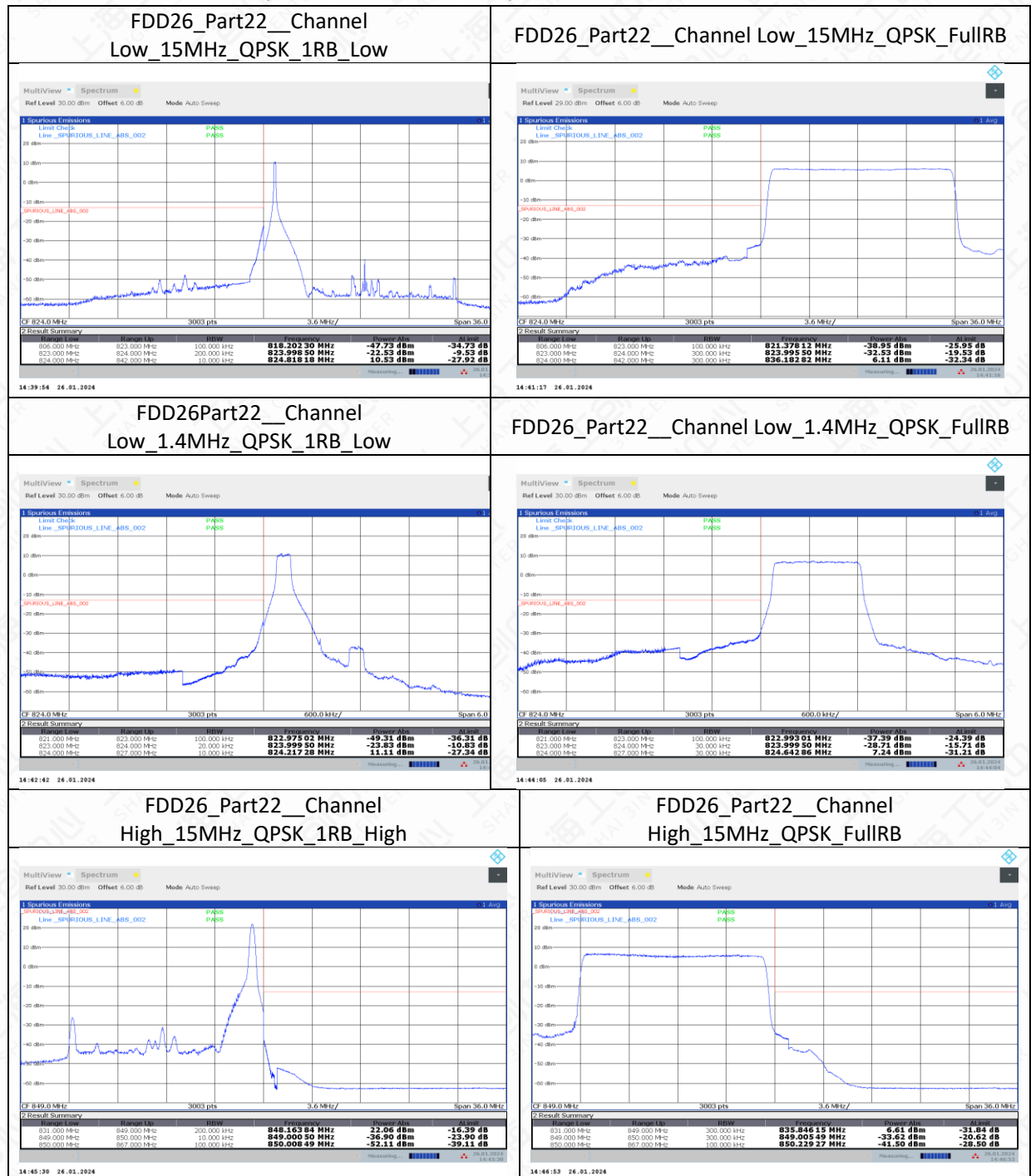
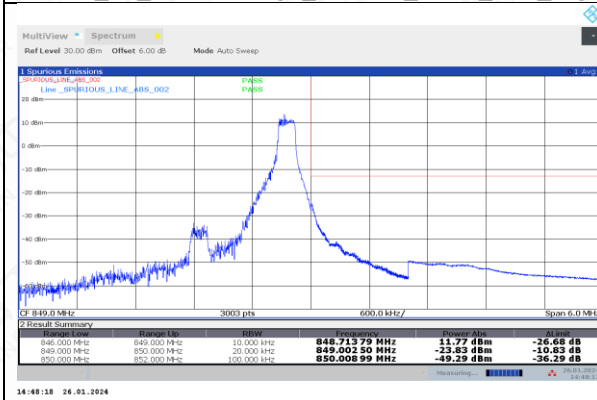


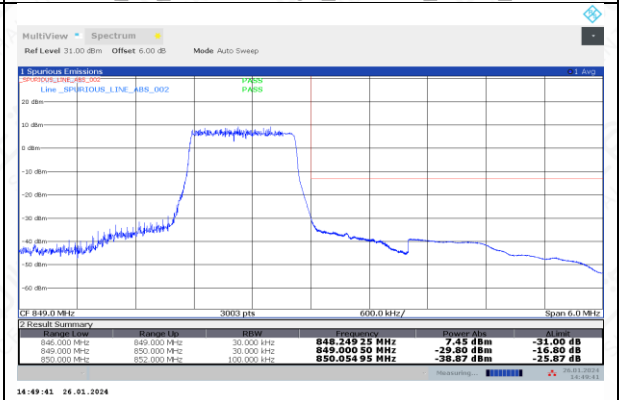
Band 26(824-849MHz)(Only the worst mode data is provided)



FDD26_22_Channel High_1.4MHz_QPSK_1RB_High



FDD26_22_Channel High_1.4MHz_QPSK_FullRB

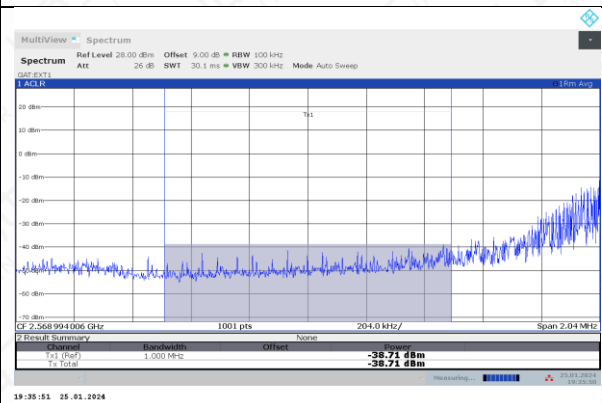


Band 38

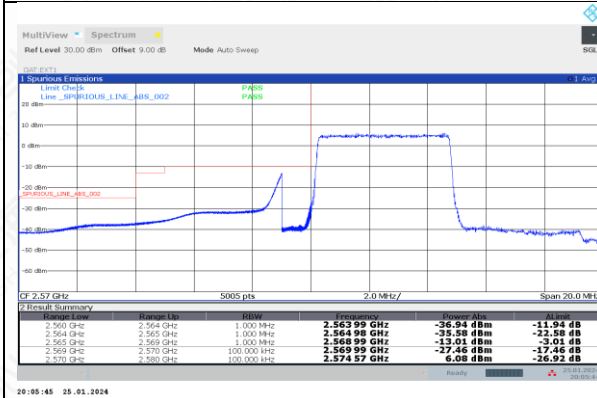
TDD38_Channel Low_5MHz_QPSK_1RB_Low



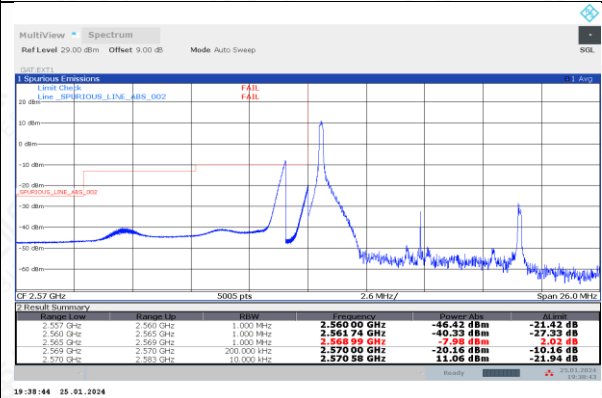
TDD38_Channel Low_5MHz_2568994006Hz_1RB_Low Out of Limit Channel Power



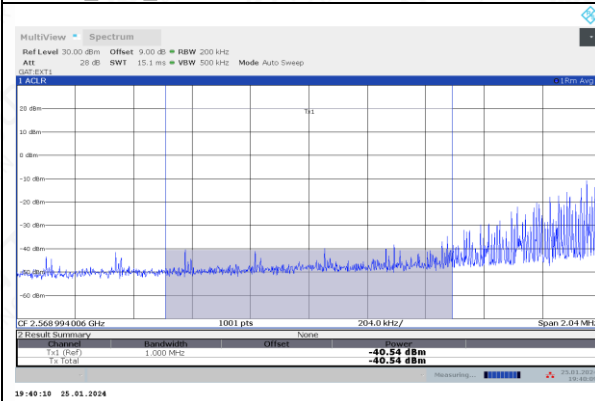
TDD38_Channel Low_5MHz_QPSK_FullRB



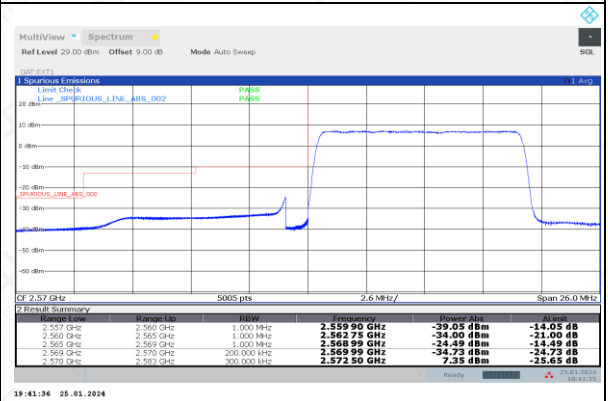
TDD38_Channel Low_10MHz_QPSK_1RB_Low



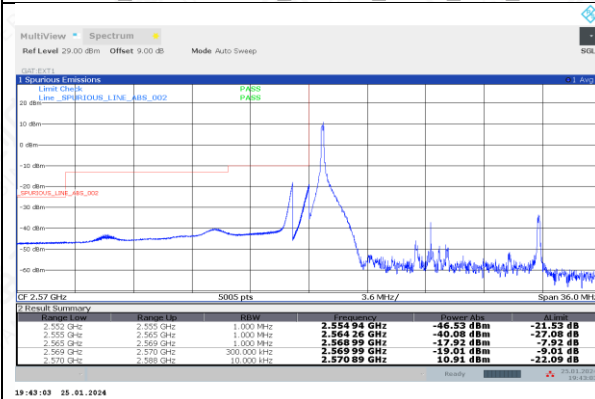
TDD38_Channel Low_10MHz_2568994006Hz
_1RB_Low Out of Limit Channel Power



