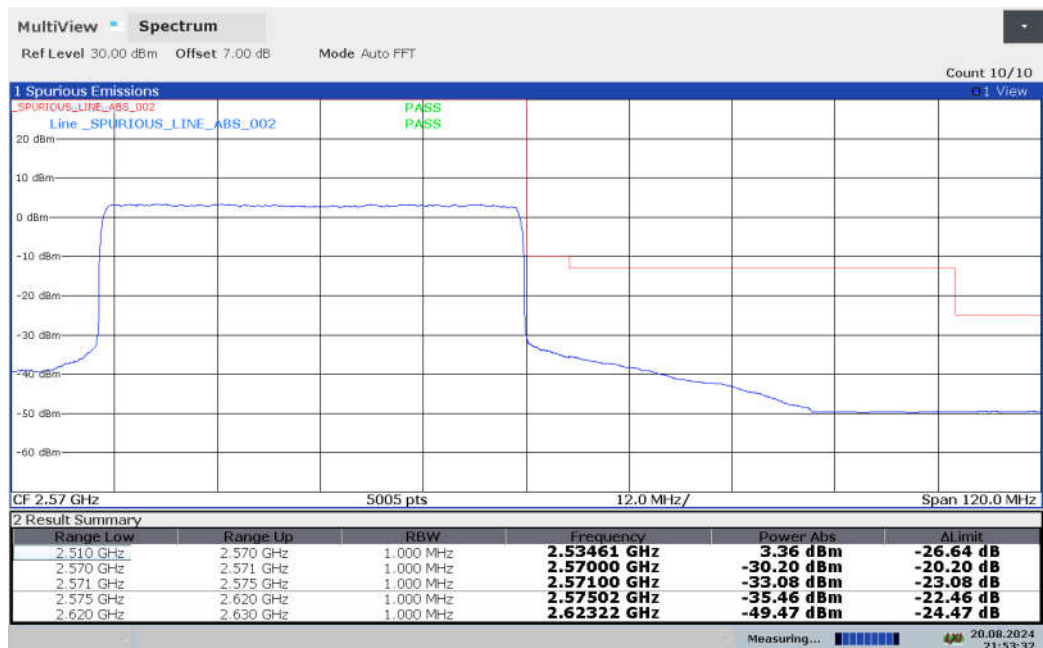


No.24T04N001537-009-RF NR

LOW BAND EDGE BLOCK-50M-100%RB



HIGH BAND EDGE BLOCK-50M-100%RB

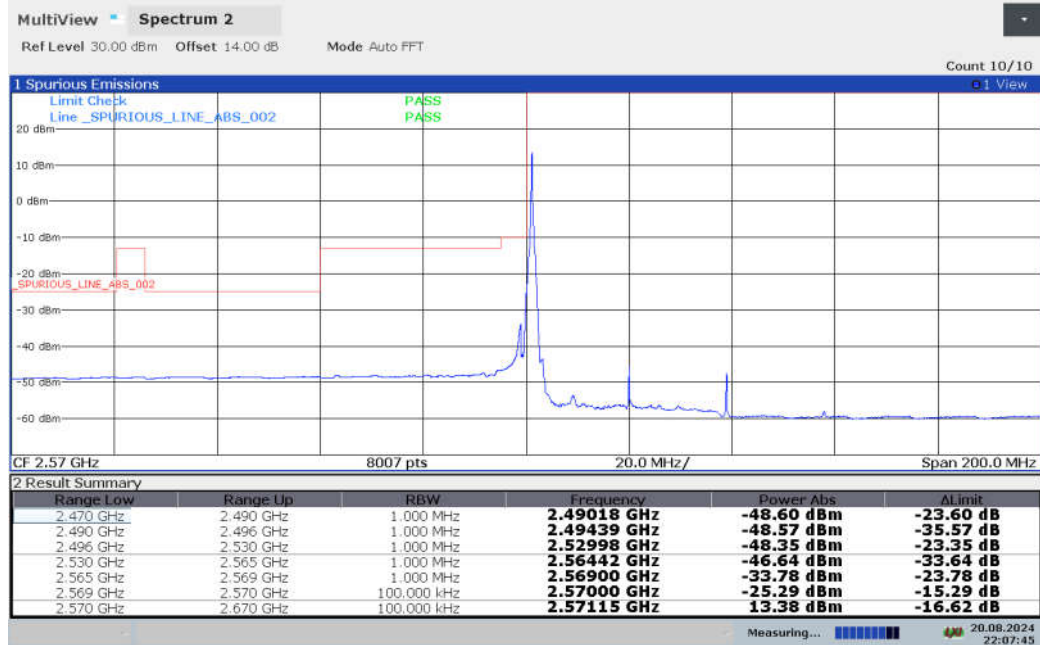




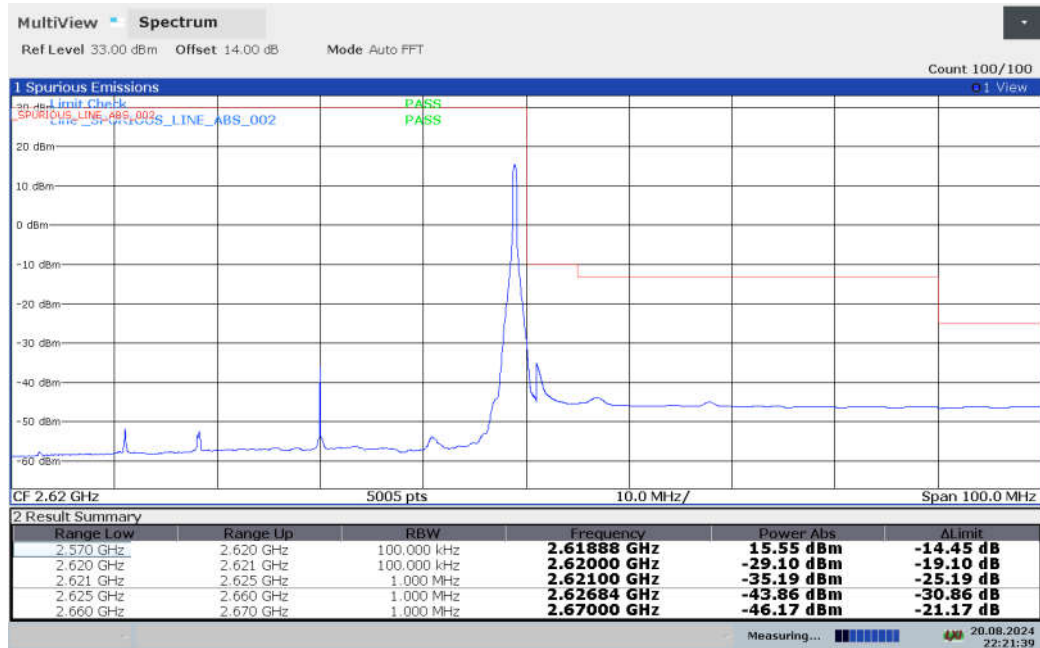
No.24T04N001537-009-RF NR

n38

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



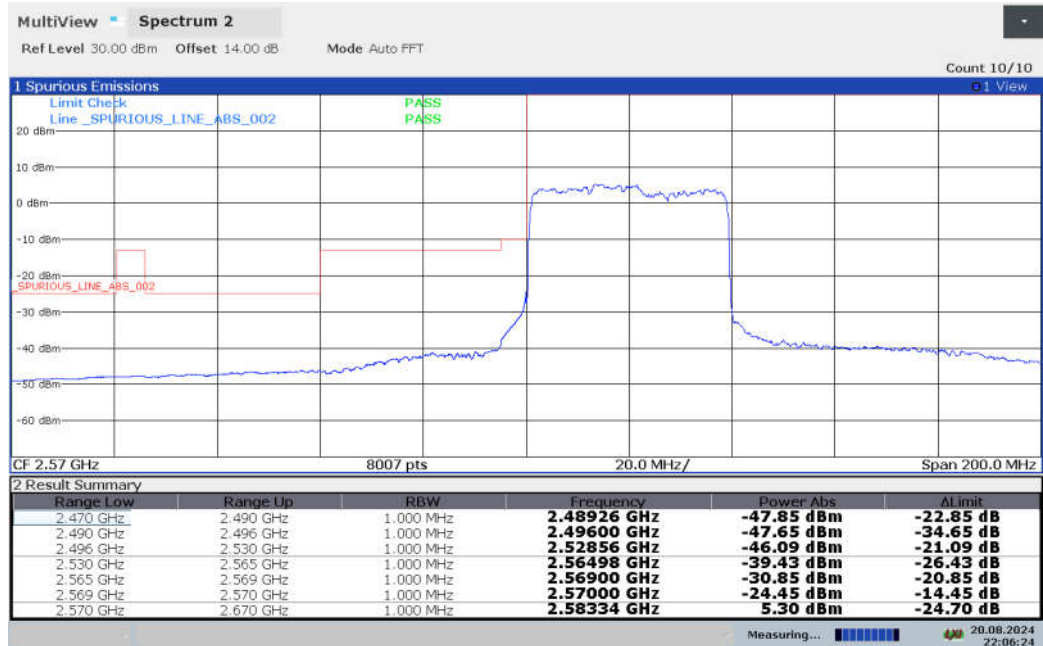
HIGH BAND EDGE BLOCK-40M-1RB-HIGH_offset



