



RF TEST REPORT

Report No.: 20230917G12965X-W12

Product Name: METAVERTU 2 5G digital mobile phone

Model No.: VTL-202301

FCC ID: 2A6IQ-VTL202301

Applicant: VERTU INTERNATIONAL CORPORATION LIMITED

Address: Chase Business Centre 39-41 Chase Side London England N14
5BP

Dates of Testing: 09/29/2023 - 12/14/2023

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street,
Nanshan District, Shenzhen, Guangdong, China.

Tel: 86 755 26627338 **Fax:** 86 755 26627238

This test report consists of 141 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by CCIC-SET. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver. Any objections must be raised to CCIC-SET within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.



Test Report

Product METAVERTU 2 5G digital mobile phone
Brand Name VERTU
Trade Name VERTU
Applicant VERTU INTERNATIONAL CORPORATION LIMITED
Applicant Address Chase Business Centre 39-41 Chase Side London England N14 5BP
Manufacturer Chengdu Vertu Business and Service Management Co., Ltd
Manufacturer Address 1601,16th Floor, No. 1577 Middle Section of Tianfu Avenue, Chengdu High-tech Zone, China (Sichuan) Pilot Free Trade Zone
Test Standards 47 CFR Part 2/22/27
Test Result Pass

Tested by Kim Li 2023.12.15

Kim Li, Test Engineer

Reviewed by Chris You 2023.12.15

Chris You, Senior Engineer

Approved by Yang Fan 2023.12.15

Yang Fan, Manager



Table of Contents

1. GENERAL INFORMATION	5
1.1. EUT Description	5
1.2. EUT Antenna Information	6
1.3. Maximum ERP/EIRP, Frequency Tolerance and Emission Designator.....	7
1.4. Test Standards and Results.....	9
1.5. Test Configuration of Equipment Under Test	11
1.6. Measurement Results Explanation Example.....	13
1.7. Laboratory Facilities	13
1.8. Test Environment Conditions.....	13
2. 47 CFR PART 2 REQUIREMENTS.....	14
2.1. Conducted Output Power and ERP/EIRP	14
2.2. Peak-to-average power ratio (PAPR)	16
2.3. 99% Occupied Bandwidth and 26dB Emission Bandwidth.....	18
2.4. Conducted Band Edge.....	20
2.5. Conducted Spurious Emission	23
2.6. Radiated Spurious Emission	25
2.7. Frequency Stability	30
3. LIST OF MEASURING EQUIPMENT	32
4. UNCERTAINTY OF EVALUATION	33
APPENDIX A	34
Conducted Output Power and ERP/EIRP	34
99% Occupied Bandwidth and 26dB Emission Bandwidth.....	105
Frequency Stability	119
Conducted Band Edge.....	122
Conducted Spurious Emissions.....	138



Change History		
Issue	Date	Reason for change
1.0	2023.12.15	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	METAVERTU 2 5G digital mobile phone				
Model No.	VTL-202301				
EUT supports Radios application	SA: NR Band n5/ n41/ n77/ n78				
SCS support:	NR Band n5: 15kHz NR Band n41/n77/n78: 30kHz				
Frequency Range(Tx)	NR Band n5: 824MHz~849MHz NR Band n41: 2496MHz~2690MHz NR Band n77: 3450MHz~3550MHz NR Band n78: 3450MHz~3550MHz				
Channel Bandwidth	NR Band n5:		5MHz/10MHz/15MHz/20MHz		
	NR Band n41/n77/n78:		20MHz/40MHz/60MHz/80MHz/100MHz		
Modulation Type	DFT-s--OFDM:	DFT-s-Pi/2-BPSK, DFT-s-QPSK, DFT-s-16QAM, DFT-s-64QAM, DFT-s-256QAM			
	CP-OFDM:	CP-QPSK, CP-16-QAM, CP-64QAM, CP-256-QAM			
Maximum ERP/EIRP	NR Band n5: 16.05dBm NR Band n41: 24.83dBm NR Band n77: 26.43dBm NR Band n78: 24.47dBm				
Antenna Type	Internal Antenna				
Power supply	Rechargeable Li-ion Polymer Battery DC3.89V/5100mAh				

1.2. EUT Antenna Information

The antenna gains and types provided by the manufacturer are as follows:

NR Bands	Ant 1 Antenna Gain (dBi)	Ant 2 Antenna Gain (dBi)	Ant 3 Antenna Gain (dBi)	Ant 4 Antenna Gain (dBi)	Ant 8 Antenna Gain (dBi)	Ant 11 Antenna Gain (dBi)	Ant 16 Antenna Gain (dBi)
n5	-6.6	/	-4.8	/	/	/	/
n41	-2.5	-0.7	/	-3.7	-0.5	/	/
n77	-0.1	/	/	/	-0.3	-1.6	-1.3
n78	-0.1	/	/	/	-0.3	-1.6	-1.3

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

Note 2: EUT supports DPDT(Double Pole Double Throw) transfer switch, NR Band n5(TX) can switch between Ant1 and Ant3, NR Band n41(TX) can switch between Ant1, Ant2, Ant4 and Ant8, NR Band n77/78(TX) can switch between Ant1, Ant8, Ant11 and Ant16.

1.3. Maximum ERP/EIRP, Frequency Tolerance and Emission Designator

5G NR Bands	Type of Modulation	Bandwidth (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP(W)
NR Band n5	DFT-s-BPSK	5	4M51G7D	—	0.039
NR Band n5	DFT-s-QPSK	5	4M49G7D	—	0.039
NR Band n5	DFT-s-16QAM	5	4M51W7D	—	0.035
NR Band n5	DFT-s-BPSK	10	8M91G7D	—	0.040
NR Band n5	DFT-s-QPSK	10	8M91G7D	—	0.038
NR Band n5	DFT-s-16QAM	10	8M94W7D	—	0.034
NR Band n5	DFT-s-BPSK	15	13M5G7D	—	0.039
NR Band n5	DFT-s-QPSK	15	13M4G7D	—	0.039
NR Band n5	DFT-s-16QAM	15	13M4W7D	—	0.037
NR Band n5	DFT-s-BPSK	20	17M8G7D	-0.01416	0.039
NR Band n5	DFT-s-QPSK	20	17M9G7D	—	0.037
NR Band n5	DFT-s-16QAM	20	17M8W7D	—	0.034

5G NR Bands	Type of Modulation	Bandwidth (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
NR Band n41	DFT-s-BPSK	20	17M9G7D	—	0.291
NR Band n41	DFT-s-QPSK	20	17M9G7D	—	0.280
NR Band n41	DFT-s-16QAM	20	17M9W7D	—	0.219
NR Band n41	DFT-s-BPSK	40	35M7G7D	—	0.300
NR Band n41	DFT-s-QPSK	40	35M8G7D	—	0.304
NR Band n41	DFT-s-16QAM	40	35M7W7D	—	0.229
NR Band n41	DFT-s-BPSK	60	57M9G7D	—	0.299
NR Band n41	DFT-s-QPSK	60	57M8G7D	—	0.290
NR Band n41	DFT-s-16QAM	60	57M9W7D	—	0.207
NR Band n41	DFT-s-BPSK	80	77M2G7D	—	0.284
NR Band n41	DFT-s-QPSK	80	77M3G7D	—	0.288
NR Band n41	DFT-s-16QAM	80	77M2W7D	—	0.199
NR Band n41	DFT-s-BPSK	100	96M7G7D	-0.01329	0.296
NR Band n41	DFT-s-QPSK	100	96M6G7D	—	0.293
NR Band n41	DFT-s-16QAM	100	96M6W7D	—	0.193

5G NR Bands	Type of Modulation	Bandwidth (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
NR Band n77	DFT-s-BPSK	20	17M8G7D	—	0.412
NR Band n77	DFT-s-QPSK	20	17M9G7D	—	0.440
NR Band n77	DFT-s-16QAM	20	17M9W7D	—	0.308
NR Band n77	DFT-s-BPSK	40	35M7G7D	—	0.414
NR Band n77	DFT-s-QPSK	40	35M7G7D	—	0.410
NR Band n77	DFT-s-16QAM	40	35M8W7D	—	0.299
NR Band n77	DFT-s-BPSK	60	57M9G7D	—	0.410
NR Band n77	DFT-s-QPSK	60	57M9G7D	—	0.417
NR Band n77	DFT-s-16QAM	60	57M7W7D	—	0.290
NR Band n77	DFT-s-BPSK	80	76M9G7D	—	0.432
NR Band n77	DFT-s-QPSK	80	77M1G7D	—	0.406
NR Band n77	DFT-s-16QAM	80	77M2W7D	—	0.304
NR Band n77	DFT-s-BPSK	100	96M4G7D	-0.01318	0.425
NR Band n77	DFT-s-QPSK	100	96M1G7D	—	0.420
NR Band n77	DFT-s-16QAM	100	96M5W7D	—	0.298

5G NR Bands	Type of Modulation	Bandwidth (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
NR Band n78	DFT-s-BPSK	20	17M8G7D	—	0.279
NR Band n78	DFT-s-QPSK	20	17M9G7D	—	0.283
NR Band n78	DFT-s-16QAM	20	17M9W7D	—	0.220
NR Band n78	DFT-s-BPSK	40	35M7G7D	—	0.279
NR Band n78	DFT-s-QPSK	40	35M7G7D	—	0.289
NR Band n78	DFT-s-16QAM	40	35M7W7D	—	0.216
NR Band n78	DFT-s-BPSK	60	57M9G7D	—	0.278
NR Band n78	DFT-s-QPSK	60	57M8G7D	—	0.267
NR Band n78	DFT-s-16QAM	60	57M9W7D	—	0.205
NR Band n78	DFT-s-BPSK	80	77M1G7D	—	0.272
NR Band n78	DFT-s-QPSK	80	77M1G7D	—	0.264
NR Band n78	DFT-s-16QAM	80	77M0W7D	—	0.197
NR Band n78	DFT-s-BPSK	100	96M3G7D	-0.01381	0.274
NR Band n78	DFT-s-QPSK	100	96M4G7D	—	0.260
NR Band n78	DFT-s-16QAM	100	96M2W7D	—	0.190



1.4. Test Standards and Results

The purpose of the report is to conduct testing according to the following FCC certification standards:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services
5	KDB 971168 D01 Power Meas License Digital Systems v03r01	Measurement Guidance For Certification of Licensed Digital Transmitters
6	KDB 412172 D01 Determining ERP and EIRP v01r01	Guidelines for Determining the Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) of an RF Transmitting Systems
7	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
8	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

Test detailed items/section required by FCC rules and results are as below:

No.	FCC Rule	Description	Limit	Result
1	2.1046	Conducted Output Power	Reporting Only	PASS
2	22.913 (d) 27.50 (d)(5) 27.50 (k)(4)	Peak to Average Radio	< 13dB	PASS
3	22.913 (a)(5)	Effective Radiated Power (Band n5)	ERP < 7W	PASS
	27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band n41)	EIRP < 2W	PASS
	27.50 (k)(3)	Equivalent Isotropic Radiated Power (Band n77/n78)	EIRP < 1W	PASS
4	2.1049	Occupied Bandwidth	Reporting Only	PASS
5	2.1051 22.917 (a)	Conducted Spurious Emission and Conducted Band Edge Measurement (n5)	< 43+10log10(P[watt])	PASS
	2.1051 27.53 (m)(4)	Conducted Spurious Emission and Conducted Band Edge Measurement (Band n41)	Refer to 27.53(m)(4)	PASS
	2.1051 27.53 (n)(2)	Conducted Spurious Emission and Conducted Band Edge Measurement (Band n77/n78)	< -13 dBm/MHz	PASS
6	2.1053 22.917 (a)	Radiated Spurious Emission (Band n5)	< 43+10log10(P[watt])	PASS
	2.1053 27.53 (m)(4)	Radiated Spurious Emission (Band n41)	< 55+10log10(P[watt])	PASS
	2.1053 27.53 (n)(2)	Radiated Spurious Emission (Band n77/n78)	< -13 dBm/MHz	PASS
7	2.1055 22.335 27.54	Frequency Stability (Band n5)	< 2.5ppm	PASS
		Frequency Stability (Band n41/n77/n78)	Within the Authorized Band	PASS

Remark: 1. All test items were verified and recorded according to the standards and without any deviation during the test.

2. This EUT has also been tested and complied with the requirements of FCC Part 15 Subpart B, recorded in a separate test report.



1.5. Test Configuration of Equipment Under Test

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three(X: flat, Y: portrait, Z: landscape) different orthogonal test planes to find the maximum emission.

5G NR Bands	Conducted Measurement	Radiated Measurement
NR Band n5	Ant 1	Ant 3
NR Band n41	Ant 8	Ant 8
NR Band n77	Ant 8	Ant 8
NR Band n78	Ant 8	Ant 8

Note: Conducted output power is measured on all antenna ports, other conducted items are measured on the maximum output power port.

Test Items	Band	Bandwidth(MHz)	Modulation	RB Configuration	Test Channel
Conducted Output Power and ERP/EIRP	n5	5, 10, 15, 20	All DFT-s--OFDM All CP-OFDM	Inner_1RB Inner_Full Outer_Full	L, M, H
	n41	20, 40, 60, 80, 100			
	n77	20, 40, 60, 80, 100			
	n78	20, 40, 60, 80, 100			
Peak-to-Average Ratio	n5	20	DFT-s-PI/2-BPSK DFT-s-256QAM	Outer_Full	M
	n41	100			
	n77	100			
	n78	100			
99% OBW and 26dB EBW	n5	5, 10, 15, 20	DFT-s-PI/2-BPSK DFT-s-QPSK DFT-s-16QAM	Outer_Full	M
	n41	20, 40, 60, 80, 100			
	n77	20, 40, 60, 80, 100			
	n78	20, 40, 60, 80, 100			
Conducted Band Edge	n5	5, 10, 15, 20	DFT-s-PI/2-BPSK	Edge_1RB Outer_Full	L, H
	n41	20, 40, 60, 80, 100			
	n78	20, 40, 60, 80, 100			
	n78	20, 40, 60, 80, 100			
Conducted Spurious Emission	n5	20	DFT-s-PI/2-BPSK	Inner_1RB	L, M, H
	n41	100			
	n77	100			
	n78	100			
Frequency Stability	n5	20	DFT-s-PI/2-BPSK	Outer_Full	M
	n41	100			
	n77	100			
	n78	100			
Radiated Spurious	n5	20	DFT-s-PI/2-BPSK	Inner_1RB	M



Emission	n41	100			
	n77	100			
	n78	100			

Note 1: All bandwidths, all transmission schemes(DFT-s--OFDM, CP-OFDM), all RB configurations, all channels have been evaluated, only the worst test results are reflected in the report.



1.6. Measurement Results Explanation Example

For all conduction test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor..

Following shows an offset computation example with cable loss 4dB, 10dB attenuator.

Example: Offset (dB) = RF cable loss(dB) + attenuator factor(dB) = 4 + 10 = 14 (dB).

1.7. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until June 30, 2025.

ISED Registration: 11185A

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until June 30, 2025.

CAB number: CN0064

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.8. Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15°C - 35°C
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86KPa-106KPa

2. 47 CFR Part 2 Requirements

2.1. Conducted Output Power and ERP/EIRP

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

The ERP of mobile transmitters must not exceed 7 Watts for Band n5.

The EIRP of mobile transmitters must not exceed 2 Watts for Band n41.

The EIRP of mobile transmitters must not exceed 1 Watts for Band n77/n78.

According to KDB 412172 D01 Determining ERP and EIRP v01r01.

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm;

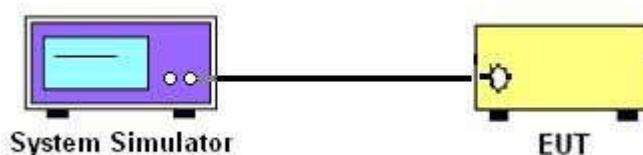
G_T = gain of the transmitting antenna in dBi;

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB.

2.1.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.1.3. Test Setup



2.1.4. Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



2.1.5. Test Results of Conducted Output Power and ERP/EIRP

Please refer to Appendix A for detail.

2.2. Peak-to-average power ratio (PAPR)

2.2.1. Requirement

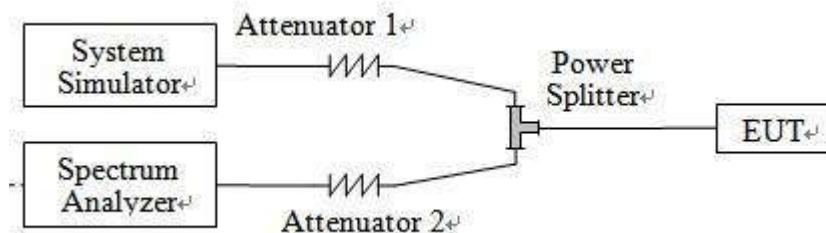
Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth.

In measuring transmissions in this band using an average power technique, the Peak-to-average power ratio (PAPR) of the transmission may not exceed 13 dB.

2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3. Test Description



2.2.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 5.7.2 and ANSI C63.26-2015 Section 5.2.3.4.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. Set resolution/measurement bandwidth \geq OBW or specified reference bandwidth.
5. Set the number of counts to a value that stabilizes the measured CCDF curve.
6. Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level.
7. Repeat step 3~6 at other frequency and modulations.



2.2.5. Test Results of Peak-to-average power ratio (PAPR)

Please refer to Appendix A for detail.