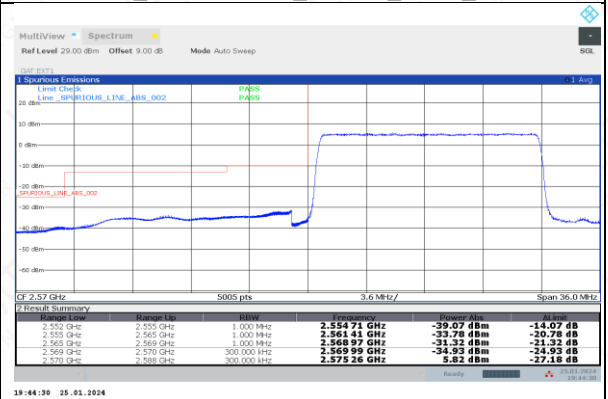
TDD38_Channel Low_10MHz_QPSK_FullRB



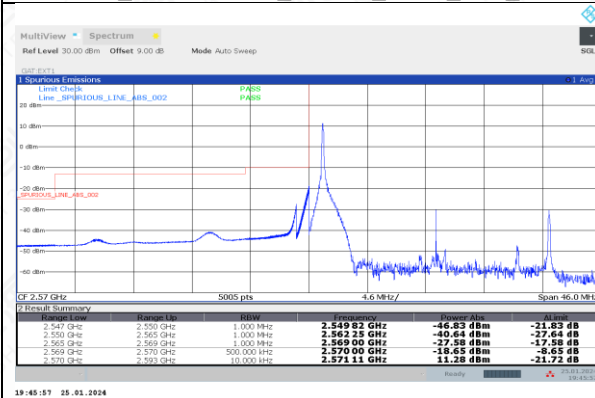
TDD38_Channel Low_15MHz_QPSK_1RB_Low



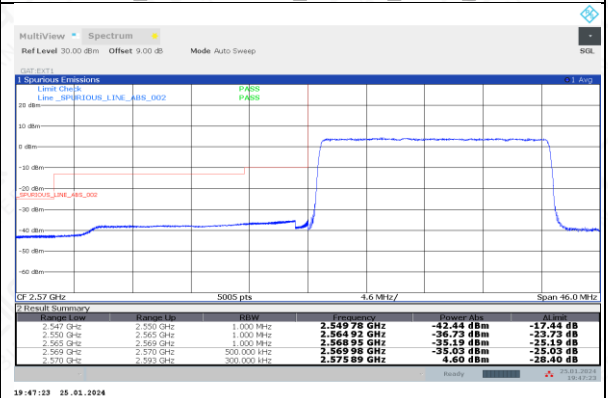
TDD38_Channel Low_15MHz_QPSK_FullRB



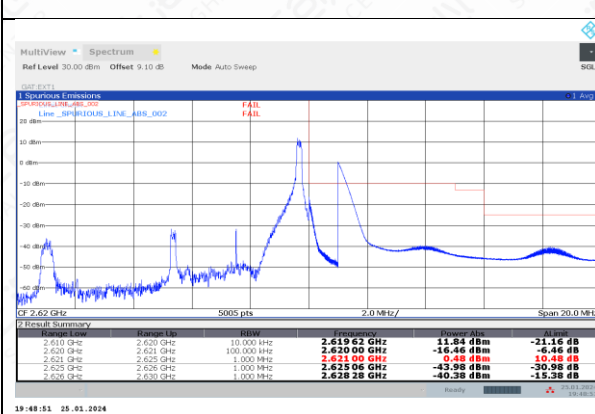
TDD38_Channel Low_20MHz_QPSK_1RB_Low



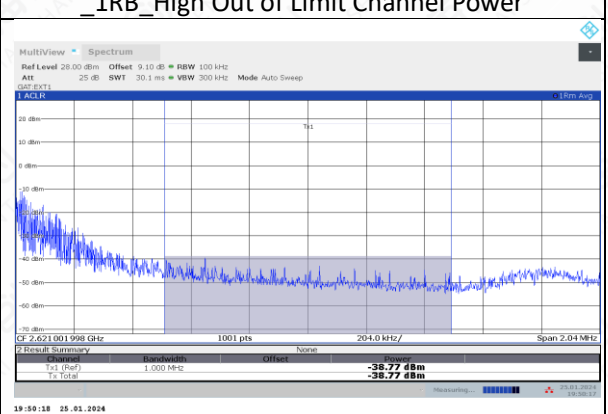
TDD38_Channel Low_20MHz_QPSK_FullRB



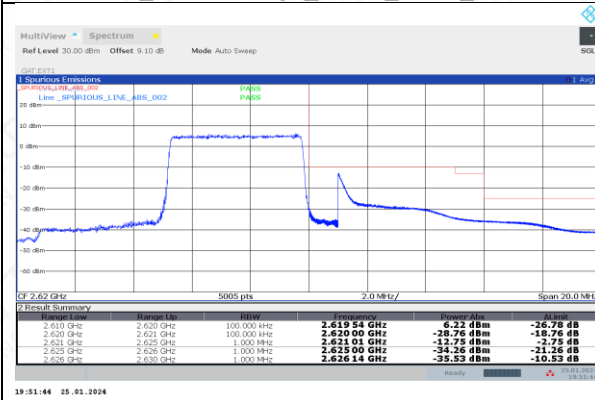
TDD38_Channel High_5MHz_QPSK_1RB_High



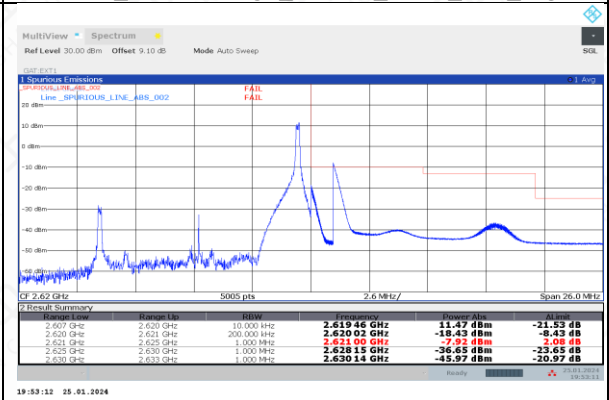
TDD38_Channel High_5MHz_2621001998Hz
_1RB_High Out of Limit Channel Power



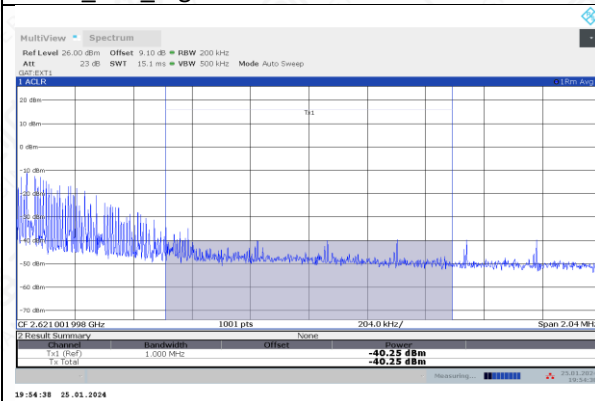
TDD38_Channel High_5MHz_QPSK_FullIRB



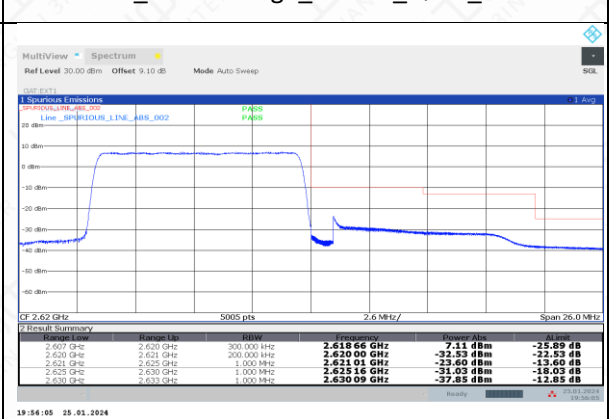
TDD38_Channel High_10MHz_QPSK_1RB_High



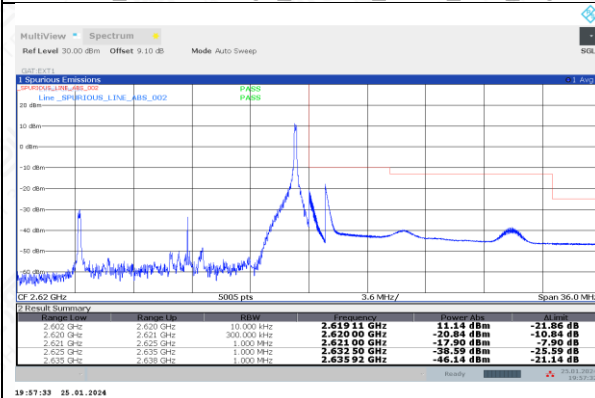
TDD38_Channel High_10MHz_2621001998Hz_1RB_High Out of Limit Channel Power