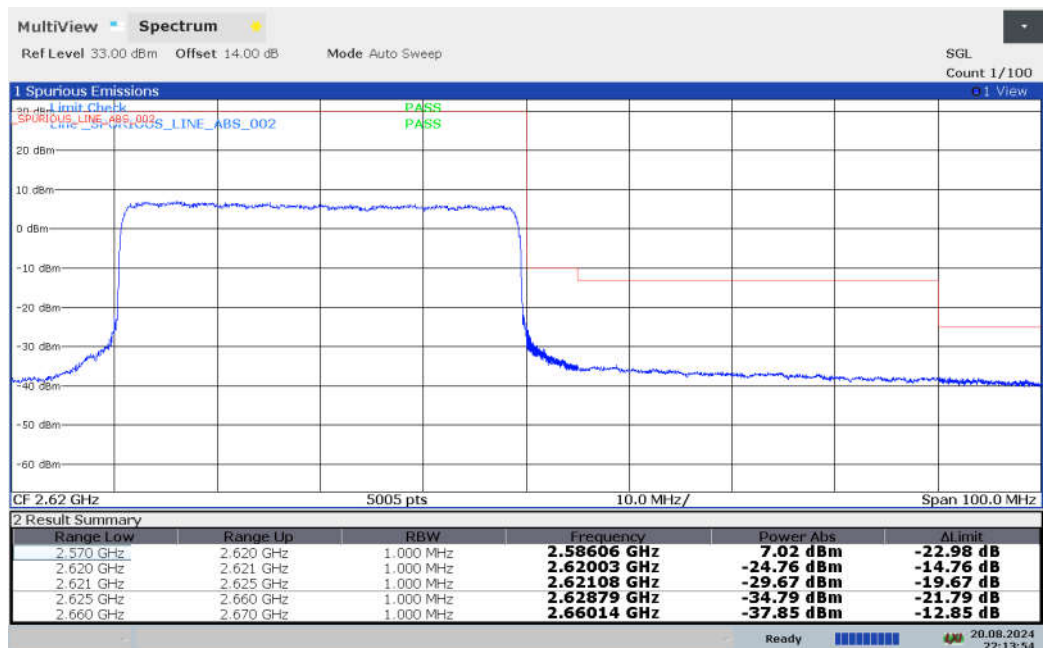


No.24T04N001537-009-RF NR

LOW BAND EDGE BLOCK-40M-100%RB



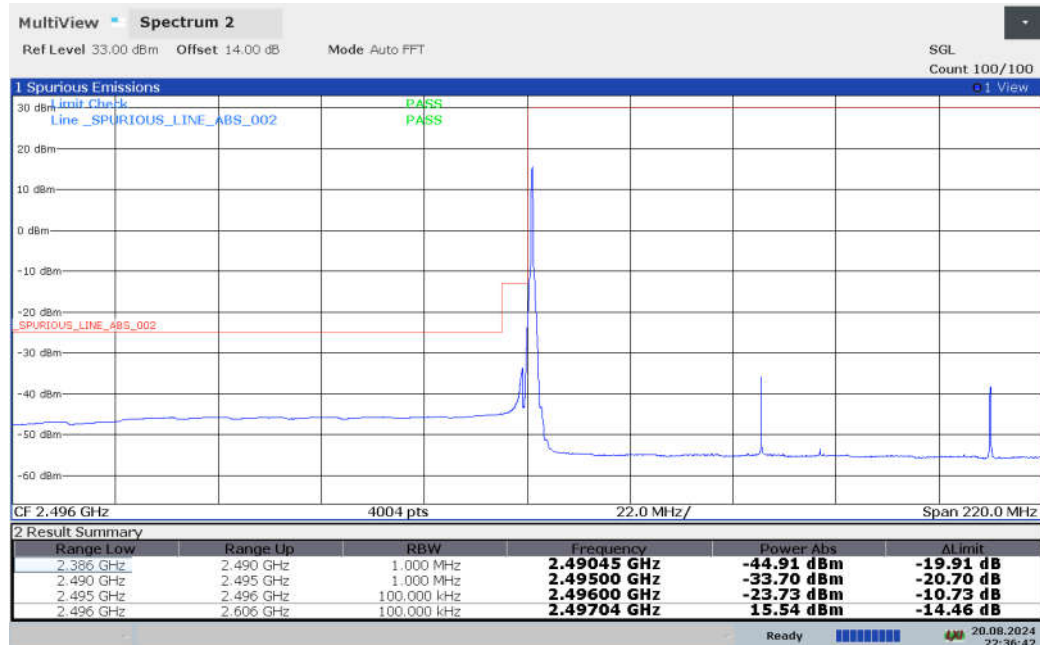
HIGH BAND EDGE BLOCK-40M-100%RB



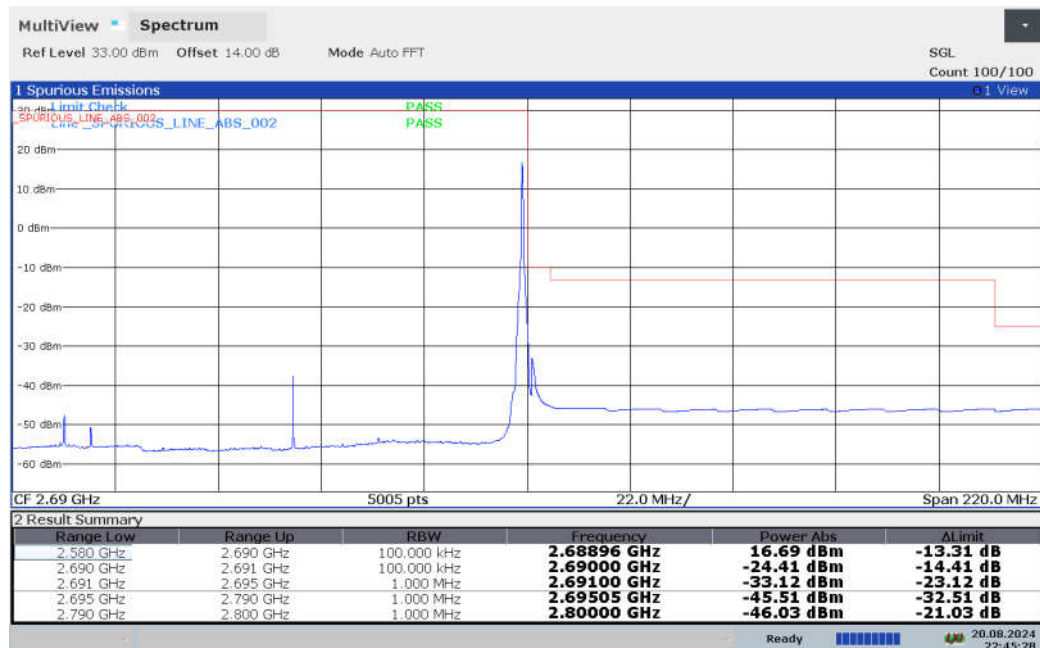


n41

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



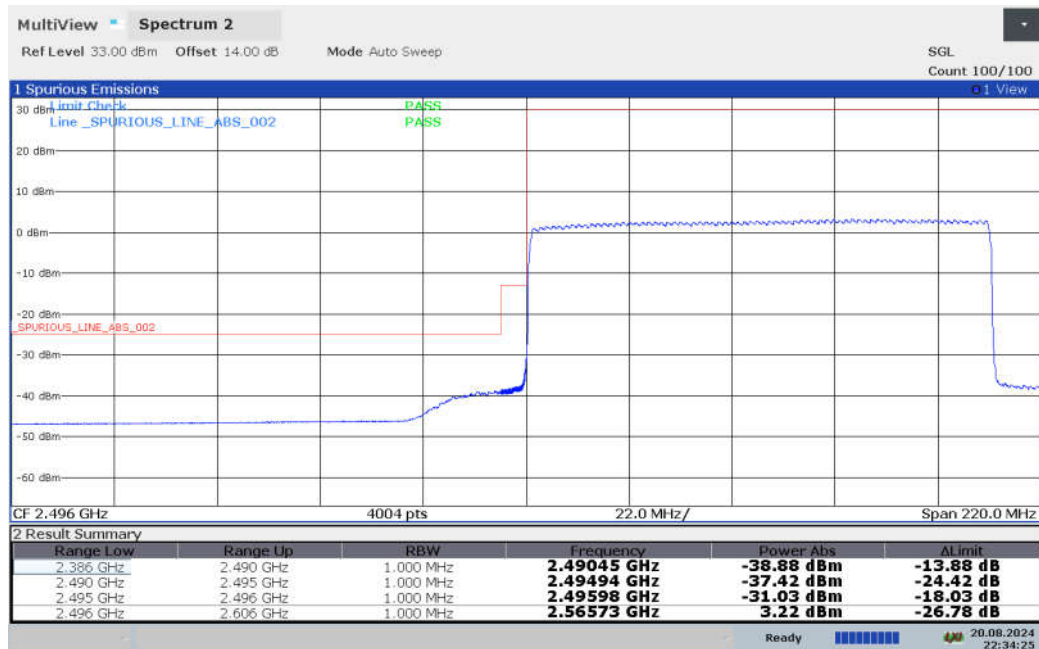
HIGH BAND EDGE BLOCK-100M-1RB-HIGH_offset