2.3. 99% Occupied Bandwidth and 26dB Emission Bandwidth

2.3.1. Requirement

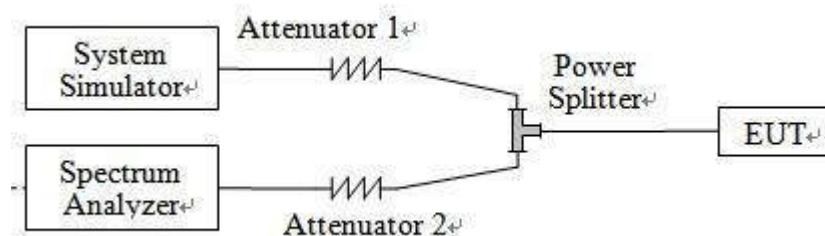
The Occupied Bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 4 and ANSI C63.26-2015 Section 5.4.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency.
4. Set span to be approximately 1.5 to 5 times the OBW.
5. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW.
6. Set VBW $\geq 3 \times$ RBW.
7. Set Detection mode = peak.
8. Set Trace mode = max hold.
9. Allow trace to stabilize.
10. Repeat step 3~9 at other frequency and modulations.



2.3.5. Test Result of 99% Occupied Bandwidth and 26dB Emission Bandwidth

Please refer to Appendix A for detail.



2.4. Conducted Band Edge

2.4.1. Requirement

For Band n5 Part 22 [Part 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. In the spectrum below 1 GHz, instrumentation should employ a reference bandwidth of 100 kHz or greater. 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. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy, provided that the measured power is integrated over the full required reference bandwidth (i.e., 100 kHz or 1 percent of emission bandwidth, as specified).

For Band n41 [Part 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.

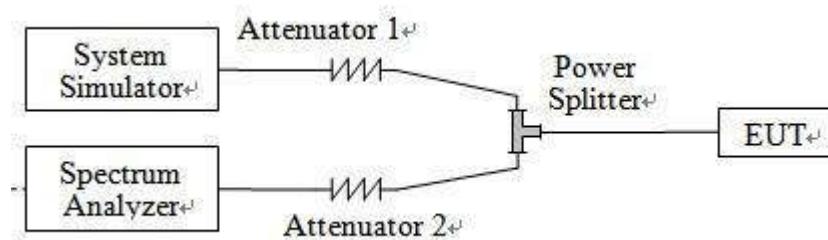
For Band n77/n78 [Part 27.53 (n)(2)]:

For mobile operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz. Compliance with this paragraph (n)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, but limited to a maximum of 200 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3. Test Setup



2.4.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 6 and ANSI C63.26-2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Span was set large enough so as to capture all out of band emissions near the Channel Edge.
4. Use $RBW \geq 1\% EBW$ in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, and use $RBW = 1 \text{ MHz}$ outside 1 MHz of the authorized frequency channel.
5. Set $VBW \geq 3 \times RBW$
6. Set Detector = power averaging (rms).
7. Set the number of points in sweep $\geq 2 \times \text{span} / RBW$.
8. Set sweep trigger to "free run."
9. Set the Sweep time $> (\text{number of points in sweep}) \times (\text{transmitter period})$ (i.e., the transmit on-time + the off-time).
10. Perform a trace average of at least 100 traces.
11. Repeat step 3~10 at other frequency and modulations.



2.4.5. Test Result of Conducted Band Edge

Please refer to Appendix A for detail.

2.5. Conducted Spurious Emission

2.5.1. Requirement

For Band n5/n77/n78:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

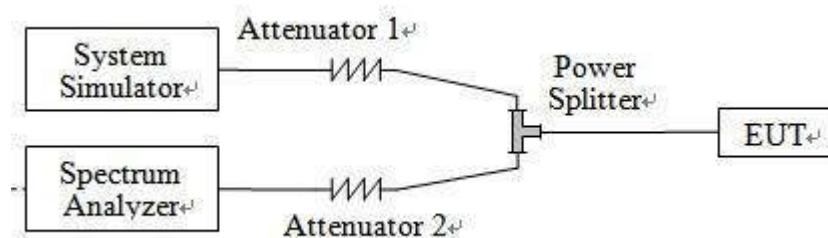
For Band n41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.5.3. Test Setup



2.5.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 6 and ANSI C63.26-2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Set the spectrum analyzer start frequency to 9kHz and stop frequency to the tenth harmonic of the highest fundamental frequency.
4. Set RBW = 1MHz, VBW $\geq 3 \times$ RBW
5. Set Detector = peak.
6. Set Trace mode = max hold.
7. Set Sweep time = auto-couple.
8. Identify and measure the highest spurious emission levels in each frequency range.
9. Compare the results with the corresponding limit in the applicable regulation.
10. Repeat step 3~9 at other frequency and modulations.



2.5.5. Test Result of Conducted Spurious Emission

Please refer to Appendix A for detail.

2.6. Radiated Spurious Emission

2.6.1. Requirement

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E-2016.

For Band n5/n77/n78:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band n41:

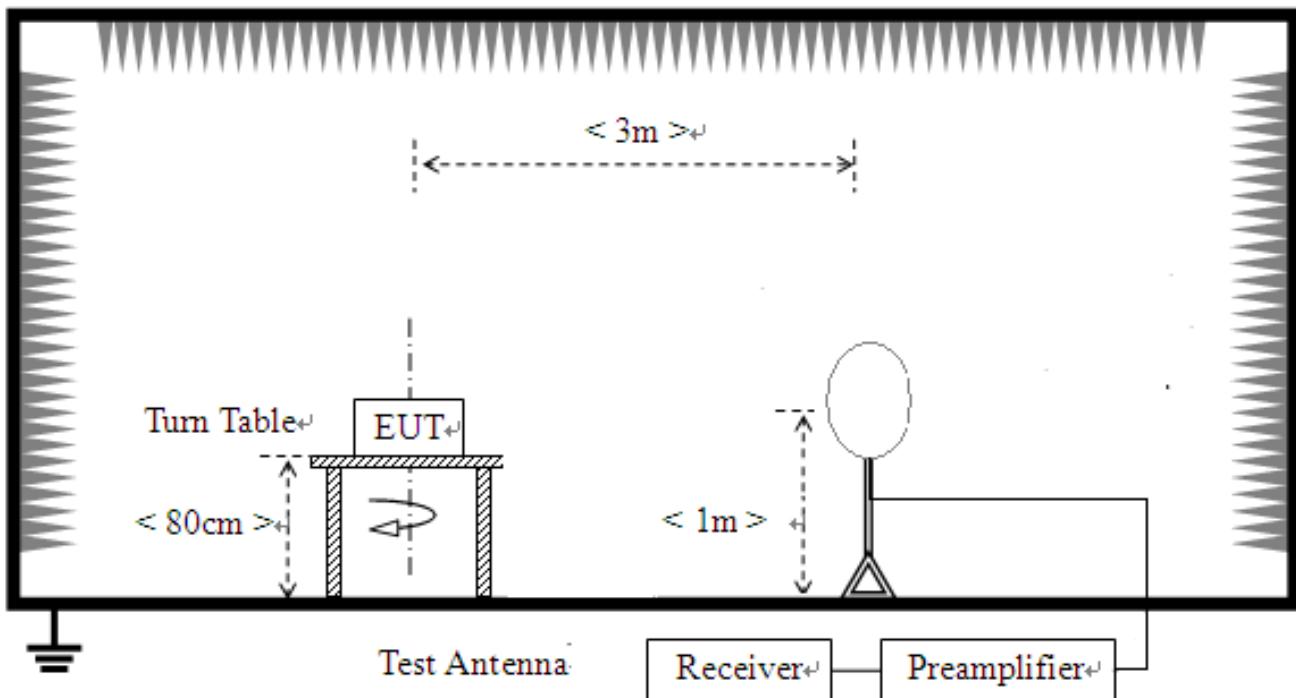
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

2.6.2. Measuring Instruments

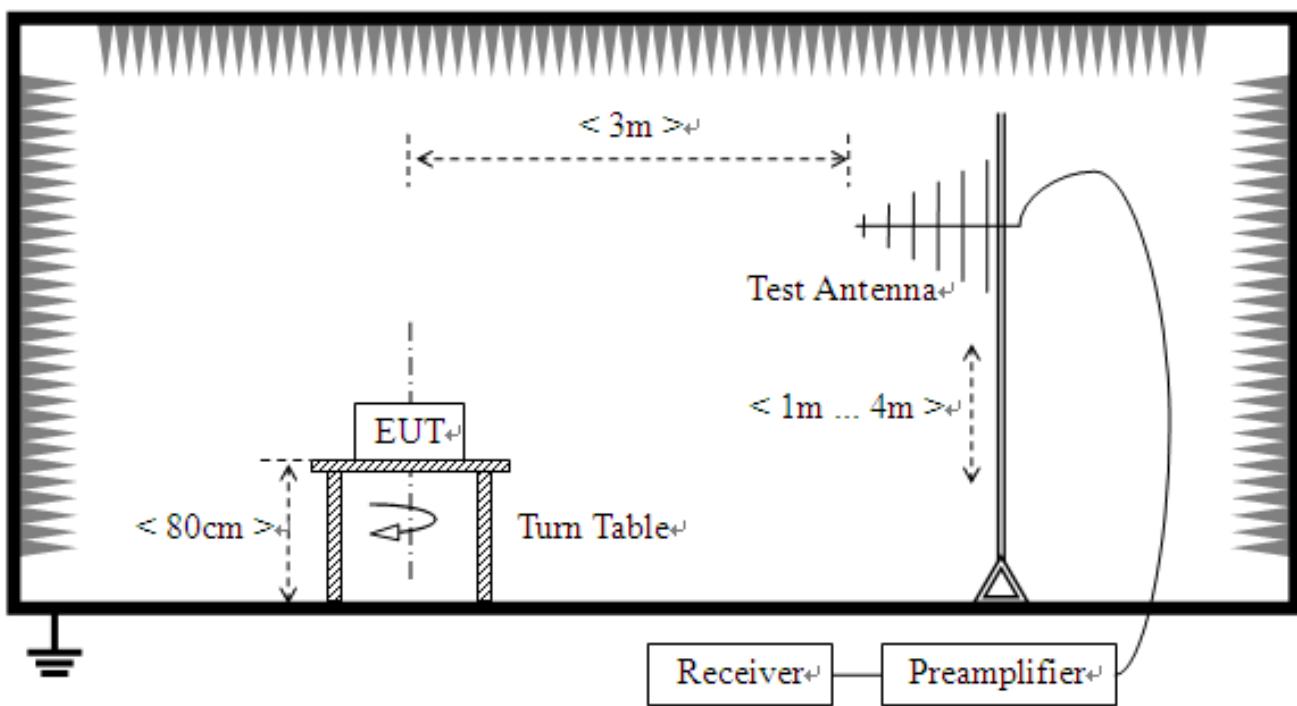
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

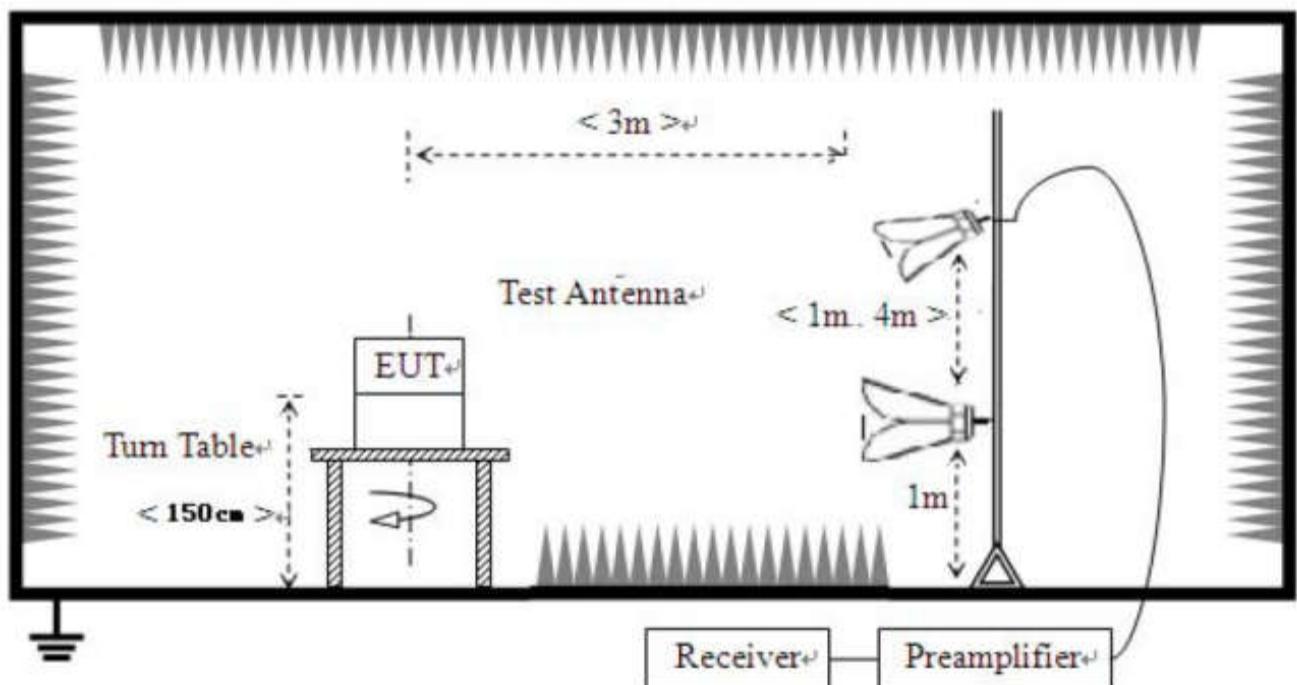
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.4. Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter (for below 1GHz) / 1.5 meters (for above 1GHz) above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
12. The spectrum is measured from 9 kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
13. The maximum RB configurations of the Radiated Spurious Emissions as RB Size full, RB Offset 0.

2.6.5. Test Result of Radiated Spurious Emission

Note: 1. The emission levels of above 18GHz are lower than the limit 20dB and not show in test report.

Note: 2. Absolute Level = Reading Level + Factor



NR Band n5_20MHz_DFT-s-BPSK_Edge_1RB_Left_Mid_CH							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	64.4522	-90.24	-70.90	-13.00	57.90	19.34	Horizontal
2	196.438	-95.14	-71.88	-13.00	58.88	23.26	Horizontal
3	1599.53	-46.96	-48.18	-13.00	35.18	-1.22	Horizontal
4	1794.73	-45.28	-45.22	-13.00	32.22	0.06	Horizontal
5	2509.77	-44.80	-41.10	-13.00	28.10	3.70	Horizontal
6	11111.1	-60.89	-38.07	-13.00	25.07	22.82	Horizontal

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	64.9375	-91.16	-70.54	-13.00	57.54	20.62	Vertical
2	90.1701	-96.85	-73.53	-13.00	60.53	23.32	Vertical
3	1592.52	-49.36	-50.63	-13.00	37.63	-1.27	Vertical
4	4799.96	-58.00	-43.27	-13.00	30.27	14.73	Vertical
5	7728.83	-59.69	-40.40	-13.00	27.40	19.29	Vertical
6	17377.8	-64.65	-35.41	-13.00	22.41	29.24	Vertical

NR Band n41_100MHz_DFT-s-BPSK_Edge_1RB_Left_Mid_CH							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.1571	-81.83	-62.57	-25.00	37.57	19.26	Horizontal
2	365.787	-90.35	-61.94	-25.00	36.94	28.41	Horizontal
3	823.371	-89.49	-52.46	-25.00	27.46	37.03	Horizontal
4	1674.33	-52.99	-53.78	-25.00	28.78	-0.79	Horizontal
5	7487.24	-59.82	-39.33	-25.00	14.33	20.49	Horizontal
6	14270.6	-61.11	-31.29	-25.00	6.29	29.82	Horizontal

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	74.1571	-81.62	-60.04	-25.00	35.04	21.58	Vertical
2	1598.29	-44.88	-46.11	-25.00	21.11	-1.23	Vertical
3	1887.44	-47.29	-46.66	-25.00	21.66	0.63	Vertical
4	7457.22	-59.18	-38.80	-25.00	13.80	20.38	Vertical
5	10121.0	-58.33	-35.50	-25.00	10.50	22.83	Vertical
6	14300.6	-62.85	-32.61	-25.00	7.61	30.24	Vertical



NR Band n77 _100MHz_DFT-s-BPSK_Edge_1RB_Left_Mid_CH							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.941	-97.10	-73.57	-13.00	60.57	23.53	Horizontal
2	83.3767	-93.34	-74.20	-13.00	61.20	19.14	Horizontal
3	314.837	-101.20	-74.39	-13.00	61.39	26.81	Horizontal
4	3029.75	-57.89	-50.57	-13.00	37.57	7.32	Horizontal
5	7591.84	-57.26	-37.64	-13.00	24.64	19.62	Horizontal
6	17405.4	-65.40	-36.12	-13.00	23.12	29.28	Horizontal

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.941	-96.87	-75.60	-13.00	62.60	21.27	Vertical
2	95.5078	-98.65	-74.72	-13.00	61.72	23.93	Vertical
3	149.369	-96.24	-76.30	-13.00	63.30	19.94	Vertical
4	778.244	-102.76	-66.72	-13.00	53.72	36.04	Vertical
5	7496.47	-60.38	-40.71	-13.00	27.71	19.67	Vertical
6	11124.3	-61.46	-38.72	-13.00	25.72	22.74	Vertical

NR Band n78 _100MHz_DFT-s-BPSK_Edge_1RB_Left_Mid_CH							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	47.4687	-94.61	-74.79	-13.00	61.79	19.82	Horizontal
2	65.908	-93.69	-74.35	-13.00	61.35	19.34	Horizontal
3	194.012	-95.05	-71.92	-13.00	58.92	23.13	Horizontal
4	1595.62	-47.54	-48.78	-13.00	35.78	-1.24	Horizontal
5	7592.55	-59.41	-39.79	-13.00	26.79	19.62	Horizontal
6	11859.2	-61.32	-37.63	-13.00	24.63	23.69	Horizontal

NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	64.4522	-93.00	-72.43	-13.00	59.43	20.57	Vertical
2	113.947	-98.22	-75.06	-13.00	62.06	23.16	Vertical
3	265.342	-97.34	-72.62	-13.00	59.62	24.72	Vertical
4	1597.22	-48.23	-49.47	-13.00	36.47	-1.24	Vertical
5	4802.41	-58.53	-43.79	-13.00	30.79	14.74	Vertical
6	7494.22	-59.06	-39.39	-13.00	26.39	19.67	Vertical

2.7. Frequency Stability

2.7.1. Requirement

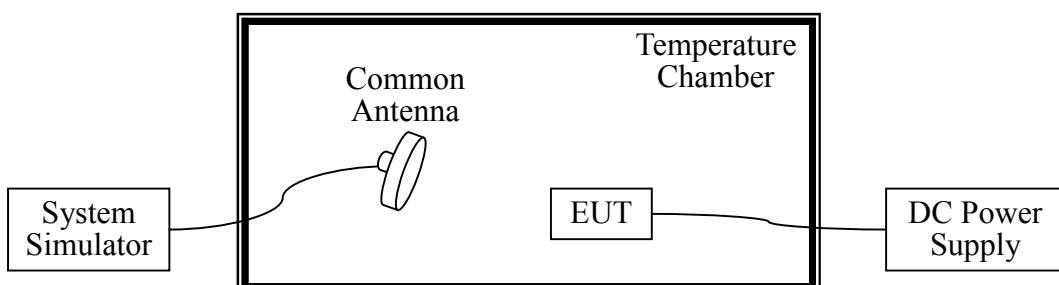
According to FCC requirement, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency. According to FCC section 2.1055, the test conditions are:

- (1) The temperature is varied from -30°C to $+50^\circ\text{C}$ at intervals of not more than 10°C .
- (2) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

2.7.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.7.3. Test Setup



2.7.4. Test Procedures

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. The nominal, highest and lowest extreme voltages were tested, which are specified by the applicant; the normal temperature here used is 20°C .
5. The variation in frequency was measured for the worst case.



