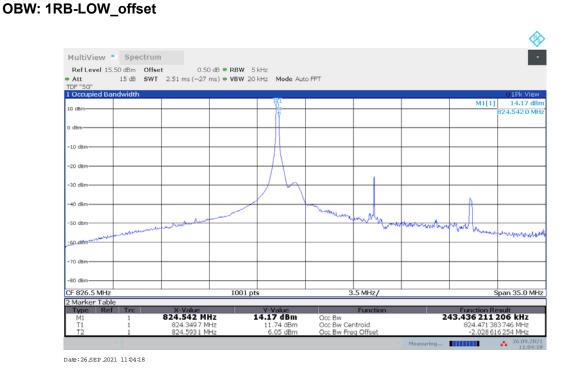
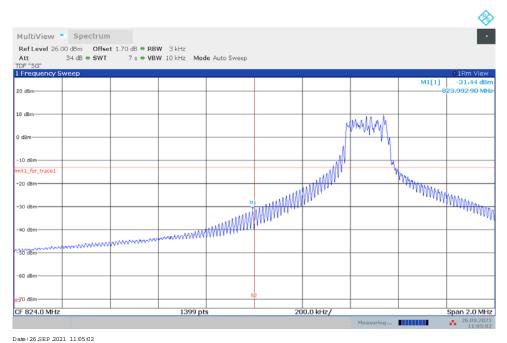




