TEST REPORT

No. 25T04Z100437-003

for

Baicells Technologies Co., Ltd.

Product Name: Aurora454

Model Name: BSQ7041A454

FCC ID: 2AG32BSQ7041A454

with

Hardware Version: Ver.B

Software Version: BaiBNQ_2.7.2

Issued Date: 2025-04-03

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

Test Laboratory:

CTTL-Telecommunication Technology Labs, CAICT

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REPORT HISTORY

Report Number	Revision	Description	Issue Date
25T04Z100437-003	Rev.0	1st edition	2025-04-03

Note: the latest revision of the test report supersedes all previous version.

CONTENTS

1. Test Laboratory

1.1. Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2. Testing Location

Location 1: CTTL (huayuan North Road)

Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191

Location 2: CTTL (BDA)

Address: No.18A, Kangding Street, Beijing Economic-Technology Development Area, Beijing, P. R. China 100176

1.3. Testing Environment

Normal Temperature: 15-35℃

Relative Humidity: 20-75%

1.4. Project Data

Testing Start Date: 2025-03-14

Testing End Date: 2025-03-25

1.5. Signature

Dong Yuan

(Prepared this test report)

Zhou Yu

(Reviewed this test report)

Zhao Hui Lin

Deputy Director of the laboratory

(Approved this test report)

2. Client Information

2.1. Applicant Information

Company Name:	Baicells Technologies Co., Ltd.
Address:	9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China
City:	Beijing
Country:	China
Contact	Back Huang
Email	contact@baicells.com
Tel.	010 6260 7100

2.2. Manufacturer Information

Company Name:	Baicells Technologies Co., Ltd.
Address:	9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China
City:	Beijing
Country:	China
Contact	Back Huang
Email	contact@baicells.com
Tel.	010 6260 7100

3. Equipment Under Test (EUT)

3.1. About EUT(*)

Description	5G NR Base Station
Model Name	BSQ7041A454
Supported Channel bandwidth	NR:100MHz
Output Power	60W per port
Number of Antenna ports	4
Max antenna gain	17.9dBi
Frequency range	N41 2496MHz-2690MHz
Type of modulation	QPSK, 16QAM, 64QAM, 256QAM
Extreme Temperature	-40/+55℃
Normal Voltage	-48V DC

(*): Declared by applicant.

3.2. Internal Identification of EUT used during the test

EUT ID*	SN	HW Version	SW Version	Date of receipt
UT01a	24B000010	Ver.B	BaiBNQ_2.7.2	2025-03-14

3.3. General Description

The Equipment Under Test (EUT) BSQ7041A454 is a NR Base Station which provides communication connections to 2496-2690MHz network. The EUT operates from a -48V DC supply.

The EUT includes 4 TX/RX ports. It can operate in NR single RAT mode. It can be configured to transmit in MIMO mode which was used for measurements as the worst configuration. The complete testing was performed with the EUT transmitting at rated maximum RF power unless otherwise stated.

A full technical description can be found in the Manufacturer's documentation.

3.4. Configuration Description

The following settings were used to represent all traffic scenarios. The output power was measured on the bottom, middle and top channel of both applicable antenna ports. By measuring the output power of QPSK, 16QAM, 64QAM and 256QAM for NR on all of the antenna ports, it was determined that QPSK was the worst case modulation scheme and was used for all testing.

Complete testing was carried out on the worst case antenna port which was established as being the highest output power from the applicable measured ports on worst case modulation scheme. This antenna port was Port 1 for NR single RAT mode.

The settings below were used for all measurements unless otherwise noted:

Carrier Bandwidth	Carrier Frequency Configuration (MHz)		
	Bottom	Middle	Top
100MHz	2546.01	2593.02	2640

4. Reference Documents

4.1. Documents supplied by applicant

EUT parameters are supplied by the customer, which are the bases of testing. CAICT is not responsible for the accuracy of customer supplied technical information that may affect the test results (for example, antenna gain and loss of customer supplied cable).

4.2. Reference Documents for testing

The following documents listed in this section are referred for testing.

Reference	Title	Version
FCC Part 27	MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES	10-1-23 Edition
FCC Part 2	FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS	10-1-23 Edition
ANSI 63.26	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services	2015
ANSI/TIA-603-E	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards	2016
KDB 971168 D01	MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS	v03r01
KDB 662911 D01	Emissions Testing of Transmitters with Multiple Outputs in the Same Band	v02r01

5. Laboratory Environment

Control room / conducted chamber did not exceed following limits along the testing:

Temperature	Min. = 15 ˚C, Max. = 35 ˚C
Relative humidity	Min. =20 %, Max. = 80 %
Shielding effectiveness	> 110 dB
Electrical insulation	>2 M
Ground system resistance	< 0.5

Semi-anechoic chamber(10 meters × 6.7 meters × 6.15 meters) did not exceed following limits along the testing:

Temperature	Min. = 15 ˚C, Max. = 30 ˚C
Relative humidity	Min. = 35 %, Max. = 60 %
Shielding effectiveness	> 100 dB
Electrical insulation	>2 M
Ground system resistance	< 0.5
Normalised site attenuation (NSA)	<±3.5 dB, 3 m distance
Site voltage standing-wave ratio (S_{VSWR})	Between 0 and 6 dB, from 1GHz to 18GHz
Uniformity of field strength	Between 0 and 6 dB, from 80 to 3000 MHz

6. Summary Of Test Result

Items	Test Name	Clause in FCC rules	Verdict
1	Maximum Output Power and PAPR	27.50(j), 2.1046	Pass
2	Occupied Bandwidth	27.53(m), 2.1049	Pass
3	Transmitter unwanted emissions at Band Edge	27.53(l), 2.1051	Pass
4	Transmitter unwanted emissions - Conducted Spurious Emission	27.53(l), 2.1051	Pass
5	Radiated Spurious Emission	27.53(l), 2.1053	Pass
6	Frequency Stability	27.54, 2.1055	Pass

7. Test Equipment Utilized

NO.	DESCRIPTION	TYPE	SERIES NUMBER	MANUFACTURE	CAL. DUE DATE	CAL. INTERVAL
1	AC Power Supply	PCR2000M	PJ000583	Kikusui	2025-05-13	1 year
2	40dB Attenuator	TSG150R-4-40N11	1511040001	Nanjing Jiexi Technologies	-	-
3	40dB Attenuator	66-40-33	CD4019	Aeroflex / Weinschel	-	-
4	PXA Signal Analyzer	N9030B	MY57142378	Keysight	2026-02-20	1 year
5	Climate Chamber	GPS-4	0010-003512	Espec	2025-03-18	1 year
6	Test Receiver	ESU26	100376	R&S	2025-06-06	1 year
7	Antenna	VULB9163	01177	Schwarzbeck	2025-11-19	1 year
8	Antenna	3117	00119021	ETS-Lindgren	2025-09-18	1 year
9	Test Receiver	FSV40	101047	R&S	2025-07-18	1 year
10	Antenna	LB-180400-25-C-KF	2110084000006	A-INFO	2025-05-15	1 year

Note: All equipment is in valid calibration period when used.

8. Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

Test Discipline	Measurement Uncertainty
Conducted Maximum Peak Output Power	0.68dB
Occupied Bandwidth	439.79kHz
Conducted Unwanted Emissions	4.5dB
Frequency Stability	11Hz
Radiated Spurious Emissions SAC/FAC 3	30MHz-1GHz: 5.73dB, k=2 1GHz-18GHz: 5.58dB, k=2 18GHz-40GHz: 3.37dB, k=2

Measurement uncertainty is not taken into account when stating conformity with a specified requirement.

Annex A: Measurement Results

A.1 Maximum Output Power and Peak to Average Power Ratio

A.1.1 Reference

FCC CFR 47 Part 2, Clause 2.1046
FCC CFR 47 Part 27, Clause 27.50(h)

A.1.2 Method of Measurements

During the process of testing, the EUT was configured to transmit on maximum power and proper modulation. The transmitter power shall be measured in terms of a root-mean-square (RMS) average value. In case of the EUT was configured to MIMO mode, since the EUT transmits on all antennas simultaneously in the same frequency range, using the Measure-and-Sum approach, the output power at all antennas were tested, and the total output power were then summed mathematically in linear power units according to FCC KDB 662911 D01.

A peak to average ratio measurement is performed at the conducted ports of the EUT for single carrier for single RAT mode. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) was used and 0.1% probability value recorded.