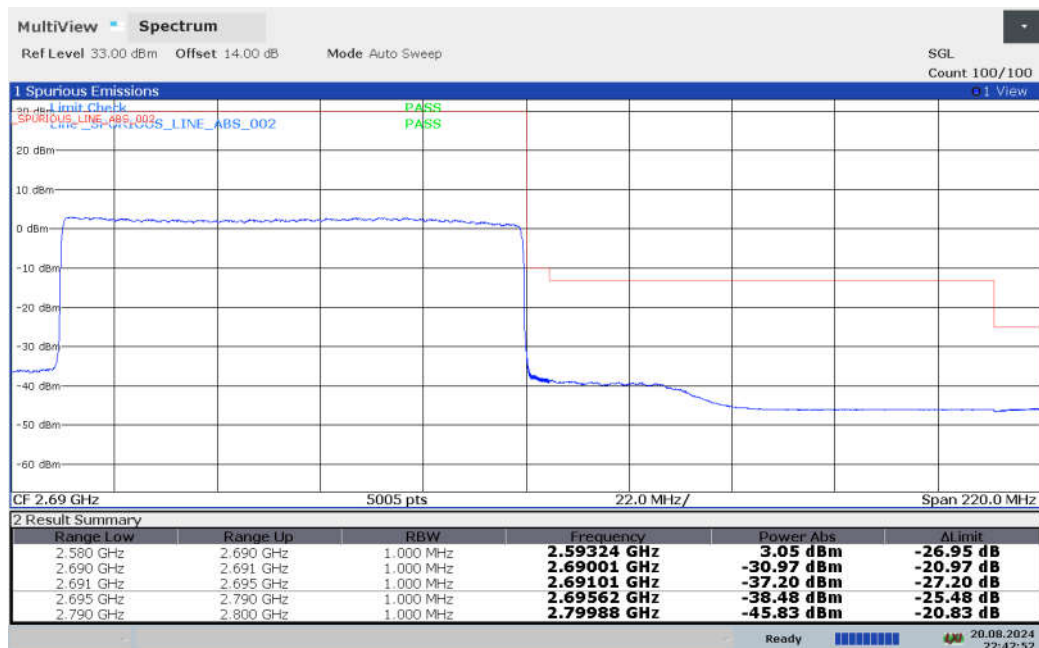


No.24T04N001537-009-RF NR

LOW BAND EDGE BLOCK-100M-100%RB



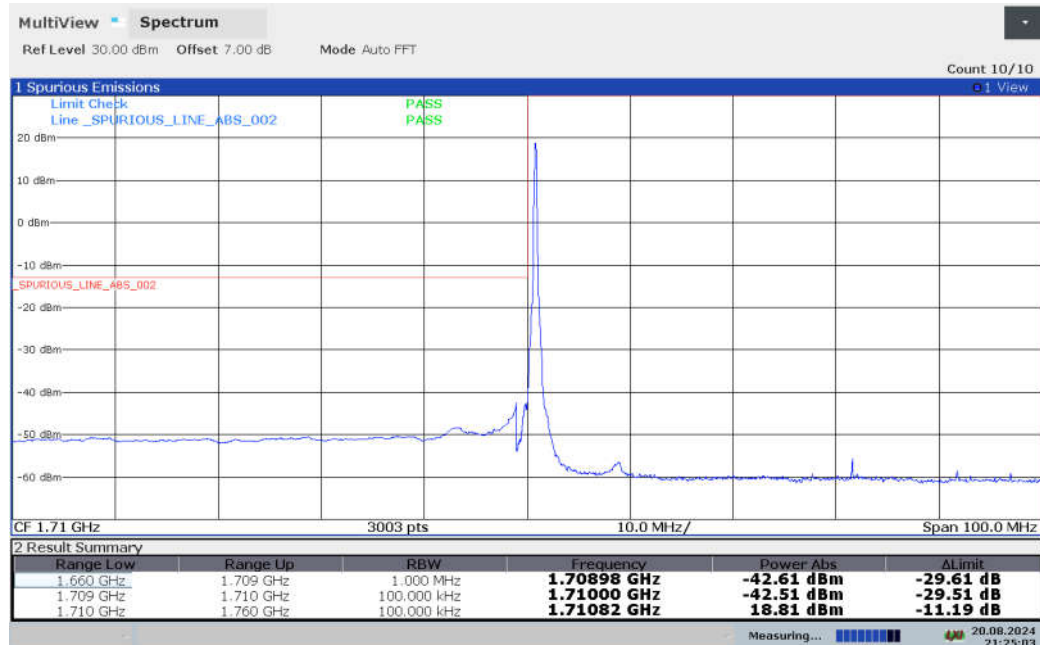
HIGH BAND EDGE BLOCK-100M-100%RB



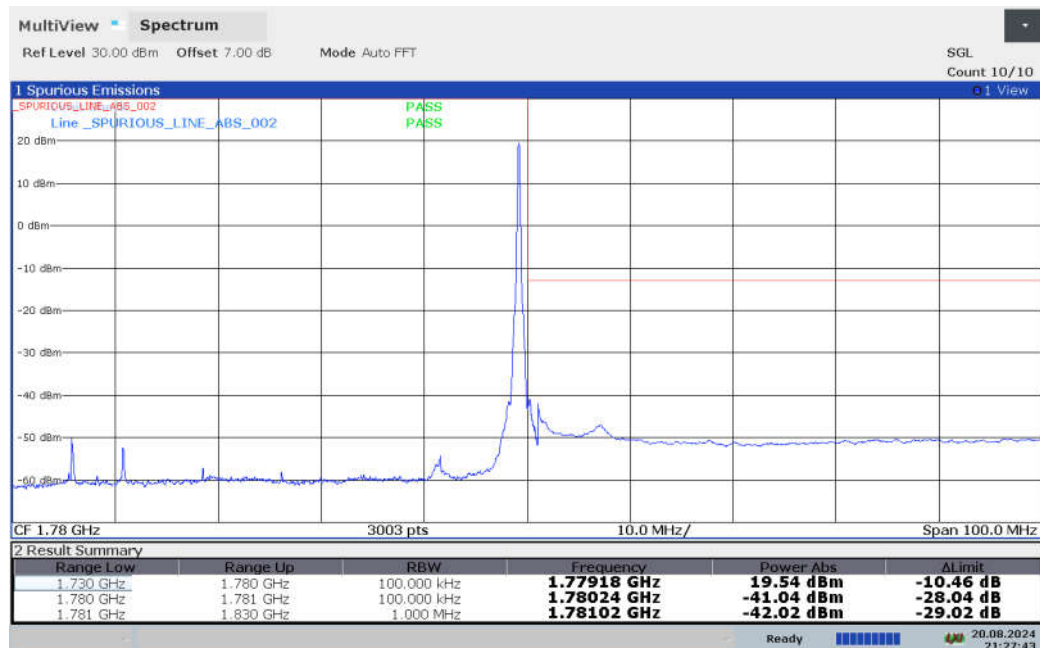


n66

LOW BAND EDGE BLOCK-45M-1RB-LOW_offset



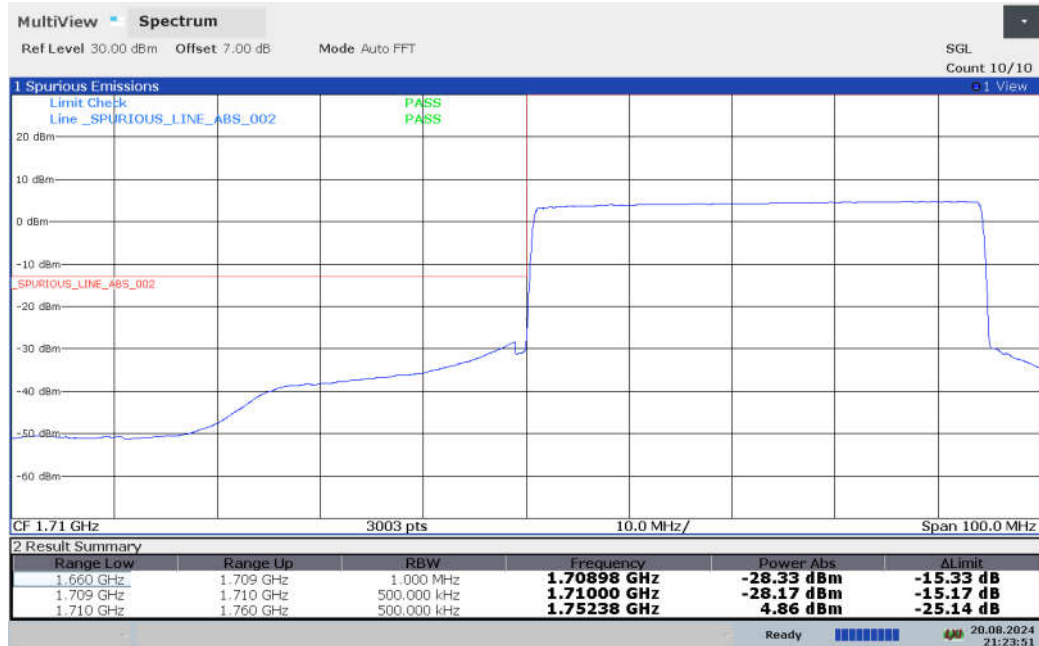
HIGH BAND EDGE BLOCK-45M-1RB-HIGH_offset



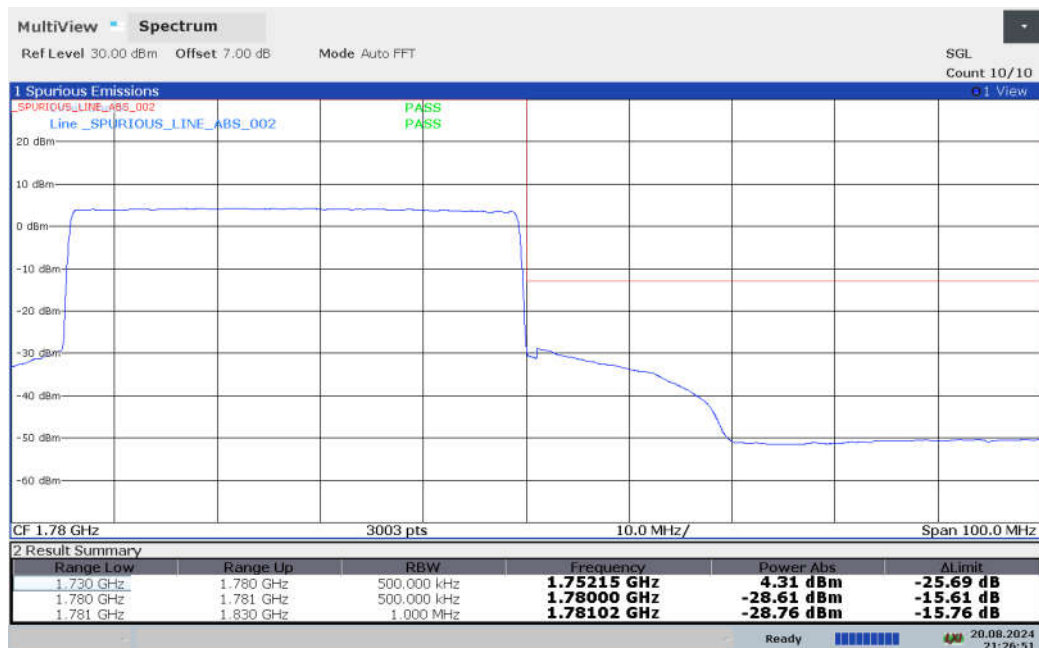


No.24T04N001537-009-RF NR

LOW BAND EDGE BLOCK-45M-100%RB



HIGH BAND EDGE BLOCK-45M-100%RB



Note: Expanded measurement uncertainty is $U = 0.49\text{dB}(100\text{kHz}-2\text{GHz})/1.21\text{dB}(2\text{GHz}-26.5\text{GHz})$, $k = 1.96$

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 $2 \times \text{span} / \text{RBW}$

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 than $43 + 10 \log(P)$ 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.