# LTE Band 66+NR n5



# LOW BAND EDGE BLOCK-1RB-LOW\_offset

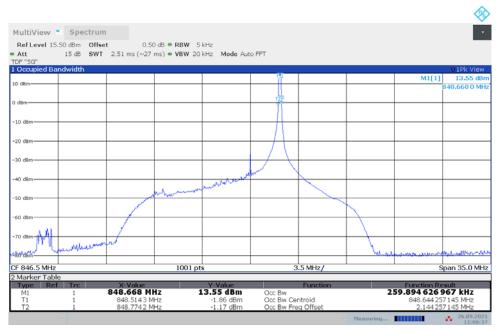


Date: 26.SEP.2021 11:05:02



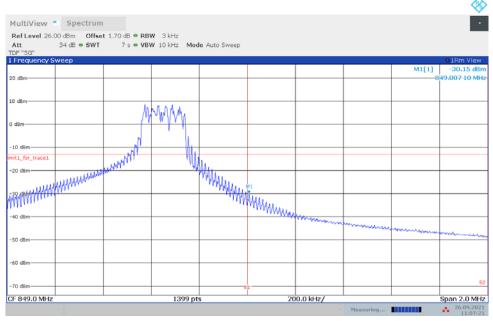


#### **OBW: 1RB-HIGH\_offset**



Date: 26.SEP.2021 11:06:38

#### HIGH BAND EDGE BLOCK-1RB-HIGH\_offset

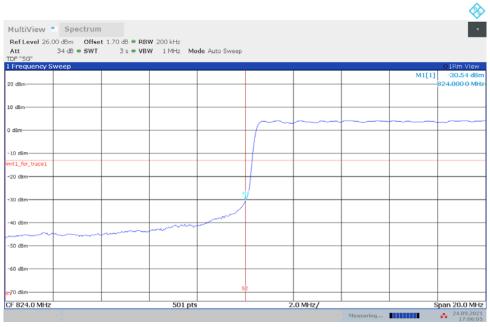


Date: 26.SEP.2021 11:07:22



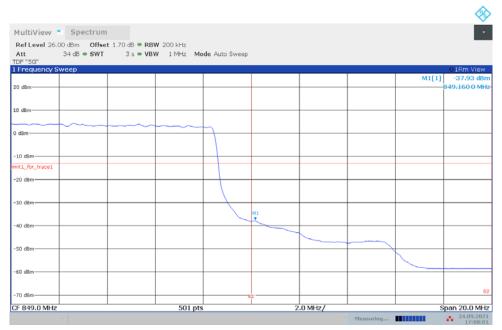


#### LOW BAND EDGE BLOCK-20M-100%RB



Date: 24.SEP.2021 17:06:06

#### **HIGH BAND EDGE BLOCK-20M-100%RB**

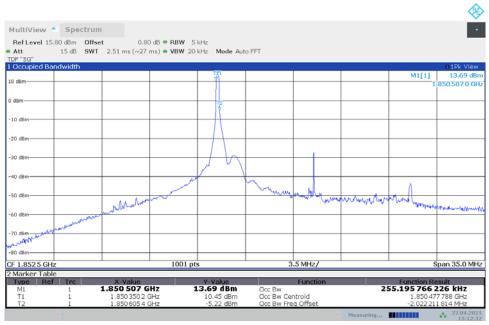


Date: 24.SEP.2021 17:08:01



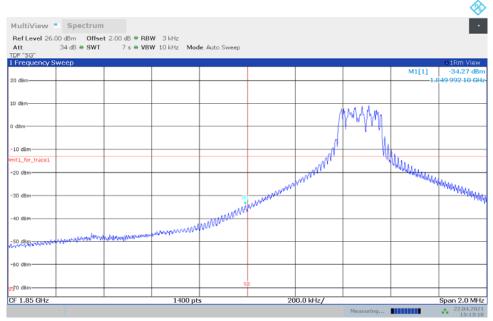


## LTE Band 12+NR n25 OBW: 1RB-low\_offset



Date: 22 APR 2021 15:12:33

#### LOW BAND EDGE BLOCK-1RB-low\_offset

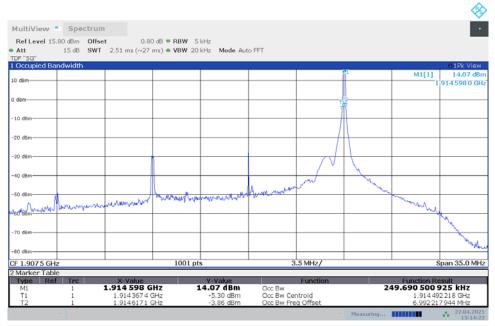


Date: 22 APR 2021 15:13:10