A.1.3 Limit

Output Power:

EIRP ≤ 33 dBW + 10log(X/Y) dBW
X is the actual channel width
Y is 5.5 or 6 MHz

Peak to Average Ratio: ≤13 dB

A.1.4 Measurement result

Configuration NR-MIMO-1C 100M

Maximum Output Power 47.78dBm per port

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
1	QPSK/100	47.01	27.01	8.07	47.53	27.53	8.08	47.42	27.33	8.11
2		47.00	27.00	8.09	47.31	27.31	8.07	47.28	27.28	8.07
3		47.11	27.11	8.09	47.38	27.38	8.08	47.33	27.33	8.12
4		47.05	27.05	8.11	47.35	27.35	8.11	47.41	27.41	8.08
Total conducted power		53.06	33.06	-	53.41	33.41	-	53.38	33.36	-
Calculated EIRP		70.96	50.96	-	71.31	51.31	-	71.28	51.26	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
1	16QAM/100	47.08	27.08	8.18	47.12	27.12	8.22	47.14	27.14	8.22
2		47.17	27.17	8.19	47.11	27.11	8.17	47.03	27.03	8.21
3		47.02	27.02	8.18	47.22	27.22	8.22	47.06	27.06	8.22
4		47.14	27.14	8.21	47.21	27.21	8.20	47.08	27.08	8.23
Total conducted power		53.12	33.12	-	53.19	33.19	-	53.10	33.10	-
Calculated EIRP		71.02	51.02	-	71.09	51.09	-	71.00	51.00	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
1	64QAM/100	47.41	27.41	8.16	47.28	27.28	8.21	47.19	27.19	8.18
2		47.31	27.31	8.18	47.22	27.22	8.21	47.26	27.26	8.22
3		47.31	27.31	8.19	47.15	27.15	8.20	47.18	27.18	8.23
4		47.27	27.27	8.24	47.12	27.12	8.23	47.27	27.27	8.22
Total conducted power		53.35	33.35	-	53.21	33.21	-	53.25	33.25	-
Calculated EIRP		71.25	51.25	-	71.11	51.11	-	71.15	51.15	-

Antenna	Modulation/ Carrier Bandwidth (MHz)	Output Power / Peak to Average Ratio (PAR)								
		Channel position B			Channel position M			Channel position T		
		POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)	POWER (dBm)	POWER (dBm/MHz)	PAR (db)
1	256QAM/ 100	47.44	27.44	8.16	47.15	27.15	8.14	47.14	27.14	8.14
2		47.20	27.20	8.14	47.31	27.31	8.16	47.04	27.04	8.16
3		47.28	27.28	8.15	47.13	27.13	8.17	47.03	27.03	8.15
4		47.39	27.39	8.16	47.38	27.38	8.16	47.26	27.26	8.16
Total conducted power		53.35	33.35	-	53.26	33.26	-	53.14	33.14	-
Calculated EIRP		71.25	51.25	-	71.16	51.16	-	71.04	51.04	-

A.2 Occupied Bandwidth

A.2.1 Reference

FCC CFR 47 Part 2, Clause 2.1049
FCC CFR 47 Part 27, Clause 27.53 (m)

A.2.2 Method of Measurements

The EUT was set to transmit at maximum power and testing was carried out on bottom, middle and top channels. Using the Occupied Bandwidth measurement function in the spectrum analyser, the 26dB bandwidth was measured in accordance with FCC KDB 971168 D01 Clause 4.2.

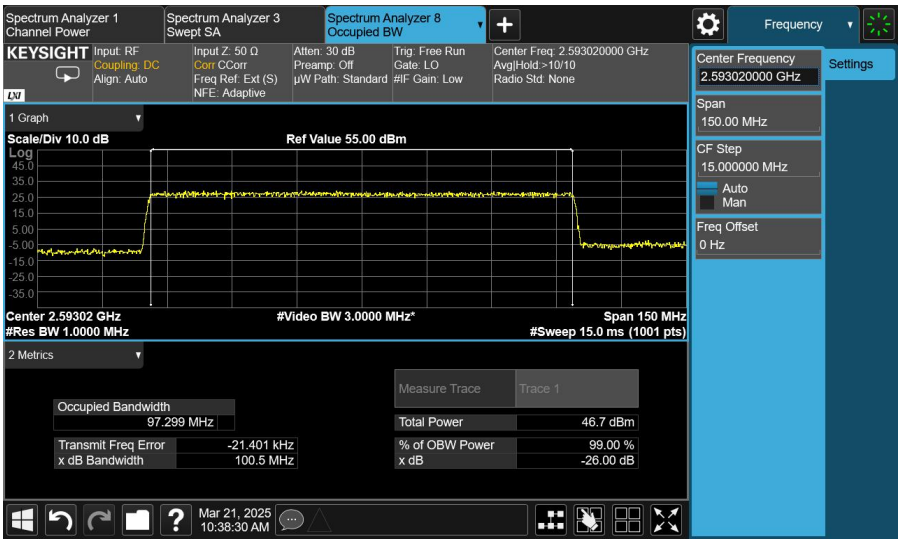
The measurement method is from KDB 971168 4.2:
a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The frequency span for the spectrum analyzer shall be set wide enough to capture all modulation products including the emission skirts (i.e., two to five times the OBW).
b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
c) Set the reference level of the instrument as required to keep the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope must be at least 10log (OBW / RBW) below the reference level.

A.2.3 Measurement result

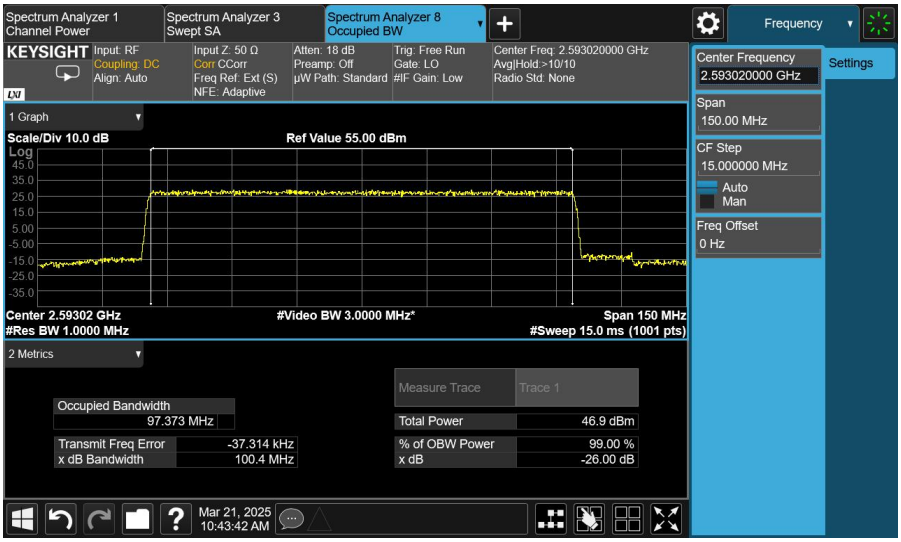
Port	Channel Position	BW (MHz)	-26dB Bandwidth (MHz)				99% Bandwidth (MHz)			
			QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
1	Middle	100	100.5	100.5	100.4	100.5	97.31	97.30	97.37	97.36

Port 1, 100MHz, Mid Channel, QPSK

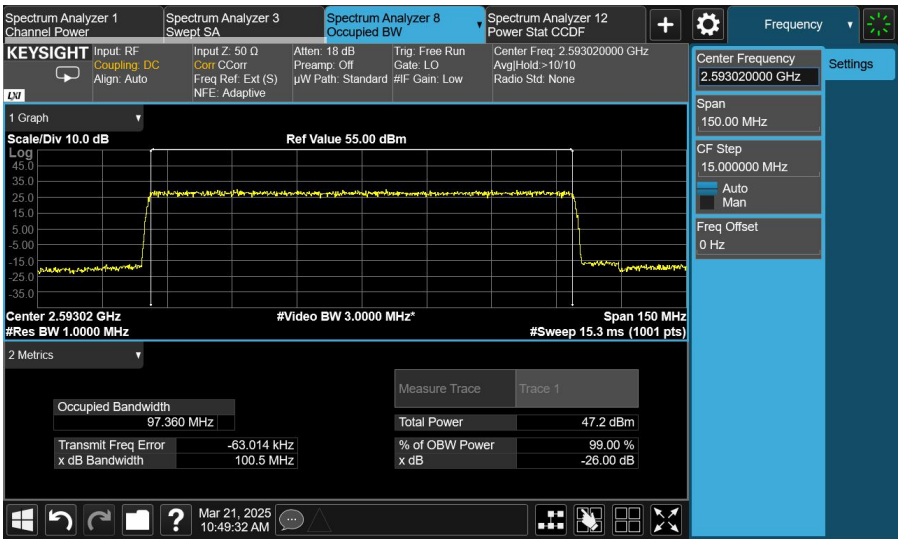
Port 1, 100MHz, Mid Channel, 16QAM



Port 1, 100MHz, Mid Channel, 64QAM



Port 1, 100MHz, Mid Channel, 256QAM



A.3 Transmitter unwanted emissions at Band Edge

A.3.1 Reference

FCC CFR 47 Part 2, Clause 2.1051
FCC CFR 47 Part 27, Clause 27.53(m)

A.3.2 Method of measurement

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 + 10log(P) dB.

For MIMO mode configurations, the limit was adjusted with a correction of -6.02dB [10Log4] by using the Measure and Add 10Log(N) dB technique according to FCC KDB 662911 D01 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports RF A,B,C and D.

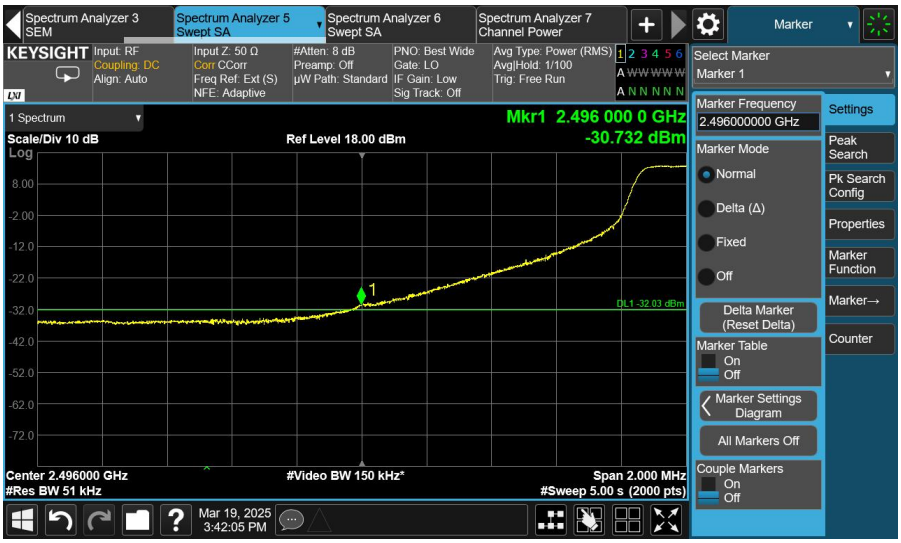
According to FCC rules, in the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed and a RBW of 1MHz for measurements of emissions > 1MHz away from the band edges. The limit was adjusted with -13.01dB [10Log(50/1000)] to compensate for the reduce measurement bandwidth 50KHz for emission more than 1MHz away from the band edges. For MIMO mode, the limit of -32.03dBm was used for emission more than 1MHz away from the band edges. Spectrum analyser detector was set as RMS.