2.7.5. Test Result of Frequency Stability

Please refer to Appendix A for detail.

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2023.06.08	2024.06.07
2	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2022.06.09	2026.06.08
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2023.06.08	2024.06.07
5	EMI Horn Ant. (1-18G)	ETC	1209	A150402241	2021.01.02	2024.01.01
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2023.06.01	2024.05.31
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-1000	A140101634	2022.12.13	2023.12.12
8	Amplifier 30M~1GHz	MILMEGA	80RF1000-1000	A140101634	2023.10.20	2024.10.19
9	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2022.12.13	2023.12.12
10	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2023.10.20	2024.10.19
11	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2023.02.20	2024.02.19
12	Test Receiver	R&S	ESIB7	A0501375	2023.03.16	2024.03.15
13	Broadband Ant.	ETC	2786	A150402240	2021.09.16	2024.03.03
14	3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2019.03.26	2024.03.25
15	Temperature chamber	ESPEC	SU-642	A150802409	2023.03.18	2024.03.17
16	Wideband Radio Communication Tester	KEYSIGHT	E7515B	A210603658	2023.02.20	2024.02.19
17	Test Receiver	KEYSIGHT	N9038A	A141202036	2023.06.12	2024.06.11
18	LISN	ROHDE&SCHWARZ	ENV216	A140701847	2023.06.08	2024.06.07

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.8dB
---	-------

Uncertainty of Radiated Emission Measurement (9kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.5dB
---	-------

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.91dB
---	--------

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.5dB
---	-------

Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.9dB
---	-------

Uncertainty of RF Conducted Measurement (9kHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	1.2dB
---	-------

APPENDIX A

Conducted Output Power and ERP/EIRP

NR Band n5 – ANT1:

NR Band n5 - SCS 15kHz - 5MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165300	167300	169300			
			826.5MHz	836.5MHz	846.5MHz			
PI/2 BPSK	1	0	23.13	23.29	23.42	-6.60	14.67	38.45
	1	24	23.08	23.28	23.17			
	1	1	23.26	23.36	23.34			
	1	23	23.36	23.35	23.41			
	12	6	23.08	22.97	22.91			
	25	0	22.83	22.91	22.93			
QPSK	1	0	21.25	21.38	21.23	-6.60	14.08	38.45
	1	24	21.34	21.44	21.24			
	1	1	22.39	22.43	22.32			
	1	23	22.28	22.40	22.29			
	12	6	22.64	22.74	22.83			
	25	0	21.60	21.64	21.58			
16QAM	1	1	21.89	21.73	21.74	-6.60	13.14	38.45
64QAM	1	1	20.33	20.45	20.39	-6.60	11.70	38.45
256QAM	1	1	18.89	19.08	18.96	-6.60	10.33	38.45
NR Band n5 - SCS 15kHz - 5MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165300	167300	169300			
			826.5MHz	836.5MHz	846.5MHz			
QPSK	1	0	20.88	20.98	20.96	-6.60	13.22	38.45
	1	24	20.71	20.94	20.89			
	1	1	21.87	21.97	21.77			
	1	23	21.90	21.92	21.74			
	13	6	21.23	21.19	21.07			
	25	0	20.22	20.42	20.36			
16QAM	1	1	21.30	21.26	21.25	-6.60	12.55	38.45
64QAM	1	1	21.25	21.13	21.07	-6.60	12.50	38.45
256QAM	1	1	18.10	18.09	18.08	-6.60	9.35	38.45

NR Band n5 - SCS 15kHz - 10MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
PI/2 BPSK	1	0	23.05	23.15	23.06	-6.60	14.48	38.45
	1	51	23.06	22.96	23.16			
	1	1	22.91	23.04	23.03			
	1	50	23.02	23.05	22.97			
	25	12	23.23	23.14	23.02			
	50	0	23.21	23.13	23.22			
QPSK	1	0	21.69	21.82	21.94	-6.60	14.15	38.45
	1	51	21.83	21.94	21.73			
	1	1	22.75	22.83	22.86			
	1	50	22.71	22.90	22.80			
	25	12	22.71	22.72	22.72			
	50	0	21.76	21.86	21.80			
16QAM	1	1	21.73	21.81	21.72	-6.60	13.06	38.45
64QAM	1	1	20.27	20.17	20.10	-6.60	11.52	38.45
256QAM	1	1	18.48	18.44	18.34	-6.60	9.73	38.45
NR Band n5 - SCS 15kHz - 10MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	20.43	20.49	20.34	-6.60	12.75	38.45
	1	51	20.37	20.42	20.53			
	1	1	21.42	21.32	21.25			
	1	50	21.35	21.36	21.38			
	26	13	21.45	21.44	21.50			
	52	0	20.22	20.35	20.27			
16QAM	1	1	20.82	20.66	20.79	-6.60	12.07	38.45
64QAM	1	1	20.46	20.30	20.28	-6.60	11.71	38.45
256QAM	1	1	17.97	18.03	17.87	-6.60	9.28	38.45

NR Band n5 - SCS 15kHz - 15MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			166300	167300	168300			
			831.5MHz	836.5MHz	841.5MHz			
PI/2 BPSK	1	0	23.35	23.46	23.29	-6.60	14.71	38.45
	1	78	23.06	23.13	23.26			
	1	1	23.37	23.37	23.24			
	1	77	23.29	23.23	23.39			
	36	18	23.20	23.25	23.21			
	75	0	22.93	22.97	22.95			
QPSK	1	0	21.41	21.35	21.25	-6.60	13.94	38.45
	1	78	21.86	21.71	21.76			
	1	1	22.42	22.38	22.43			
	1	77	22.61	22.66	22.58			
	36	18	22.62	22.62	22.69			
	75	0	21.65	21.75	21.88			
16QAM	1	1	21.83	21.77	21.85	-6.60	13.10	38.45
64QAM	1	1	20.42	20.26	20.17	-6.60	11.67	38.45
256QAM	1	1	17.91	17.96	18.07	-6.60	9.32	38.45
NR Band n5 - SCS 15kHz - 15MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			166300	167300	168300			
			831.5MHz	836.5MHz	841.5MHz			
QPSK	1	0	20.34	20.45	20.53	-6.60	13.23	38.45
	1	78	21.27	21.13	21.25			
	1	1	21.61	21.65	21.55			
	1	77	21.94	21.98	21.92			
	39	19	21.30	21.26	21.23			
	79	0	20.36	20.43	20.51			
16QAM	1	1	20.98	20.99	21.04	-6.60	12.29	38.45
64QAM	1	1	20.52	20.51	20.41	-6.60	11.77	38.45
256QAM	1	1	17.89	17.82	17.88	-6.60	9.14	38.45

NR Band n5 - SCS 15kHz -20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
PI/2 BPSK	1	0	23.50	23.35	23.26	-6.60	14.75	38.45
	1	105	23.07	23.15	23.14			
	1	1	23.30	23.23	23.35			
	1	104	23.13	23.17	23.23			
	50	25	23.42	23.26	23.17			
	100	0	23.29	23.18	23.05			
QPSK	1	0	21.59	21.70	21.67	-6.60	14.26	38.45
	1	105	21.97	21.88	21.96			
	1	1	22.61	22.74	22.58			
	1	104	22.73	22.86	23.01			
	50	25	22.57	22.61	22.50			
	100	0	21.89	21.82	21.79			
16QAM	1	1	22.54	22.56	22.59	-6.60	13.84	38.45
64QAM	1	1	20.76	20.90	20.92	-6.60	12.17	38.45
256QAM	1	1	19.11	19.03	19.02	-6.60	10.36	38.45
NR Band n5 - SCS 15kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	20.78	20.86	20.73	-6.60	13.31	38.45
	1	105	21.17	21.03	20.93			
	1	1	21.91	21.90	22.04			
	1	104	22.06	21.93	21.92			
	53	26	21.22	21.13	21.30			
	106	0	20.50	20.51	20.52			
16QAM	1	1	21.52	21.38	21.54	-6.60	12.79	38.45
64QAM	1	1	20.79	20.74	20.75	-6.60	12.04	38.45
256QAM	1	1	17.82	17.86	17.83	-6.60	9.11	38.45

NR Band n5 – ANT3:

NR Band n5 - SCS 15kHz - 5MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165300	167300	169300			
			826.5MHz	836.5MHz	846.5MHz			
PI/2 BPSK	1	0	22.85	22.91	22.63	-4.80	15.96	38.45
	1	24	22.31	22.44	22.38			
	1	1	22.56	22.48	22.34			
	1	23	22.50	22.59	22.70			
	12	6	22.76	22.58	22.89			
	25	0	22.65	22.69	22.49			
QPSK	1	0	22.28	22.50	22.34	-4.80	15.95	38.45
	1	24	21.91	21.85	22.01			
	1	1	22.49	22.37	22.43			
	1	23	22.73	22.87	22.90			
	12	6	21.97	21.88	22.16			
	25	0	22.21	22.26	22.11			
16QAM	1	1	22.34	22.18	22.34	-4.80	15.39	38.45
64QAM	1	1	20.78	20.70	20.59	-4.80	13.83	38.45
256QAM	1	1	19.01	19.17	19.02	-4.80	12.22	38.45
NR Band n5 - SCS 15kHz - 5MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165300	167300	169300			
			826.5MHz	836.5MHz	846.5MHz			
QPSK	1	0	20.83	20.73	20.95	-4.80	15.04	38.45
	1	24	20.62	20.92	20.82			
	1	1	21.99	21.78	21.88			
	1	23	21.45	21.84	21.66			
	13	6	20.81	20.66	20.80			
	25	0	20.53	20.40	20.33			
16QAM	1	1	21.22	21.52	21.32	-4.80	14.57	38.45
64QAM	1	1	20.49	20.31	20.40	-4.80	13.54	38.45
256QAM	1	1	17.42	17.02	17.24	-4.80	10.47	38.45

NR Band n5 - SCS 15kHz - 10MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
PI/2 BPSK	1	0	22.74	22.66	22.79	-4.80	16.05	38.45
	1	51	22.64	22.81	22.62			
	1	1	22.53	22.58	22.33			
	1	50	22.37	22.18	22.23			
	25	12	22.80	23.00	22.78			
	50	0	22.68	22.49	22.46			
QPSK	1	0	22.44	22.63	22.40	-4.80	15.83	38.45
	1	51	22.24	22.43	22.22			
	1	1	22.57	22.65	22.78			
	1	50	22.63	22.69	22.55			
	25	12	22.25	22.42	22.30			
	50	0	22.10	21.96	22.22			
16QAM	1	1	22.24	22.13	22.27	-4.80	15.32	38.45
64QAM	1	1	20.94	21.10	20.91	-4.80	14.15	38.45
256QAM	1	1	19.24	19.09	19.04	-4.80	12.29	38.45
NR Band n5 - SCS 15kHz - 10MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	20.73	20.71	20.79	-4.80	15.01	38.45
	1	51	21.06	21.15	21.27			
	1	1	21.65	21.45	21.79			
	1	50	21.83	21.72	21.96			
	26	13	20.97	20.85	20.96			
	52	0	20.26	20.18	20.34			
16QAM	1	1	20.93	20.82	21.07	-4.80	14.12	38.45
64QAM	1	1	20.50	20.34	20.62	-4.80	13.67	38.45
256QAM	1	1	17.50	17.37	17.43	-4.80	10.55	38.45

NR Band n5 - SCS 15kHz - 15MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			166300	167300	168300			
			831.5MHz	836.5MHz	841.5MHz			
PI/2 BPSK	1	0	22.69	22.56	22.69	-4.80	15.87	38.45
	1	78	22.40	22.17	22.49			
	1	1	22.26	22.14	22.26			
	1	77	22.21	22.34	22.11			
	36	18	22.74	22.82	22.65			
	75	0	22.52	22.55	22.33			
QPSK	1	0	22.49	22.42	22.31	-4.80	15.92	38.45
	1	78	21.87	21.81	21.86			
	1	1	22.72	22.84	22.87			
	1	77	22.53	22.48	22.54			
	36	18	22.16	22.11	22.32			
	75	0	22.23	22.43	22.28			
16QAM	1	1	22.48	22.28	22.62	-4.80	15.67	38.45
64QAM	1	1	20.84	21.07	20.82	-4.80	14.12	38.45
256QAM	1	1	19.13	19.07	19.06	-4.80	12.18	38.45
NR Band n5 - SCS 15kHz - 15MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			166300	167300	168300			
			831.5MHz	836.5MHz	841.5MHz			
QPSK	1	0	21.03	20.80	20.95	-4.80	14.92	38.45
	1	78	20.79	20.64	20.82			
	1	1	21.87	21.67	21.85			
	1	77	21.60	21.80	21.63			
	39	19	21.14	20.93	20.93			
	79	0	20.45	20.34	20.13			
16QAM	1	1	21.07	21.10	21.26	-4.80	14.31	38.45
64QAM	1	1	20.54	20.57	20.67	-4.80	13.72	38.45
256QAM	1	1	17.62	17.56	17.70	-4.80	10.75	38.45

NR Band n5 - SCS 15kHz -20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
PI/2 BPSK	1	0	22.91	22.69	22.67	-4.80	15.96	38.45
	1	105	22.52	22.50	22.48			
	1	1	22.43	22.53	22.65			
	1	104	22.39	22.48	22.54			
	50	25	22.63	22.65	22.50			
	100	0	22.61	22.61	22.48			
QPSK	1	0	22.45	22.25	22.39	-4.80	15.73	38.45
	1	105	22.07	22.26	22.31			
	1	1	22.68	22.56	22.38			
	1	104	22.59	22.50	22.51			
	50	25	22.16	22.23	22.20			
	100	0	22.13	21.93	22.01			
16QAM	1	1	22.25	22.25	22.17	-4.80	15.30	38.45
64QAM	1	1	20.88	20.71	20.53	-4.80	13.93	38.45
256QAM	1	1	19.16	19.03	18.98	-4.80	12.21	38.45
NR Band n5 - SCS 15kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			165800	167300	168800			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	20.93	20.74	20.81	-4.80	14.77	38.45
	1	105	20.77	20.85	21.04			
	1	1	21.47	21.66	21.44			
	1	104	21.51	21.72	21.65			
	53	26	21.17	21.01	20.90			
	106	0	20.29	20.40	20.32			
16QAM	1	1	21.28	21.10	21.03	-4.80	14.33	38.45
64QAM	1	1	20.27	20.44	20.45	-4.80	13.50	38.45
256QAM	1	1	17.63	17.43	17.27	-4.80	10.68	38.45

NR Band n41 –ANT1:

NR Band n41 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
PI/2 BPSK	1	0	20.12	20.16	19.90	-2.50	21.85	33.00
	1	50	20.28	20.21	20.40			
	1	1	23.83	23.95	24.01			
	1	49	23.96	23.93	24.05			
	25	12	24.16	23.95	24.35			
	50	0	23.29	23.26	23.24			
QPSK	1	0	20.69	20.71	20.65	-2.50	21.95	33.00
	1	50	21.19	21.29	21.03			
	1	1	23.81	23.68	23.67			
	1	49	24.39	24.45	24.19			
	25	12	24.07	24.13	24.22			
	50	0	23.31	23.43	23.20			
16QAM	1	1	23.03	23.12	22.90	-2.50	20.62	33.00
64QAM	1	1	21.38	21.35	21.35	-2.50	18.88	33.00
256QAM	1	1	19.48	19.43	19.34	-2.50	16.98	33.00
NR Band n41 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
QPSK	1	0	20.09	20.32	19.91	-2.50	20.56	33.00
	1	50	20.68	20.62	20.61			
	1	1	22.19	22.38	22.00			
	1	49	22.89	23.06	22.98			
	25	12	22.34	22.47	22.35			
	51	0	21.10	20.97	21.32			
16QAM	1	1	21.84	21.84	21.80	-2.50	19.34	33.00
64QAM	1	1	20.21	20.03	20.10	-2.50	17.71	33.00
256QAM	1	1	17.22	17.12	17.32	-2.50	14.82	33.00