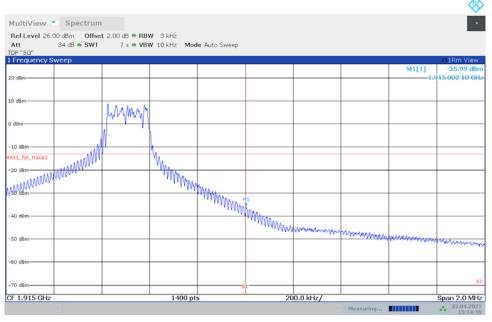


#### OBW: 1RB-high\_offset



Date: 22 APR 2021 15:14:22

#### HIGH BAND EDGE BLOCK-1RB-high\_offset

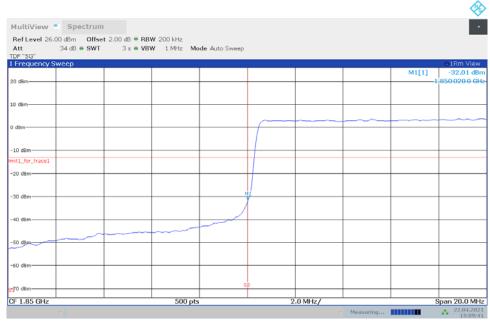


Date: 22 APR 2021 15:14:59



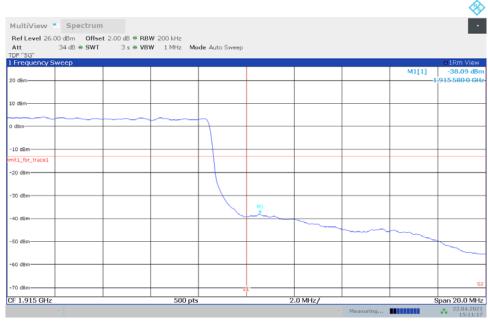


#### LOW BAND EDGE BLOCK-20MHz-100%RB



Date: 22 APR 2021 15:09:41

#### HIGH BAND EDGE BLOCK-20MHz-100%RB

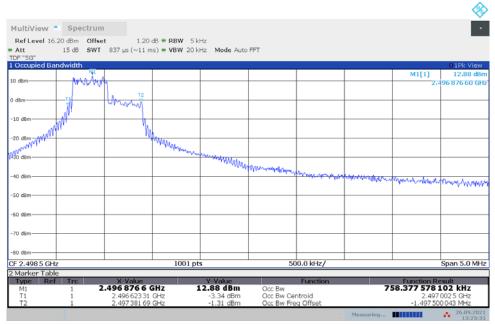


Date: 22 APR 2021 15:11:17



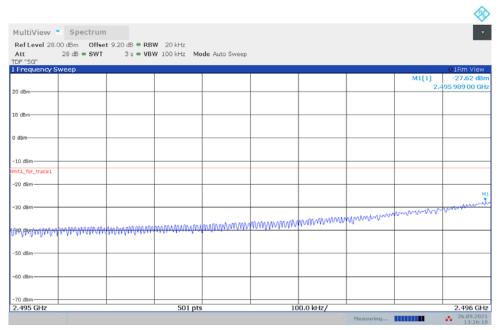


# LTE Band 66+NR n41 OBW: 1RB-LOW\_offset



Date: 26.SEP.2021 13:25:32

#### LOW BAND EDGE BLOCK-1RB-LOW\_offset

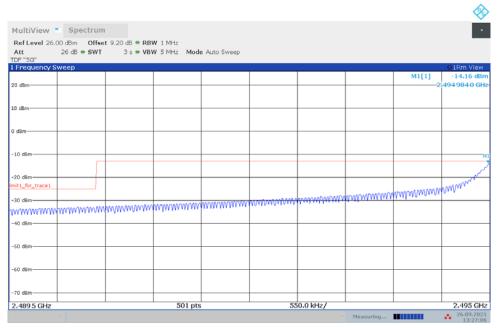


Date: 26 SEP 2021 13:26:19





## LOW BAND EDGE BLOCK-1RB-LOW\_offset

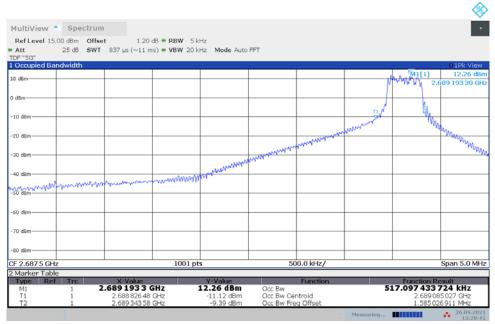


Date:26.SEP.2021 13:27:06