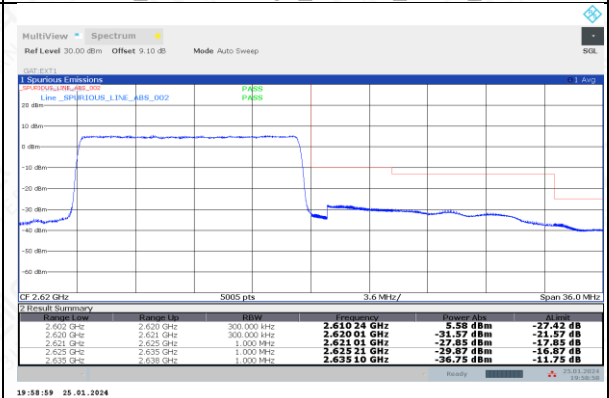
TDD38_Channel High_10MHz_QPSK_FullIRB



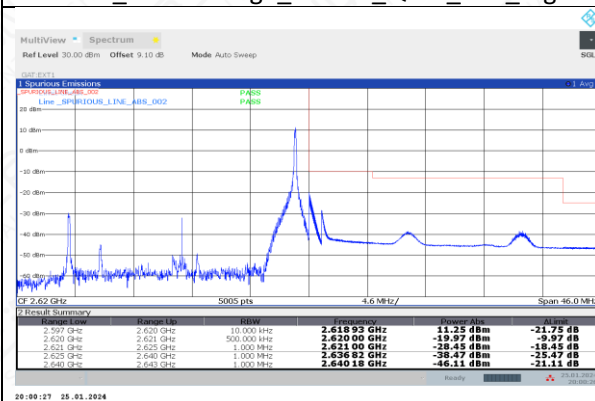
TDD38_Channel High_15MHz_QPSK_1RB_High



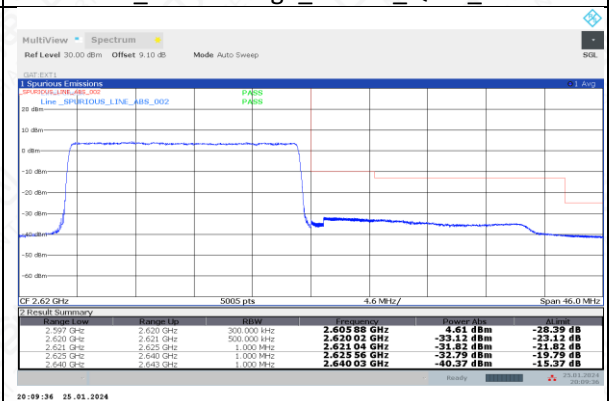
TDD38_Channel High_15MHz_QPSK_FullIRB

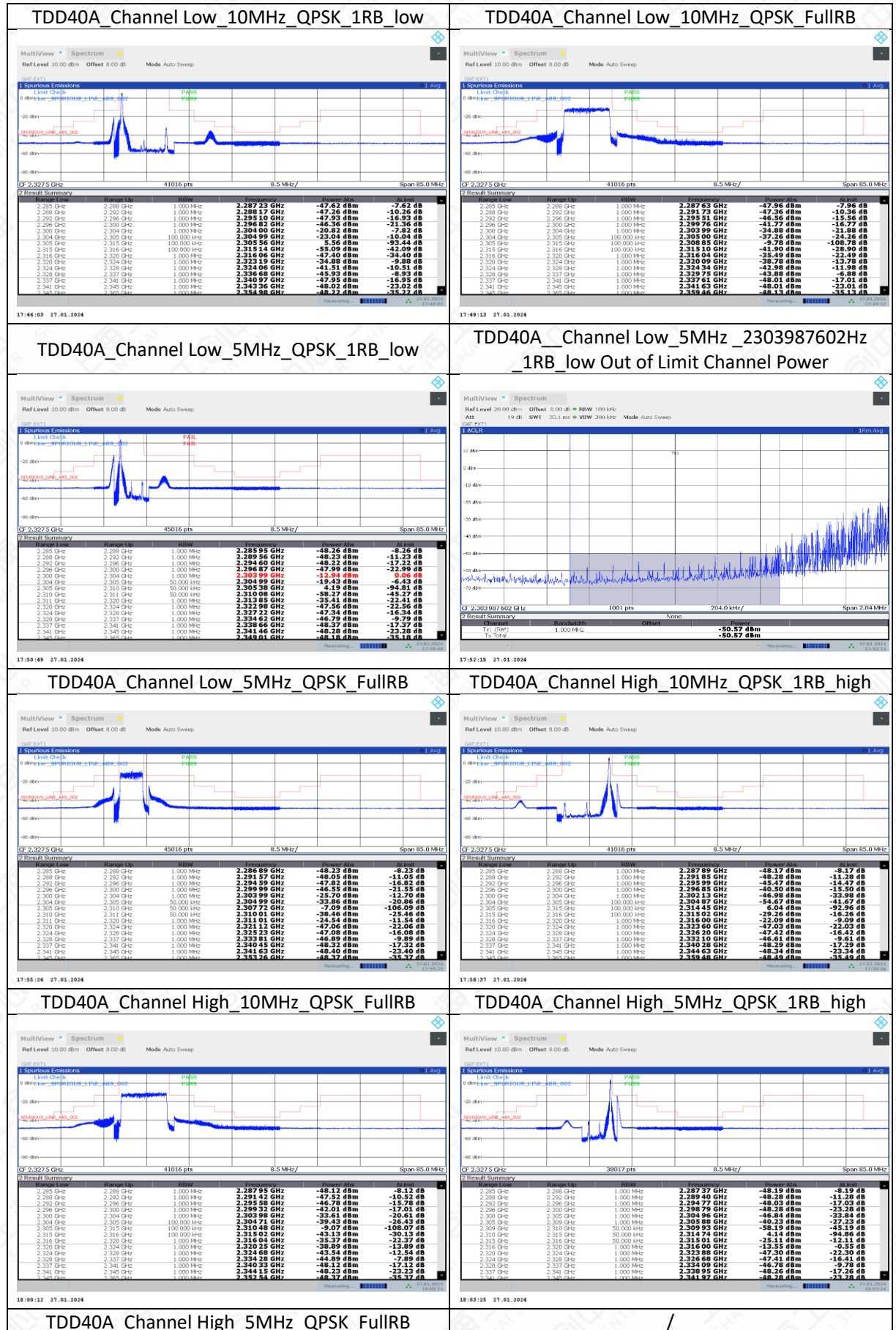


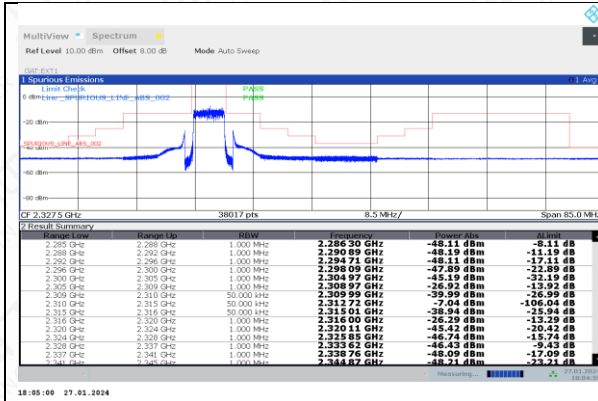
TDD38_Channel High_20MHz_QPSK_1RB_High



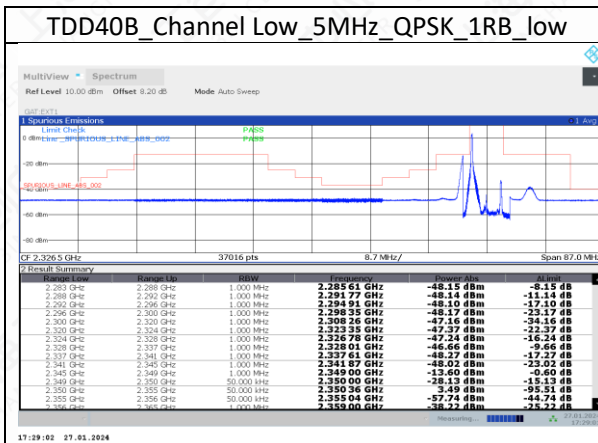
TDD38_Channel High_20MHz_QPSK_FullIRB



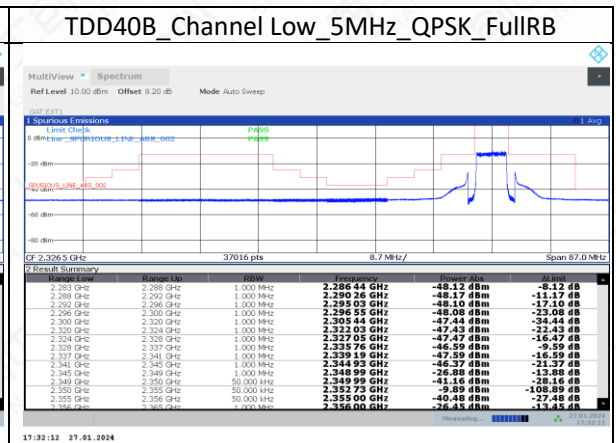
Band40A(2305-2315MHz)




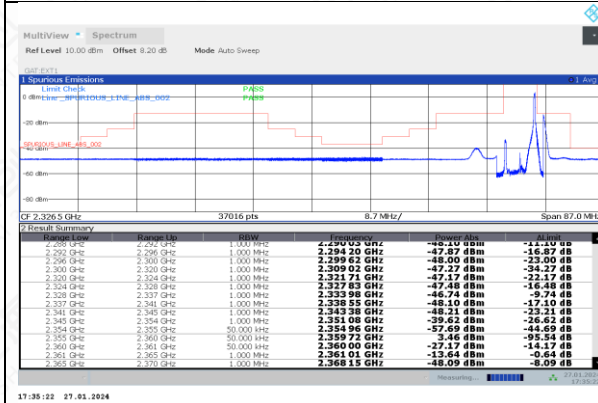
Band40B(2350-2360MHz)



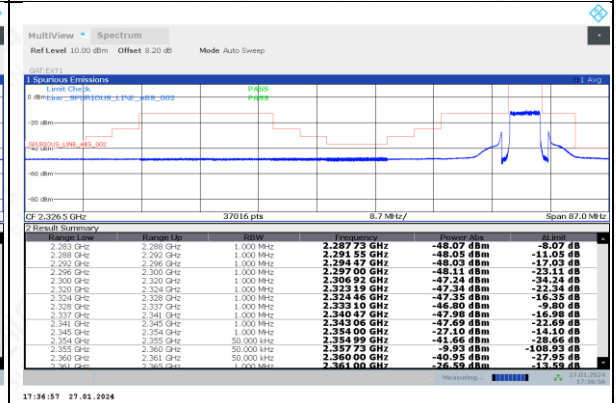
TDD40B_Channel Low_5MHz_QPSK_1RB_low



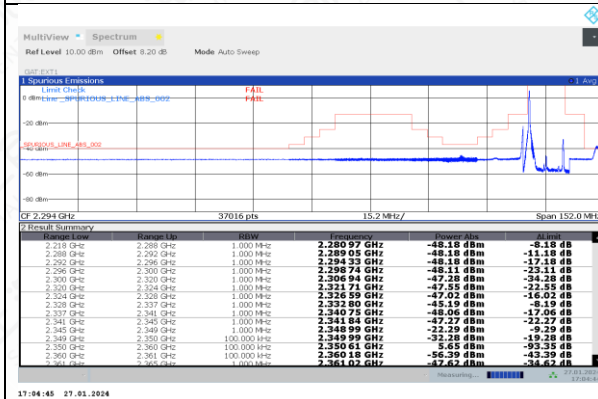
TDD40B_Channel Low_5MHz_QPSK_FullRB



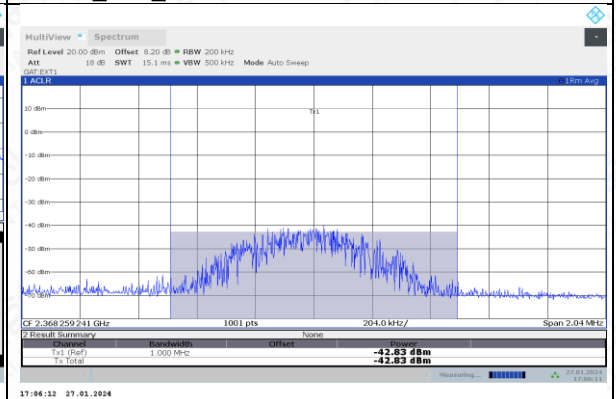
TDD40B_Channel High_5MHz_QPSK_1RB_high



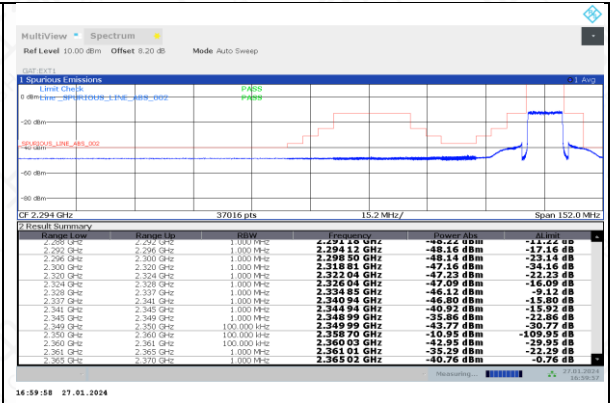
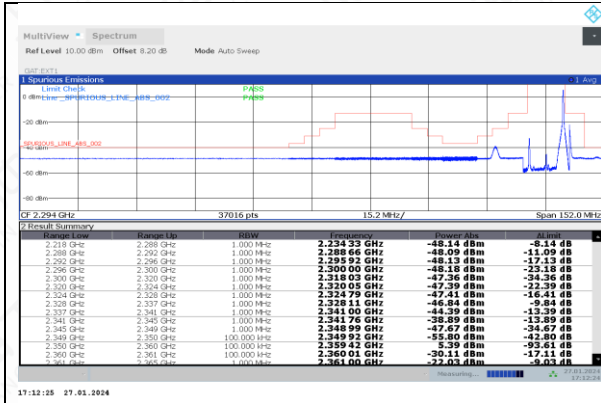
TDD40B_Channel High_5MHz_QPSK_FullRB



TDD40B_Channel Low_10MHz_QPSK_1RB_low



TDD40B_Channel Low_10MHz_QPSK_FullRB

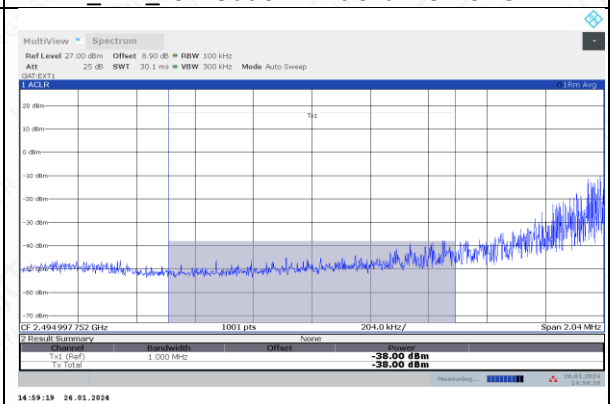


Band41

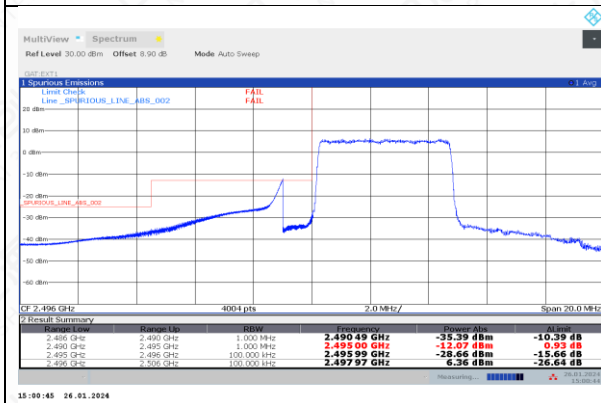
TDD41_Channel Low_5MHz_QPSK_1RB_Low



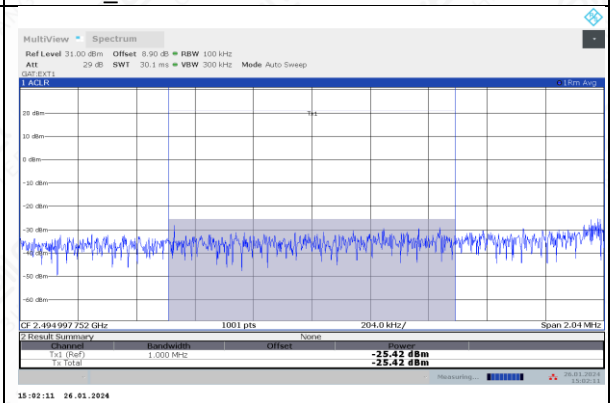
TDD41_Channel Low_5MHz_2494997752Hz_1RB_Low Out of Limit Channel Power

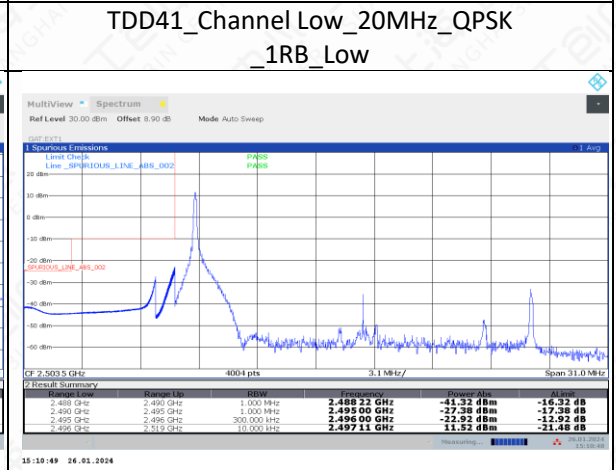
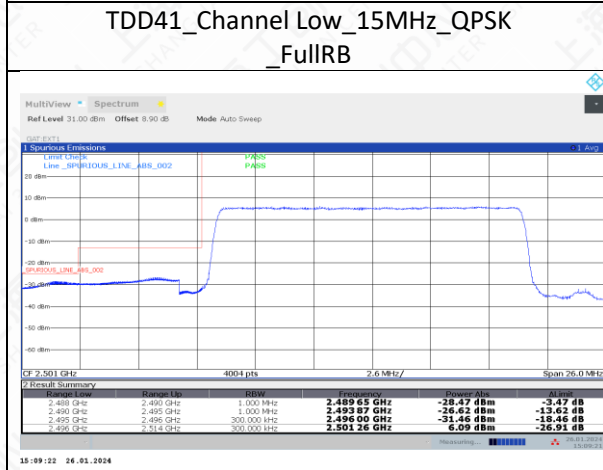
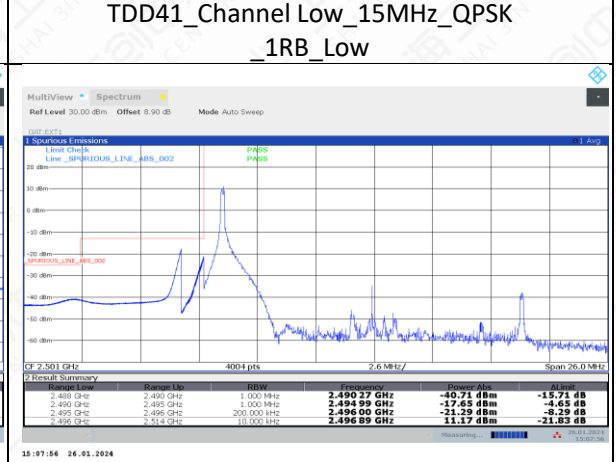
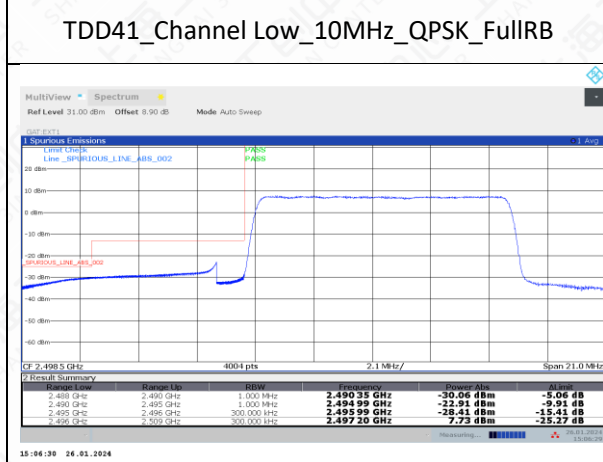
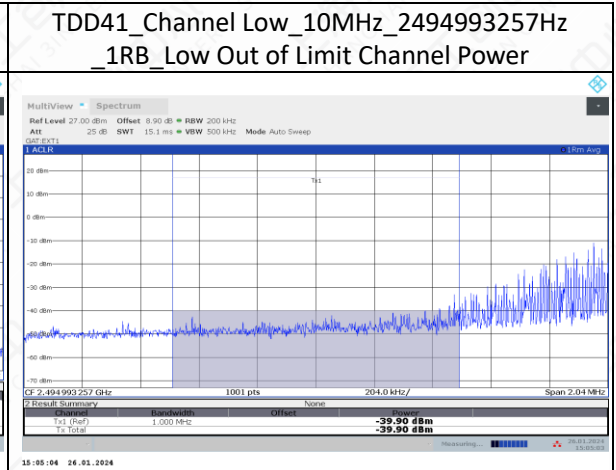
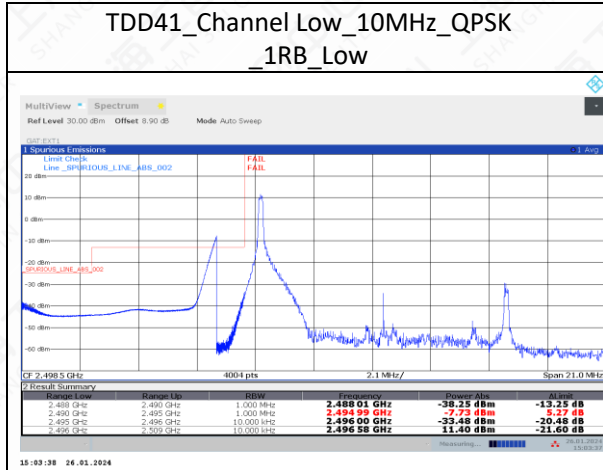