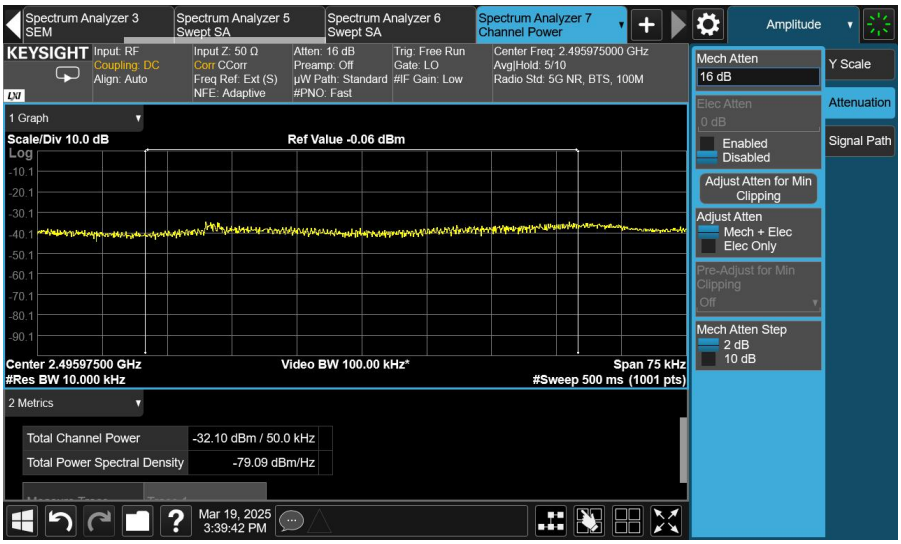
A.3.3 Measurement limit

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 + 10log(P) dB.

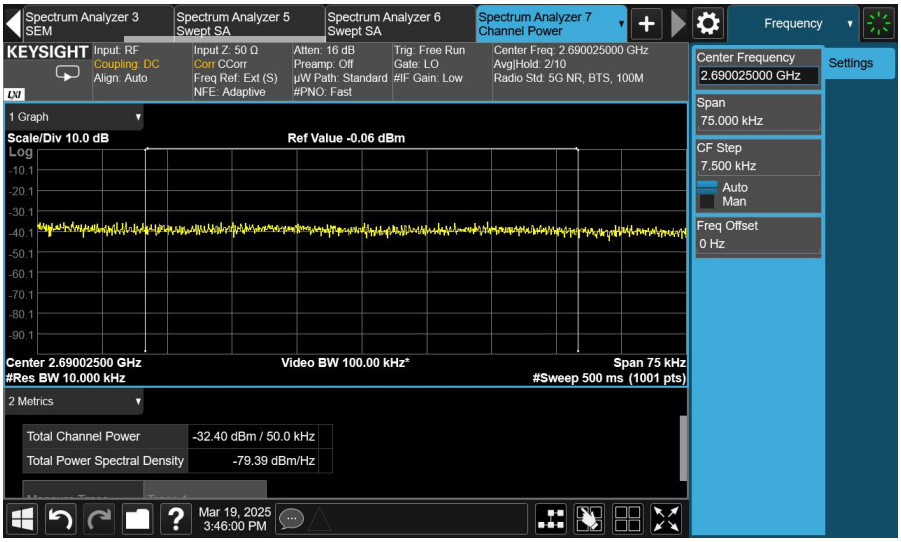
A.3.4 Measurement result

Port 1, 100MHz, Bottom Channel, QPSK





Port 1, 100MHz, Top Channel, QPSK



A.4 Transmitter unwanted emissions - Conducted Spurious Emission

A.4.1 Reference

FCC CFR 47 Part 2, Clause 2.1051
FCC CFR 47 Part 27, Clause 27.53(m)

A.4.2 Method of measurement

In accordance with FCC rules, 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.

The spurious emissions from the antenna terminal were measured. The transmitter output power was attenuated using an attenuator and the frequency spectrum investigated from 3MHz to 27GHz. The resolution bandwidth of 1MHz was employed for frequency band 3MHz to 27GHz. The spectrum analyzer detector was set to RMS.

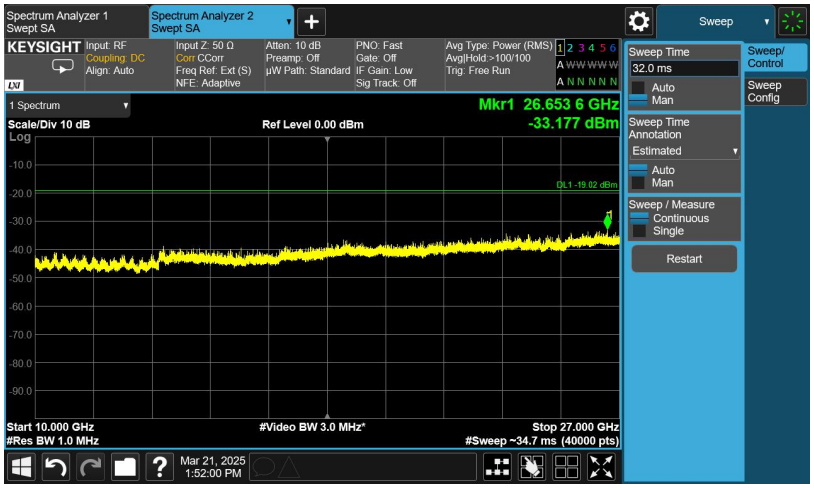
For MIMO mode configurations, the limit was adjusted with a correction of -6.02dB [10Log4] by using the Measure and Add 10Log(N) dB technique according to FCC KDB 662911 D01 Multiple Transmitter Output accounting for simultaneous transmission from antenna ports RF A,B,C and D. Then the limit was adjust to -19.02dBm.

A.4.3 Measurement limit

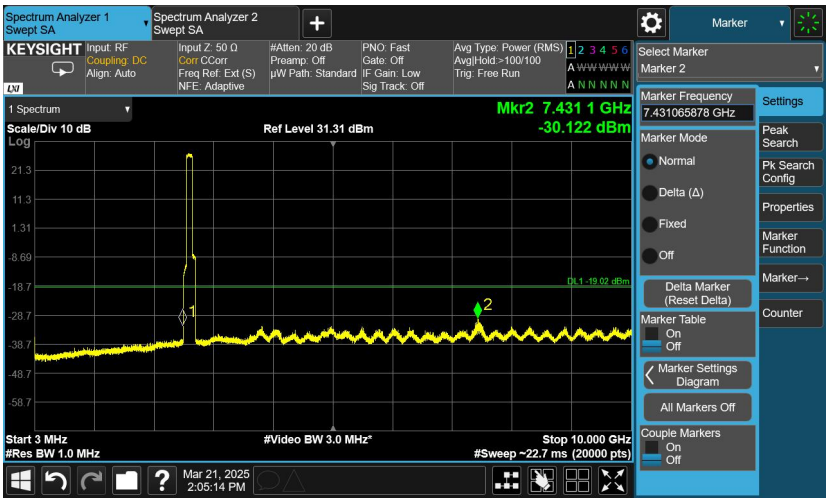
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10log(P) dB.