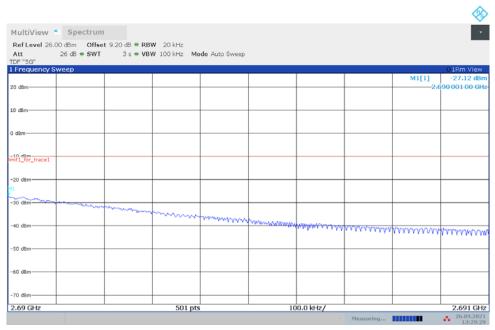


#### **OBW: 1RB-HIGH\_offset**



Date: 26.SEP.2021 13:28:41

#### HIGH BAND EDGE BLOCK-1RB-HIGH\_offset

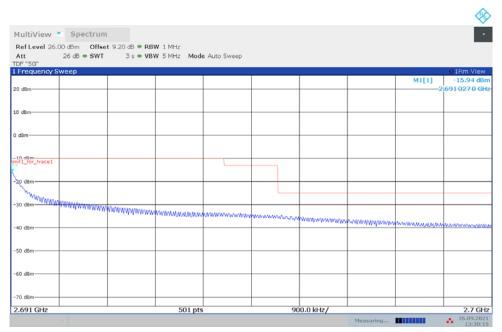


Date: 26 SEP 2021 13:29:29





#### HIGH BAND EDGE BLOCK-1RB-HIGH\_offset

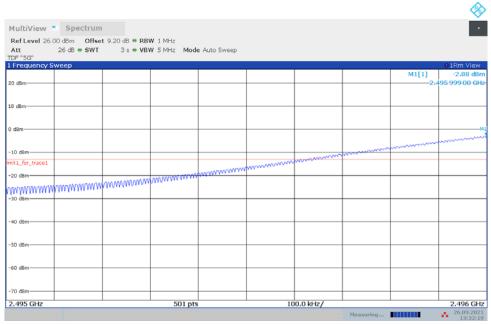


Date:26.SEP.2021 13:30:16



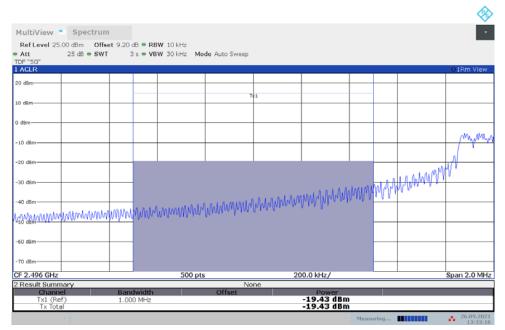


#### LOW BAND EDGE BLOCK-100M-100%RB



Date: 26.SEP.2021 13:32:19

#### **Channal Power**

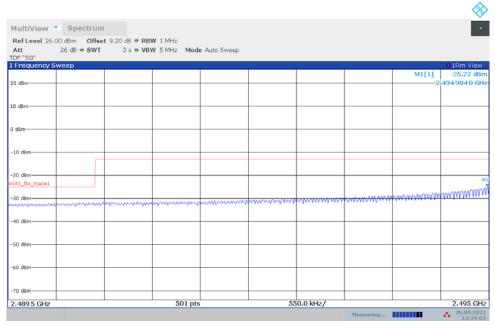


Date: 26.SEP.2021 13:33:16





#### LOW BAND EDGE BLOCK-100M-100%RB

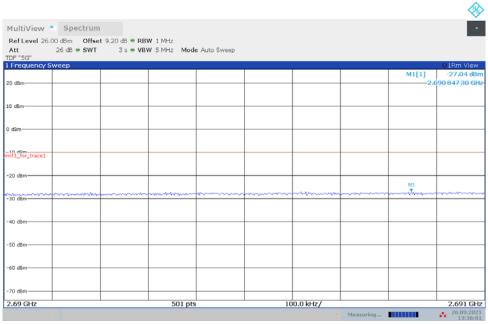


Date: 26.SEP.2021 13:34:04



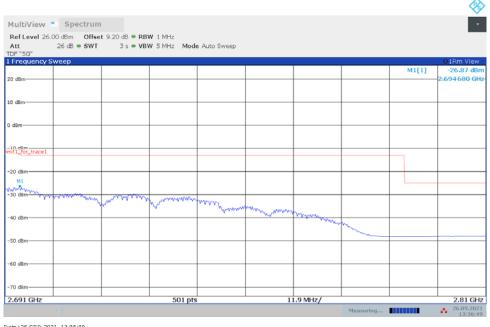


#### HIGH BAND EDGE BLOCK-100M-100%RB



Date: 26.SEP.2021 13:36:02

#### HIGH BAND EDGE BLOCK-100M-100%RB

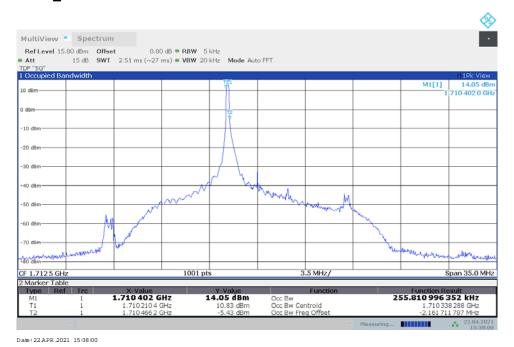