NR Band n41 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
PI/2 BPSK	1	0	19.98	20.12	19.96	-2.50	21.99	33.00
	1	105	20.36	20.14	20.05			
	1	1	23.60	23.73	23.62			
	1	104	24.49	24.33	24.18			
	50	25	23.79	23.70	23.70			
	100	0	23.75	23.55	23.54			
QPSK	1	0	20.66	20.58	20.53	-2.50	21.83	33.00
	1	105	21.33	21.11	20.90			
	1	1	23.83	23.77	23.57			
	1	104	24.32	24.33	24.27			
	50	25	24.03	23.99	24.17			
	100	0	22.94	23.05	23.23			
16QAM	1	1	22.99	23.05	23.26	-2.50	20.76	33.00
64QAM	1	1	21.10	21.04	21.26	-2.50	18.76	33.00
256QAM	1	1	19.62	19.71	19.60	-2.50	17.21	33.00
NR Band n41 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
QPSK	1	0	19.91	20.01	19.99	-2.50	20.78	33.00
	1	105	20.12	20.28	20.32			
	1	1	22.12	22.46	22.35			
	1	104	23.26	23.28	23.13			
	53	26	22.47	22.45	22.43			
	106	0	21.11	21.01	20.95			
16QAM	1	1	21.41	21.32	21.49	-2.50	18.99	33.00
64QAM	1	1	20.41	20.59	20.50	-2.50	18.09	33.00
256QAM	1	1	17.30	17.42	17.26	-2.50	14.92	33.00



NR Band n41 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
PI/2 BPSK	1	0	20.07	19.99	20.01	-2.50	21.86	33.00
	1	161	20.06	20.31	20.23			
	1	1	24.04	23.63	23.82			
	1	160	24.13	24.26	24.36			
	81	40	23.79	23.77	23.86			
	162	0	23.60	23.57	23.60			
QPSK	1	0	20.56	20.55	20.77	-2.50	21.91	33.00
	1	161	21.34	21.13	21.26			
	1	1	23.85	23.89	23.86			
	1	160	24.41	24.06	24.21			
	81	40	24.21	24.21	24.12			
	162	0	23.61	23.25	23.38			
16QAM	1	1	23.20	23.00	23.06	-2.50	20.70	33.00
64QAM	1	1	21.03	21.05	21.19	-2.50	18.69	33.00
256QAM	1	1	19.13	19.34	19.33	-2.50	16.84	33.00
NR Band n41 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
QPSK	1	0	19.91	19.88	20.06	-2.50	20.53	33.00
	1	161	20.38	20.39	20.54			
	1	1	22.44	22.52	22.64			
	1	160	23.03	22.89	22.87			
	81	40	22.50	22.59	22.82			
	162	0	21.05	20.96	21.00			
16QAM	1	1	21.74	21.80	21.65	-2.50	19.30	33.00
64QAM	1	1	20.20	20.40	20.43	-2.50	17.93	33.00
256QAM	1	1	16.78	16.92	16.91	-2.50	14.42	33.00

NR Band n41 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
PI/2 BPSK	1	0	19.90	20.12	19.69	-2.50	21.69	33.00
	1	216	20.35	20.51	20.28			
	1	1	23.43	23.60	23.60			
	1	215	23.94	24.08	23.97			
	108	54	24.11	24.13	24.19			
	216	0	23.60	23.55	23.38			
QPSK	1	0	20.46	20.33	20.30	-2.50	21.98	33.00
	1	216	21.24	21.13	21.27			
	1	1	23.74	23.95	23.91			
	1	215	24.42	24.38	24.48			
	108	54	24.15	23.95	24.27			
	216	0	23.15	23.14	23.22			
16QAM	1	1	23.06	23.13	23.23	-2.50	20.73	33.00
64QAM	1	1	21.41	21.27	21.41	-2.50	18.91	33.00
256QAM	1	1	19.59	19.76	19.78	-2.50	17.28	33.00
NR Band n41 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
QPSK	1	0	19.56	19.84	19.74	-2.50	20.64	33.00
	1	216	20.51	20.56	20.69			
	1	1	22.57	22.49	22.45			
	1	215	23.14	22.85	23.04			
	109	54	22.42	22.29	22.43			
	217	0	21.25	21.21	21.08			
16QAM	1	1	21.65	21.40	21.43	-2.50	19.15	33.00
64QAM	1	1	20.31	20.38	20.39	-2.50	17.89	33.00
256QAM	1	1	17.12	17.46	17.30	-2.50	14.96	33.00



NR Band n41 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
PI/2 BPSK	1	0	19.97	20.02	19.89	-2.50	21.81	33.00
	1	272	20.29	20.33	20.36			
	1	1	23.66	23.63	23.50			
	1	271	24.31	24.14	24.28			
	135	67	23.88	23.93	24.13			
	270	0	23.27	23.45	23.50			
QPSK	1	0	20.42	20.63	20.86	-2.50	22.07	33.00
	1	272	20.85	21.06	21.07			
	1	1	23.90	23.77	23.96			
	1	271	24.57	24.36	24.27			
	135	67	23.83	23.93	23.71			
	270	0	23.26	23.22	23.21			
16QAM	1	1	22.93	22.92	22.90	-2.50	20.43	33.00
64QAM	1	1	21.45	21.23	21.17	-2.50	18.95	33.00
256QAM	1	1	19.67	19.49	19.55	-2.50	17.17	33.00
NR Band n41 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
QPSK	1	0	19.83	19.92	19.79	-2.50	20.55	33.00
	1	272	20.48	20.53	20.40			
	1	1	22.22	22.35	22.52			
	1	271	23.05	22.96	22.88			
	137	68	22.56	22.54	22.33			
	273	0	21.21	21.14	21.31			
16QAM	1	1	21.40	21.63	21.49	-2.50	19.13	33.00
64QAM	1	1	20.40	20.31	20.47	-2.50	17.97	33.00
256QAM	1	1	17.21	17.14	17.33	-2.50	14.83	33.00

NR Band n41 –ANT2:

NR Band n41 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
PI/2 BPSK	1	0	19.49	19.42	19.58	-0.70	22.79	33.00
	1	50	19.66	19.72	19.84			
	1	1	23.26	23.49	23.21			
	1	49	23.04	22.94	22.85			
	25	12	23.39	23.39	23.13			
	50	0	22.57	22.80	22.52			
QPSK	1	0	20.06	20.09	20.10	-0.70	23.13	33.00
	1	50	20.15	19.96	20.09			
	1	1	23.11	22.84	22.99			
	1	49	23.64	23.83	23.83			
	25	12	23.11	23.36	23.17			
	50	0	22.25	22.10	22.37			
16QAM	1	1	22.33	22.29	22.09	-0.70	21.63	33.00
64QAM	1	1	20.77	20.88	20.97	-0.70	20.27	33.00
256QAM	1	1	18.58	18.37	18.83	-0.70	18.13	33.00
NR Band n41 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
QPSK	1	0	19.82	19.51	19.56	-0.70	21.80	33.00
	1	50	19.77	19.67	19.56			
	1	1	21.41	21.45	21.44			
	1	49	22.18	22.50	22.27			
	25	12	21.53	21.43	21.60			
	51	0	20.44	20.62	20.39			
16QAM	1	1	21.27	21.16	21.13	-0.70	20.57	33.00
64QAM	1	1	19.35	19.65	19.47	-0.70	18.95	33.00
256QAM	1	1	16.34	16.16	16.31	-0.70	15.64	33.00



NR Band n41 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
PI/2 BPSK	1	0	19.31	19.45	19.53	-0.70	22.87	33.00
	1	105	19.34	19.53	19.60			
	1	1	23.13	23.22	23.27			
	1	104	23.57	23.39	23.33			
	50	25	23.36	23.23	23.43			
	100	0	22.49	22.34	22.41			
QPSK	1	0	19.75	19.80	19.76	-0.70	22.98	33.00
	1	105	20.57	20.64	20.49			
	1	1	23.22	23.07	22.97			
	1	104	23.45	23.68	23.52			
	50	25	23.01	23.18	23.32			
	100	0	22.76	22.56	22.37			
16QAM	1	1	22.50	22.40	22.50	-0.70	21.80	33.00
64QAM	1	1	20.32	20.40	20.33	-0.70	19.70	33.00
256QAM	1	1	18.40	18.46	18.25	-0.70	17.76	33.00
NR Band n41 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
QPSK	1	0	19.66	19.88	19.55	-0.70	21.33	33.00
	1	105	19.70	19.76	19.69			
	1	1	21.38	21.52	21.45			
	1	104	22.03	21.83	21.79			
	53	26	21.87	21.63	21.97			
	106	0	20.33	20.17	20.10			
16QAM	1	1	20.84	20.85	20.76	-0.70	20.15	33.00
64QAM	1	1	19.12	18.99	19.22	-0.70	18.52	33.00
256QAM	1	1	16.08	16.15	16.03	-0.70	15.45	33.00

NR Band n41 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
PI/2 BPSK	1	0	19.18	19.11	19.13	-0.70	22.62	33.00
	1	161	19.48	19.58	19.61			
	1	1	23.22	23.04	22.81			
	1	160	23.01	23.25	23.29			
	81	40	23.32	23.31	23.28			
	162	0	22.37	22.50	22.44			
QPSK	1	0	19.46	19.66	19.71	-0.70	22.85	33.00
	1	161	20.75	20.55	20.47			
	1	1	22.71	22.87	22.79			
	1	160	23.35	23.55	23.52			
	81	40	23.49	23.53	23.47			
	162	0	22.37	22.32	22.16			
16QAM	1	1	22.05	22.13	22.18	-0.70	21.48	33.00
64QAM	1	1	20.88	20.78	20.83	-0.70	20.18	33.00
256QAM	1	1	19.13	18.92	18.96	-0.70	18.43	33.00
NR Band n41 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
QPSK	1	0	19.60	19.74	19.70	-0.70	21.43	33.00
	1	161	19.74	19.69	19.91			
	1	1	21.90	21.71	21.66			
	1	160	22.01	22.13	22.09			
	81	40	21.82	21.55	21.66			
	162	0	20.36	20.24	20.25			
16QAM	1	1	21.09	21.08	21.18	-0.70	20.48	33.00
64QAM	1	1	19.23	19.12	18.87	-0.70	18.53	33.00
256QAM	1	1	16.55	16.56	16.68	-0.70	15.98	33.00



NR Band n41 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
PI/2 BPSK	1	0	19.41	19.64	19.50	-0.70	22.82	33.00
	1	216	19.89	19.77	19.71			
	1	1	22.96	22.85	22.76			
	1	215	22.99	23.27	23.08			
	108	54	23.52	23.44	23.28			
	216	0	22.39	22.58	22.51			
QPSK	1	0	20.17	20.14	19.96	-0.70	23.12	33.00
	1	216	20.40	20.51	20.43			
	1	1	22.75	22.83	22.91			
	1	215	23.82	23.80	23.68			
	108	54	23.02	22.82	23.08			
	216	0	22.60	22.72	22.51			
16QAM	1	1	22.29	22.16	22.11	-0.70	21.59	33.00
64QAM	1	1	20.40	20.34	20.50	-0.70	19.80	33.00
256QAM	1	1	18.69	18.63	18.57	-0.70	17.99	33.00
NR Band n41 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
QPSK	1	0	19.36	19.56	19.54	-0.70	21.74	33.00
	1	216	19.69	19.60	19.65			
	1	1	21.54	21.74	21.35			
	1	215	22.44	22.28	22.36			
	109	54	21.64	21.80	21.81			
	217	0	20.01	20.16	20.02			
16QAM	1	1	20.85	21.04	20.69	-0.70	20.34	33.00
64QAM	1	1	19.36	19.11	19.44	-0.70	18.74	33.00
256QAM	1	1	16.19	16.09	16.44	-0.70	15.74	33.00



NR Band n41 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
PI/2 BPSK	1	0	19.25	19.23	19.39	-0.70	22.96	33.00
	1	272	19.54	19.38	19.40			
	1	1	23.17	22.94	22.80			
	1	271	23.24	22.99	22.79			
	135	67	23.60	23.43	23.66			
	270	0	22.65	22.41	22.33			
QPSK	1	0	19.67	19.67	19.92	-0.70	22.85	33.00
	1	272	20.32	20.42	20.45			
	1	1	22.96	22.75	22.74			
	1	271	23.14	23.35	23.55			
	135	67	23.28	23.04	23.29			
	270	0	22.70	22.46	22.51			
16QAM	1	1	22.34	22.29	22.15	-0.70	21.64	33.00
64QAM	1	1	20.35	20.43	20.44	-0.70	19.74	33.00
256QAM	1	1	18.87	18.94	18.78	-0.70	18.24	33.00
NR Band n41 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
QPSK	1	0	19.66	19.51	19.49	-0.70	22.02	33.00
	1	272	20.15	19.95	20.00			
	1	1	21.15	21.29	21.35			
	1	271	22.72	22.39	22.48			
	137	68	21.40	21.45	21.53			
	273	0	20.19	20.14	20.17			
16QAM	1	1	21.51	21.51	21.26	-0.70	20.81	33.00
64QAM	1	1	19.14	19.12	19.04	-0.70	18.44	33.00
256QAM	1	1	16.42	16.56	16.56	-0.70	15.86	33.00

NR Band n41 –ANT4:

NR Band n41 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
PI/2 BPSK	1	0	20.12	20.05	19.99	-3.70	20.48	33.00
	1	50	20.66	20.45	20.43			
	1	1	23.87	23.98	23.95			
	1	49	24.18	24.10	24.03			
	25	12	23.96	24.04	23.95			
	50	0	23.29	23.53	23.30			
QPSK	1	0	20.61	20.78	20.60	-3.70	21.05	33.00
	1	50	20.93	21.12	21.09			
	1	1	23.52	23.65	23.69			
	1	49	24.75	24.70	24.57			
	25	12	24.28	24.09	24.31			
	50	0	23.28	22.89	23.09			
16QAM	1	1	22.95	23.32	23.07	-3.70	19.62	33.00
64QAM	1	1	21.16	21.35	21.12	-3.70	17.65	33.00
256QAM	1	1	19.43	19.34	19.27	-3.70	15.73	33.00
NR Band n41 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
QPSK	1	0	20.65	20.46	20.38	-3.70	19.39	33.00
	1	50	20.35	20.56	20.45			
	1	1	22.72	22.52	22.45			
	1	49	22.98	23.09	23.06			
	25	12	22.57	22.50	22.60			
	51	0	20.69	20.83	20.96			
16QAM	1	1	21.60	21.72	21.80	-3.70	18.10	33.00
64QAM	1	1	20.18	19.92	19.82	-3.70	16.48	33.00
256QAM	1	1	17.24	17.22	17.27	-3.70	13.57	33.00



NR Band n41 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
PI/2 BPSK	1	0	19.87	20.03	20.08	-3.70	20.96	33.00
	1	105	20.53	20.30	20.49			
	1	1	23.94	24.12	24.14			
	1	104	24.04	24.30	23.96			
	50	25	24.40	24.66	24.44			
	100	0	23.20	23.40	23.14			
QPSK	1	0	20.79	21.02	21.03	-3.70	20.79	33.00
	1	105	20.99	20.85	20.92			
	1	1	23.58	23.54	23.77			
	1	104	24.26	24.49	24.36			
	50	25	24.31	24.37	24.16			
	100	0	23.11	22.92	23.38			
16QAM	1	1	23.06	23.01	23.25	-3.70	19.55	33.00
64QAM	1	1	21.48	21.28	21.35	-3.70	17.78	33.00
256QAM	1	1	19.29	19.35	19.48	-3.70	15.78	33.00
NR Band n41 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
QPSK	1	0	20.36	20.19	20.32	-3.70	19.15	33.00
	1	105	20.69	20.83	20.87			
	1	1	22.54	22.65	22.64			
	1	104	22.80	22.78	22.85			
	53	26	22.57	22.35	22.43			
	106	0	20.79	20.72	20.85			
16QAM	1	1	21.99	21.96	21.80	-3.70	18.29	33.00
64QAM	1	1	19.59	19.80	19.79	-3.70	16.10	33.00
256QAM	1	1	17.56	17.36	17.37	-3.70	13.86	33.00



NR Band n41 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
PI/2 BPSK	1	0	20.19	20.17	20.13	-3.70	20.75	33.00
	1	161	20.11	20.25	20.45			
	1	1	23.39	23.64	23.87			
	1	160	23.96	24.07	24.21			
	81	40	24.29	24.20	24.45			
	162	0	23.65	23.55	23.52			
QPSK	1	0	20.43	20.57	20.79	-3.70	21.04	33.00
	1	161	21.11	21.04	21.21			
	1	1	23.87	23.77	23.75			
	1	160	24.74	24.59	24.56			
	81	40	24.30	24.27	24.37			
	162	0	23.48	23.36	23.43			
16QAM	1	1	23.37	23.12	23.11	-3.70	19.67	33.00
64QAM	1	1	21.31	21.13	20.94	-3.70	17.61	33.00
256QAM	1	1	19.52	19.60	19.57	-3.70	15.90	33.00
NR Band n41 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
QPSK	1	0	20.48	20.35	20.28	-3.70	19.70	33.00
	1	161	20.49	20.67	20.46			
	1	1	22.42	22.35	22.42			
	1	160	23.21	23.40	23.35			
	81	40	22.70	22.61	22.77			
	162	0	20.81	20.65	20.77			
16QAM	1	1	22.04	21.83	22.03	-3.70	18.34	33.00
64QAM	1	1	19.78	19.81	19.84	-3.70	16.14	33.00
256QAM	1	1	16.91	17.06	16.88	-3.70	13.36	33.00