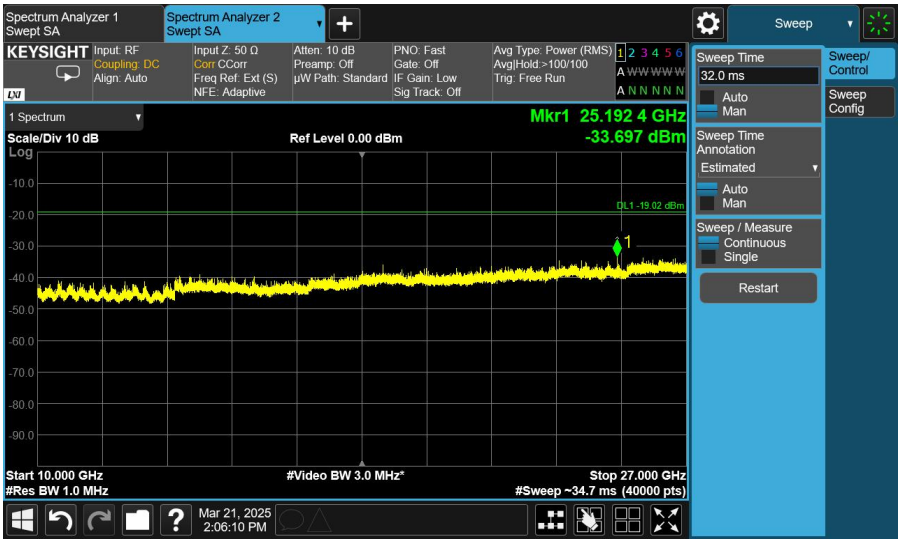
A.4.4 Measurement results

Port 1, 100MHz, Bottom Channel, QPSK

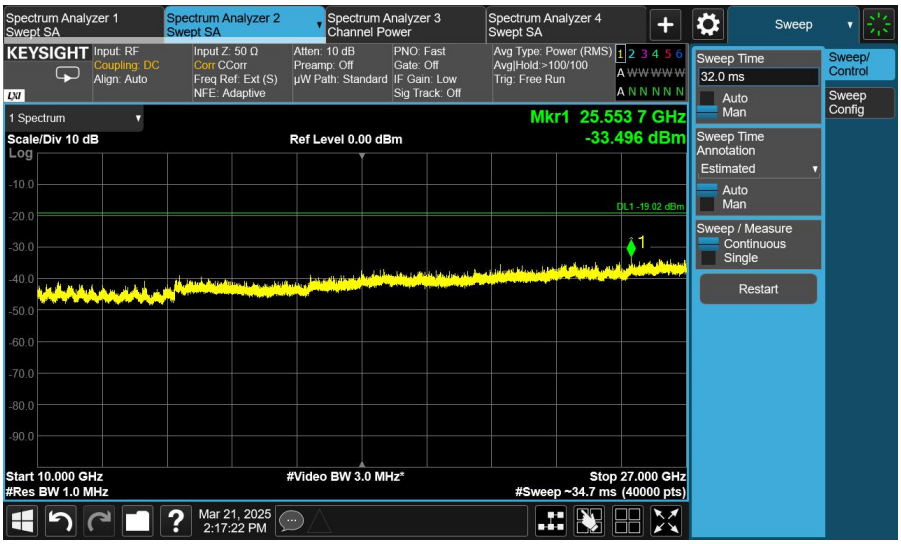


Port 1, 100MHz, Mid Channel, QPSK





Port 1, 100MHz, Top Channel, QPSK



A.5 Radiated Spurious Emission

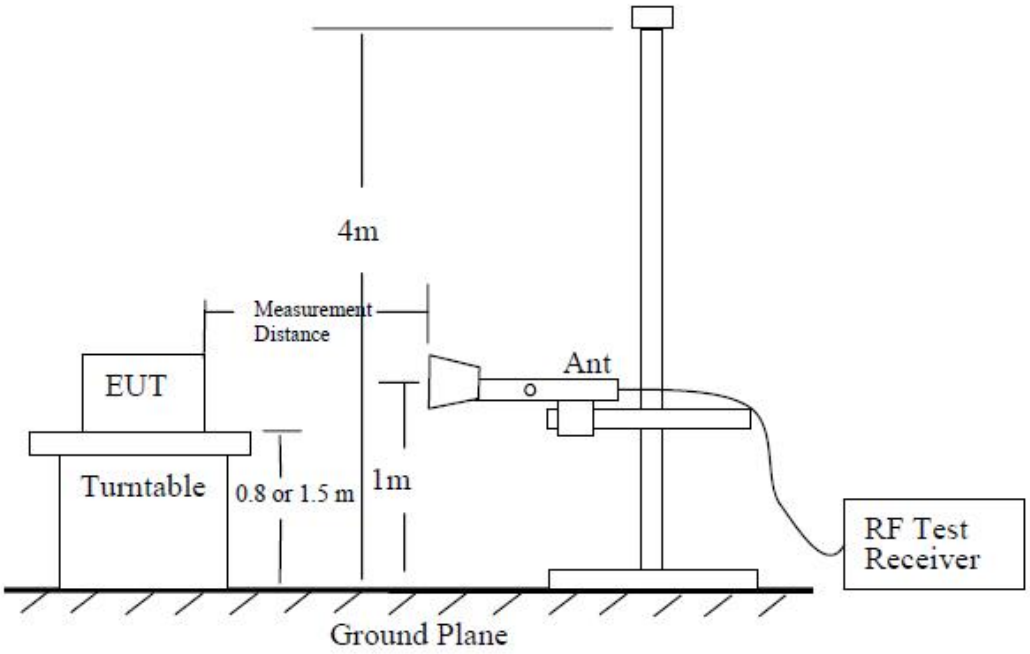
A.5.1 Reference

FCC CFR 47 Part 2, Clause 2.1051
FCC CFR 47 Part 27, Clause 27.53(m)(2)

A.5.2 Method of measurement

The measurements procedures in C63.26 are used.
The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment.

The procedure of radiated spurious emissions is as follows:
Using the test configuration as follow, measure the radiated emissions directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits.



The emission characteristics of the EUT can be identified from the pre-scan measurement information.

Exploratory radiated measurements (pre-scans) may be performed to determine the general EUT radiated emissions characteristics and, when necessary, the EUT-to-measurement antenna orientation that produces the maximum emission amplitude. Pre-scans shall only be used to determine the emission frequencies (i.e., not amplitude levels). The information garnered from a pre-scan can then be used to perform final compliance measurements using either the substitution or direct field strength method.

For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table or support at a nominal height of 80 cm above the reference ground plane. Radiated measurements shall be made with the measurement

antenna positioned in both horizontal and vertical polarization. The measurement antenna shall be varied from 1 m to 4 m in height above the reference ground in a search for the relative positioning that produces the maximum radiated signal level (i.e., field strength or received power). When orienting the measurement antenna in vertical polarization, the minimum height of the lowest element of the antenna shall clear the site reference ground plane by at least 25 cm.

The radiated emission measurements of all non-harmonic and harmonics of the transmit frequency through the 10th harmonic were measured with peak detector.

For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table or support at a nominal height of 1.5 m above the ground plane. When maximizing the emissions from the EUT for measurement, the EUT and its transmitting antenna(s) shall be rotated through 360°. For each mode of operation to be tested, the frequency spectrum (based on findings from exploratory measurements) shall be monitored.
Final measurements shall be performed for the worst case combination(s) of variable technical parameters that result in the maximum measured emission amplitude, record the frequency and amplitude of the highest fundamental emission (if applicable), and the frequency and amplitude data for the six highest-amplitude spurious emissions.
The measurements in the frequency range 30 to 1000MHz was performed with a RBW of 100kHz.
The measurements in the frequency range 1 to 40GHz was performed with a RBW of 1MHz.
Emissions identified within the range 30MHz to 40GHz were then formally measured using a peak detector as the worst case.

A.5.3 Measurement limit

The limits for outside a licensee's frequency band(s) of operation the power of the spurious emissions have been calculated, as shown below using the following formula:

EIRP = Field Strength of Carrier + 20 log (d) -104.7

Where:

Field Strength is measured in dBμV/m

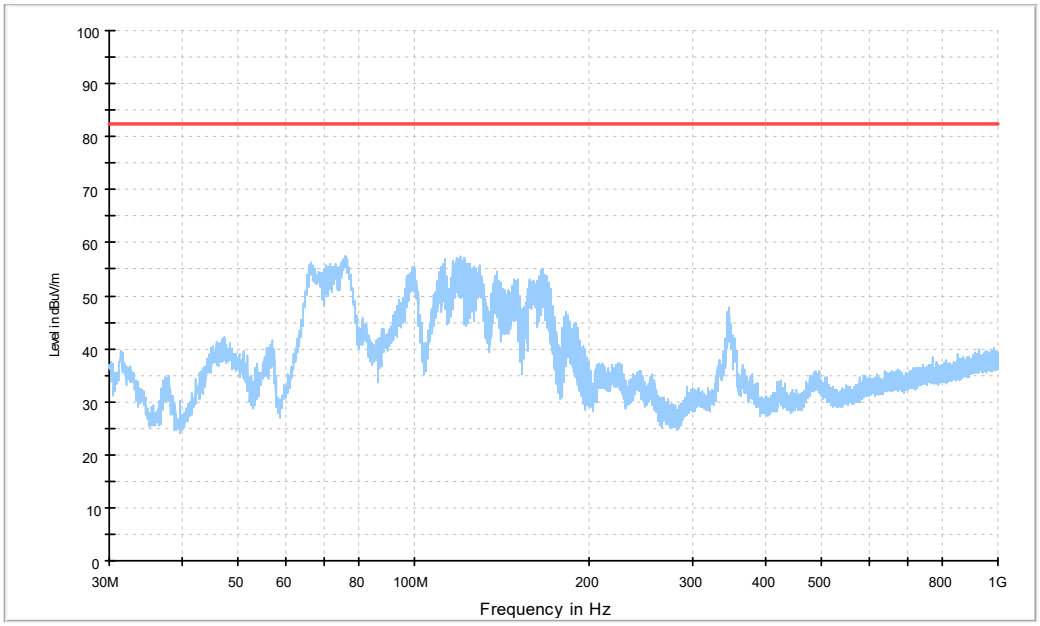
d is the measurement distance in meter.

As Clause 27.53(m)(2) : For digital base stations, the attenuation shall be not less than 43 + 10 log (P) dB, unless a documented interference complaint is received from an adjacent channel licensee with an overlapping Geographic Service Area.

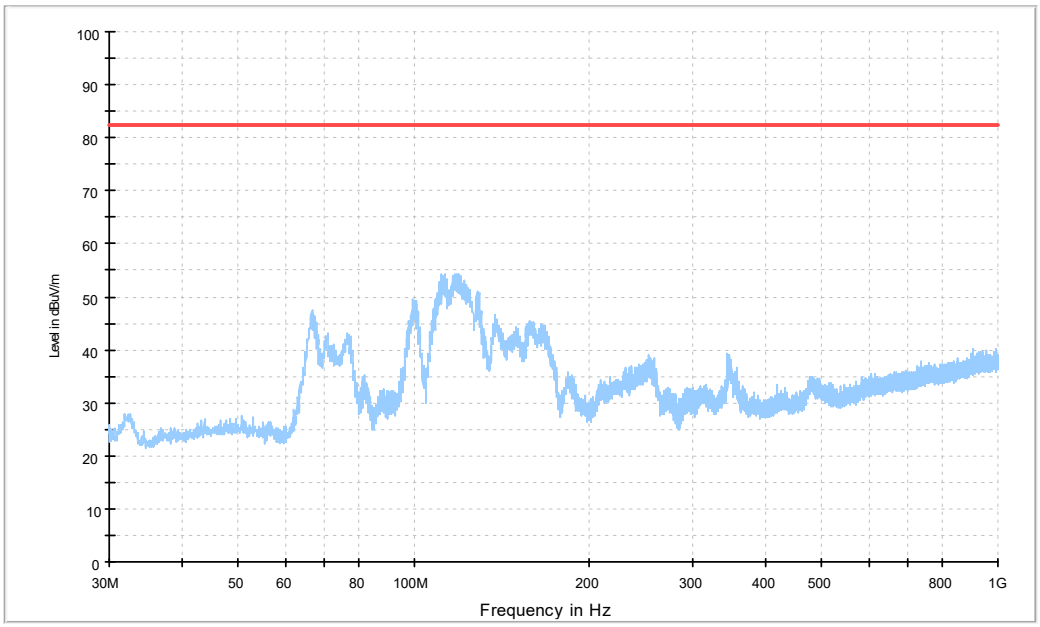
-13dBm = Field Strength of Carrier + 20 log (3) -104.7