Date: 26.SEP.2021 13:36:49

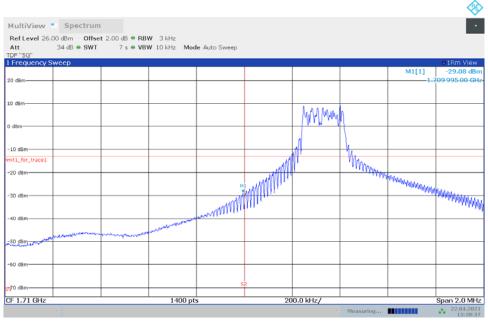




## LTE Band 12+NR n66 OBW: 1RB-low\_offset



### LOW BAND EDGE BLOCK-1RB-low\_offset

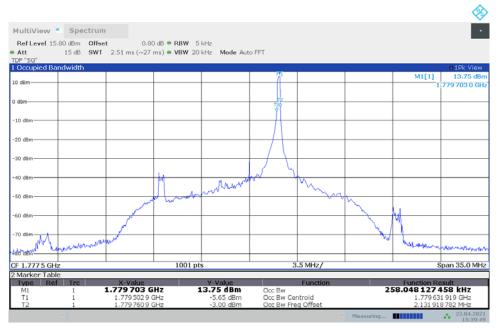


Date: 22 APR 2021 15:38:37



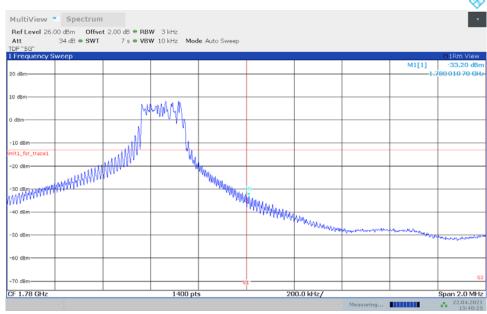


#### OBW: 1RB-high\_offset



Date: 22 APR 2021 15:39:49

#### HIGH BAND EDGE BLOCK-1RB-high\_offset

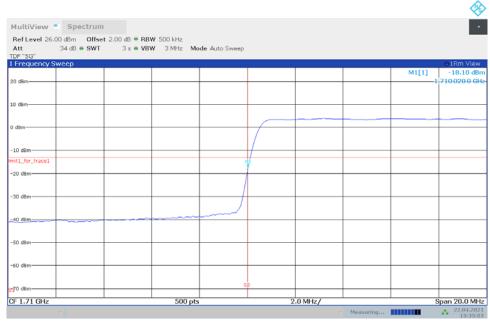


Date: 22 APR 2021 15:40:26



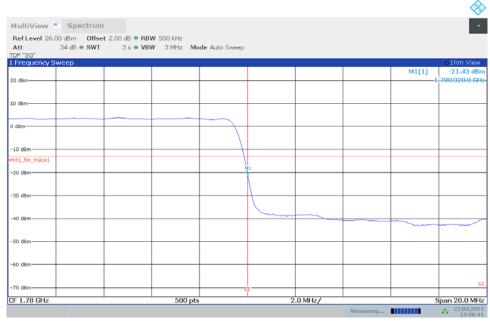


#### LOW BAND EDGE BLOCK-40MHz-100%RB



Date: 22 APR 2021 15:35:04

#### HIGH BAND EDGE BLOCK-40MHz-100%RB



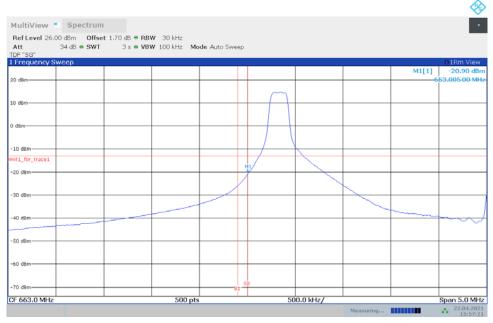
Date: 22 APR 2021 15:36:42





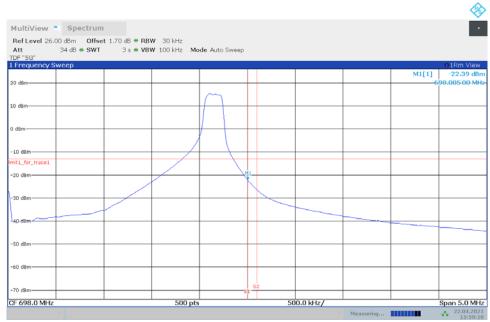