A.7.3 Measurement result

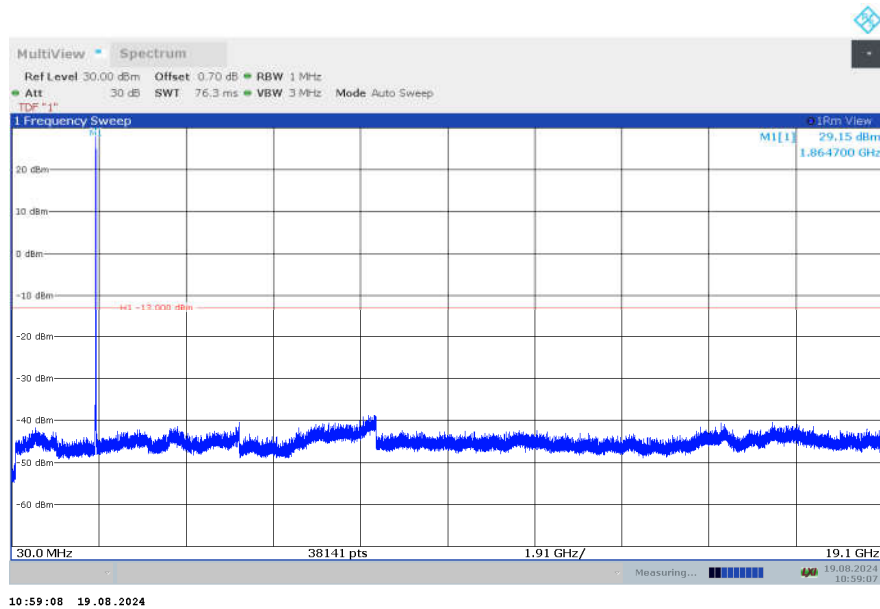
Only worst case result is given below



n2 : 30MHz –19.1GHz

Spurious emission limit –25dBm.

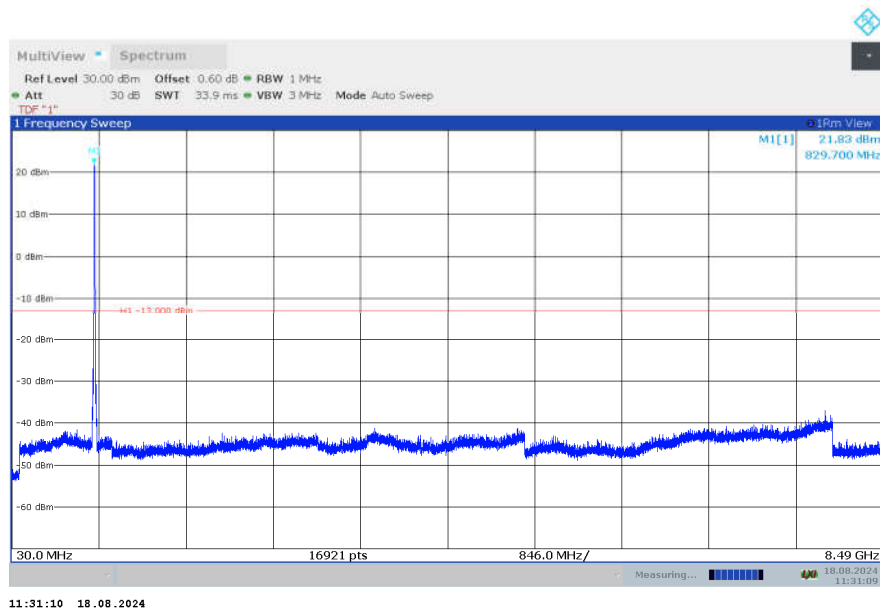
NOTE: peak above the limit line is the carrier frequency.



n5 : 30MHz –8.49GHz

Spurious emission limit –13dBm.

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

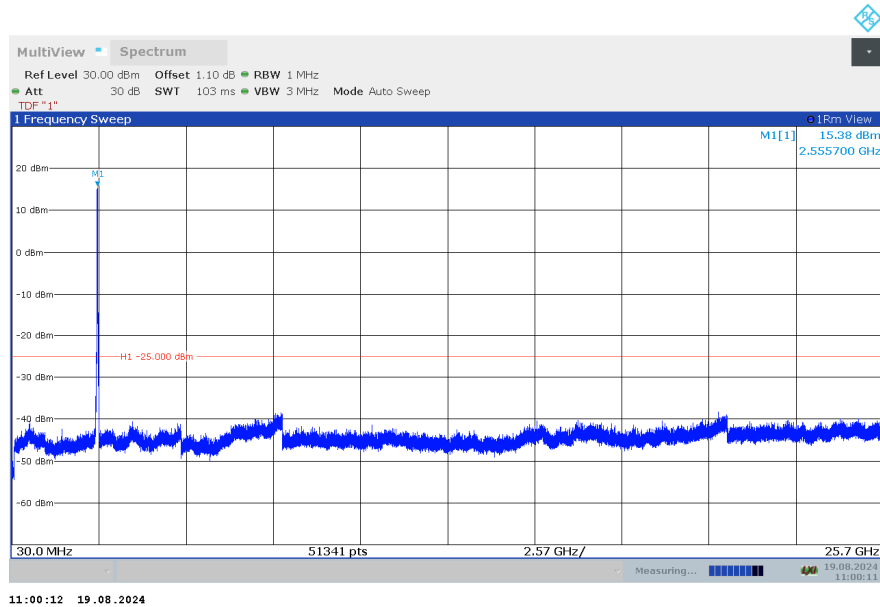




n7 : 30MHz –25.7GHz

Spurious emission limit –25dBm.

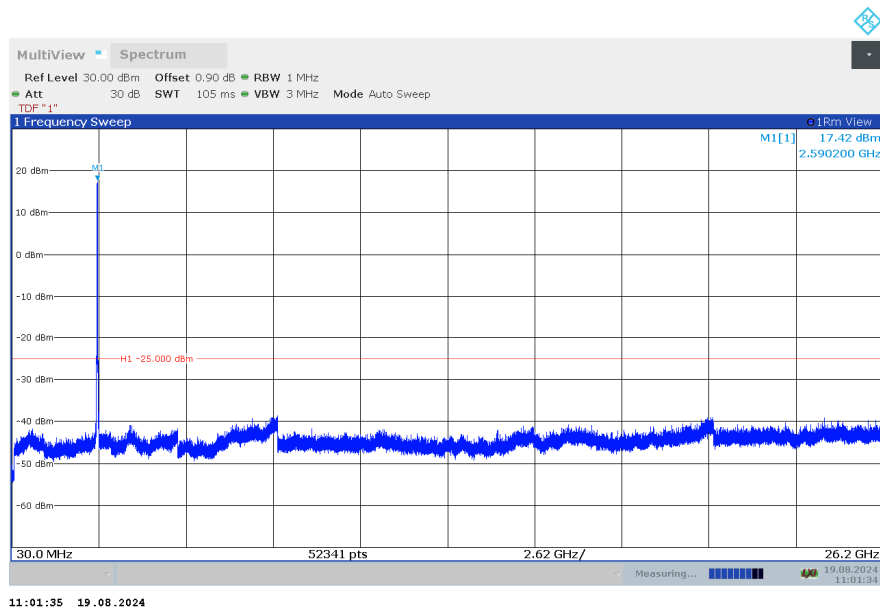
NOTE: peak above the limit line is the carrier frequency.



n38 : 30MHz –26.2GHz

Spurious emission limit –25dBm.

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



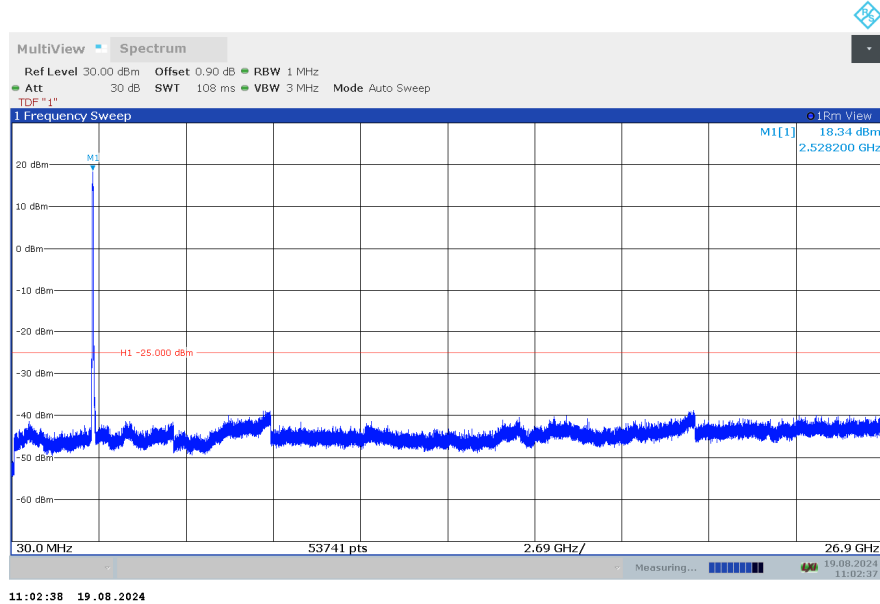


No.24T04N001537-009-RF NR

n41 : 30MHz –26.9GHz

Spurious emission limit –25dBm.