Field Strength of Carrie = -13dBm – (20 log (3) -104.7) = -13dBm – (-95.3) = 82.3 dBμV/m

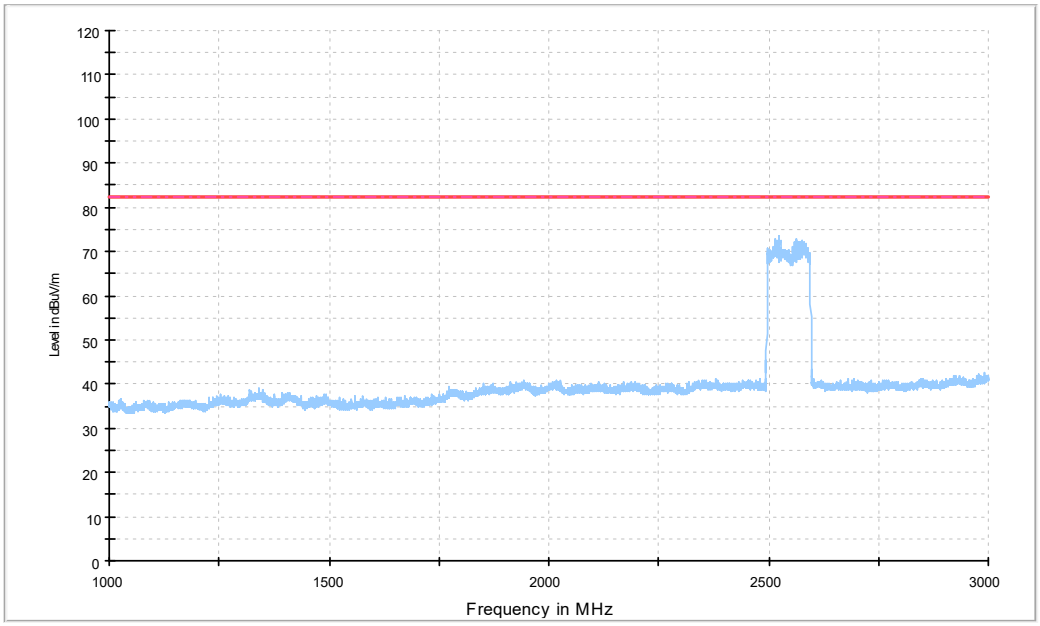
A.5.4 Measurement results



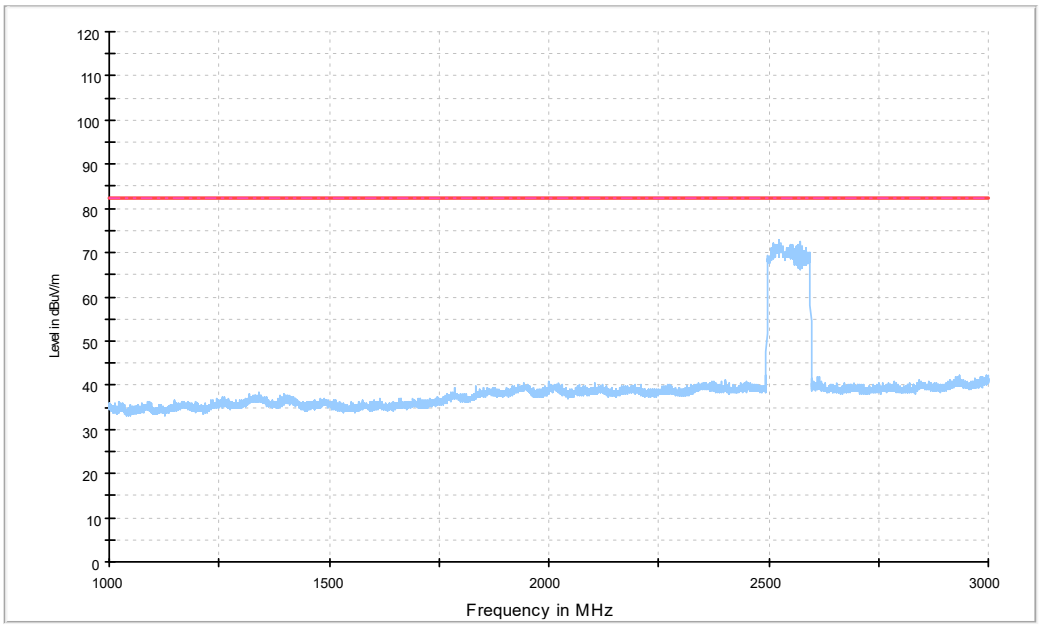
Configuration 5G SA n41; 100MHz, MIMO, Top, Vertical, 30MHz-1GHz



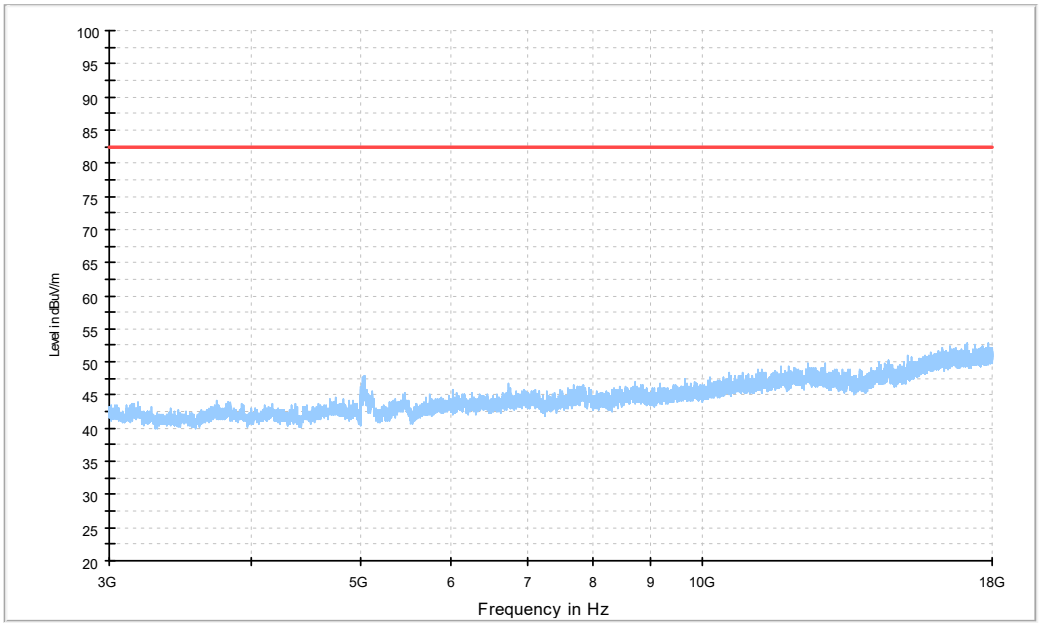
Configuration 5G SA n41; 100MHz, MIMO, Top, Horizontal, 30MHz-1GHz



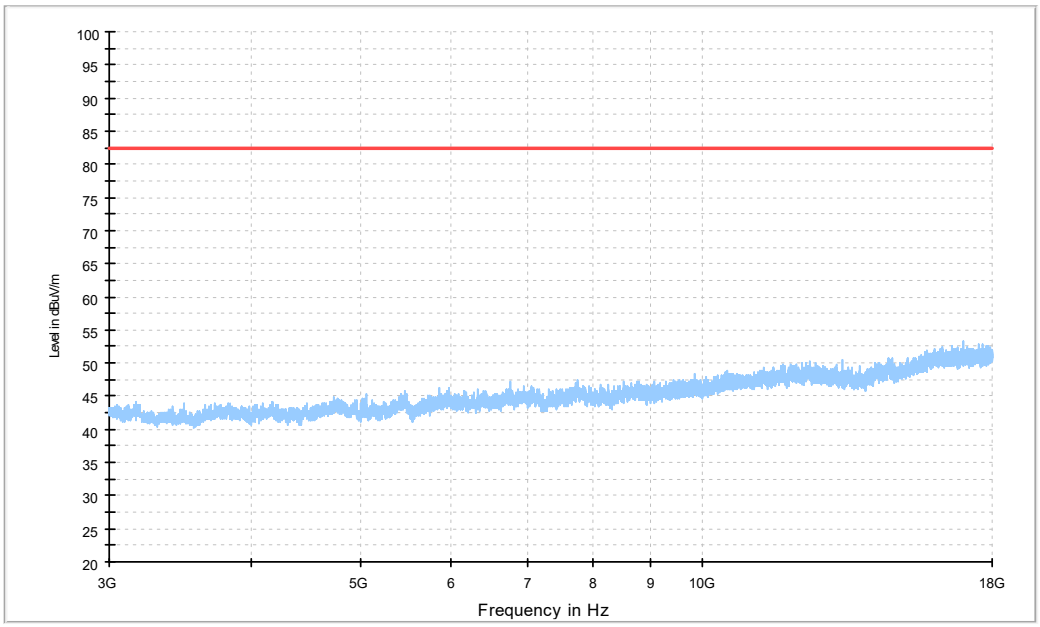
Configuration 5G SA n41; 100MHz, MIMO, Bottom, Vertical, 1GHz-3GHz