#### LTE Band 66+NR n71

#### LOW BAND EDGE BLOCK-1RB-low\_offset



Date: 22 APR 2021 15:57:22

#### HIGH BAND EDGE BLOCK-1RB-high\_offset

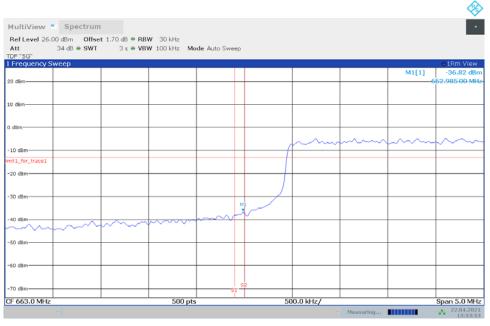


Date: 22 APR 2021 15:59:10



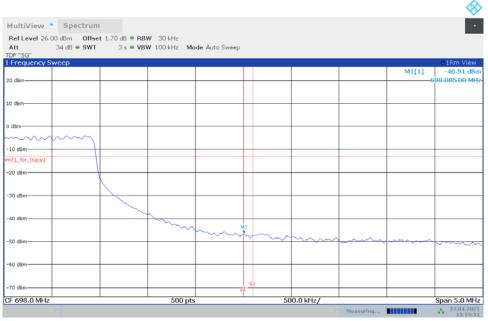


#### LOW BAND EDGE BLOCK-20MHz-100%RB



Date: 22 APR 2021 15:53:54

#### HIGH BAND EDGE BLOCK-20MHz-100%RB



Date: 22 APR 2021 15:55:31





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

#### A. 7.2 Measurement Limit

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

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

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

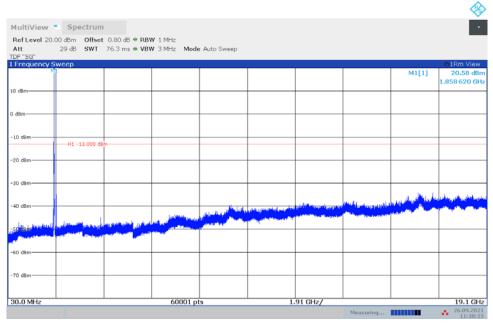




#### A. 7.3 Measurement result

#### LTE Band 12+NR n2

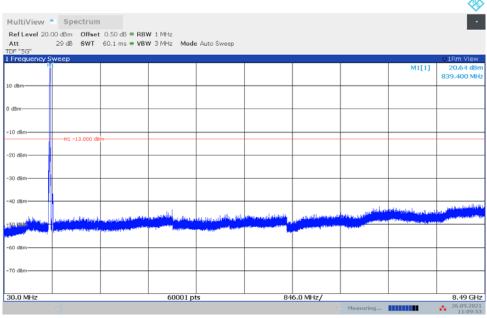
NOTE: peak above the limit line is the carrier frequency.