TDD41_Channel Low_5MHz_QPSK_FullRB

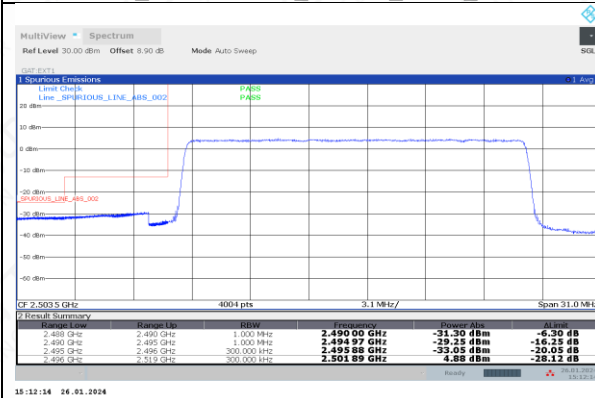


TDD41_Channel Low_5MHz_2494997752Hz_FullRB Out of Limit Channel Power

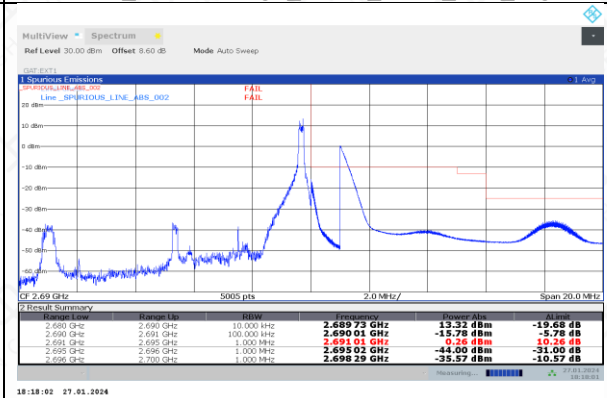




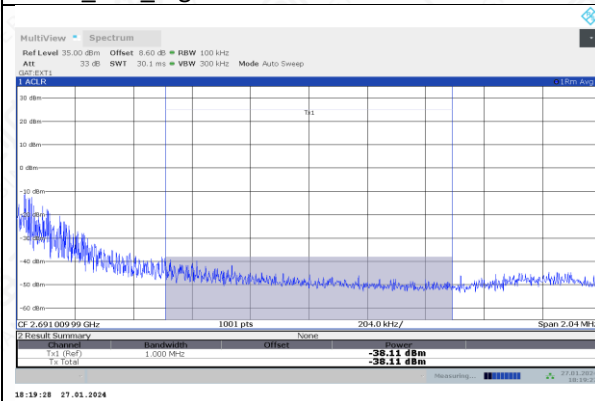
TDD41_Channel Low_20MHz_QPSK_FullRB



TDD41_Channel High_5MHz_QPSK_1RB_High



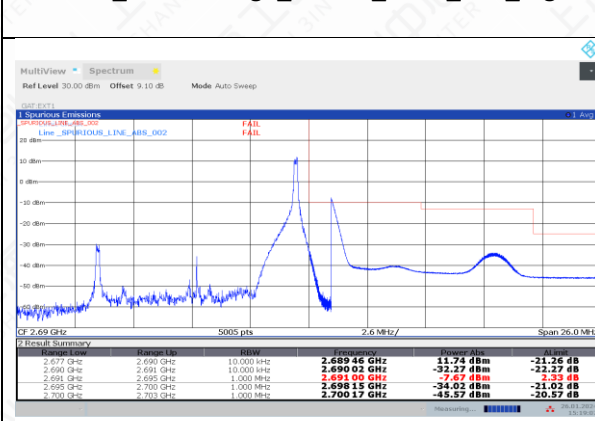
TDD41_Channel High_5MHz_2691001998Hz_1RB_High Out of Limit Channel Power



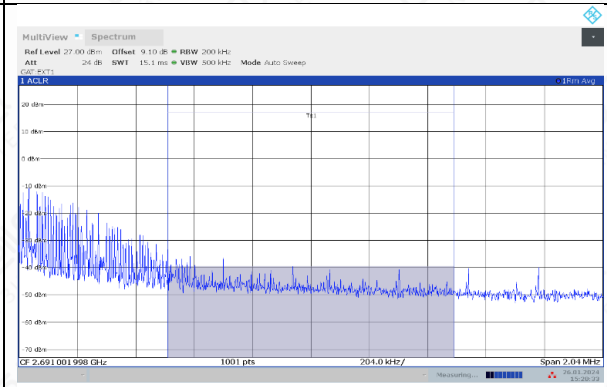
TDD41_Channel High_5MHz_QPSK_FullRB



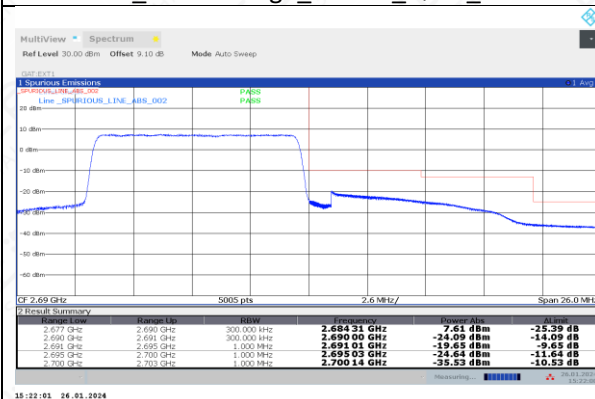
TDD41_Channel High_10MHz_QPSK_1RB_High



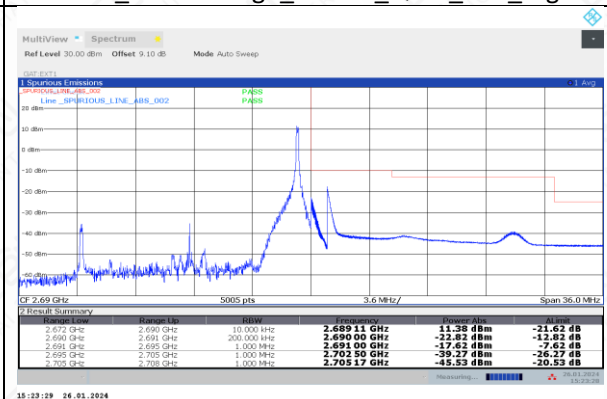
TDD41_Channel High_10MHz_2691001998Hz_1RB_High Out of Limit Channel Power



TDD41_Channel High_10MHz_QPSK_FullRB



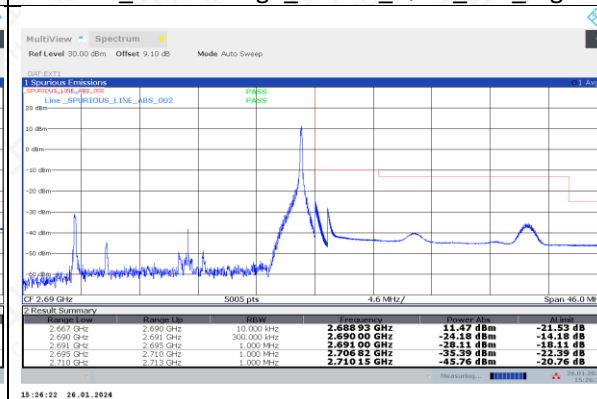
TDD41_Channel High_15MHz_QPSK_1RB_High



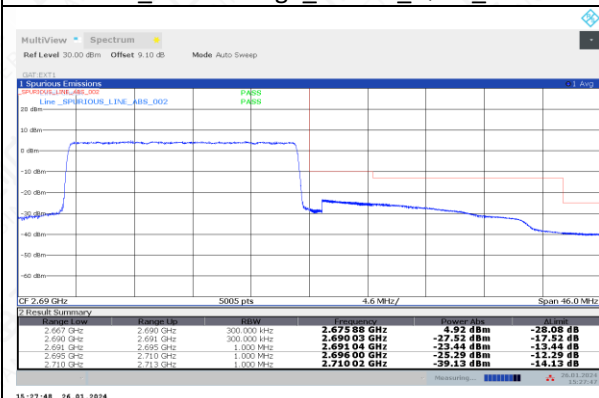
TDD41_Channel High_15MHz_QPSK_FullRB



TDD41_Channel High_20MHz_QPSK_1RB_High



TDD41_Channel High_20MHz_QPSK_FullRB



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6.7 Conducted Spurious Emission

6.7.1 Measurement Limit

FCC §22.917(a) Out of band emissions. 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.

FCC §24.238(a) Out of band emissions. 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.

FCC §27.53(a) For mobile and portable stations operating in the 2305–2315 MHz and 2350–2360 MHz bands:

(i) By a factor of not less than: $43 + 10 \log(P)$ dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than $55 + 10 \log(P)$ dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than $61 + 10 \log(P)$ dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than $67 + 10 \log(P)$ dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2300 and 2305 MHz, $55 + 10 \log(P)$ dB on all frequencies between 2296 and 2300 MHz, $61 + 10 \log(P)$ dB on all frequencies between 2292 and 2296 MHz, $67 + 10 \log(P)$ dB on all frequencies between 2288 and 2292 MHz, and $70 + 10 \log(P)$ dB below 2288 MHz;

(iii) By a factor of not less than $43 + 10 \log(P)$ dB on all frequencies between 2360 and 2365 MHz, and not less than $70 + 10 \log(P)$ dB above 2365 MHz.

FCC §27.53(h) (1) General protection levels. Except as otherwise specified below, for operations in the 1695–1710 MHz, 1710–1755 MHz, 1755–1780 MHz, 1915–1920 MHz, 1995–2000 MHz, 2000–2020 MHz, 2110–2155 MHz, 2155–2180 MHz, and 2180–2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10}(P)$ dB.

FCC §27.53(m)(4) 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.