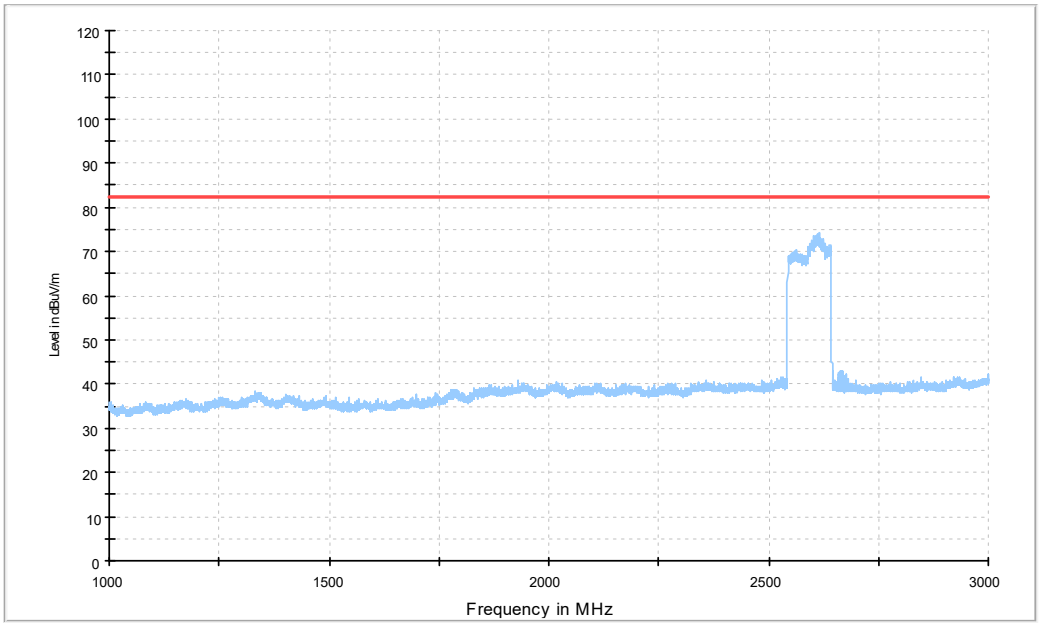
Configuration 5G SA n41; 100MHz, MIMO, Bottom, Horizontal, 1GHz-3GHz



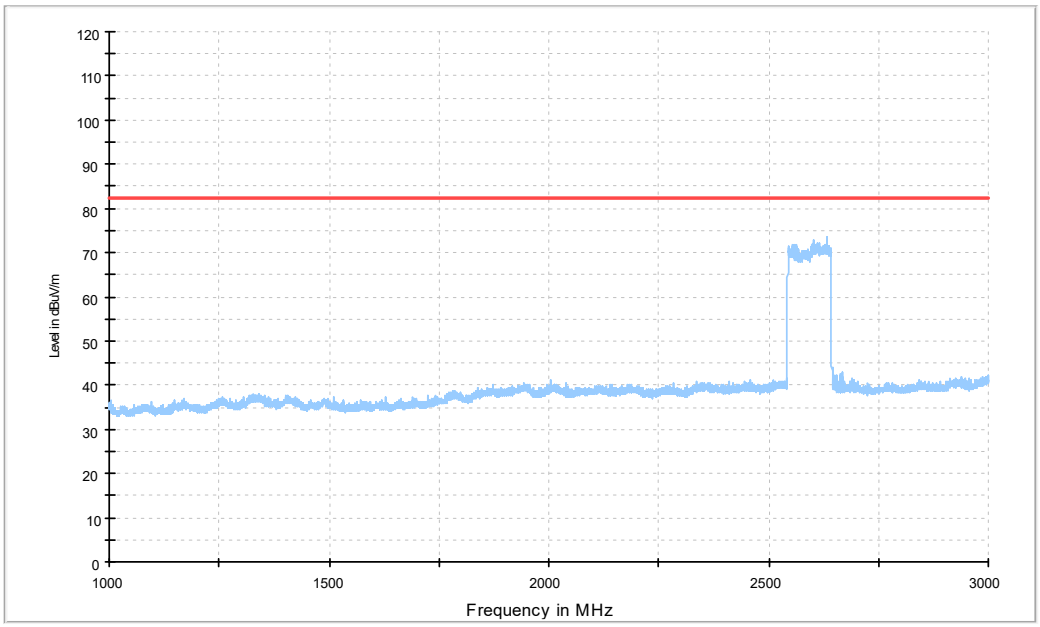
Configuration 5G SA n41; 100MHz, MIMO, Bottom, Vertical, 3GHz-18GHz



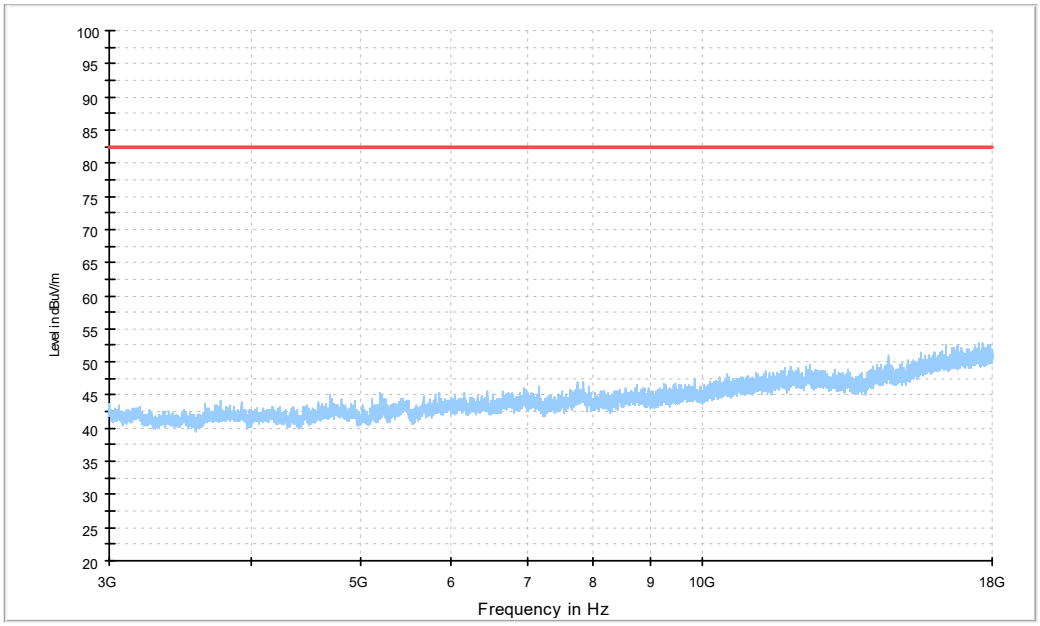
Configuration 5G SA n41; 100MHz, MIMO, Bottom, Horizontal, 3GHz-18GHz



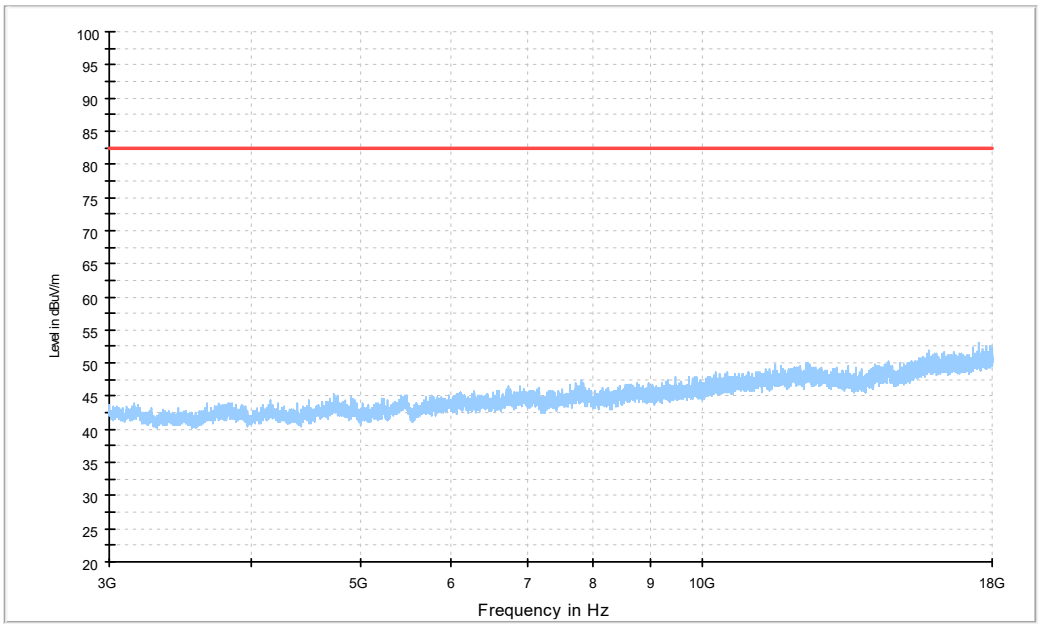
Configuration 5G SA n41; 100MHz, MIMO, Middle, Vertical, 1GHz-3GHz