NR Band n41 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
PI/2 BPSK	1	0	20.13	20.16	20.28	-3.70	20.56	33.00
	1	216	20.54	20.33	20.45			
	1	1	23.87	23.58	23.65			
	1	215	24.02	23.96	24.14			
	108	54	24.16	24.26	24.02			
	216	0	23.33	23.03	23.15			
QPSK	1	0	20.62	20.59	20.57	-3.70	21.14	33.00
	1	216	21.13	21.19	21.10			
	1	1	23.56	23.49	23.66			
	1	215	24.84	24.80	24.58			
	108	54	24.11	24.13	24.20			
	216	0	23.18	23.30	23.12			
16QAM	1	1	22.80	22.86	22.86	-3.70	19.16	33.00
64QAM	1	1	21.70	21.55	21.50	-3.70	18.00	33.00
256QAM	1	1	19.39	19.82	19.56	-3.70	16.12	33.00
NR Band n41 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
QPSK	1	0	20.37	20.40	20.60	-3.70	19.66	33.00
	1	216	20.38	20.58	20.43			
	1	1	22.39	22.35	22.20			
	1	215	23.36	23.15	23.35			
	109	54	22.27	22.38	22.60			
	217	0	20.86	20.85	20.79			
16QAM	1	1	21.86	21.75	21.56	-3.70	18.16	33.00
64QAM	1	1	19.98	20.09	20.18	-3.70	16.48	33.00
256QAM	1	1	16.72	16.86	17.02	-3.70	13.32	33.00

NR Band n41 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
PI/2 BPSK	1	0	20.09	20.16	20.27	-3.70	20.69	33.00
	1	272	20.55	20.70	20.72			
	1	1	23.60	23.63	23.46			
	1	271	23.94	23.74	23.75			
	135	67	24.16	24.18	24.39			
	270	0	23.04	23.14	23.21			
QPSK	1	0	20.73	20.95	20.56	-3.70	20.82	33.00
	1	272	21.25	21.29	21.25			
	1	1	23.68	23.93	23.64			
	1	271	24.31	24.52	24.31			
	135	67	24.12	23.98	23.85			
	270	0	23.29	23.08	23.11			
16QAM	1	1	23.28	23.33	23.41	-3.70	19.71	33.00
64QAM	1	1	21.27	21.06	21.34	-3.70	17.64	33.00
256QAM	1	1	19.58	19.53	19.54	-3.70	15.88	33.00
NR Band n41 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
QPSK	1	0	20.12	20.20	20.02	-3.70	19.43	33.00
	1	272	20.39	20.43	20.58			
	1	1	22.33	22.25	22.45			
	1	271	23.02	23.13	23.02			
	137	68	22.40	22.42	22.31			
	273	0	20.78	20.78	20.76			
16QAM	1	1	21.96	21.92	21.71	-3.70	18.26	33.00
64QAM	1	1	20.32	20.12	20.06	-3.70	16.62	33.00
256QAM	1	1	17.13	17.26	17.26	-3.70	13.56	33.00

NR Band n41 –ANT8:

NR Band n41 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
PI/2 BPSK	1	0	21.34	21.27	21.31	-0.50	24.64	33.00
	1	50	21.59	21.47	21.40			
	1	1	24.70	24.83	24.76			
	1	49	25.03	24.92	24.96			
	25	12	25.14	25.04	24.97			
	50	0	24.68	24.56	24.59			
QPSK	1	0	21.38	21.22	21.10	-0.50	24.47	33.00
	1	50	21.41	21.36	21.19			
	1	1	24.86	24.74	24.65			
	1	49	24.94	24.81	24.87			
	25	12	24.97	24.88	24.75			
	50	0	24.09	24.02	23.87			
16QAM	1	1	23.73	23.91	23.75	-0.50	23.41	33.00
64QAM	1	1	22.79	22.69	22.68	-0.50	22.29	33.00
256QAM	1	1	20.57	20.46	20.40	-0.50	20.07	33.00
NR Band n41 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			501204	518598	535998			
			2506.02MHz	2592.99MHz	2679.99MHz			
QPSK	1	0	20.96	21.04	21.15	-0.50	23.06	33.00
	1	50	21.18	21.23	21.38			
	1	1	23.14	23.02	23.01			
	1	49	23.19	23.35	23.27			
	25	12	23.56	23.44	23.51			
	51	0	22.07	21.96	21.80			
16QAM	1	1	22.74	22.62	22.47	-0.50	22.24	33.00
64QAM	1	1	21.08	21.19	21.04	-0.50	20.69	33.00
256QAM	1	1	18.33	18.24	18.08	-0.50	17.83	33.00

NR Band n41 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
PI/2 BPSK	1	0	21.24	21.34	21.38	-0.50	24.77	33.00
	1	105	21.59	21.54	21.63			
	1	1	24.95	24.89	24.79			
	1	104	25.27	25.17	25.15			
	50	25	25.01	25.03	25.17			
	100	0	24.58	24.55	24.58			
QPSK	1	0	21.40	21.46	21.51	-0.50	24.83	33.00
	1	105	21.74	21.72	21.87			
	1	1	24.92	24.95	24.87			
	1	104	25.14	25.24	25.33			
	50	25	25.03	25.02	24.93			
	100	0	23.94	24.07	23.94			
16QAM	1	1	23.97	24.10	23.97	-0.50	23.60	33.00
64QAM	1	1	22.36	22.42	22.36	-0.50	21.92	33.00
256QAM	1	1	20.43	20.38	20.47	-0.50	19.97	33.00
NR Band n41 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			503202	518598	534000			
			2516.01MHz	2592.99MHz	2670.00MHz			
QPSK	1	0	21.43	21.53	21.44	-0.50	23.41	33.00
	1	105	21.82	21.73	21.84			
	1	1	23.61	23.60	23.66			
	1	104	23.91	23.89	23.72			
	53	26	23.51	23.46	23.58			
	106	0	21.93	22.07	22.00			
16QAM	1	1	23.17	23.13	23.01	-0.50	22.67	33.00
64QAM	1	1	21.72	21.59	21.70	-0.50	21.22	33.00
256QAM	1	1	21.39	21.33	21.40	-0.50	20.90	33.00

NR Band n41 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
PI/2 BPSK	1	0	21.23	21.22	21.39	-0.50	24.76	33.00
	1	161	21.71	21.61	21.77			
	1	1	24.80	24.82	24.94			
	1	160	25.11	25.10	25.26			
	81	40	25.09	24.99	24.87			
	162	0	24.60	24.48	24.49			
QPSK	1	0	21.08	21.19	21.11	-0.50	24.63	33.00
	1	161	21.43	21.50	21.41			
	1	1	24.58	24.65	24.68			
	1	160	25.13	25.06	24.88			
	81	40	24.76	24.86	24.94			
	162	0	24.08	23.98	24.05			
16QAM	1	1	23.64	23.65	23.50	-0.50	23.15	33.00
64QAM	1	1	22.14	22.15	22.27	-0.50	21.77	33.00
256QAM	1	1	20.27	20.20	20.27	-0.50	19.77	33.00
NR Band n41 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			505200	518598	531996			
			2526.00MHz	2592.99MHz	2659.98MHz			
QPSK	1	0	21.49	21.34	21.48	-0.50	23.13	33.00
	1	161	21.40	21.47	21.30			
	1	1	23.22	23.30	23.38			
	1	160	23.35	23.46	23.33			
	81	40	23.63	23.54	23.44			
	162	0	21.94	21.95	21.91			
16QAM	1	1	22.69	22.56	22.47	-0.50	22.19	33.00
64QAM	1	1	21.24	21.08	21.12	-0.50	20.74	33.00
256QAM	1	1	18.33	18.16	18.03	-0.50	17.83	33.00

NR Band n41 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
PI/2 BPSK	1	0	21.14	21.16	21.21	-0.50	24.54	33.00
	1	216	21.38	21.53	21.52			
	1	1	24.84	24.69	24.56			
	1	215	24.85	25.01	24.88			
	108	54	25.04	24.94	24.84			
	216	0	24.30	24.35	24.27			
QPSK	1	0	20.91	21.06	21.20	-0.50	24.60	33.00
	1	216	21.58	21.58	21.72			
	1	1	24.47	24.64	24.48			
	1	215	25.10	25.09	25.06			
	108	54	24.72	24.84	24.82			
	216	0	23.84	23.91	23.75			
16QAM	1	1	23.33	23.49	23.47	-0.50	22.99	33.00
64QAM	1	1	22.27	22.18	22.01	-0.50	21.77	33.00
256QAM	1	1	20.38	20.22	20.27	-0.50	19.88	33.00
NR Band n41 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			507204	518598	529998			
			2536.02MHz	2592.99MHz	2649.99MHz			
QPSK	1	0	21.08	21.15	21.07	-0.50	22.98	33.00
	1	216	21.60	21.51	21.45			
	1	1	23.13	23.17	23.16			
	1	215	23.34	23.48	23.43			
	109	54	23.36	23.40	23.24			
	217	0	21.90	21.91	21.86			
16QAM	1	1	22.80	22.97	22.80	-0.50	22.47	33.00
64QAM	1	1	21.23	21.18	21.34	-0.50	20.84	33.00
256QAM	1	1	18.24	18.17	18.18	-0.50	17.74	33.00



NR Band n41 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
PI/2 BPSK	1	0	21.03	20.94	20.97	-0.50	24.71	33.00
	1	272	21.36	21.28	21.17			
	1	1	24.47	24.50	24.51			
	1	271	24.84	24.93	25.08			
	135	67	25.21	25.07	25.06			
	270	0	24.57	24.58	24.62			
QPSK	1	0	20.94	21.04	20.95	-0.50	24.67	33.00
	1	272	21.40	21.42	21.52			
	1	1	24.74	24.72	24.85			
	1	271	25.02	25.14	25.17			
	135	67	24.84	24.87	24.70			
	270	0	24.16	24.04	24.03			
16QAM	1	1	23.29	23.35	23.34	-0.50	22.85	33.00
64QAM	1	1	22.17	22.10	22.22	-0.50	21.72	33.00
256QAM	1	1	20.03	20.19	20.11	-0.50	19.69	33.00
NR Band n41 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			509202	518598	528000			
			2546.01MHz	2592.99MHz	2640.00MHz			
QPSK	1	0	20.89	20.90	20.99	-0.50	23.11	33.00
	1	272	21.41	21.35	21.28			
	1	1	22.95	23.09	23.05			
	1	271	23.61	23.54	23.50			
	137	68	23.19	23.34	23.18			
	273	0	22.09	22.06	21.96			
16QAM	1	1	22.26	22.34	22.39	-0.50	21.89	33.00
64QAM	1	1	21.46	21.30	21.35	-0.50	20.96	33.00
256QAM	1	1	18.15	18.21	18.19	-0.50	17.71	33.00

NR Band n77 – ANT1:

NR Band n77 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	18.86	18.76	18.89	-0.10	22.56	30.00
	1	50	18.93	19.01	18.97			
	1	1	22.16	22.25	22.23			
	1	49	22.37	22.43	22.26			
	25	12	22.53	22.66	22.51			
	50	0	21.95	22.08	22.18			
QPSK	1	0	18.56	18.54	18.63	-0.10	22.81	30.00
	1	50	18.95	18.84	18.94			
	1	1	22.40	22.22	22.06			
	1	49	22.45	22.55	22.63			
	25	12	22.91	22.79	22.66			
	50	0	21.88	21.75	21.85			
16QAM	1	1	21.11	21.22	21.29	-0.10	21.19	30.00
64QAM	1	1	19.92	19.94	19.90	-0.10	19.84	30.00
256QAM	1	1	17.71	17.75	17.79	-0.10	17.69	30.00
NR Band n77 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	18.98	18.88	18.99	-0.10	21.10	30.00
	1	50	18.88	18.89	18.71			
	1	1	20.81	20.84	20.67			
	1	49	21.17	21.14	21.20			
	25	12	20.91	21.08	21.06			
	51	0	19.45	19.34	19.42			
16QAM	1	1	20.28	20.21	20.03	-0.10	20.18	30.00
64QAM	1	1	18.95	19.01	19.03	-0.10	18.93	30.00
256QAM	1	1	15.83	15.81	15.63	-0.10	15.73	30.00

NR Band n77 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	18.41	18.49	18.35	-0.10	22.55	30.00
	1	105	18.82	18.86	18.71			
	1	1	22.12	22.10	22.18			
	1	104	22.42	22.39	22.27			
	50	25	22.47	22.65	22.48			
	100	0	21.86	21.94	21.77			
QPSK	1	0	18.79	18.67	18.50	-0.10	22.77	30.00
	1	105	18.80	18.96	19.08			
	1	1	22.28	22.36	22.38			
	1	104	22.38	22.47	22.52			
	50	25	22.79	22.87	22.79			
	100	0	21.67	21.72	21.80			
16QAM	1	1	21.22	21.39	21.55	-0.10	21.45	30.00
64QAM	1	1	20.03	20.13	20.20	-0.10	20.10	30.00
256QAM	1	1	17.77	17.64	17.70	-0.10	17.67	30.00
NR Band n77 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	18.41	18.58	18.67	-0.10	21.32	30.00
	1	105	18.93	19.03	18.91			
	1	1	20.89	20.98	21.06			
	1	104	21.42	21.31	21.17			
	53	26	21.33	21.26	21.19			
	106	0	19.66	19.49	19.52			
16QAM	1	1	20.22	20.39	20.41	-0.10	20.31	30.00
64QAM	1	1	18.85	18.82	18.86	-0.10	18.76	30.00
256QAM	1	1	15.70	15.69	15.59	-0.10	15.60	30.00

NR Band n77 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	18.61	18.68	18.66	-0.10	22.65	30.00
	1	161	18.89	18.74	18.62			
	1	1	22.02	22.20	22.30			
	1	160	22.42	22.36	22.44			
	81	40	22.75	22.68	22.50			
	162	0	22.04	21.99	21.96			
QPSK	1	0	18.68	18.66	18.76	-0.10	22.83	30.00
	1	161	18.74	18.72	18.72			
	1	1	21.92	22.07	22.17			
	1	160	22.59	22.43	22.61			
	81	40	22.92	22.84	22.93			
	162	0	21.75	21.79	21.71			
16QAM	1	1	21.36	21.43	21.51	-0.10	21.41	30.00
64QAM	1	1	20.21	20.27	20.19	-0.10	20.17	30.00
256QAM	1	1	17.67	17.58	17.64	-0.10	17.57	30.00
NR Band n77 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	18.74	18.87	18.72	-0.10	21.14	30.00
	1	161	18.82	18.99	19.07			
	1	1	20.84	20.86	20.93			
	1	160	20.89	21.04	21.01			
	81	40	21.18	21.13	21.24			
	162	0	19.78	19.62	19.78			
16QAM	1	1	20.36	20.41	20.47	-0.10	20.37	30.00
64QAM	1	1	19.16	19.05	18.95	-0.10	19.06	30.00
256QAM	1	1	15.75	15.82	15.75	-0.10	15.72	30.00

NR Band n77 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	18.76	18.63	18.60	-0.10	22.62	30.00
	1	216	18.92	18.91	18.99			
	1	1	22.12	22.21	22.29			
	1	215	22.60	22.57	22.63			
	108	54	22.72	22.66	22.66			
	216	0	22.06	22.07	21.92			
QPSK	1	0	18.67	18.58	18.56	-0.10	22.47	30.00
	1	216	19.11	19.06	19.10			
	1	1	22.30	22.14	22.07			
	1	215	22.37	22.41	22.31			
	108	54	22.40	22.57	22.51			
	216	0	21.75	21.65	21.69			
16QAM	1	1	21.33	21.23	21.06	-0.10	21.23	30.00
64QAM	1	1	20.03	20.06	19.98	-0.10	19.96	30.00
256QAM	1	1	17.33	17.43	17.30	-0.10	17.33	30.00
NR Band n77 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	18.57	18.59	18.73	-0.10	21.30	30.00
	1	216	18.69	18.86	18.87			
	1	1	20.78	20.92	20.94			
	1	215	21.34	21.32	21.40			
	109	54	20.87	21.03	21.16			
	217	0	19.27	19.44	19.29			
16QAM	1	1	20.56	20.47	20.32	-0.10	20.46	30.00
64QAM	1	1	18.93	18.97	19.11	-0.10	19.01	30.00
256QAM	1	1	15.89	15.98	16.04	-0.10	15.94	30.00

NR Band n77 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	18.64	/	-0.10	22.72	30.00
	1	272	/	18.83	/			
	1	1	/	22.16	/			
	1	271	/	22.42	/			
	135	67	/	22.82	/			
	270	0	/	22.09	/			
QPSK	1	0	/	18.55	/	-0.10	22.61	30.00
	1	272	/	18.86	/			
	1	1	/	22.22	/			
	1	271	/	22.41	/			
	135	67	/	22.71	/			
	270	0	/	21.64	/			
16QAM	1	1	/	21.32	/	-0.10	21.22	30.00
64QAM	1	1	/	20.11	/	-0.10	20.01	30.00
256QAM	1	1	/	17.60	/	-0.10	17.50	30.00
NR Band n77 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	18.76	/	-0.10	21.07	30.00
	1	272	/	18.87	/			
	1	1	/	20.86	/			
	1	271	/	21.14	/			
	137	68	/	21.17	/			
	273	0	/	19.52	/			
16QAM	1	1	/	20.34	/	-0.10	20.24	30.00
64QAM	1	1	/	18.93	/	-0.10	18.83	30.00
256QAM	1	1	/	15.87	/	-0.10	15.77	30.00