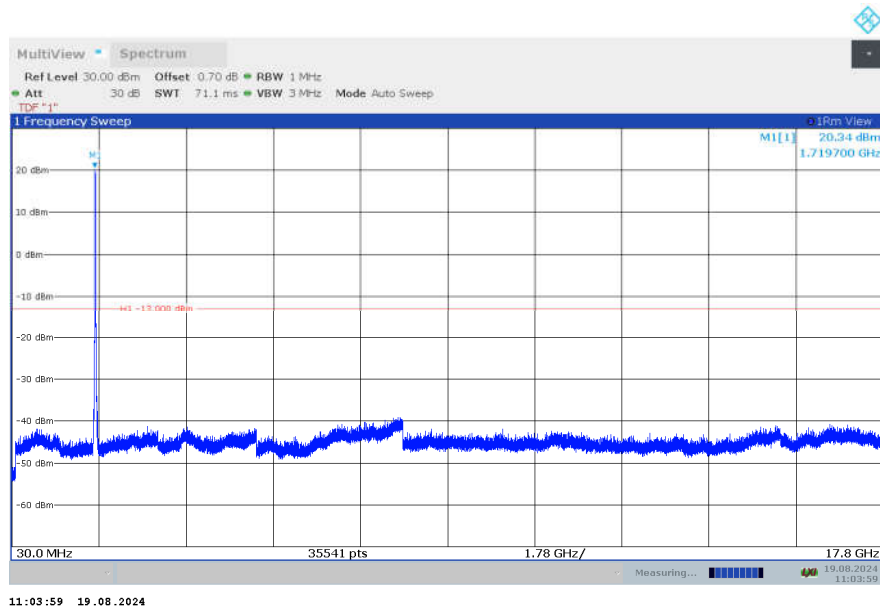
NOTE: peak above the limit line is the carrier frequency.



n66 : 30MHz –25.7GHz

Spurious emission limit –13dBm.

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



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



A.8 PEAK-TO-AVERAGE POWER RATIO

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

- Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;
- Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1%.

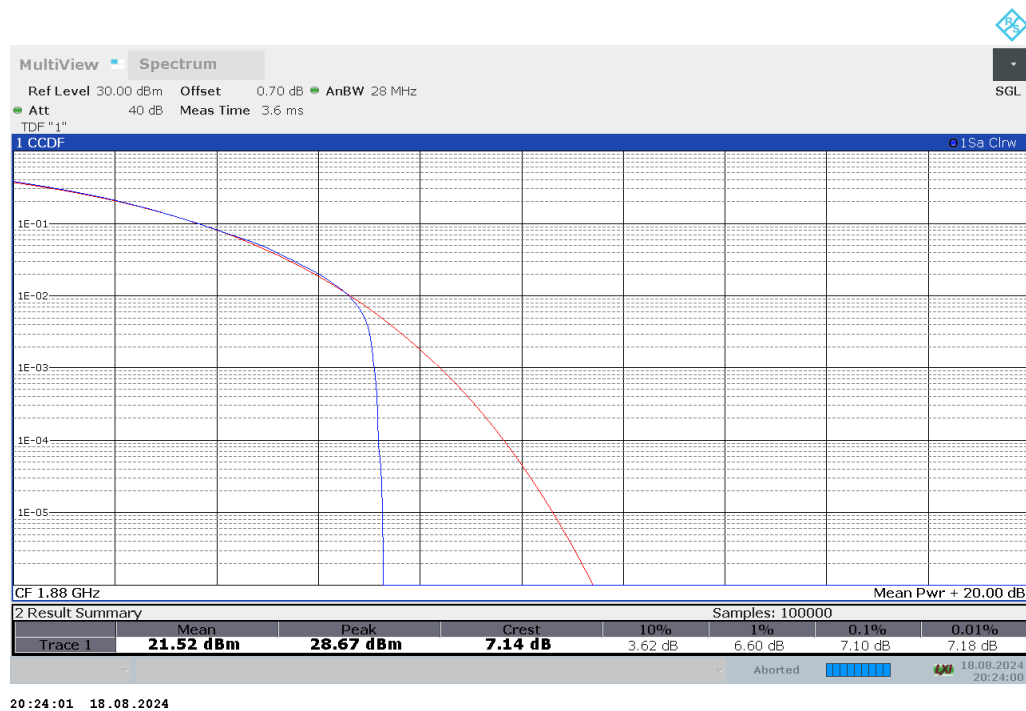
Measurement results

Only worst case result is given below

n2,5MHz

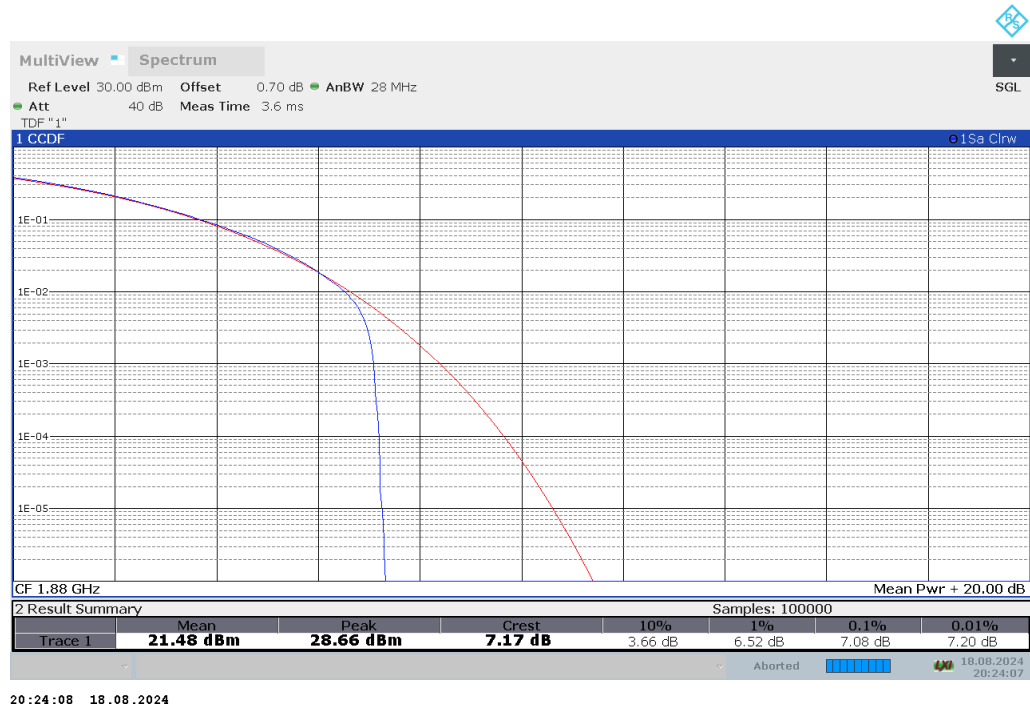
Frequency (MHz)	PAPR (dB)							
	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
1880	5.42	6.28	6.54	6.60	7.10	7.08	7.14	8.30

n2, CP-QPSK (PAPR)

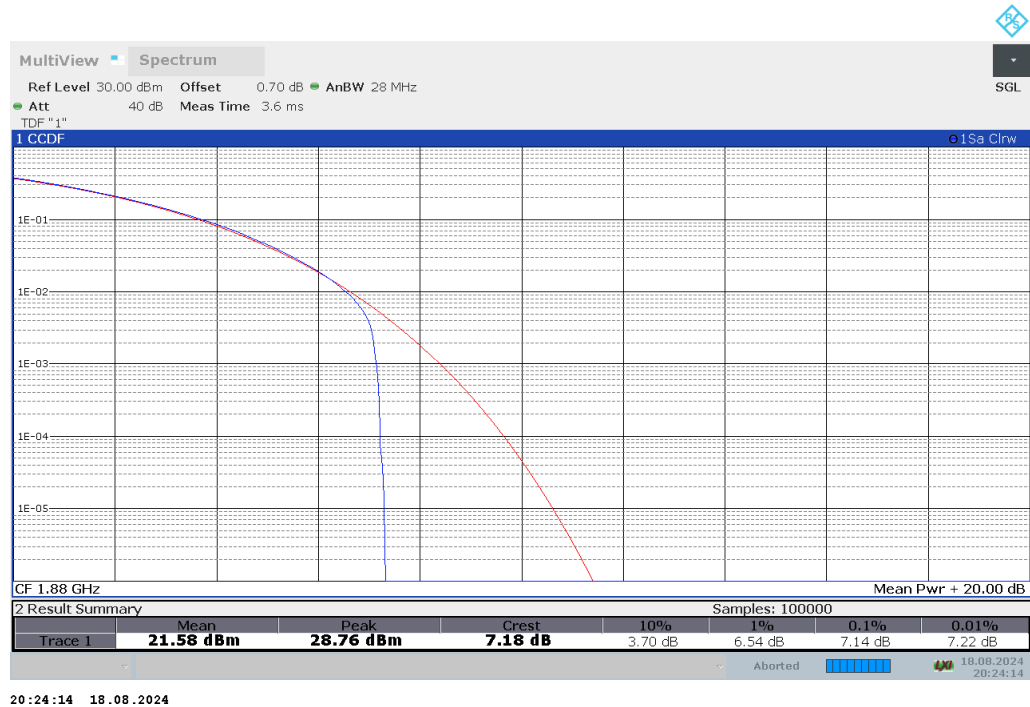




n2, CP-16QAM (PAPR)