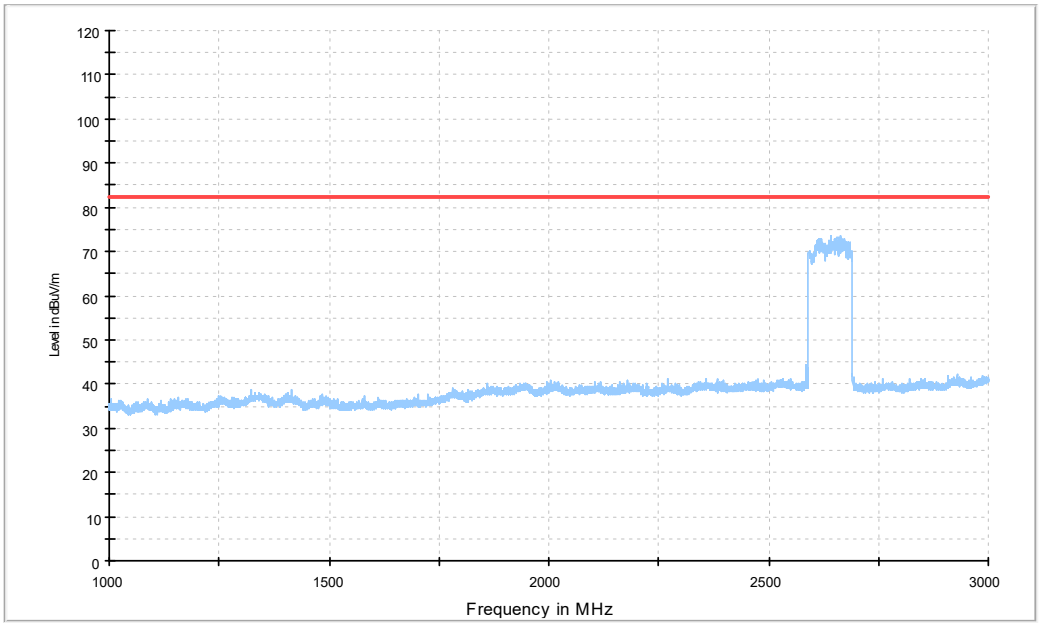
Configuration 5G SA n41; 100MHz, MIMO, Middle, Horizontal, 1GHz-3GHz



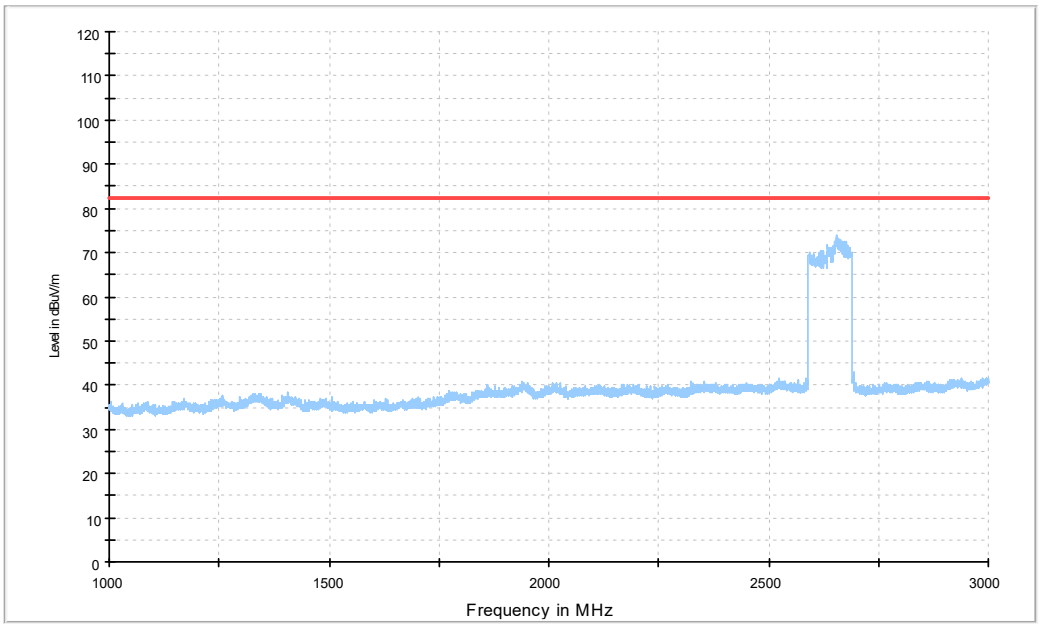
Configuration 5G SA n41; 100MHz, MIMO, Middle, Vertical, 3GHz-18GHz



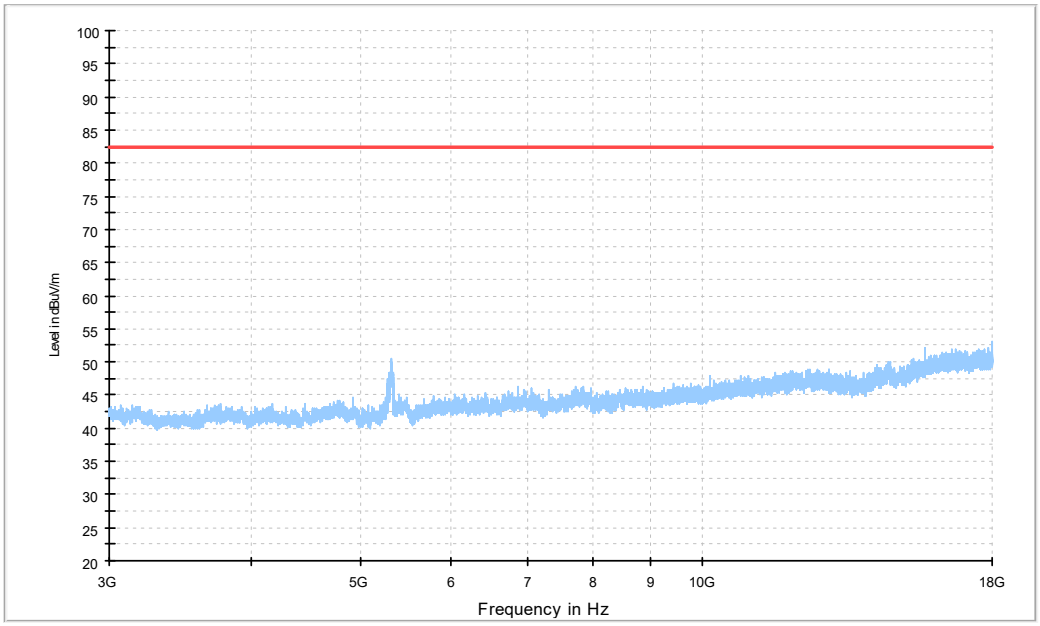
Configuration 5G SA n41; 100MHz, MIMO, Middle, Horizontal, 3GHz-18GHz



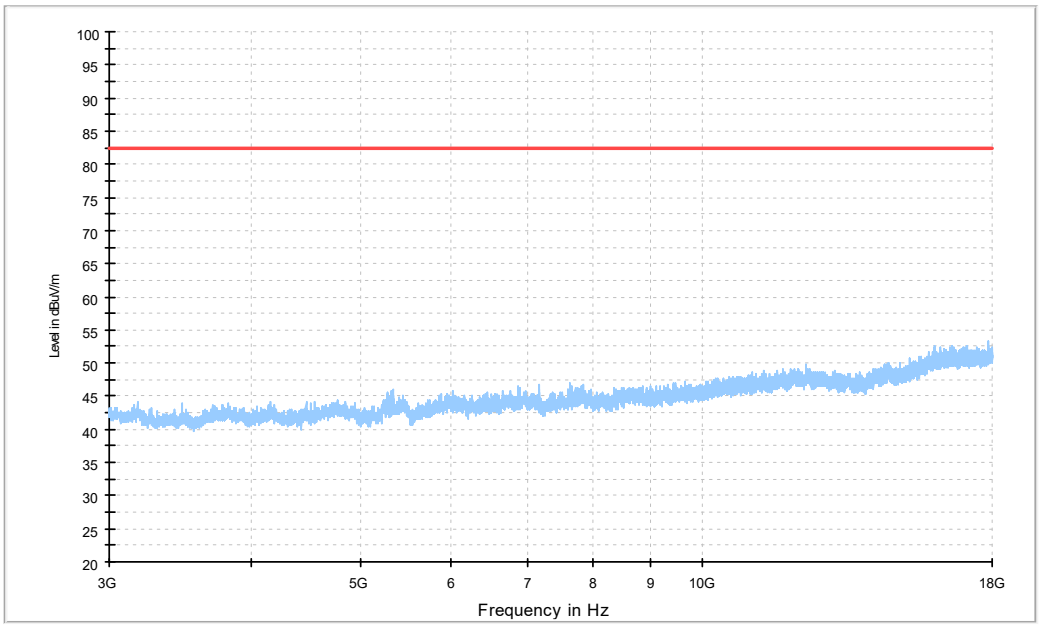
Configuration 5G SA n41; 100MHz, MIMO, Top, Vertical, 1GHz-3GHz



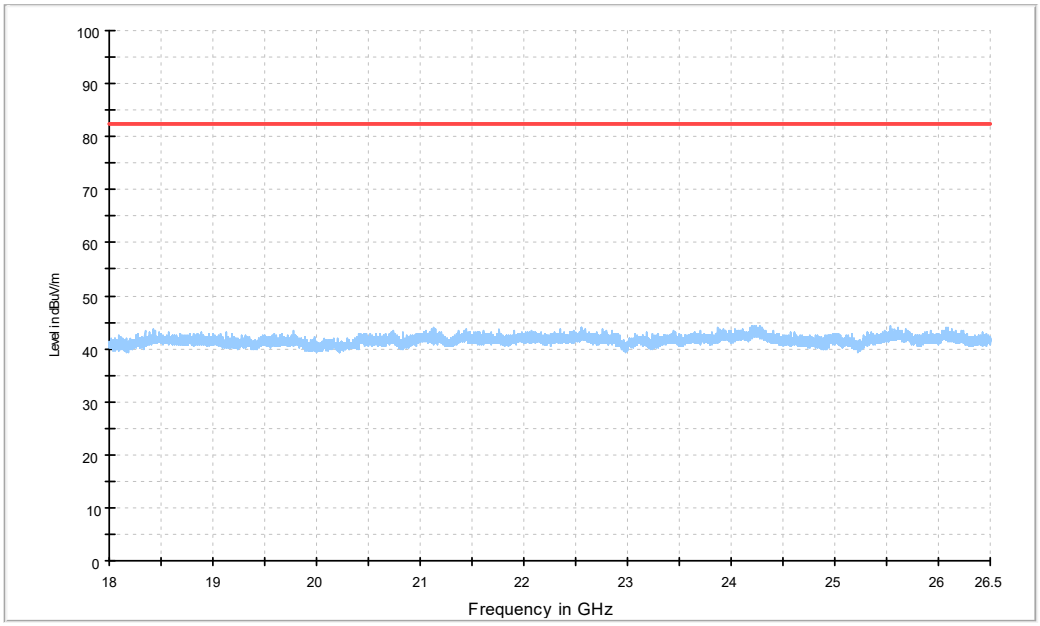
Configuration 5G SA n41; 100MHz, MIMO, Top, Horizontal, 1GHz-3GHz