NR Band n77 – ANT8:

NR Band n77 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	22.40	22.37	22.39	-0.30	26.15	30.00
	1	50	22.06	22.21	22.09			
	1	1	25.84	25.79	25.90			
	1	49	25.86	26.02	26.18			
	25	12	26.40	26.45	26.38			
	50	0	25.21	25.20	25.26			
QPSK	1	0	22.32	22.35	22.42	-0.30	26.43	30.00
	1	50	22.54	22.48	22.33			
	1	1	26.07	26.16	26.07			
	1	49	26.08	25.92	26.04			
	25	12	26.73	26.60	26.56			
	50	0	25.33	25.42	25.58			
16QAM	1	1	24.93	25.04	25.19	-0.30	24.89	30.00
64QAM	1	1	23.86	23.94	23.82	-0.30	23.64	30.00
256QAM	1	1	21.31	21.31	21.20	-0.30	21.01	30.00
NR Band n77 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	22.24	22.22	22.04	-0.30	24.91	30.00
	1	50	22.79	22.72	22.86			
	1	1	24.54	24.61	24.44			
	1	49	24.67	24.80	24.92			
	25	12	25.04	25.04	25.21			
	51	0	23.29	23.27	23.41			
16QAM	1	1	24.16	24.16	24.11	-0.30	23.86	30.00
64QAM	1	1	22.83	22.77	22.60	-0.30	22.53	30.00
256QAM	1	1	19.81	19.75	19.72	-0.30	19.51	30.00

NR Band n77 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	22.43	22.44	22.62	-0.30	26.17	30.00
	1	105	22.38	22.39	22.24			
	1	1	25.72	25.82	25.80			
	1	104	26.09	25.97	25.98			
	50	25	26.33	26.45	26.47			
	100	0	25.43	25.33	25.22			
QPSK	1	0	22.13	22.17	22.20	-0.30	26.13	30.00
	1	105	22.58	22.44	22.55			
	1	1	25.97	25.95	26.06			
	1	104	25.89	26.02	26.04			
	50	25	26.28	26.43	26.42			
	100	0	25.54	25.41	25.51			
16QAM	1	1	25.06	24.95	24.92	-0.30	24.76	30.00
64QAM	1	1	23.88	23.82	23.80	-0.30	23.58	30.00
256QAM	1	1	21.17	21.24	21.12	-0.30	20.94	30.00
NR Band n77 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	22.18	22.28	22.31	-0.30	24.71	30.00
	1	105	22.40	22.56	22.60			
	1	1	24.38	24.51	24.57			
	1	104	24.61	24.53	24.49			
	53	26	25.01	24.98	24.92			
	106	0	23.38	23.48	23.44			
16QAM	1	1	24.15	24.25	24.16	-0.30	23.95	30.00
64QAM	1	1	22.86	22.70	22.65	-0.30	22.56	30.00
256QAM	1	1	19.87	19.78	19.65	-0.30	19.57	30.00

NR Band n77 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	22.26	22.30	22.31	-0.30	26.13	30.00
	1	161	22.41	22.36	22.35			
	1	1	25.87	25.93	25.77			
	1	160	26.08	25.94	26.05			
	81	40	26.28	26.43	26.30			
	162	0	25.50	25.46	25.60			
QPSK	1	0	22.39	22.38	22.43	-0.30	26.20	30.00
	1	161	22.35	22.37	22.51			
	1	1	26.22	26.05	25.99			
	1	160	25.91	25.90	25.72			
	81	40	26.35	26.50	26.43			
	162	0	25.38	25.48	25.37			
16QAM	1	1	24.91	24.92	24.82	-0.30	24.62	30.00
64QAM	1	1	23.83	23.96	24.06	-0.30	23.76	30.00
256QAM	1	1	21.54	21.46	21.38	-0.30	21.24	30.00
NR Band n77 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	22.11	22.28	22.38	-0.30	24.85	30.00
	1	161	22.71	22.66	22.82			
	1	1	24.69	24.83	24.77			
	1	160	24.70	24.58	24.64			
	81	40	25.15	25.02	24.98			
	162	0	23.55	23.39	23.43			
16QAM	1	1	24.32	24.25	24.12	-0.30	24.02	30.00
64QAM	1	1	22.93	22.87	23.05	-0.30	22.75	30.00
256QAM	1	1	19.58	19.61	19.69	-0.30	19.39	30.00

NR Band n77 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	22.16	22.22	22.20	-0.30	26.35	30.00
	1	216	22.27	22.30	22.34			
	1	1	25.65	25.81	25.90			
	1	215	26.14	26.08	26.22			
	108	54	26.65	26.49	26.38			
	216	0	25.41	25.46	25.51			
QPSK	1	0	22.37	22.49	22.64	-0.30	26.08	30.00
	1	216	22.31	22.20	22.25			
	1	1	26.13	26.11	26.19			
	1	215	25.97	25.91	26.05			
	108	54	26.28	26.38	26.38			
	216	0	25.30	25.38	25.56			
16QAM	1	1	25.09	25.13	25.03	-0.30	24.83	30.00
64QAM	1	1	23.87	23.94	23.77	-0.30	23.64	30.00
256QAM	1	1	21.52	21.42	21.36	-0.30	21.22	30.00
NR Band n77 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	22.42	22.26	22.40	-0.30	24.76	30.00
	1	216	22.63	22.56	22.69			
	1	1	24.67	24.84	24.85			
	1	215	24.59	24.64	24.56			
	109	54	24.96	25.06	25.04			
	217	0	23.43	23.48	23.40			
16QAM	1	1	24.07	24.11	24.11	-0.30	23.81	30.00
64QAM	1	1	22.64	22.67	22.81	-0.30	22.51	30.00
256QAM	1	1	19.67	19.70	19.64	-0.30	19.40	30.00

NR Band n77 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	22.37	/	-0.30	26.28	30.00
	1	272	/	22.31	/			
	1	1	/	25.93	/			
	1	271	/	25.97	/			
	135	67	/	26.58	/			
	270	0	/	25.36	/			
QPSK	1	0	/	22.31	/	-0.30	26.23	30.00
	1	272	/	22.34	/			
	1	1	/	26.03	/			
	1	271	/	25.96	/			
	135	67	/	26.53	/			
	270	0	/	25.37	/			
16QAM	1	1	/	25.04	/	-0.30	24.74	30.00
64QAM	1	1	/	23.88	/	-0.30	23.58	30.00
256QAM	1	1	/	21.41	/	-0.30	21.11	30.00
NR Band n77 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	22.33	/	-0.30	24.65	30.00
	1	272	/	22.58	/			
	1	1	/	24.68	/			
	1	271	/	24.63	/			
	137	68	/	24.95	/			
	273	0	/	23.34	/			
16QAM	1	1	/	24.19	/	-0.30	23.89	30.00
64QAM	1	1	/	22.77	/	-0.30	22.47	30.00
256QAM	1	1	/	19.77	/	-0.30	19.47	30.00

NR Band n77 – ANT11:

NR Band n77 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	20.72	20.55	20.69	-1.60	23.50	30.00
	1	50	21.21	21.07	21.05			
	1	1	24.30	24.16	24.12			
	1	49	24.93	25.01	24.85			
	25	12	25.08	24.98	25.10			
	50	0	23.52	23.65	23.81			
QPSK	1	0	20.45	20.60	20.42	-1.60	23.23	30.00
	1	50	21.17	21.02	20.89			
	1	1	23.99	24.12	24.14			
	1	49	24.72	24.75	24.80			
	25	12	24.67	24.74	24.83			
	50	0	23.88	23.96	23.87			
16QAM	1	1	23.32	23.24	23.38	-1.60	21.78	30.00
64QAM	1	1	21.40	21.55	21.60	-1.60	20.00	30.00
256QAM	1	1	19.57	19.67	19.59	-1.60	18.07	30.00
NR Band n77 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	20.88	20.72	20.63	-1.60	22.36	30.00
	1	50	21.09	21.11	21.04			
	1	1	22.75	22.81	22.68			
	1	49	23.67	23.80	23.96			
	25	12	23.28	23.33	23.29			
	51	0	21.72	21.83	21.95			
16QAM	1	1	22.79	22.67	22.83	-1.60	21.23	30.00
64QAM	1	1	21.18	21.16	21.20	-1.60	19.60	30.00
256QAM	1	1	17.90	18.07	18.11	-1.60	16.51	30.00

NR Band n77 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	20.34	20.51	20.47	-1.60	23.37	30.00
	1	105	21.11	21.22	21.28			
	1	1	24.34	24.20	24.07			
	1	104	24.70	24.83	24.97			
	50	25	24.93	24.88	24.90			
	100	0	23.85	23.86	23.77			
QPSK	1	0	20.58	20.65	20.51	-1.60	23.48	30.00
	1	105	21.33	21.19	21.10			
	1	1	24.45	24.39	24.42			
	1	104	25.08	24.91	24.74			
	50	25	24.74	24.89	24.73			
	100	0	23.81	23.65	23.72			
16QAM	1	1	23.34	23.29	23.11	-1.60	21.74	30.00
64QAM	1	1	21.60	21.45	21.28	-1.60	20.00	30.00
256QAM	1	1	20.09	20.01	19.88	-1.60	18.49	30.00
NR Band n77 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	20.77	20.70	20.80	-1.60	22.17	30.00
	1	105	21.35	21.39	21.45			
	1	1	22.69	22.83	22.89			
	1	104	23.68	23.77	23.65			
	53	26	23.12	23.23	23.33			
	106	0	21.78	21.79	21.67			
16QAM	1	1	22.57	22.64	22.58	-1.60	21.04	30.00
64QAM	1	1	20.98	21.03	21.09	-1.60	19.49	30.00
256QAM	1	1	17.96	17.81	17.78	-1.60	16.36	30.00



NR Band n77 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	20.74	20.78	20.81	-1.60	23.41	30.00
	1	161	21.19	21.23	21.39			
	1	1	24.53	24.47	24.59			
	1	160	24.85	25.01	24.92			
	81	40	24.72	24.83	24.72			
	162	0	24.09	23.96	23.94			
QPSK	1	0	20.91	20.88	20.80	-1.60	23.28	30.00
	1	161	21.30	21.14	21.13			
	1	1	24.28	24.38	24.37			
	1	160	24.87	24.87	24.83			
	81	40	24.63	24.72	24.88			
	162	0	23.93	23.97	24.12			
16QAM	1	1	23.10	23.27	23.17	-1.60	21.67	30.00
64QAM	1	1	21.88	21.72	21.61	-1.60	20.28	30.00
256QAM	1	1	19.86	19.83	19.69	-1.60	18.26	30.00
NR Band n77 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	20.80	20.85	20.93	-1.60	22.10	30.00
	1	161	21.47	21.34	21.49			
	1	1	22.70	22.52	22.63			
	1	160	23.66	23.70	23.55			
	81	40	23.12	23.30	23.45			
	162	0	22.08	21.92	21.85			
16QAM	1	1	22.63	22.48	22.36	-1.60	21.03	30.00
64QAM	1	1	21.08	21.10	21.15	-1.60	19.55	30.00
256QAM	1	1	17.76	17.91	17.93	-1.60	16.33	30.00



NR Band n77 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	20.64	20.63	20.78	-1.60	23.33	30.00
	1	216	21.36	21.22	21.33			
	1	1	24.28	24.14	24.16			
	1	215	24.56	24.71	24.65			
	108	54	24.90	24.93	24.92			
	216	0	23.84	23.76	23.65			
QPSK	1	0	20.72	20.80	20.91	-1.60	23.30	30.00
	1	216	21.28	21.29	21.16			
	1	1	24.17	24.24	24.33			
	1	215	24.51	24.65	24.51			
	108	54	24.77	24.88	24.90			
	216	0	23.75	23.81	23.93			
16QAM	1	1	23.37	23.43	23.43	-1.60	21.83	30.00
64QAM	1	1	21.76	21.75	21.84	-1.60	20.24	30.00
256QAM	1	1	19.73	19.81	19.88	-1.60	18.28	30.00
NR Band n77 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	20.76	20.61	20.70	-1.60	22.05	30.00
	1	216	21.18	21.11	21.13			
	1	1	22.63	22.76	22.78			
	1	215	23.51	23.65	23.53			
	109	54	23.41	23.46	23.48			
	217	0	21.62	21.65	21.76			
16QAM	1	1	22.61	22.44	22.47	-1.60	21.01	30.00
64QAM	1	1	21.09	21.11	20.96	-1.60	19.51	30.00
256QAM	1	1	17.98	18.05	18.01	-1.60	16.45	30.00

NR Band n77 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	20.68	/	-1.60	23.29	30.00
	1	272	/	21.25	/			
	1	1	/	24.29	/			
	1	271	/	24.88	/			
	135	67	/	24.89	/			
	270	0	/	23.81	/			
QPSK	1	0	/	20.75	/	-1.60	23.26	30.00
	1	272	/	21.13	/			
	1	1	/	24.24	/			
	1	271	/	24.80	/			
	135	67	/	24.86	/			
	270	0	/	23.81	/			
16QAM	1	1	/	23.41	/	-1.60	21.81	30.00
64QAM	1	1	/	21.61	/	-1.60	20.01	30.00
256QAM	1	1	/	19.83	/	-1.60	18.23	30.00
NR Band n77 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	20.69	/	-1.60	22.05	30.00
	1	272	/	21.26	/			
	1	1	/	22.70	/			
	1	271	/	23.65	/			
	137	68	/	23.37	/			
	273	0	/	21.78	/			
16QAM	1	1	/	22.49	/	-1.60	20.89	30.00
64QAM	1	1	/	21.01	/	-1.60	19.41	30.00
256QAM	1	1	/	17.98	/	-1.60	16.38	30.00

NR Band n77 – ANT16:

NR Band n77 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	22.43	22.58	22.68	-1.30	25.19	30.00
	1	50	22.26	22.24	22.32			
	1	1	26.14	26.06	25.89			
	1	49	25.99	25.98	25.82			
	25	12	26.42	26.40	26.49			
	50	0	25.85	25.73	25.74			
QPSK	1	0	22.46	22.51	22.45	-1.30	25.12	30.00
	1	50	22.34	22.40	22.52			
	1	1	26.17	26.26	26.24			
	1	49	26.29	26.14	26.21			
	25	12	26.35	26.42	26.24			
	50	0	25.26	25.25	25.07			
16QAM	1	1	25.28	25.42	25.46	-1.30	24.16	30.00
64QAM	1	1	24.02	24.05	23.97	-1.30	22.75	30.00
256QAM	1	1	21.75	21.69	21.54	-1.30	20.45	30.00
NR Band n77 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	22.59	22.63	22.49	-1.30	23.81	30.00
	1	50	22.57	22.41	22.33			
	1	1	24.71	24.70	24.74			
	1	49	24.31	24.38	24.50			
	25	12	25.11	24.98	24.95			
	51	0	23.39	23.44	23.57			
16QAM	1	1	24.44	24.35	24.52	-1.30	23.22	30.00
64QAM	1	1	22.69	22.59	22.46	-1.30	21.39	30.00
256QAM	1	1	20.13	19.99	20.05	-1.30	18.83	30.00



NR Band n77 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	22.56	22.55	22.42	-1.30	25.24	30.00
	1	105	22.14	22.29	22.41			
	1	1	26.21	26.37	26.26			
	1	104	26.08	26.08	25.99			
	50	25	26.30	26.41	26.54			
	100	0	25.66	25.63	25.49			
QPSK	1	0	22.36	22.52	22.48	-1.30	24.91	30.00
	1	105	22.30	22.44	22.33			
	1	1	26.08	26.17	26.14			
	1	104	26.14	26.12	26.10			
	50	25	26.06	26.21	26.05			
	100	0	25.55	25.46	25.35			
16QAM	1	1	25.20	25.16	24.98	-1.30	23.90	30.00
64QAM	1	1	24.01	24.03	24.17	-1.30	22.87	30.00
256QAM	1	1	21.90	21.90	21.77	-1.30	20.60	30.00
NR Band n77 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	22.65	22.64	22.82	-1.30	23.55	30.00
	1	105	22.49	22.56	22.39			
	1	1	24.82	24.85	24.72			
	1	104	24.85	24.68	24.67			
	53	26	24.69	24.68	24.52			
	106	0	23.09	23.24	23.19			
16QAM	1	1	24.17	24.35	24.34	-1.30	23.05	30.00
64QAM	1	1	22.26	22.31	22.18	-1.30	21.01	30.00
256QAM	1	1	20.09	19.97	20.11	-1.30	18.81	30.00

NR Band n77 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	22.33	22.50	22.54	-1.30	25.29	30.00
	1	161	22.35	22.41	22.30			
	1	1	26.25	26.10	26.13			
	1	160	25.90	25.79	25.86			
	81	40	26.46	26.46	26.59			
	162	0	25.86	25.68	25.55			
QPSK	1	0	22.60	22.48	22.62	-1.30	25.26	30.00
	1	161	22.46	22.50	22.39			
	1	1	26.05	26.08	26.22			
	1	160	26.16	26.19	26.06			
	81	40	26.39	26.39	26.56			
	162	0	25.35	25.29	25.25			
16QAM	1	1	25.59	25.42	25.51	-1.30	24.29	30.00
64QAM	1	1	24.07	24.20	24.25	-1.30	22.95	30.00
256QAM	1	1	21.70	21.64	21.82	-1.30	20.52	30.00
NR Band n77 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	22.59	22.67	22.78	-1.30	23.57	30.00
	1	161	22.54	22.38	22.35			
	1	1	24.87	24.74	24.82			
	1	160	24.34	24.38	24.46			
	81	40	24.75	24.87	24.70			
	162	0	23.29	23.41	23.52			
16QAM	1	1	24.52	24.55	24.58	-1.30	23.28	30.00
64QAM	1	1	22.51	22.37	22.45	-1.30	21.21	30.00
256QAM	1	1	19.78	19.77	19.69	-1.30	18.48	30.00