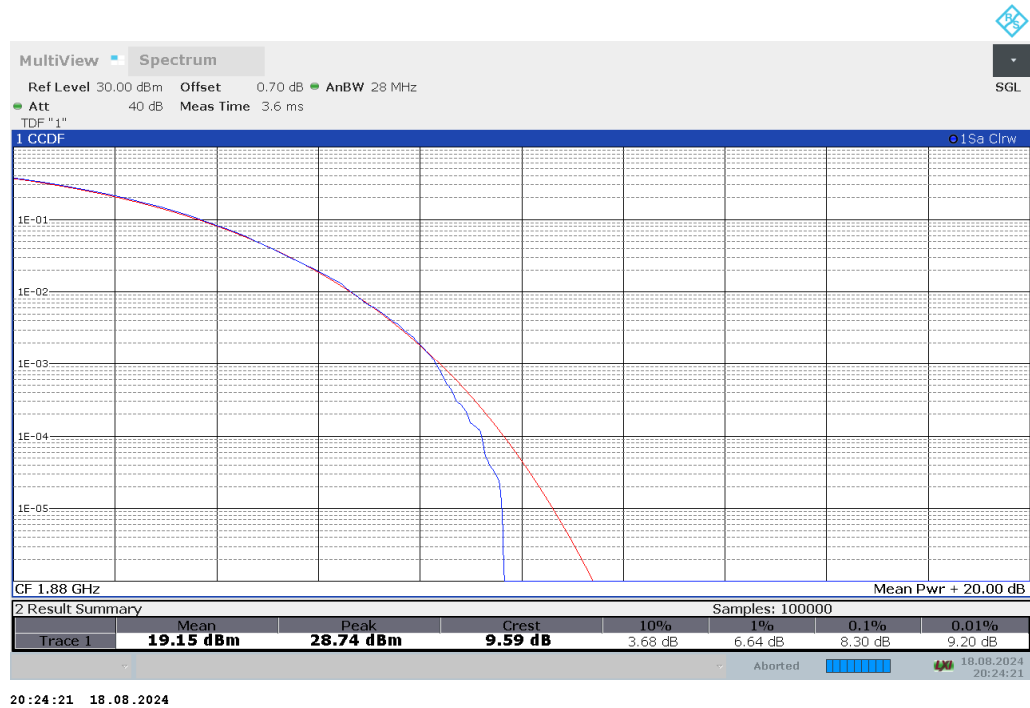


n2, CP-64QAM (PAPR)

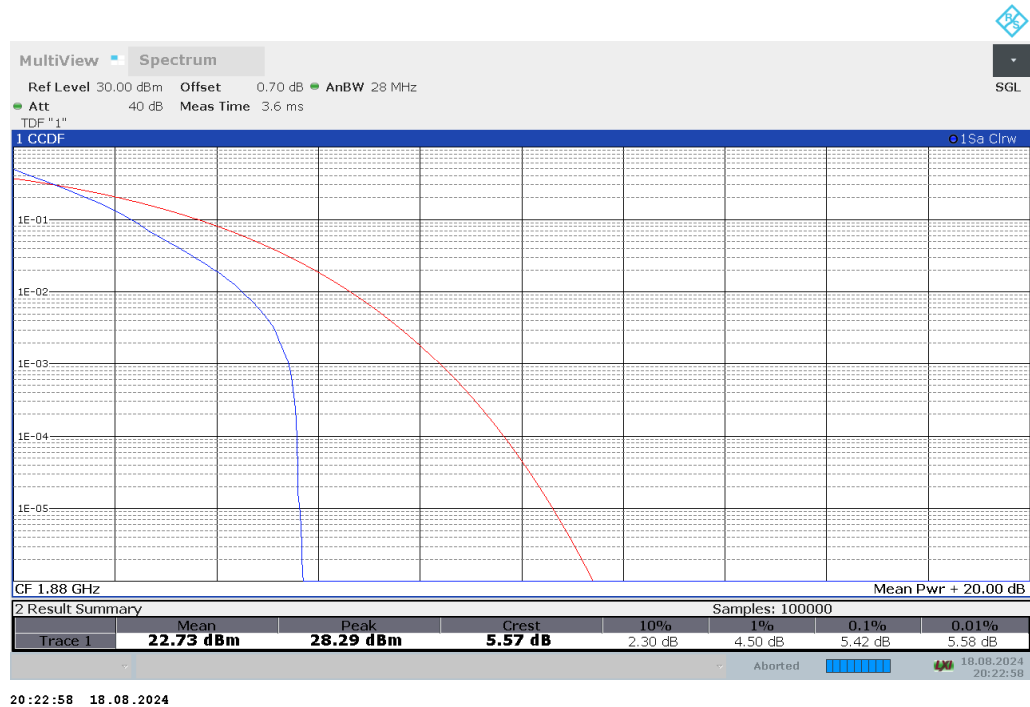




n2, CP-256QAM (PAPR)

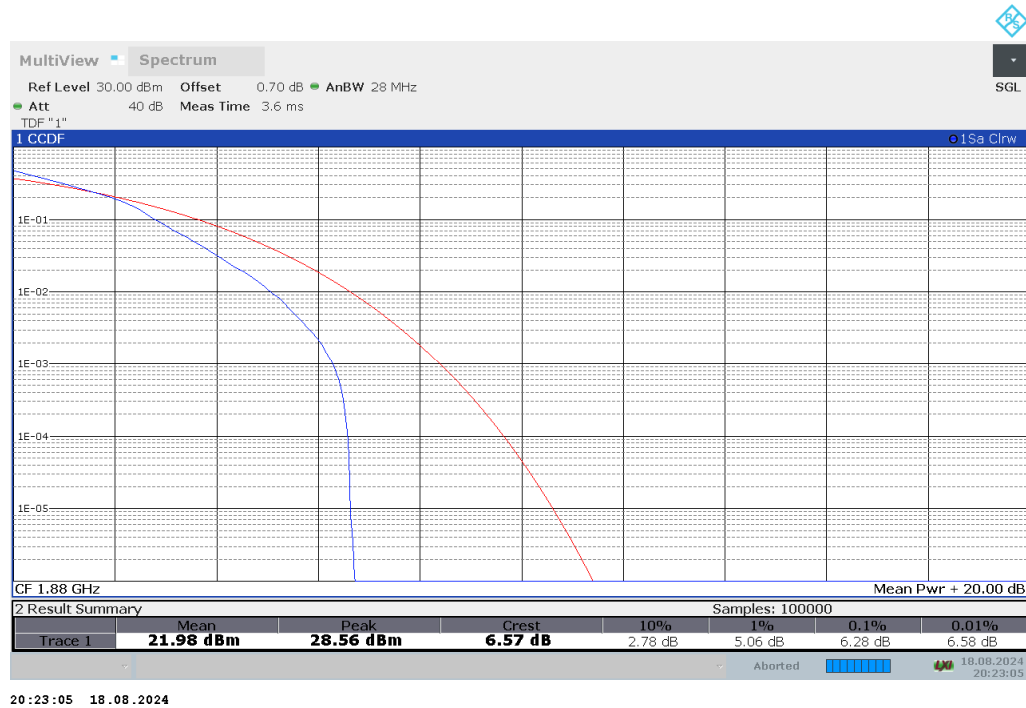


n2, DFT-s-QPSK (PAPR)





n2, DFT-s-16QAM (PAPR)

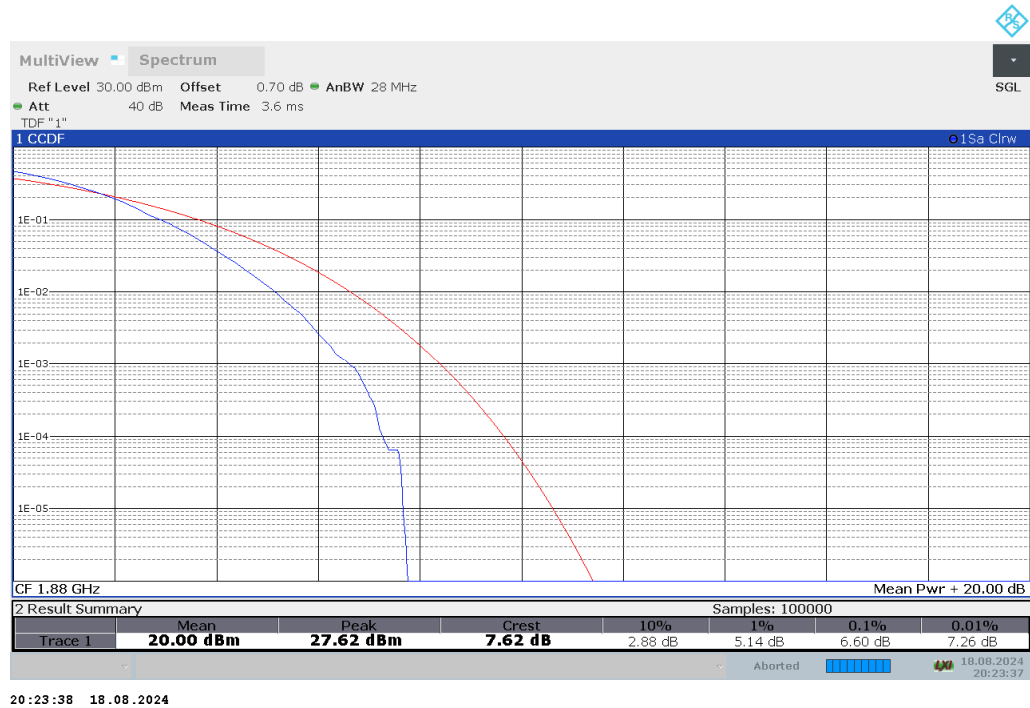


n2, DFT-s-64QAM (PAPR)





n2, DFT-s-256QAM (PAPR)





n2,10MHz

Frequency (MHz)	PAPR (dB)							
	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
1880	5.38	6.26	6.52	6.40	6.96	6.94	7.06	8.62

n2, CP-QPSK (PAPR)