FCC §27.53(h):

AWS emission limits —

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

(2) Additional protection levels. Notwithstanding the foregoing paragraph (h)(1) of this section:

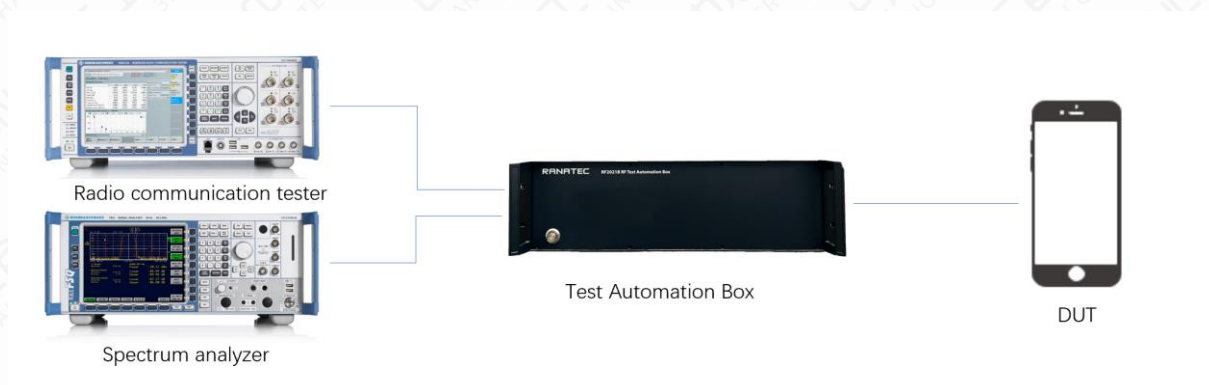
- (i) Operations in the 2180–2200 MHz band are subject to the out-of-band emission requirements set forth in § 27.1134 for the protection of federal government operations operating in the 2200–2290 MHz band.
- (ii) For operations in the 2000–2020 MHz band, the power of any emissions below 2000 MHz shall be attenuated below the transmitter power (P) in watts by at least $70 + 10 \log_{10}(P)$ dB.
- (iii) For operations in the 1915–1920 MHz band, the power of any emission between 1930–1995 MHz shall be attenuated below the transmitter power (P) in watts by at least $70 + 10 \log_{10}(P)$ dB.
- (iv) For operations in the 1995–2000 MHz band, the power of any emission between 2005–2020 MHz shall be attenuated below the transmitter power (P) in watts by at least $70 + 10 \log_{10}(P)$ dB.

6.7.2 Method of Measurement

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

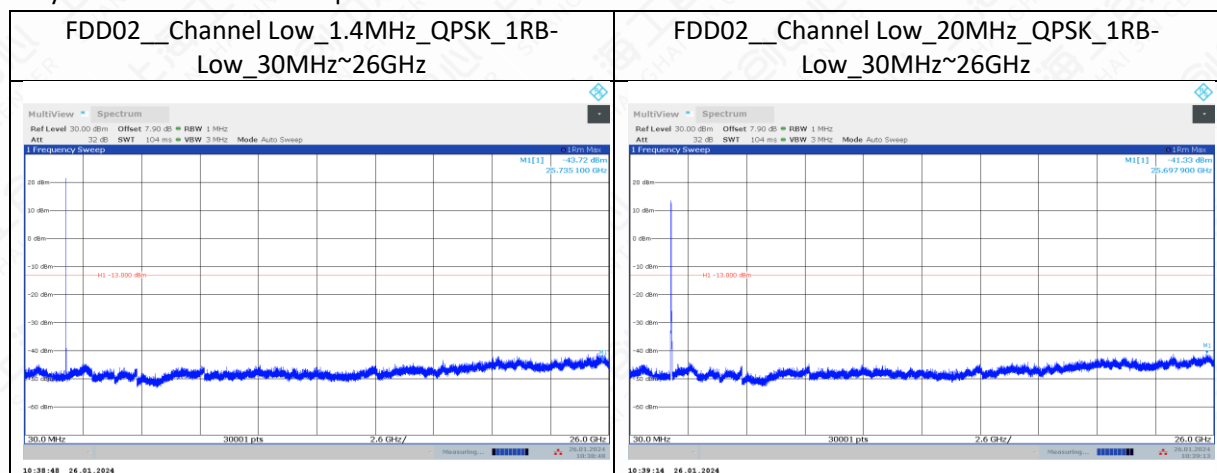
1. Determine frequency range for measurements: From CFR 2.1057 the spectrum should be investigated from the lowest radio frequency generated in the equipment up to at least the 10th harmonic of the carrier frequency. For the mobile station equipment tested, this equates to a frequency range of 13 MHz to 9 GHz, data taken from 10 MHz to 25 GHz.
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 set to 30001 which is greater than span/RBW.

6.7.3 Test Setup

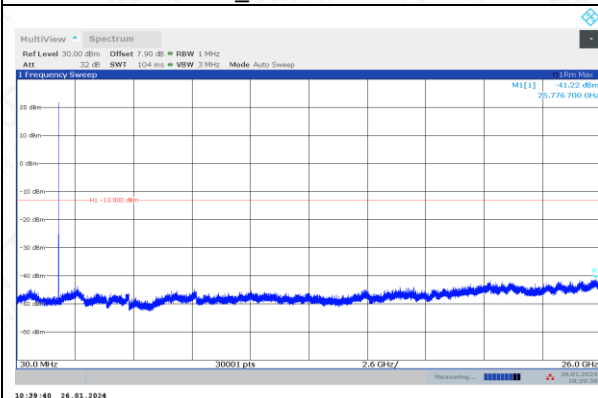


6.7.4 Measurement result

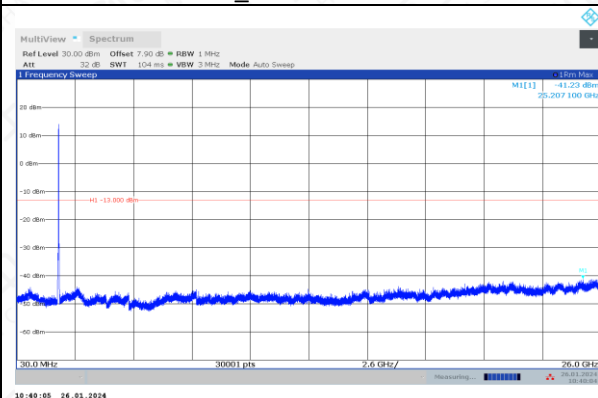
Only the worst mode data is provided.



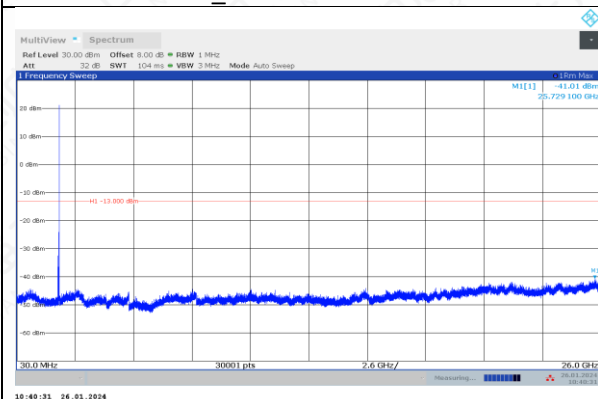
FDD02_Channel Mid_1.4MHz_QPSK_1RB-
Low_30MHz~26GHz



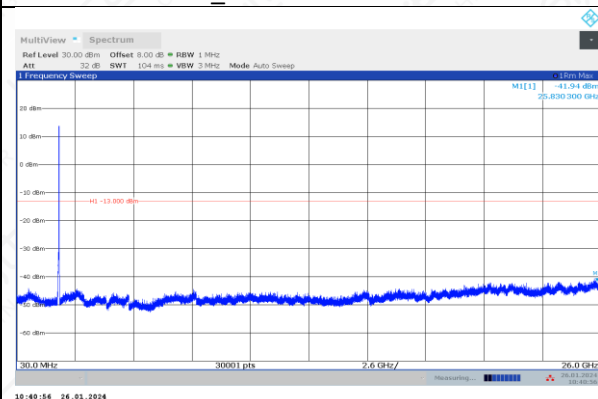
FDD02_Channel Mid_20MHz_QPSK_1RB-
Low_30MHz~26GHz



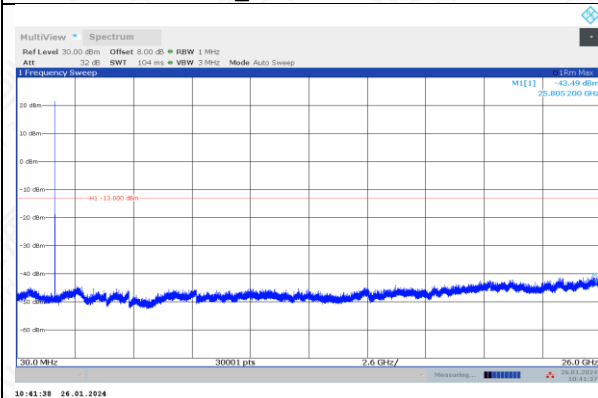
FDD02_Channel High_1.4MHz_QPSK_1RB- High
_30MHz~26GHz



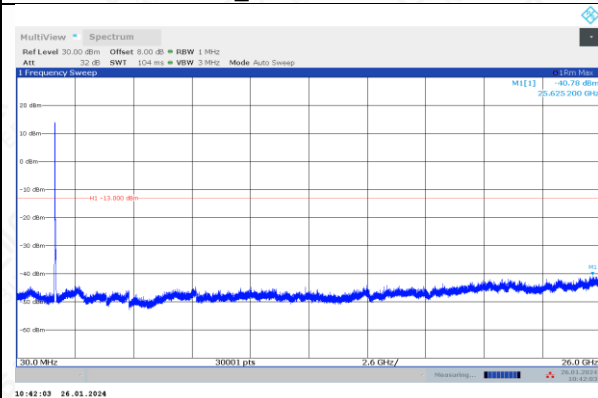
FDD02_Channel High_20MHz_QPSK_1RB- High
_30MHz~26GHz



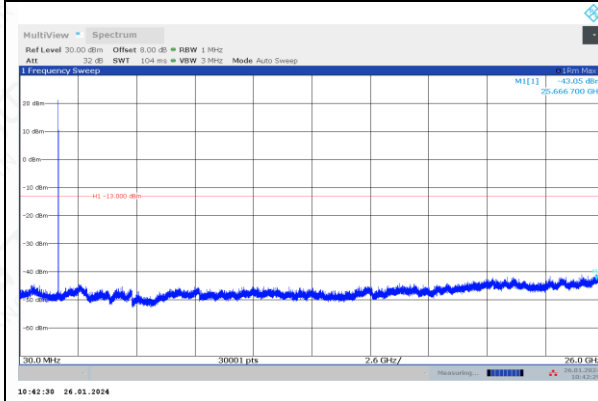
FDD04_Channel Low_1.4MHz_QPSK_1RB-
Low_30MHz~26GHz



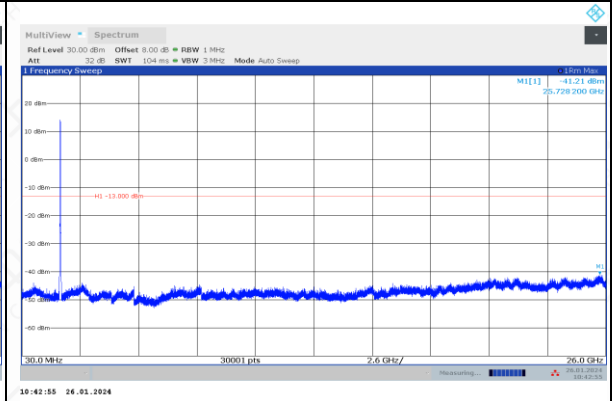
FDD04_Channel Low_20MHz_QPSK_1RB-
Low_30MHz~26GHz



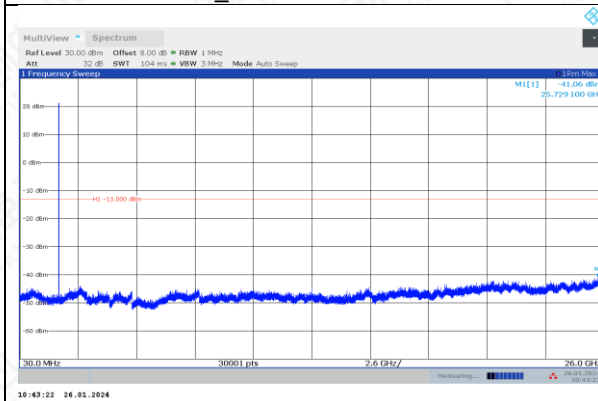
FDD04_Channel Mid_1.4MHz_QPSK_1RB-
Low_30MHz~26GHz



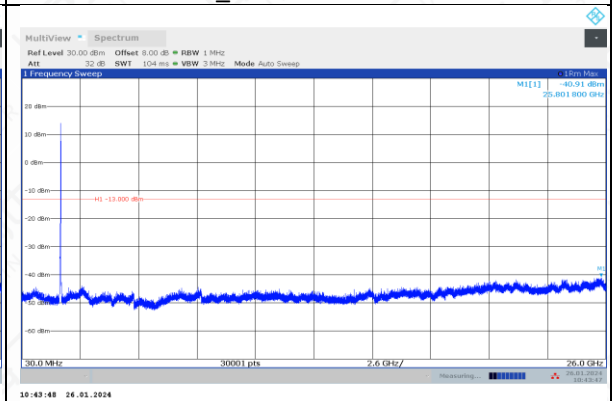
FDD04_Channel Mid_20MHz_QPSK_1RB-
Low_30MHz~26GHz