NR Band n77 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	22.57	22.41	22.34	-1.30	25.38	30.00
	1	216	22.34	22.25	22.29			
	1	1	26.43	26.26	26.10			
	1	215	25.89	25.98	26.06			
	108	54	26.68	26.55	26.42			
	216	0	25.73	25.87	25.93			
QPSK	1	0	22.63	22.53	22.50	-1.30	25.18	30.00
	1	216	22.22	22.25	22.29			
	1	1	26.19	26.23	26.24			
	1	215	26.14	26.21	26.39			
	108	54	26.48	26.46	26.48			
	216	0	25.35	25.24	25.10			
16QAM	1	1	25.38	25.44	25.45	-1.30	24.15	30.00
64QAM	1	1	24.37	24.20	24.20	-1.30	23.07	30.00
256QAM	1	1	21.88	21.89	22.01	-1.30	20.71	30.00
NR Band n77 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	22.56	22.62	22.73	-1.30	23.63	30.00
	1	216	22.58	22.46	22.49			
	1	1	24.72	24.70	24.57			
	1	215	24.65	24.49	24.61			
	109	54	24.93	24.80	24.91			
	217	0	23.33	23.45	23.41			
16QAM	1	1	24.52	24.65	24.74	-1.30	23.44	30.00
64QAM	1	1	22.39	22.47	22.35	-1.30	21.17	30.00
256QAM	1	1	19.85	19.87	19.77	-1.30	18.57	30.00

NR Band n77 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	22.54	/	-1.30	25.10	30.00
	1	272	/	22.40	/			
	1	1	/	26.19	/			
	1	271	/	25.96	/			
	135	67	/	26.40	/			
	270	0	/	25.81	/			
QPSK	1	0	/	22.56	/	-1.30	25.07	30.00
	1	272	/	22.36	/			
	1	1	/	26.17	/			
	1	271	/	26.04	/			
	135	67	/	26.37	/			
	270	0	/	25.32	/			
16QAM	1	1	/	25.32	/	-1.30	24.02	30.00
64QAM	1	1	/	24.12	/	-1.30	22.82	30.00
256QAM	1	1	/	21.72	/	-1.30	20.42	30.00
NR Band n77 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	22.64	/	-1.30	23.52	30.00
	1	272	/	22.48	/			
	1	1	/	24.74	/			
	1	271	/	24.56	/			
	137	68	/	24.82	/			
	273	0	/	23.31	/			
16QAM	1	1	/	24.53	/	-1.30	23.23	30.00
64QAM	1	1	/	22.45	/	-1.30	21.15	30.00
256QAM	1	1	/	19.82	/	-1.30	18.52	30.00

NR Band n78 – ANT1:

NR Band n78 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	18.44	18.29	18.50	-0.10	22.24	30.00
	1	50	18.33	18.44	18.51			
	1	1	21.77	21.84	22.02			
	1	49	22.17	22.34	22.10			
	25	12	21.92	21.71	21.91			
	50	0	21.74	21.49	21.98			
QPSK	1	0	18.23	18.01	18.19	-0.10	22.25	30.00
	1	50	18.48	18.26	18.70			
	1	1	22.12	22.25	22.35			
	1	49	21.90	22.07	21.73			
	25	12	22.05	21.88	22.23			
	50	0	20.82	20.78	20.92			
16QAM	1	1	20.90	21.11	20.90	-0.10	21.01	30.00
64QAM	1	1	18.41	18.18	18.43	-0.10	18.33	30.00
256QAM	1	1	17.27	17.40	17.21	-0.10	17.30	30.00
NR Band n78 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	18.93	18.68	18.91	-0.10	20.81	30.00
	1	50	18.90	18.87	18.71			
	1	1	20.57	20.44	20.25			
	1	49	20.66	20.48	20.57			
	25	12	20.91	20.77	20.88			
	51	0	18.86	19.09	18.93			
16QAM	1	1	19.91	20.09	20.32	-0.10	20.22	30.00
64QAM	1	1	18.45	18.48	18.56	-0.10	18.46	30.00
256QAM	1	1	15.80	15.59	15.79	-0.10	15.70	30.00

NR Band n78 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	18.65	18.66	18.81	-0.10	22.23	30.00
	1	105	18.20	18.36	18.40			
	1	1	21.81	21.64	21.68			
	1	104	22.27	22.33	22.27			
	50	25	22.06	21.91	21.93			
	100	0	21.22	21.40	21.56			
QPSK	1	0	18.59	18.46	18.69	-0.10	22.26	30.00
	1	105	18.18	18.27	18.19			
	1	1	22.06	21.89	21.94			
	1	104	21.88	21.94	21.88			
	50	25	22.36	22.10	22.17			
	100	0	21.04	21.24	21.06			
16QAM	1	1	20.84	20.85	20.72	-0.10	20.75	30.00
64QAM	1	1	18.42	18.27	18.28	-0.10	18.32	30.00
256QAM	1	1	17.54	17.39	17.35	-0.10	17.44	30.00
NR Band n78 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	18.69	18.91	18.58	-0.10	20.89	30.00
	1	105	18.79	18.89	18.80			
	1	1	20.86	20.77	20.70			
	1	104	20.82	20.89	20.99			
	53	26	20.61	20.41	20.87			
	106	0	18.84	19.06	18.92			
16QAM	1	1	20.15	20.23	20.14	-0.10	20.13	30.00
64QAM	1	1	18.24	18.24	18.12	-0.10	18.14	30.00
256QAM	1	1	15.45	15.65	15.52	-0.10	15.55	30.00



NR Band n78 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	18.02	18.03	18.15	-0.10	22.11	30.00
	1	161	18.39	18.63	18.47			
	1	1	22.09	22.19	22.05			
	1	160	22.03	21.98	22.21			
	81	40	21.71	21.62	21.86			
	162	0	21.19	21.44	21.32			
QPSK	1	0	18.67	18.67	18.54	-0.10	22.34	30.00
	1	161	18.28	18.47	18.35			
	1	1	21.66	21.91	21.69			
	1	160	22.44	22.31	22.27			
	81	40	22.13	22.04	22.18			
	162	0	21.00	21.15	21.04			
16QAM	1	1	20.72	20.88	20.97	-0.10	20.87	30.00
64QAM	1	1	18.48	18.79	18.55	-0.10	18.69	30.00
256QAM	1	1	17.46	17.10	17.27	-0.10	17.36	30.00
NR Band n78 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	18.74	18.76	18.54	-0.10	20.90	30.00
	1	161	18.67	18.55	18.77			
	1	1	20.35	20.19	20.40			
	1	160	20.79	21.00	20.78			
	81	40	20.71	20.41	20.50			
	162	0	19.23	19.13	19.08			
16QAM	1	1	19.70	19.85	19.78	-0.10	19.75	30.00
64QAM	1	1	18.47	18.36	18.51	-0.10	18.41	30.00
256QAM	1	1	15.55	15.23	15.47	-0.10	15.45	30.00



NR Band n78 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	18.21	18.32	18.50	-0.10	22.26	30.00
	1	216	18.52	18.69	18.72			
	1	1	22.08	22.14	22.19			
	1	215	21.89	22.04	21.91			
	108	54	22.36	22.26	22.14			
	216	0	21.82	21.64	21.71			
QPSK	1	0	18.83	18.66	18.52	-0.10	22.16	30.00
	1	216	18.36	18.47	18.59			
	1	1	21.69	21.70	21.55			
	1	215	21.96	22.14	22.22			
	108	54	22.14	22.12	22.26			
	216	0	21.04	21.14	21.06			
16QAM	1	1	21.01	20.81	21.06	-0.10	20.96	30.00
64QAM	1	1	18.38	18.55	18.46	-0.10	18.45	30.00
256QAM	1	1	17.38	17.38	17.59	-0.10	17.49	30.00
NR Band n78 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	18.74	18.77	18.55	-0.10	20.65	30.00
	1	216	18.66	18.80	18.74			
	1	1	20.38	20.17	20.56			
	1	215	20.75	20.75	20.53			
	109	54	20.68	20.53	20.26			
	217	0	18.85	18.97	19.06			
16QAM	1	1	20.26	19.96	19.78	-0.10	20.16	30.00
64QAM	1	1	18.62	18.74	18.47	-0.10	18.64	30.00
256QAM	1	1	15.47	15.42	15.42	-0.10	15.37	30.00

NR Band n78 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	18.41	/	-0.10	22.02	30.00
	1	272	/	18.50	/			
	1	1	/	21.89	/			
	1	271	/	22.12	/			
	135	67	/	22.06	/			
	270	0	/	21.57	/			
QPSK	1	0	/	18.42	/	-0.10	21.95	30.00
	1	272	/	18.51	/			
	1	1	/	21.91	/			
	1	271	/	22.04	/			
	135	67	/	22.05	/			
	270	0	/	21.02	/			
16QAM	1	1	/	20.91	/	-0.10	20.81	30.00
64QAM	1	1	/	18.51	/	-0.10	18.41	30.00
256QAM	1	1	/	17.34	/	-0.10	17.24	30.00
NR Band n78 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	18.58	/	-0.10	20.59	30.00
	1	272	/	18.71	/			
	1	1	/	20.63	/			
	1	271	/	20.69	/			
	137	68	/	20.52	/			
	273	0	/	19.02	/			
16QAM	1	1	/	20.02	/	-0.10	19.92	30.00
64QAM	1	1	/	18.40	/	-0.10	18.30	30.00
256QAM	1	1	/	15.33	/	-0.10	15.23	30.00

NR Band n78 – ANT8:

NR Band n78 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	21.08	21.14	21.05	-0.30	24.42	30.00
	1	50	20.85	20.96	20.97			
	1	1	24.55	24.64	24.72			
	1	49	24.55	24.59	24.43			
	25	12	24.38	24.45	24.57			
	50	0	24.01	23.94	23.89			
QPSK	1	0	21.02	20.88	20.99	-0.30	24.31	30.00
	1	50	20.66	20.75	20.65			
	1	1	24.34	24.51	24.61			
	1	49	24.38	24.37	24.23			
	25	12	24.29	24.34	24.26			
	50	0	23.41	23.42	23.42			
16QAM	1	1	23.37	23.51	23.63	-0.30	23.33	30.00
64QAM	1	1	22.03	21.87	21.89	-0.30	21.73	30.00
256QAM	1	1	19.96	19.84	19.77	-0.30	19.66	30.00
NR Band n78 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	21.14	21.04	21.18	-0.30	22.68	30.00
	1	50	20.88	20.88	20.87			
	1	1	22.98	22.86	22.89			
	1	49	21.06	20.91	21.02			
	25	12	20.94	20.97	20.90			
	51	0	21.36	21.42	21.34			
16QAM	1	1	22.13	22.29	22.31	-0.30	22.01	30.00
64QAM	1	1	20.70	20.79	20.85	-0.30	20.55	30.00
256QAM	1	1	17.95	18.11	18.06	-0.30	17.81	30.00

NR Band n78 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	21.44	21.32	21.18	-0.30	24.42	30.00
	1	105	21.11	21.02	21.17			
	1	1	24.57	24.67	24.72			
	1	104	24.47	24.43	24.37			
	50	25	24.41	24.45	24.50			
	100	0	24.03	24.04	23.95			
QPSK	1	0	21.12	21.27	21.27	-0.30	24.47	30.00
	1	105	21.24	21.10	21.10			
	1	1	24.77	24.77	24.63			
	1	104	24.55	24.59	24.68			
	50	25	24.36	24.47	24.57			
	100	0	23.60	23.49	23.66			
16QAM	1	1	23.73	23.63	23.60	-0.30	23.43	30.00
64QAM	1	1	22.47	22.31	22.38	-0.30	22.17	30.00
256QAM	1	1	20.16	20.16	20.24	-0.30	19.94	30.00
NR Band n78 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	21.09	21.23	21.29	-0.30	22.94	30.00
	1	105	21.02	20.92	20.90			
	1	1	23.24	23.21	23.14			
	1	104	22.86	23.00	23.09			
	53	26	23.02	23.05	23.15			
	106	0	21.73	21.66	21.68			
16QAM	1	1	22.86	22.86	22.75	-0.30	22.56	30.00
64QAM	1	1	21.19	21.30	21.42	-0.30	21.12	30.00
256QAM	1	1	18.17	18.24	18.14	-0.30	17.94	30.00



NR Band n78 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	21.05	20.97	21.14	-0.30	24.25	30.00
	1	161	20.28	20.43	20.36			
	1	1	24.33	24.46	24.55			
	1	160	24.07	24.10	24.12			
	81	40	24.19	24.31	24.33			
	162	0	23.98	23.91	23.79			
QPSK	1	0	21.25	21.08	20.93	-0.30	24.39	30.00
	1	161	20.71	20.56	20.58			
	1	1	24.69	24.54	24.66			
	1	160	24.24	24.15	24.27			
	81	40	24.52	24.35	24.33			
	162	0	23.47	23.32	23.27			
16QAM	1	1	23.36	23.29	23.28	-0.30	23.06	30.00
64QAM	1	1	22.03	21.97	21.90	-0.30	21.73	30.00
256QAM	1	1	20.08	19.92	19.99	-0.30	19.78	30.00
NR Band n78 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	20.99	20.97	20.84	-0.30	22.84	30.00
	1	161	20.58	20.59	20.68			
	1	1	23.14	23.03	22.96			
	1	160	22.70	22.66	22.65			
	81	40	22.88	22.72	22.64			
	162	0	21.42	21.33	21.20			
16QAM	1	1	22.40	22.35	22.38	-0.30	22.10	30.00
64QAM	1	1	20.95	21.04	21.09	-0.30	20.79	30.00
256QAM	1	1	18.07	17.94	17.89	-0.30	17.77	30.00

NR Band n78 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	20.72	20.62	20.72	-0.30	24.08	30.00
	1	216	20.44	20.59	20.44			
	1	1	24.38	24.22	24.26			
	1	215	24.07	24.15	24.11			
	108	54	24.09	24.18	24.12			
	216	0	23.68	23.61	23.78			
QPSK	1	0	20.68	20.75	20.60	-0.30	24.08	30.00
	1	216	20.71	20.56	20.40			
	1	1	24.14	24.28	24.38			
	1	215	23.86	24.06	23.97			
	108	54	24.01	24.18	24.15			
	216	0	22.96	23.10	23.22			
16QAM	1	1	23.38	23.37	23.21	-0.30	23.08	30.00
64QAM	1	1	21.88	21.76	21.64	-0.30	21.58	30.00
256QAM	1	1	19.71	19.65	19.69	-0.30	19.41	30.00
NR Band n78 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	20.55	20.67	20.74	-0.30	22.85	30.00
	1	216	20.34	20.48	20.50			
	1	1	23.13	23.09	23.15			
	1	215	22.71	22.65	22.58			
	109	54	22.73	22.65	22.50			
	217	0	21.02	21.09	21.10			
16QAM	1	1	22.73	22.59	22.45	-0.30	22.43	30.00
64QAM	1	1	20.92	20.95	21.02	-0.30	20.72	30.00
256QAM	1	1	17.80	17.71	17.67	-0.30	17.50	30.00

NR Band n78 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	20.59	/	-0.30	24.01	30.00
	1	272	/	20.57	/			
	1	1	/	24.29	/			
	1	271	/	24.23	/			
	135	67	/	24.26	/			
	270	0	/	24.31	/			
QPSK	1	0	/	20.50	/	-0.30	23.94	30.00
	1	272	/	20.46	/			
	1	1	/	24.24	/			
	1	271	/	24.14	/			
	135	67	/	24.12	/			
	270	0	/	23.32	/			
16QAM	1	1	/	23.10	/	-0.30	22.80	30.00
64QAM	1	1	/	21.56	/	-0.30	21.26	30.00
256QAM	1	1	/	19.60	/	-0.30	19.30	30.00
NR Band n78 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	20.66	/	-0.30	22.41	30.00
	1	272	/	20.34	/			
	1	1	/	22.71	/			
	1	271	/	22.69	/			
	137	68	/	22.62	/			
	273	0	/	21.22	/			
16QAM	1	1	/	21.91	/	-0.30	21.61	30.00
64QAM	1	1	/	20.58	/	-0.30	20.28	30.00
256QAM	1	1	/	17.69	/	-0.30	17.39	30.00

NR Band n78 – ANT11:

NR Band n78 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	21.64	21.63	21.53	-1.60	22.73	30.00
	1	50	22.11	22.22	22.20			
	1	1	24.29	24.15	24.12			
	1	49	24.33	24.25	24.18			
	25	12	24.07	24.12	24.27			
	50	0	22.94	22.79	22.73			
QPSK	1	0	21.57	21.61	21.47	-1.60	23.24	30.00
	1	50	22.17	22.05	22.06			
	1	1	24.16	24.21	24.06			
	1	49	24.71	24.61	24.53			
	25	12	24.60	24.60	24.53			
	50	0	24.68	24.71	24.84			
16QAM	1	1	23.68	23.75	23.89	-1.60	22.29	30.00
64QAM	1	1	22.46	22.43	22.51	-1.60	20.91	30.00
256QAM	1	1	19.04	19.16	19.10	-1.60	17.56	30.00
NR Band n78 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	21.42	21.46	21.59	-1.60	22.64	30.00
	1	50	21.67	21.75	21.78			
	1	1	23.79	23.82	23.96			
	1	49	24.08	24.18	24.22			
	25	12	24.24	24.12	24.14			
	51	0	22.34	22.49	22.37			
16QAM	1	1	23.78	23.67	23.81	-1.60	22.21	30.00
64QAM	1	1	22.19	22.11	22.16	-1.60	20.59	30.00
256QAM	1	1	19.10	19.11	19.10	-1.60	17.51	30.00