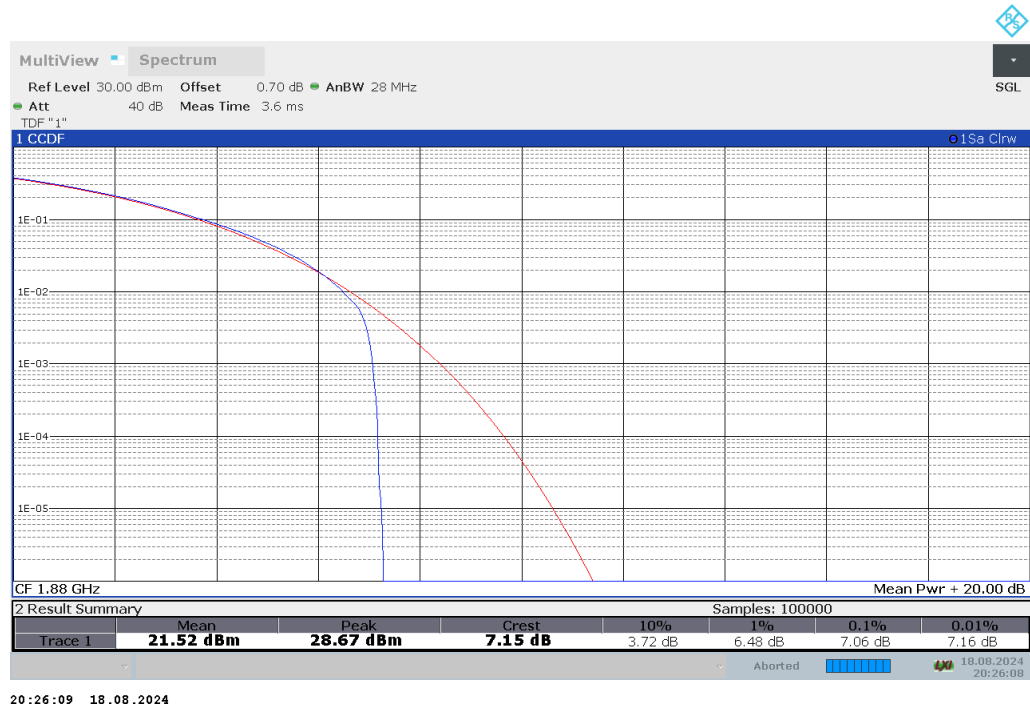
20:25:55 18.08.2024



n2, CP-16QAM (PAPR)

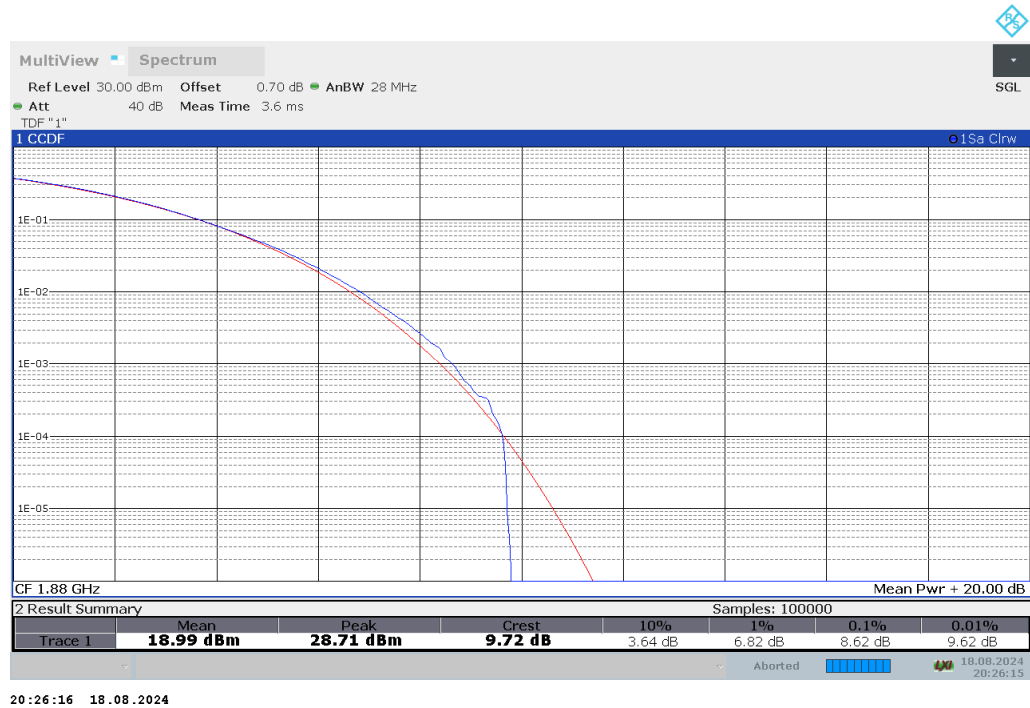


n2, CP-64QAM (PAPR)

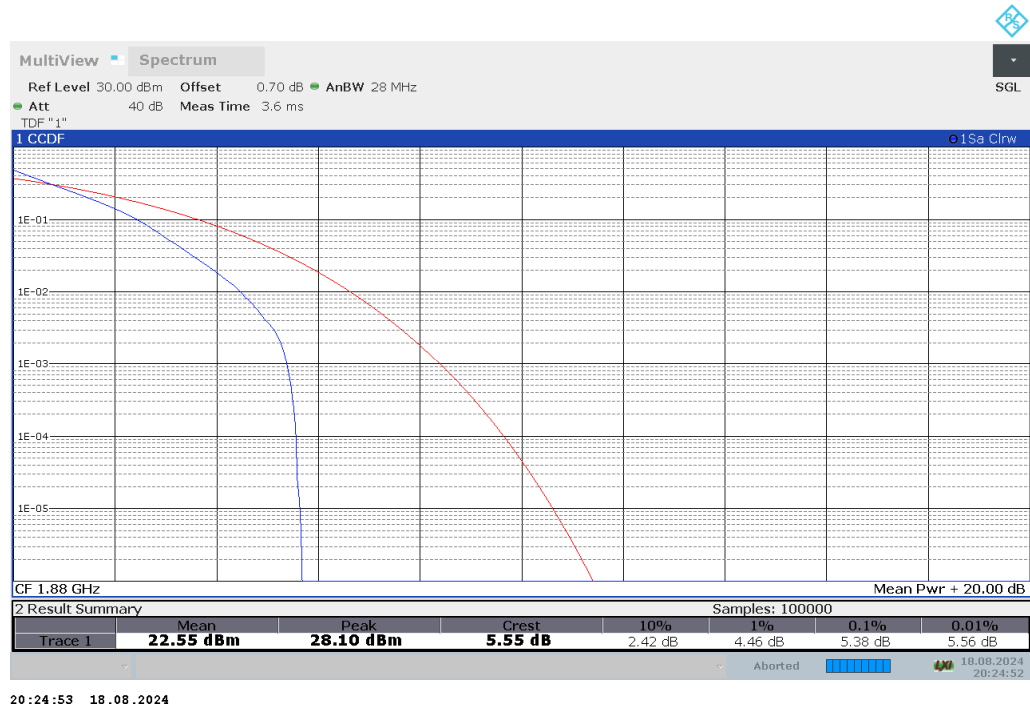




n2, CP-256QAM (PAPR)

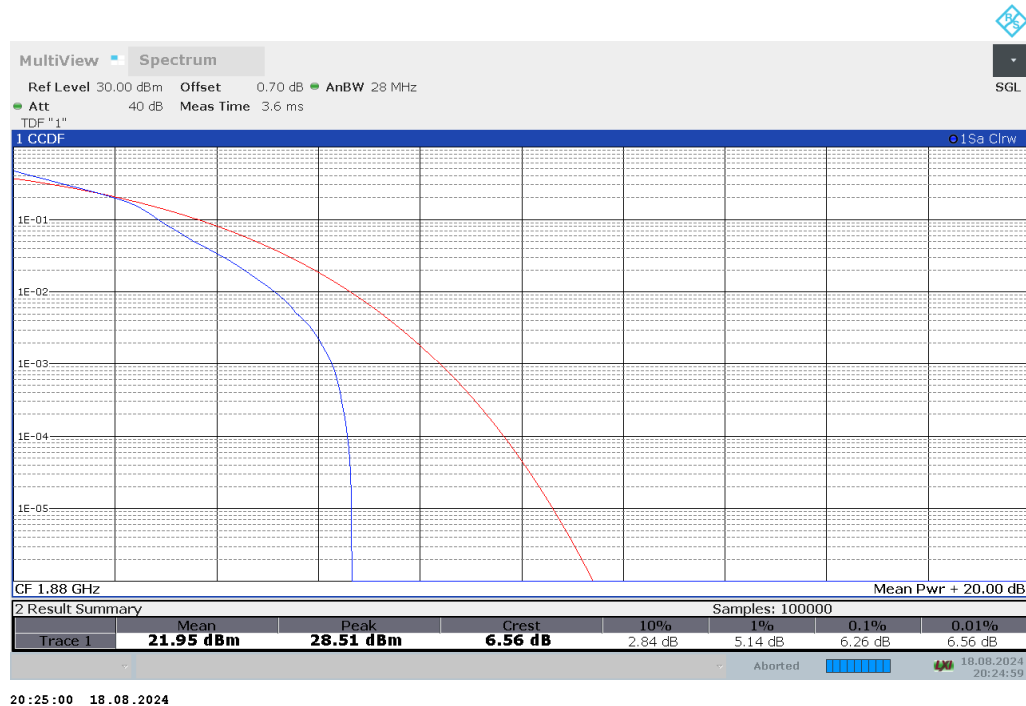


n2, DFT-s-QPSK (PAPR)