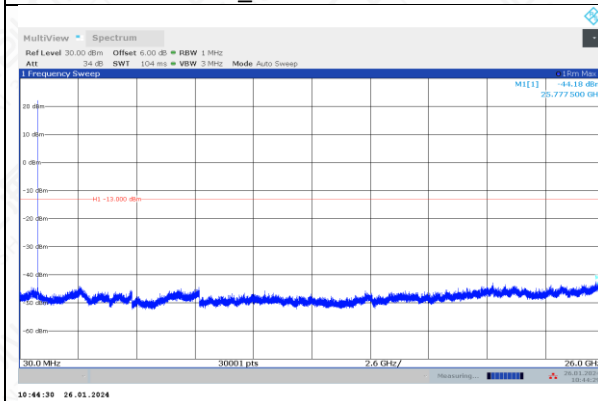
FDD04_Channel High_1.4MHz_QPSK_1RB- High
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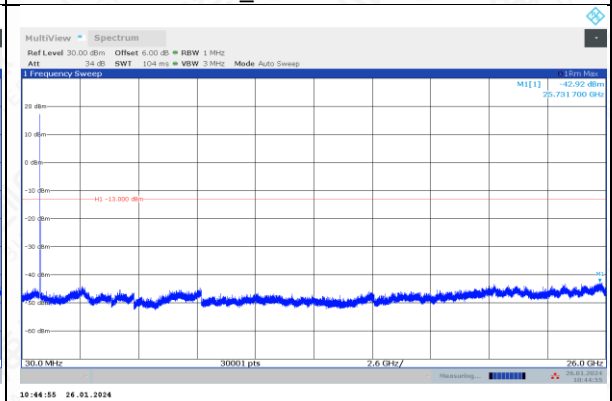
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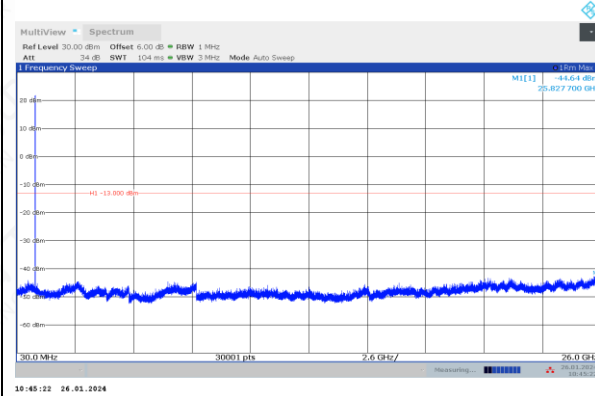
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Low_30MHz~26GHz



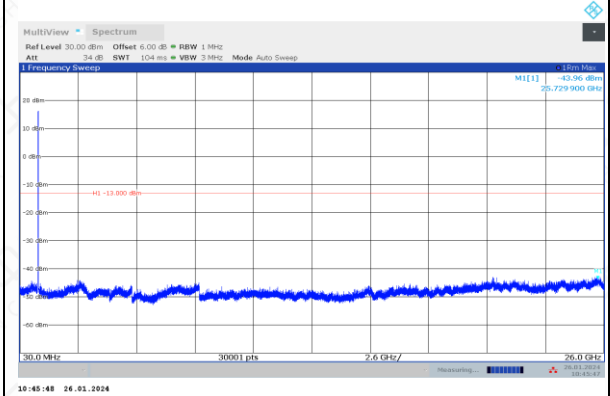
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Low_30MHz~26GHz



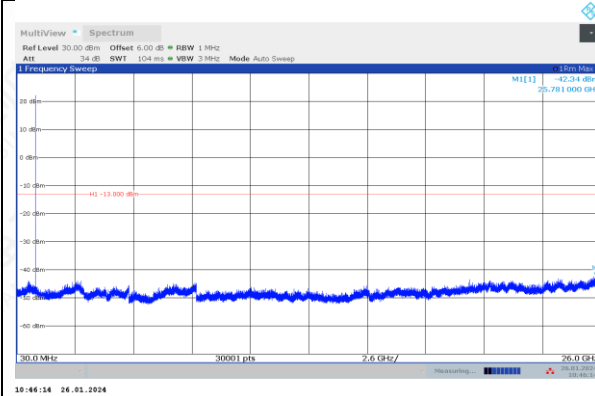
FDD05_Channel Mid_1.4MHz_QPSK_1RB-
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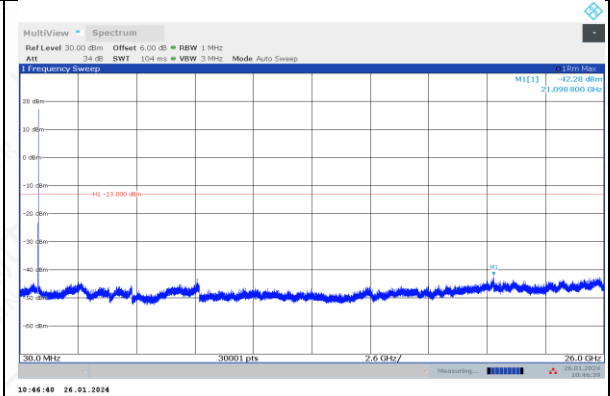
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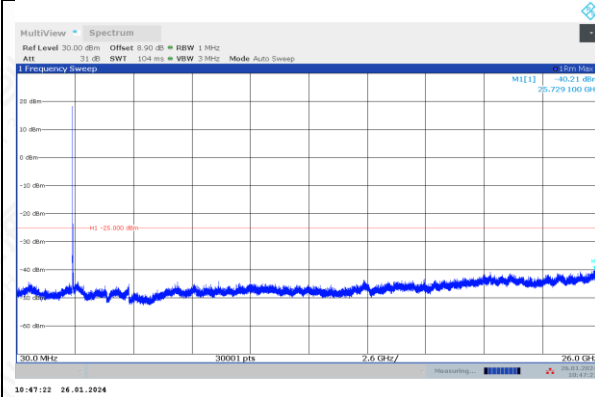
FDD05_Channel High_1.4MHz_QPSK_1RB- High
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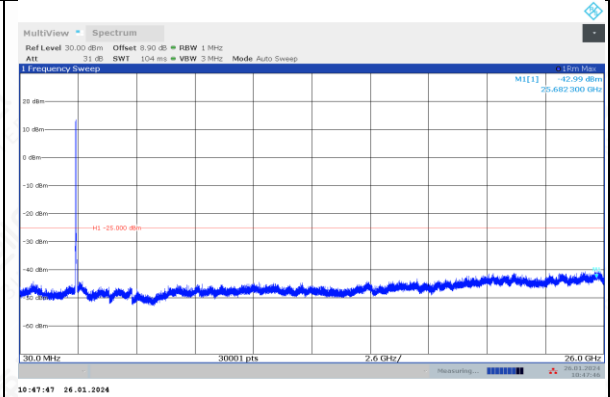
FDD05_Channel High_10MHz_QPSK_1RB- High
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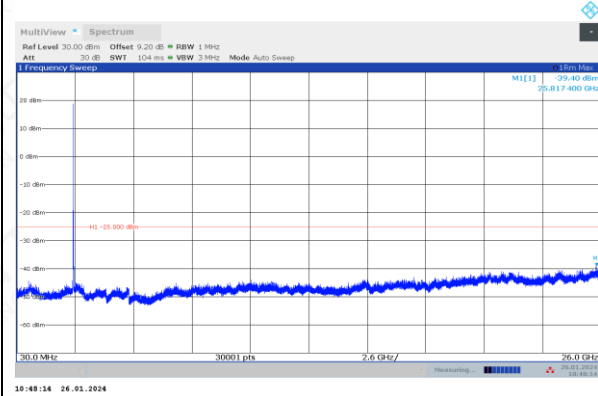
FDD07_Channel Low_5MHz_QPSK_1RB-
Low_30MHz~26GHz



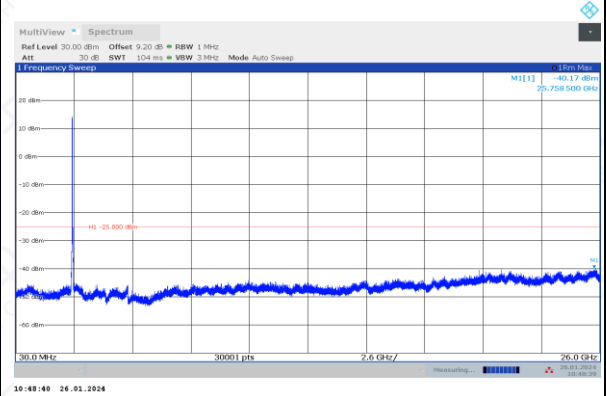
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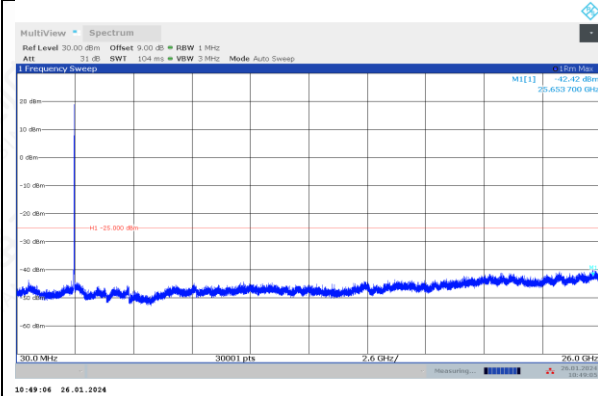
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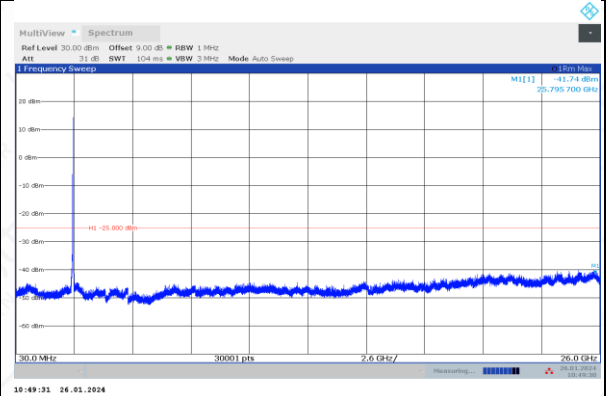
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Low_30MHz~26GHz



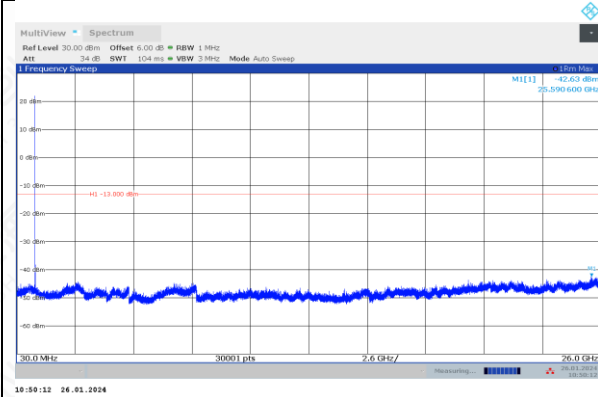
FDD07_Channel High_5MHz_QPSK_1RB- High
_30MHz~26GHz



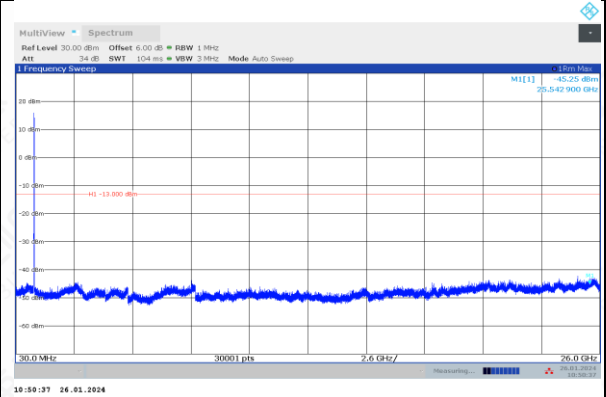
FDD07_Channel High_20MHz_QPSK_1RB- High
_30MHz~26GHz



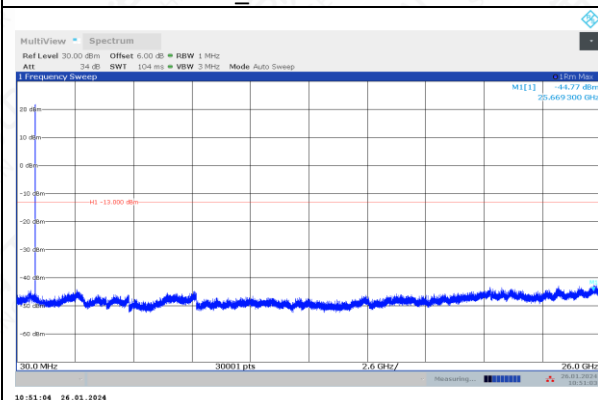
FDD26_22_Channel Low_1.4MHz_QPSK_1RB-
Low_30MHz~26GHz