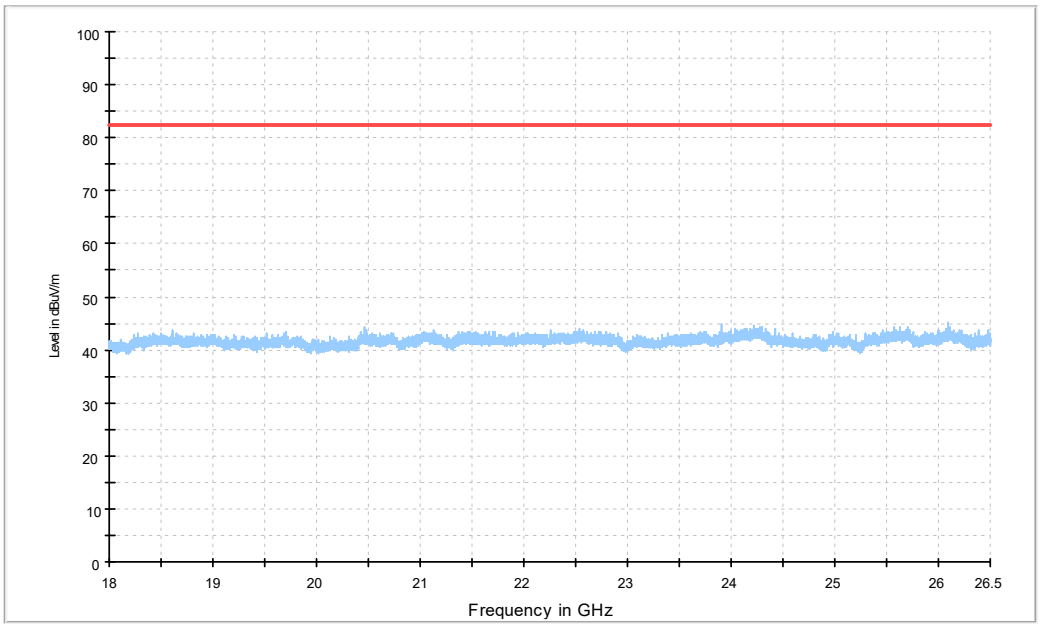
Configuration 5G SA n41; 100MHz, MIMO, Top, Vertical, 3GHz-18GHz



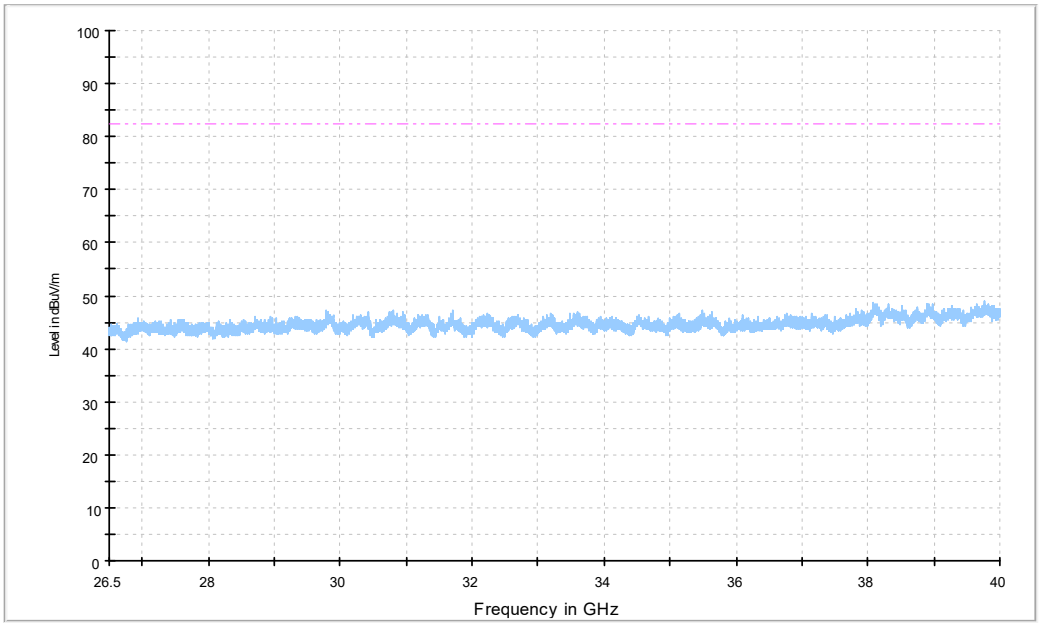
Configuration 5G SA n41; 100MHz, MIMO, Top, Horizontal, 3GHz-18GHz



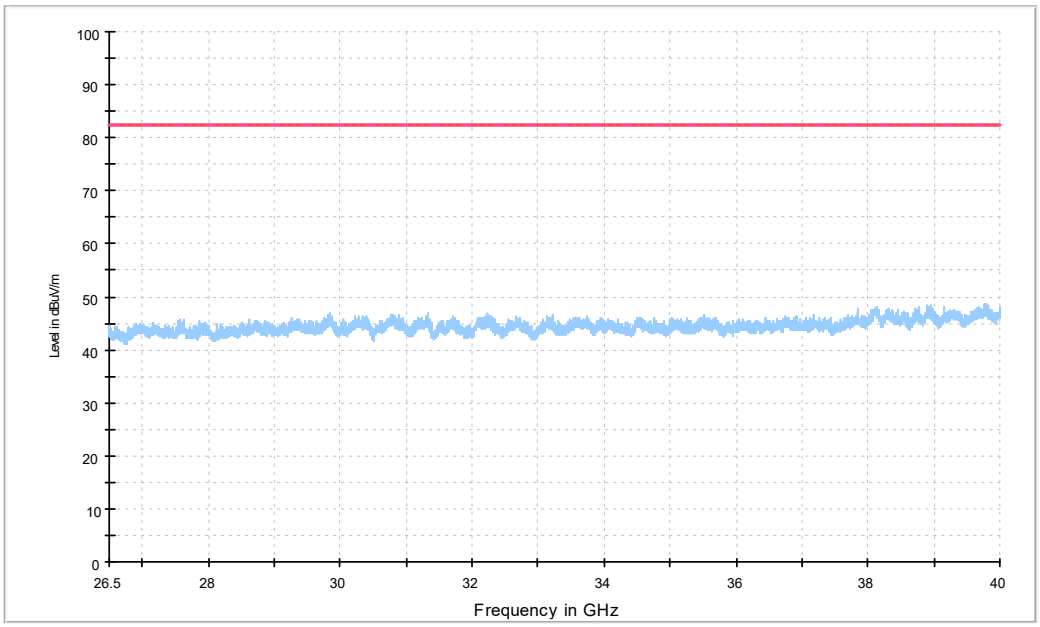
Configuration 5G SA n41; 100MHz, MIMO, Top, Vertical, 18GHz-26.5GHz



Configuration 5G SA n41; 100MHz, MIMO, Top, Horizontal, 18GHz-26.5GHz



Configuration 5G SA n41; 100MHz, MIMO, Top, Vertical, 26.5GHz-40GHz



Configuration 5G SA n41; 100MHz, MIMO, Top, Horizontal, 26.5GHz-40GHz

A.6 Frequency Stability

A.6.1 Reference

FCC CFR 47 Part 27, Clause 27.54

A.6.2 Method of measurement

Temperature Variation

The EUT was tested over the temperature range -30°C to +50°C in 10°C steps with -48V DC Power Supply. At each temperature step, the Base Station was configured to transmit an [RAT]* at maximum power on the bottom, middle and top channel of the operating band. After achieving thermal balance, the averages of 200 transmission bursts were measured and the result recorded.

Voltage Variation

The EUT was tested at the supplied voltages varied from 85 to 115 percent of the nominal values of -48V DC. At +20°C, the Base Station was configured to transmit an [RAT]* at maximum power on the bottom, middle and top channel of the operating band. The average of 200 transmission bursts was measured and the result recorded.

[RAT]*:

NR - Single Carrier with QPSK modulation, channel position M

A.6.3 Measurement limit

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

A.6.4 Measurement results

Frequency Error vs Temperature

Port	Modulation	BW	Voltage	Temperature	Frequency Error(Hz)
1	QPSK	100MHz	-48V	-30℃	3.07
				-20℃	3.22
				-10℃	2.17
				0℃	2.04
				10℃	5.09
				20℃	4.28
				30℃	4.62
				40℃	3.73
				50℃	4.14

Frequency Error vs Voltage

Port	Modulation	BW	Temperature	Voltage	Frequency Error(Hz)
1	QPSK	100MHz	20℃	-40.8V	3.17
				-55.2V	4.05

Annex B: Accreditation Certificate

Accredited Laboratory

A2LA has accredited

TELECOMMUNICATION TECHNOLOGY LABS, CAICT

Beijing, 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 23rd day of July 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 7049.01
Valid to July 31, 2026

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

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