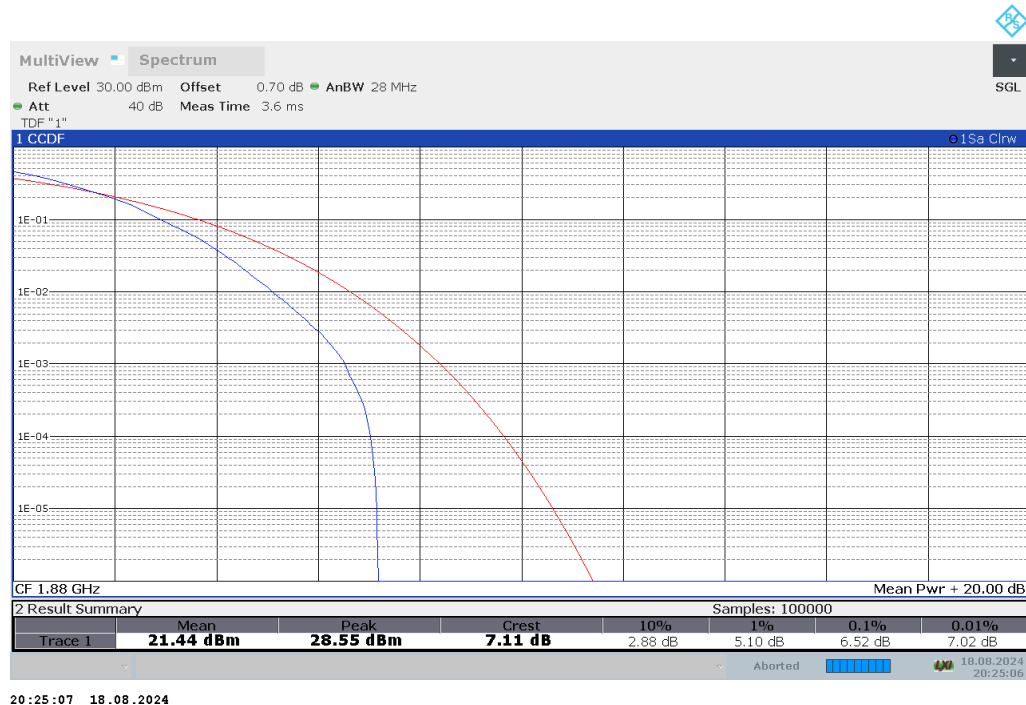




n2, DFT-s-16QAM (PAPR)

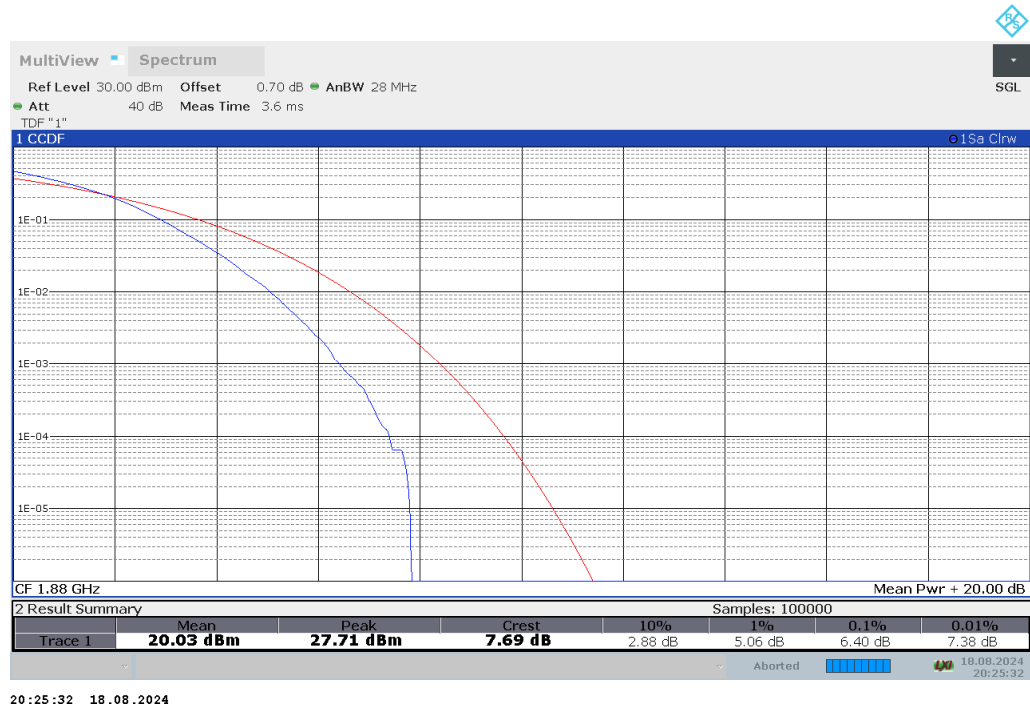


n2, DFT-s-64QAM (PAPR)





n2, DFT-s-256QAM (PAPR)

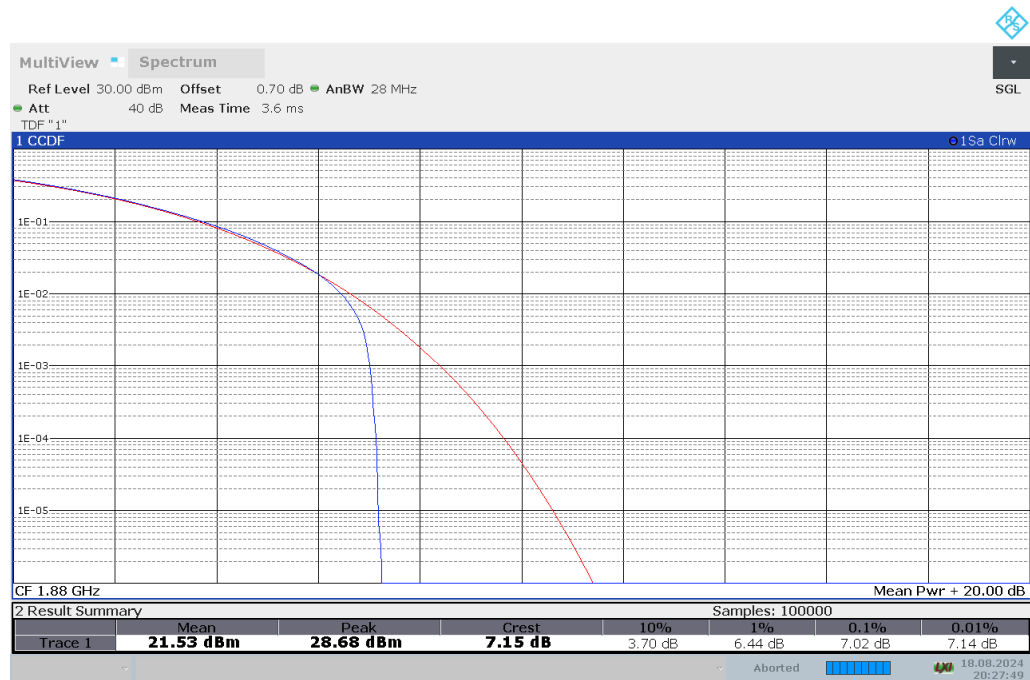




n2,15MHz

Frequency (MHz)	PAPR (dB)							
	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM
1880	5.44	6.32	6.58	6.64	7.02	7.02	7.16	8.38

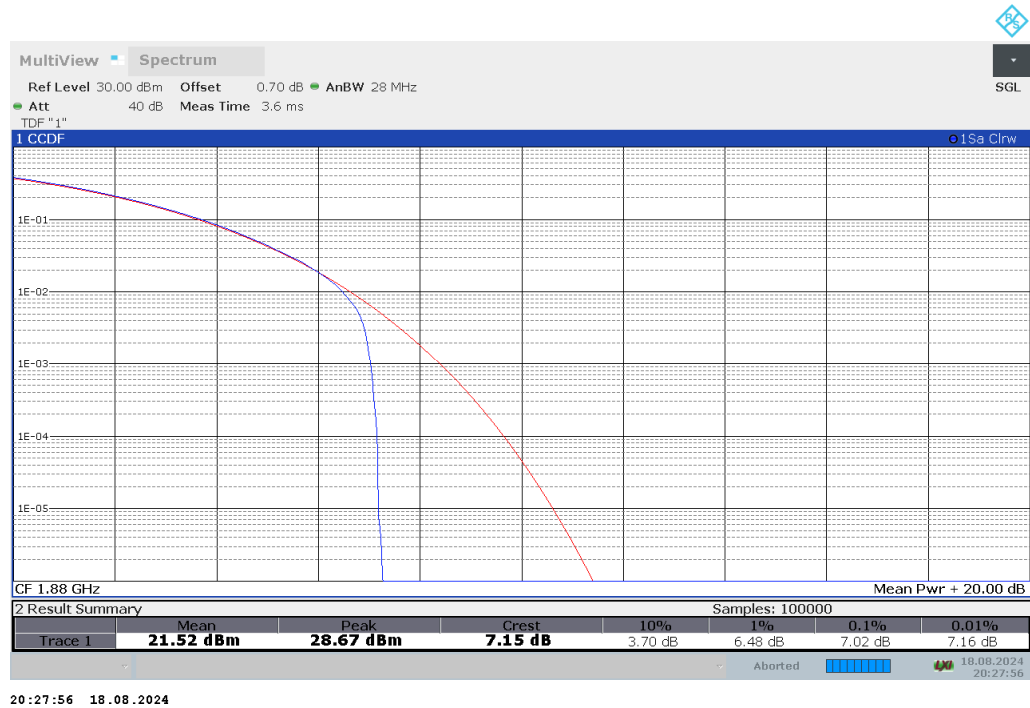
n2, CP-QPSK (PAPR)



20:27:49 18.08.2024



n2, CP-16QAM (PAPR)



n2, CP-64QAM (PAPR)