FDD26_22_Channel Low_15MHz_QPSK_1RB-
Low_30MHz~26GHz

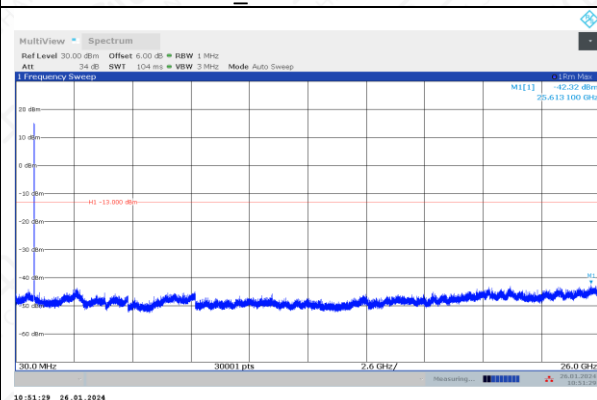


FDD26_22_Channel Mid_1.4MHz_QPSK_1RB-Low_30MHz~26GHz



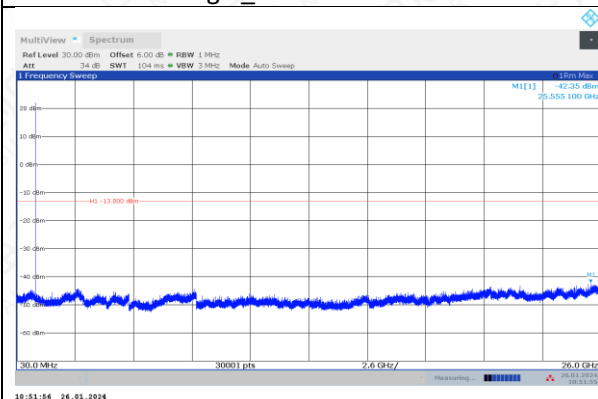
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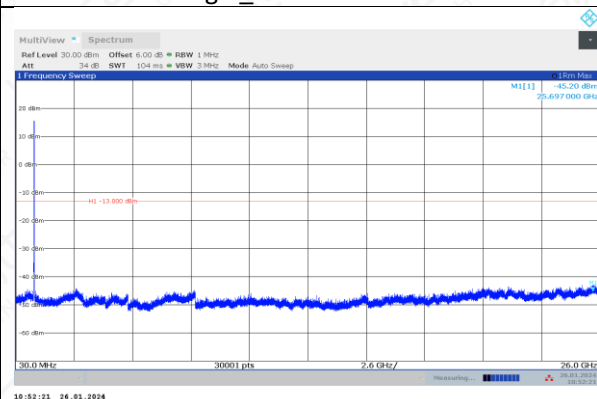
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FDD26_22_Channel High_1.4MHz_QPSK_1RB-High_30MHz~26GHz



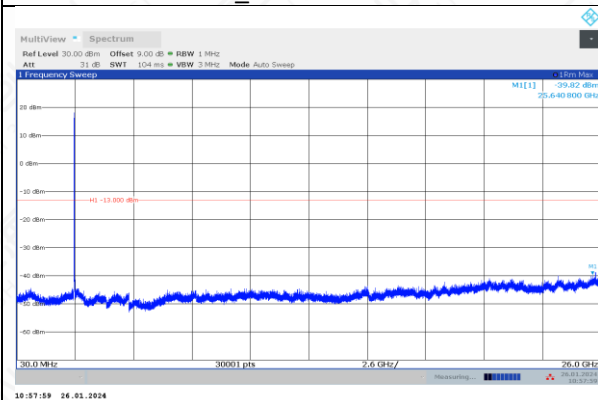
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FDD26_22_Channel High_15MHz_QPSK_1RB-High_30MHz~26GHz



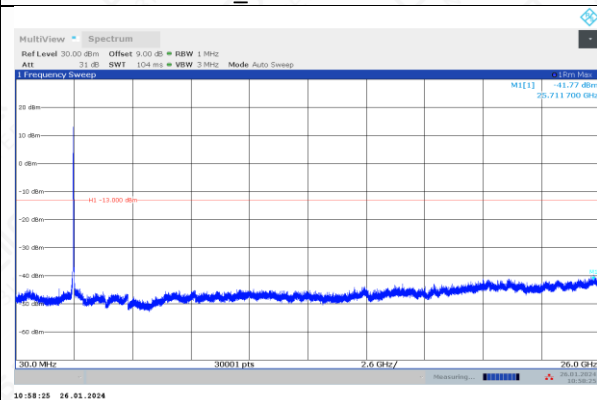
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TDD38_Channel Low_5MHz_QPSK_1RB-Low_30MHz~26GHz



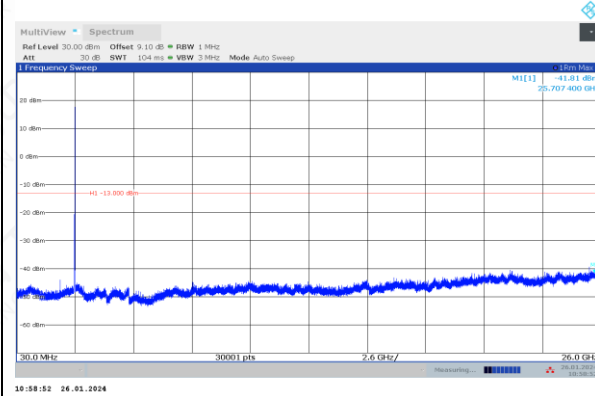
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TDD38_Channel Low_20MHz_QPSK_1RB-Low_30MHz~26GHz

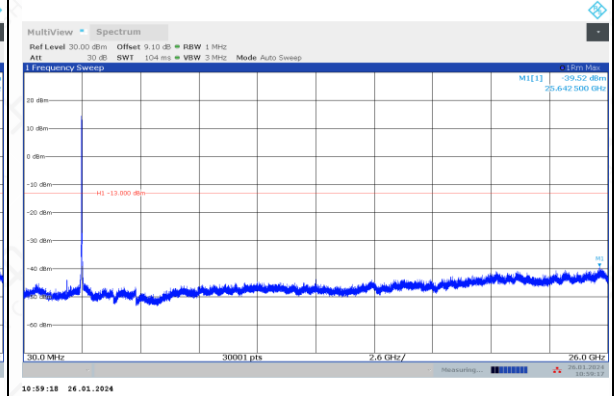


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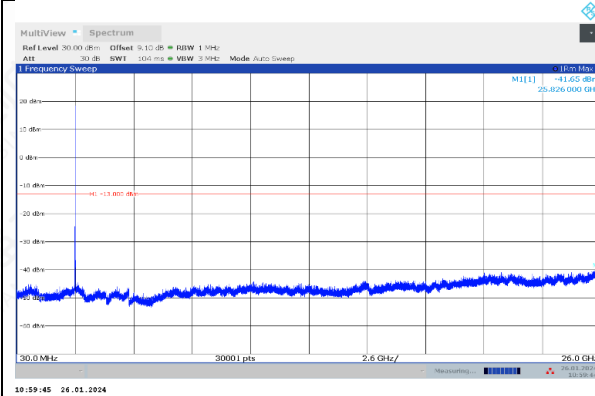
TDD38_Channel Mid_5MHz_QPSK_1RB-
Low_30MHz~26GHz



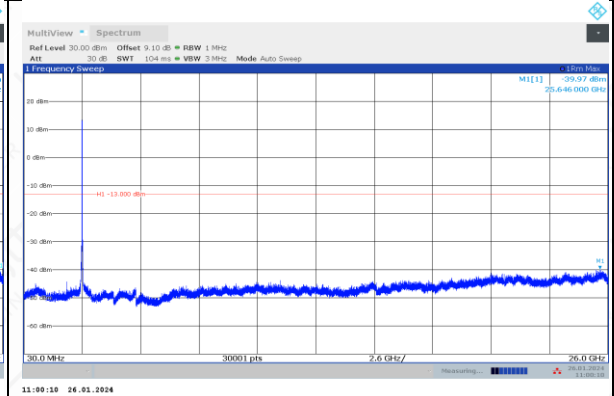
TDD38_Channel Mid_20MHz_QPSK_1RB-
Low_30MHz~26GHz



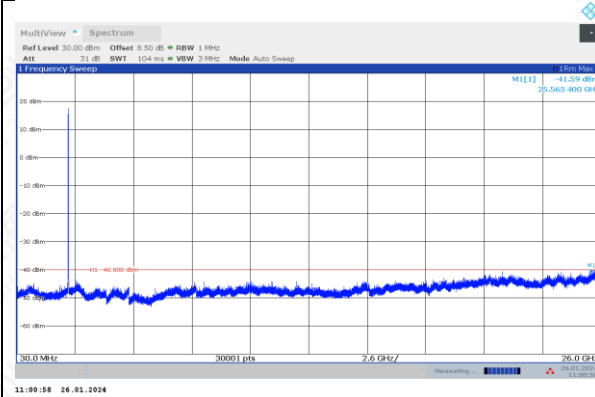
TDD38_Channel High_5MHz_QPSK_1RB- High
_30MHz~26GHz



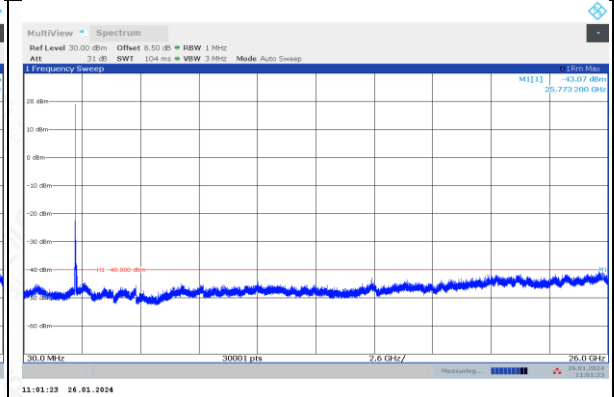
TDD38_Channel High_20MHz_QPSK_1RB- High
_30MHz~26GHz

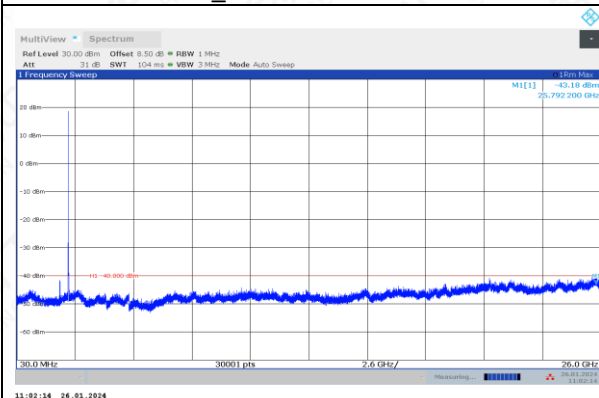
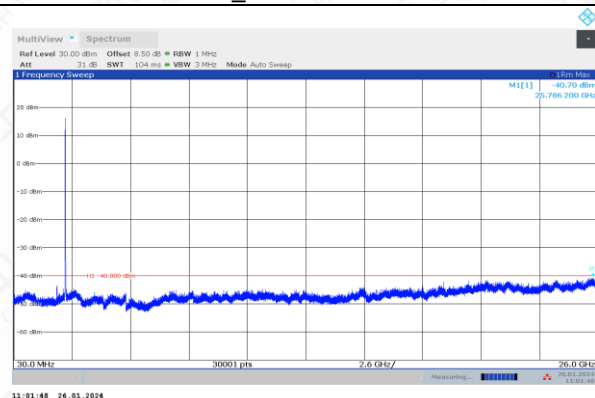
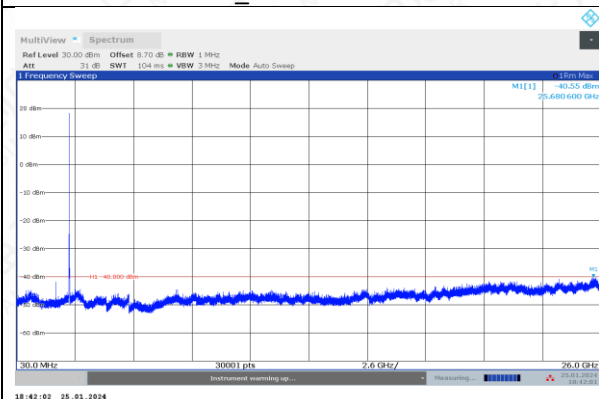
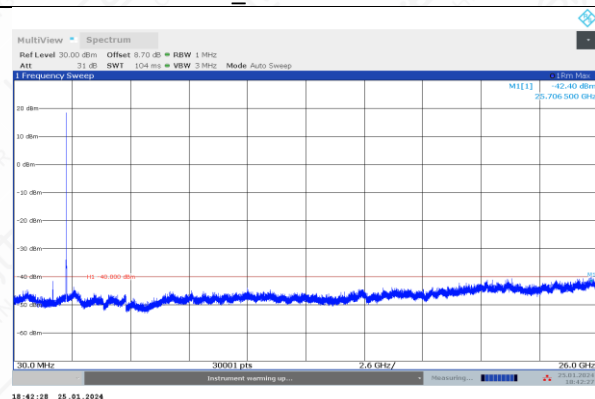
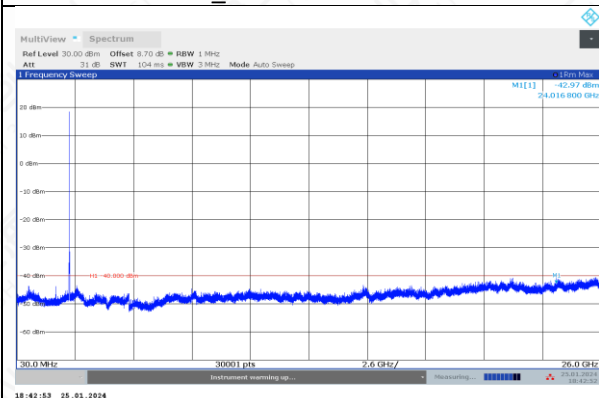
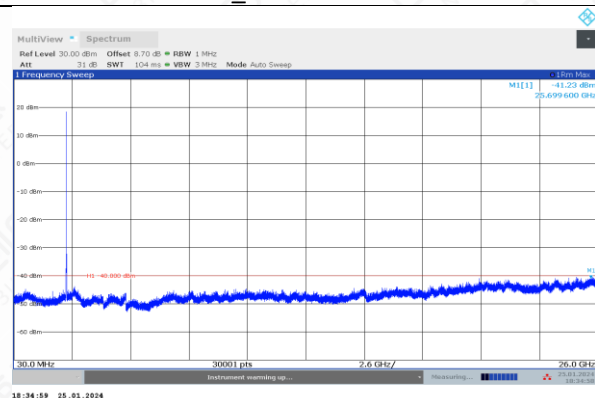