Date: 26 SEP 2021 11:38:23

#### LTE Band 66+NR n5

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



Date: 26.SEP.2021 11:09:53

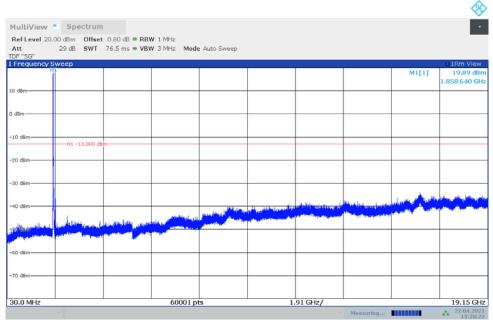




#### LTE Band 12+NR n25

n25

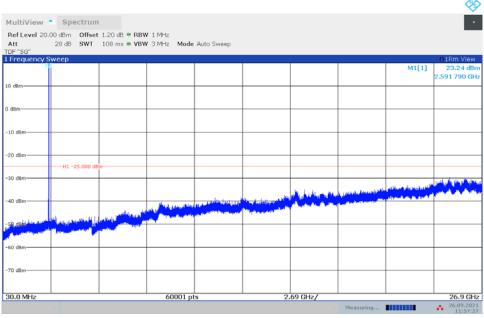
NOTE: peak above the limit line is the carrier frequency.



Date: 22 APR .2021 15:28:22

#### LTE Band 66+NR n41

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



Date: 26 SEP 2021 11:57:27

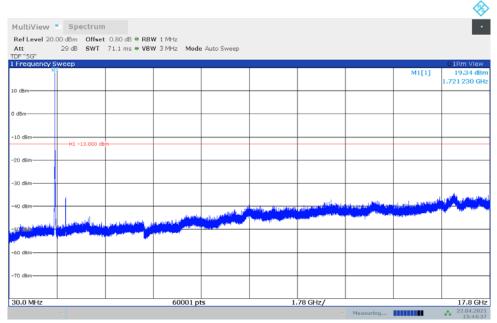




#### LTE Band 12+NR n66

**n66** 

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

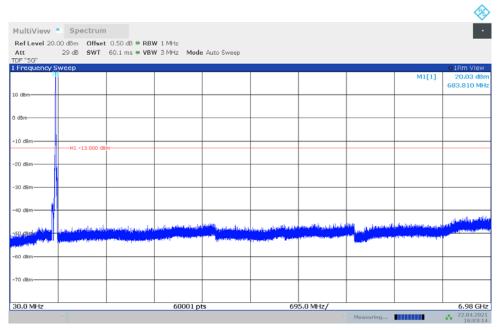


Date: 22 APR .2021 15:44:37

#### LTE Band 66+NR n71

n71

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



Date: 22 APR .2021 16:03:14





#### 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**

#### LTE Band 12+NR n2,20MHz

Frequency (MHz)		PAPR (dB)									
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM		
1880	5.58	6.32	7.42	7.76	7.76	9.32	9.46	9.42	9.46		

#### LTE Band 66+NR n5,20MHz

Frequency (MHz)	PAPR (dB)									
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM	
836.5	5.24	6.14	7.18	7.34	7.52	9.20	8.98	9.06	9.46	

# LTE Band 12+NR n25 n25,20MHz

Frequency (MHz)	PAPR (dB)									
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM	
1882.5	7.34	8.56	8.90	8.28	8.38	9.42	9.54	9.18	9.04	

#### LTE Band 66+NR n41,100MHz

	Frequency (MHz)		PAPR (dB)									
		DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM		
	2592.99	5.60	6.35	7.04	7.32	7.34	8.80	8.83	8.92	9.10		

# LTE Band 12+NR n66

#### n66,40MHz

Frequency (MHz)	PAPR (dB)									
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM	
1745	8.04	8.52	9.04	8.84	9.36	9.12	9.20	9.36	8.98	





# LTE Band 66+NR n71

#### n71,20MHz

Frequency (MHz)	PAPR (dB)									
	DFT-s-pi/2 BPSK	DFT-s-QPSK	DFT-s-16QAM	DFT-s-64QAM	DFT-s-256QAM	CP-QPSK	CP-16QAM	CP-64QAM	CP-256QAM	
680.5	7.26	8.64	8.84	8.54	8.40	9.16	9.66	9.36	9.18	





# **Annex B: Accreditation Certificate**

United States Department of Commerce National Institute of Standards and Technology



### Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 600118-0

#### Telecommunication Technology Labs, CAICT

Beijing China

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

#### **Electromagnetic Compatibility & Telecommunications**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2021-09-29 through 2022-09-30

Effective Dates

PATES OF MEETING

For the National Voluntary Laboratory Accreditation Program

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