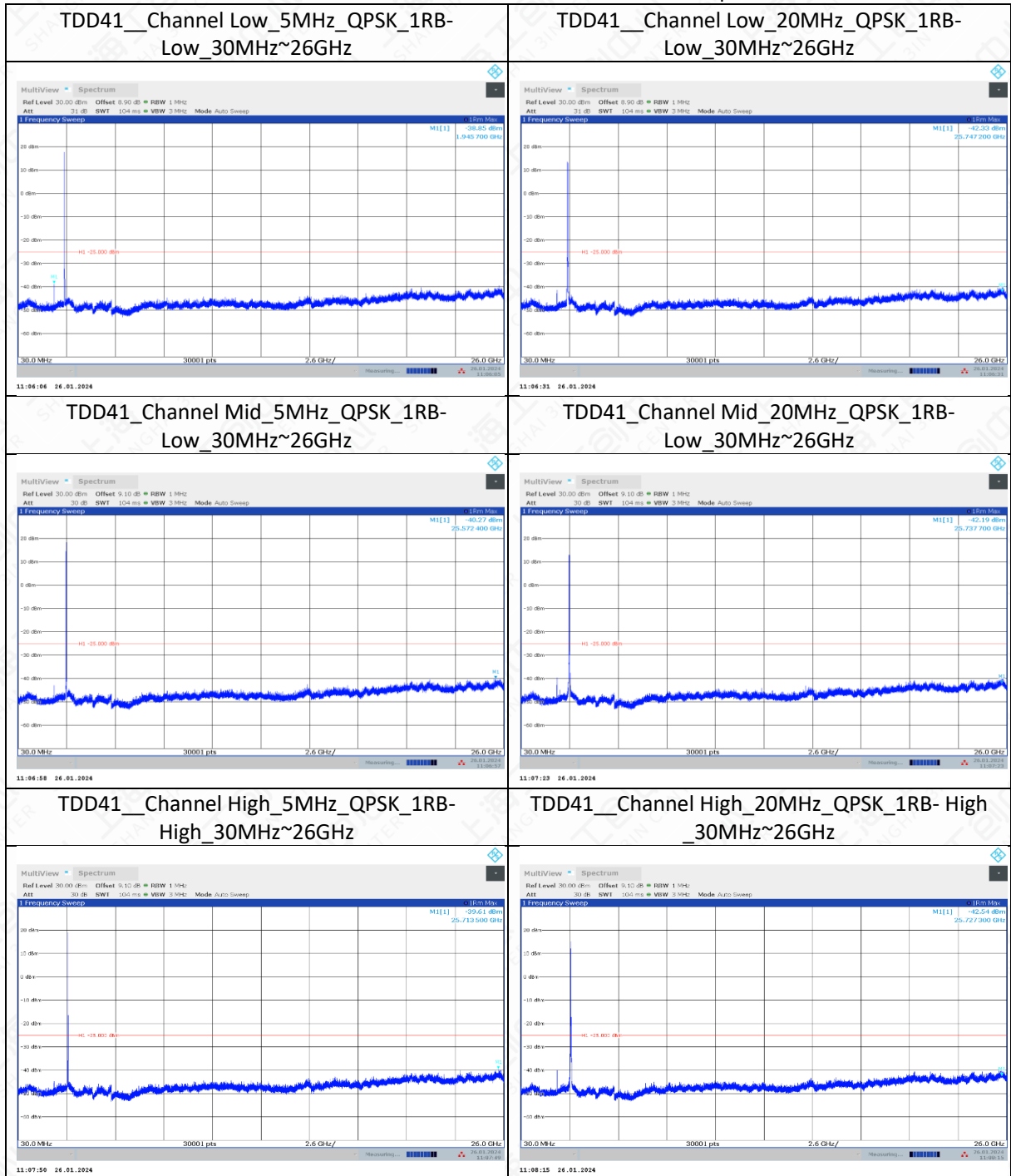
TDD40A_Channel Low_5MHz_QPSK_1RB-
Low_30MHz~26GHz



TDD40A_Channel Mid_5MHz_QPSK_1RB-
Low_30MHz~26GHz



TDD40A_Channel High_5MHz_QPSK_1RB- High_30MHz~26GHz

TDD40A_Channel Mid_10MHz_QPSK_1RB- Low_30MHz~26GHz

TDD40B_Channel Low_5MHz_QPSK_1RB- Low_30MHz~26GHz

TDD40B_Channel Mid_5MHz_QPSK_1RB- Low_30MHz~26GHz

TDD40B_Channel High_5MHz_QPSK_1RB- High_30MHz~26GHz

TDD40B_Channel Mid_10MHz_QPSK_1RB- Low_30MHz~26GHz




6.8 Peak-To-Average Power Ratio

6.8.1 Measurement Limit

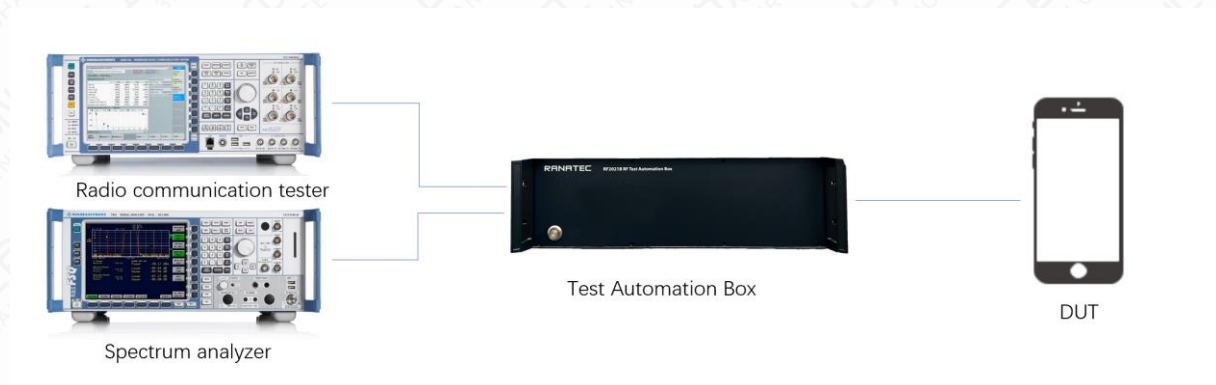
CFR Part 22.913(d)/24.232(d)/27.50 :The peak-to-average ratio (PAR) of the transmission must not exceed 13 dB.

6.8.2 Method of Measurement

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission. According to KDB 971168 5.7:

- 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;
- Set the measurement interval to 1 ms
- Record the maximum PAPR level associated with a probability of 0.1%

6.8.3 Test Setup



6.8.4 Measurement results

Band	Channel	BandWidth	RbMode	QPSK(dBm)	Q16(dBm)
FDD02	Low	20	fullRB	4.97	6.25
FDD02	Mid	20	fullRB	4.97	6.28
FDD02	High	20	fullRB	4.87	6.25
FDD04	Low	20	fullRB	5.00	6.19
FDD04	Mid	20	fullRB	4.97	6.12
FDD04	High	20	fullRB	4.97	6.15
FDD05	Low	10	fullRB	5.48	6.25

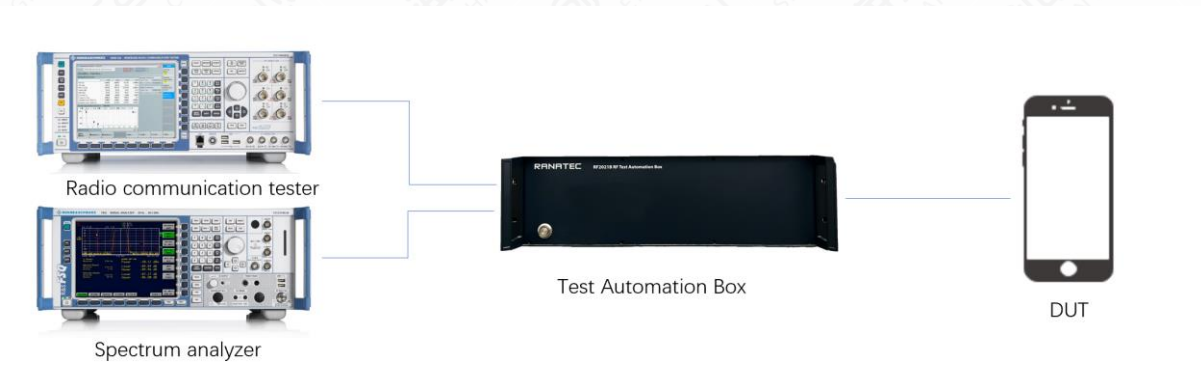
Band	Channel	BandWidth	RbMode	QPSK(dBm)	Q16(dBm)
FDD05	Mid	10	fullRB	8.53	6.22
FDD05	High	10	fullRB	5.45	6.25
FDD07	Low	20	fullRB	5.03	6.28
FDD07	Mid	20	fullRB	4.90	6.28
FDD07	High	20	fullRB	4.97	6.28
FDD26(PART 22)	Low	15	fullRB	4.90	6.09
FDD26(PART 22)	Mid	15	fullRB	4.87	8.46
FDD26(PART 22)	High	15	fullRB	4.94	6.06
TDD38	Low	20	fullRB	9.55	10.58
TDD38	Mid	20	fullRB	8.04	10.06
TDD38	High	20	fullRB	7.60	10.77
TDD40(2305-2315MHz)	LowRange	5	fullRB	9.84	9.29
TDD40(2305-2315MHz)	MidRange	10	fullRB	8.08	9.20
TDD40(2305-2315MHz)	HighRange	5	fullRB	9.78	10.58
TDD40(2350-2360MHz)	LowRange	5	fullRB	9.90	10.71
TDD41	Low	20	fullRB	9.62	10.45
TDD41	Mid	20	fullRB	9.23	8.85
TDD41	High	20	fullRB	9.58	9.20

6.9 Duty Cycle

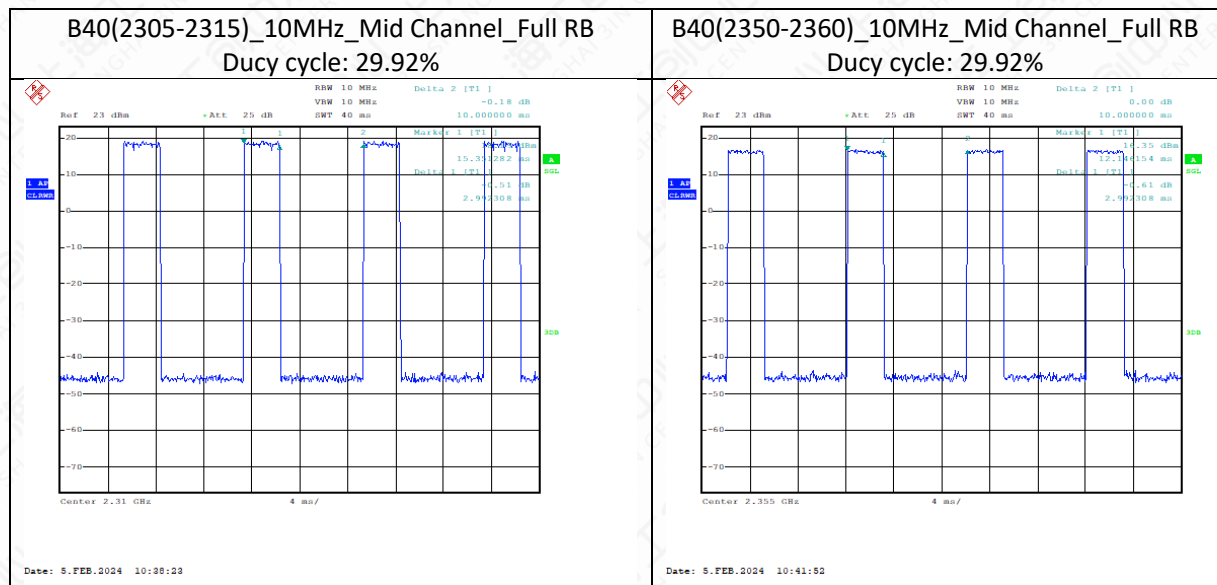
6.9.1 Measurement Limit

For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305–2315 MHz and 2350–2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305–2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

6.9.2 Test Setup



6.9.3 Measurement results



Annex A: Revised History

Version	Revised Content
V00	Initial
V01	Modify some data and statements
V02	Modify duty cycle data

Annex B: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

**INDUSTRIAL INTERNET INNOVATION CENTER
(SHANGHAI) CO., LTD.**
Shanghai, People's Republic of China

for technical competence in the field of

Electrical Testing

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



Presented this 20th day of September 2023.



Mr. Trace McInturf, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 3682.01
Valid to February 28, 2025

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

END OF REPORT