NR Band n78 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	21.87	21.86	21.93	-1.60	22.76	30.00
	1	105	22.15	22.12	22.16			
	1	1	24.16	24.01	24.16			
	1	104	24.32	24.20	24.08			
	50	25	24.13	24.21	24.36			
	100	0	22.98	22.82	22.72			
QPSK	1	0	21.47	21.61	21.70	-1.60	23.27	30.00
	1	105	21.72	21.76	21.77			
	1	1	24.38	24.41	24.51			
	1	104	24.75	24.78	24.87			
	50	25	24.65	24.61	24.70			
	100	0	24.65	24.80	24.75			
16QAM	1	1	23.89	23.78	23.78	-1.60	22.29	30.00
64QAM	1	1	22.08	22.13	22.13	-1.60	20.53	30.00
256QAM	1	1	19.21	19.28	19.37	-1.60	17.77	30.00
NR Band n78 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	21.68	21.58	21.45	-1.60	22.54	30.00
	1	105	21.77	21.71	21.79			
	1	1	23.80	23.86	23.94			
	1	104	24.06	24.14	23.98			
	53	26	23.97	24.10	24.08			
	106	0	22.64	22.58	22.71			
16QAM	1	1	23.67	23.76	23.88	-1.60	22.28	30.00
64QAM	1	1	22.39	22.29	22.40	-1.60	20.80	30.00
256QAM	1	1	19.19	19.24	19.15	-1.60	17.64	30.00

NR Band n78 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	21.82	21.85	21.83	-1.60	22.87	30.00
	1	161	22.32	22.27	22.42			
	1	1	24.01	24.05	24.21			
	1	160	24.45	24.36	24.24			
	81	40	24.47	24.32	24.29			
	162	0	22.73	22.71	22.71			
QPSK	1	0	21.51	21.45	21.45	-1.60	23.13	30.00
	1	161	22.10	22.03	21.98			
	1	1	24.37	24.41	24.51			
	1	160	24.67	24.57	24.47			
	81	40	24.70	24.67	24.65			
	162	0	24.73	24.58	24.54			
16QAM	1	1	24.06	23.99	24.02	-1.60	22.46	30.00
64QAM	1	1	22.33	22.37	22.51	-1.60	20.91	30.00
256QAM	1	1	19.28	19.18	19.27	-1.60	17.68	30.00
NR Band n78 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	21.51	21.43	21.37	-1.60	22.65	30.00
	1	161	21.89	21.80	21.92			
	1	1	23.86	23.91	23.97			
	1	160	24.08	24.14	24.10			
	81	40	24.15	24.10	24.25			
	162	0	22.42	22.38	22.49			
16QAM	1	1	23.83	23.80	23.95	-1.60	22.35	30.00
64QAM	1	1	22.15	22.08	21.94	-1.60	20.55	30.00
256QAM	1	1	19.07	19.03	19.12	-1.60	17.52	30.00

NR Band n78 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	21.47	21.62	21.61	-1.60	22.67	30.00
	1	216	22.06	22.16	22.07			
	1	1	24.05	24.11	24.02			
	1	215	24.27	24.26	24.20			
	108	54	24.04	24.09	24.03			
	216	0	22.79	22.63	22.70			
QPSK	1	0	21.61	21.62	21.61	-1.60	23.30	30.00
	1	216	21.71	21.87	21.87			
	1	1	24.25	24.36	24.41			
	1	215	24.65	24.70	24.67			
	108	54	24.88	24.77	24.90			
	216	0	24.65	24.68	24.63			
16QAM	1	1	24.06	23.96	23.86	-1.60	22.46	30.00
64QAM	1	1	22.36	22.26	22.30	-1.60	20.76	30.00
256QAM	1	1	19.07	19.15	19.11	-1.60	17.55	30.00
NR Band n78 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	21.58	21.58	21.60	-1.60	22.52	30.00
	1	216	21.76	21.72	21.80			
	1	1	23.78	23.67	23.72			
	1	215	23.98	23.97	24.12			
	109	54	23.82	23.84	23.88			
	217	0	22.53	22.55	22.56			
16QAM	1	1	23.43	23.57	23.63	-1.60	22.03	30.00
64QAM	1	1	22.27	22.12	22.24	-1.60	20.67	30.00
256QAM	1	1	19.06	18.96	18.81	-1.60	17.46	30.00

NR Band n78 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	21.76	/	-1.60	22.69	30.00
	1	272	/	22.14	/			
	1	1	/	24.10	/			
	1	271	/	24.29	/			
	135	67	/	24.21	/			
	270	0	/	22.71	/			
QPSK	1	0	/	21.56	/	-1.60	23.13	30.00
	1	272	/	21.91	/			
	1	1	/	24.35	/			
	1	271	/	24.65	/			
	135	67	/	24.71	/			
	270	0	/	24.73	/			
16QAM	1	1	/	23.91	/	-1.60	22.31	30.00
64QAM	1	1	/	22.28	/	-1.60	20.68	30.00
256QAM	1	1	/	19.24	/	-1.60	17.64	30.00
NR Band n78 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	21.53	/	-1.60	22.50	30.00
	1	272	/	21.86	/			
	1	1	/	23.79	/			
	1	271	/	24.10	/			
	137	68	/	23.97	/			
	273	0	/	22.47	/			
16QAM	1	1	/	23.64	/	-1.60	22.04	30.00
64QAM	1	1	/	22.14	/	-1.60	20.54	30.00
256QAM	1	1	/	19.09	/	-1.60	17.49	30.00

NR Band n78 – ANT16:

NR Band n78 - SCS 30kHz - 20MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
PI/2 BPSK	1	0	20.36	20.70	20.54	-1.30	22.87	30.00
	1	50	20.14	20.13	20.26			
	1	1	24.17	23.91	24.11			
	1	49	23.97	24.01	23.96			
	25	12	23.84	23.61	23.85			
	50	0	23.56	23.57	23.67			
QPSK	1	0	20.04	20.48	20.29	-1.30	22.96	30.00
	1	50	20.66	20.30	20.49			
	1	1	24.21	24.26	24.08			
	1	49	23.61	23.62	23.78			
	25	12	24.23	24.22	24.17			
	50	0	22.94	22.63	22.81			
16QAM	1	1	22.70	22.74	22.77	-1.30	21.47	30.00
64QAM	1	1	20.79	20.66	20.70	-1.30	19.49	30.00
256QAM	1	1	19.64	19.56	19.55	-1.30	18.34	30.00
NR Band n78 - SCS 30kHz - 20MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			630668	633334	636000			
			3460.02MHz	3500.01MHz	3540.00MHz			
QPSK	1	0	20.57	20.47	20.68	-1.30	21.35	30.00
	1	50	20.63	20.81	20.71			
	1	1	22.65	22.39	22.40			
	1	49	22.34	22.55	22.47			
	25	12	22.53	22.50	22.61			
	51	0	21.11	21.30	21.27			
16QAM	1	1	21.62	21.72	21.77	-1.30	20.47	30.00
64QAM	1	1	20.14	20.37	20.39	-1.30	19.09	30.00
256QAM	1	1	17.36	17.61	17.37	-1.30	16.31	30.00



NR Band n78 - SCS 30kHz - 40MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
PI/2 BPSK	1	0	20.53	20.29	20.32	-1.30	22.95	30.00
	1	105	20.24	20.15	20.38			
	1	1	24.11	24.20	24.25			
	1	104	23.93	23.78	23.85			
	50	25	23.90	23.89	24.06			
	100	0	23.33	23.40	23.27			
QPSK	1	0	20.22	20.24	20.48	-1.30	22.93	30.00
	1	105	20.43	20.17	20.23			
	1	1	24.04	24.23	23.86			
	1	104	23.96	24.05	23.70			
	50	25	23.90	23.95	23.87			
	100	0	23.21	23.35	23.20			
16QAM	1	1	22.92	23.13	22.81	-1.30	21.83	30.00
64QAM	1	1	20.42	20.55	20.43	-1.30	19.25	30.00
256QAM	1	1	19.22	19.19	19.39	-1.30	18.09	30.00
NR Band n78 - SCS 30kHz - 40MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			631334	633334	635332			
			3470.01MHz	3500.01MHz	3529.98MHz			
QPSK	1	0	20.54	20.44	20.36	-1.30	21.50	30.00
	1	105	21.04	20.75	20.85			
	1	1	22.36	22.44	22.69			
	1	104	22.80	22.62	22.54			
	53	26	22.69	22.52	22.78			
	106	0	20.85	21.01	21.03			
16QAM	1	1	21.76	21.77	21.83	-1.30	20.53	30.00
64QAM	1	1	20.09	20.32	20.55	-1.30	19.25	30.00
256QAM	1	1	17.21	17.32	17.32	-1.30	16.02	30.00

NR Band n78 - SCS 30kHz - 60MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
PI/2 BPSK	1	0	20.42	20.52	20.29	-1.30	23.18	30.00
	1	161	20.51	20.75	20.62			
	1	1	23.68	23.80	23.73			
	1	160	24.47	24.33	24.48			
	81	40	23.75	23.87	23.77			
	162	0	23.24	23.39	23.21			
QPSK	1	0	20.34	20.45	20.45	-1.30	23.09	30.00
	1	161	20.26	20.31	20.47			
	1	1	23.81	23.94	23.92			
	1	160	24.35	24.22	24.39			
	81	40	24.08	23.84	23.97			
	162	0	23.34	23.11	23.25			
16QAM	1	1	23.32	23.10	22.87	-1.30	22.02	30.00
64QAM	1	1	20.66	20.76	20.79	-1.30	19.49	30.00
256QAM	1	1	18.99	19.15	18.92	-1.30	17.85	30.00
NR Band n78 - SCS 30kHz - 60MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632000	633334	634666			
			3480.00MHz	3500.01MHz	3519.99MHz			
QPSK	1	0	20.42	20.47	20.32	-1.30	21.50	30.00
	1	161	20.58	20.51	20.34			
	1	1	22.73	22.76	22.80			
	1	160	22.68	22.65	22.56			
	81	40	22.50	22.63	22.35			
	162	0	21.03	21.21	21.20			
16QAM	1	1	22.12	22.33	22.16	-1.30	21.03	30.00
64QAM	1	1	20.29	20.32	20.50	-1.30	19.20	30.00
256QAM	1	1	17.11	17.31	17.29	-1.30	16.01	30.00

NR Band n78 - SCS 30kHz - 80MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
PI/2 BPSK	1	0	20.66	20.82	20.74	-1.30	22.96	30.00
	1	216	20.71	20.64	20.54			
	1	1	24.04	24.00	24.03			
	1	215	24.04	24.18	24.19			
	108	54	24.26	24.19	24.21			
	216	0	23.73	23.91	23.55			
QPSK	1	0	20.32	20.38	20.07	-1.30	23.01	30.00
	1	216	20.73	20.53	20.71			
	1	1	23.79	23.63	23.90			
	1	215	24.05	24.19	24.08			
	108	54	24.06	23.81	24.31			
	216	0	23.05	22.95	22.95			
16QAM	1	1	22.65	22.69	22.84	-1.30	21.54	30.00
64QAM	1	1	20.74	20.75	20.82	-1.30	19.52	30.00
256QAM	1	1	19.39	19.32	19.32	-1.30	18.09	30.00
NR Band n78 - SCS 30kHz - 80MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			632668	633334	634000			
			3490.02MHz	3500.01MHz	3510.00MHz			
QPSK	1	0	20.74	20.72	20.79	-1.30	21.32	30.00
	1	216	20.77	20.54	20.59			
	1	1	22.28	22.41	22.28			
	1	215	22.44	22.46	22.56			
	109	54	22.62	22.39	22.27			
	217	0	20.69	20.76	20.99			
16QAM	1	1	22.16	22.18	21.97	-1.30	20.88	30.00
64QAM	1	1	20.24	20.15	20.20	-1.30	18.94	30.00
256QAM	1	1	17.20	17.19	16.93	-1.30	15.90	30.00

NR Band n78 - SCS 30kHz - 100MHz Bandwidth - DFT-s-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
PI/2 BPSK	1	0	/	20.15	/	-1.30	22.81	30.00
	1	272	/	20.36	/			
	1	1	/	23.97	/			
	1	271	/	23.90	/			
	135	67	/	24.11	/			
	270	0	/	23.42	/			
QPSK	1	0	/	20.18	/	-1.30	22.85	30.00
	1	272	/	20.45	/			
	1	1	/	23.72	/			
	1	271	/	24.15	/			
	135	67	/	23.83	/			
	270	0	/	22.93	/			
16QAM	1	1	/	22.74	/	-1.30	21.44	30.00
64QAM	1	1	/	20.69	/	-1.30	19.39	30.00
256QAM	1	1	/	19.28	/	-1.30	17.98	30.00
NR Band n78 - SCS 30kHz - 100MHz Bandwidth - CP-OFDM								
Modulation	RB Size	RB Offset	Maximum Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	633334	/			
			/	3500.01MHz	/			
QPSK	1	0	/	20.38	/	-1.30	21.54	30.00
	1	272	/	20.80	/			
	1	1	/	22.81	/			
	1	271	/	22.84	/			
	137	68	/	22.64	/			
	273	0	/	21.14	/			
16QAM	1	1	/	22.09	/	-1.30	20.79	30.00
64QAM	1	1	/	20.49	/	-1.30	19.19	30.00
256QAM	1	1	/	17.37	/	-1.30	16.07	30.00

Peak To Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Freq (MHz)	Modulation	RB Configuration	Result (dB)	Limit (dB)	Verdict
n5	15	20	836.5	DFT-s-OFDM PI/2 BPSK	100@0	4.30	13	Pass
n5	15	20	836.5	DFT-s-OFDM 256QAM	100@0	7.07	13	Pass
n41	30	100	2592.99	DFT-s-OFDM PI/2 BPSK	270@0	5.21	13	Pass
n41	30	100	2592.99	DFT-s-OFDM 256QAM	270@0	7.18	13	Pass
n77	30	100	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	4.36	13	Pass
n77	30	100	3500.01	DFT-s-OFDM 256QAM	270@0	6.84	13	Pass
n78	30	100	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	4.64	13	Pass
n78	30	100	3500.01	DFT-s-OFDM 256QAM	270@0	6.93	13	Pass

Band n5_20MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH	Band n5_20MHz_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH
Band n41_100MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH	Band n41_100MHz_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH
Band n77_100MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH	Band n77_100MHz_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH

Band n78_100MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH	Band n78_100MHz_DFT-s-OFDM_256QAM_ Outer_Full_Mid_CH																								
<p>Transceiver A RAN Cell ID: 0000000000000000 Power Out CCDF</p> <p>KEYSIGHT Input RF101 Output RF101 Trigger Acq</p> <p>Center Frequency: 3.500010000 GHz Range: -40 dBm Trig. Post Frame Aligned Trig Delay: 4.600 ms #Center Freq: 1.00 MHz 30 Ms CC: 400 Ms, 100Hz, 1 KHz</p> <p>1 Metrics</p> <p>Average Power: 25.49 dBm 53.24 % at 0 dB</p> <table border="1"> <tr><td>10.8 %</td><td>2.16 dB</td></tr> <tr><td>1.0 %</td><td>4.26 dB</td></tr> <tr><td>0.1 %</td><td>4.64 dB</td></tr> <tr><td>0.01 %</td><td>4.75 dB</td></tr> <tr><td>0.001 %</td><td>4.82 dB</td></tr> <tr><td>0.0001 %</td><td>4.85 dB</td></tr> </table> <p>Peak: 4.05 dB 35.34 dBm</p> <p>Info: BW 100.00 MHz</p> <p>2 Depth: Gaussian</p> <p>20.00 dB</p> <p>Nov 06, 2023 2:09:12 PM</p>	10.8 %	2.16 dB	1.0 %	4.26 dB	0.1 %	4.64 dB	0.01 %	4.75 dB	0.001 %	4.82 dB	0.0001 %	4.85 dB	<p>Transceiver A RAN Cell ID: 0000000000000000 Power Out CCDF</p> <p>KEYSIGHT Input RF101 Output RF101 Trigger Acq</p> <p>Center Frequency: 3.500010000 GHz Range: -40 dBm Trig. Post Frame Aligned Trig Delay: 4.600 ms #Center Freq: 1.00 MHz 30 Ms CC: 400 Ms, 100Hz, 1 KHz</p> <p>1 Metrics</p> <p>Average Power: 21.45 dBm 43.54 % at 0 dB</p> <table border="1"> <tr><td>10.8 %</td><td>3.77 dB</td></tr> <tr><td>1.0 %</td><td>5.57 dB</td></tr> <tr><td>0.1 %</td><td>6.93 dB</td></tr> <tr><td>0.01 %</td><td>7.54 dB</td></tr> <tr><td>0.001 %</td><td>8.49 dB</td></tr> <tr><td>0.0001 %</td><td>8.76 dB</td></tr> </table> <p>Peak: 0.73 dB 30.18 dBm</p> <p>Info: BW 100.00 MHz</p> <p>2 Depth: Gaussian</p> <p>20.00 dB</p> <p>Nov 06, 2023 2:10:09 PM</p>	10.8 %	3.77 dB	1.0 %	5.57 dB	0.1 %	6.93 dB	0.01 %	7.54 dB	0.001 %	8.49 dB	0.0001 %	8.76 dB
10.8 %	2.16 dB																								
1.0 %	4.26 dB																								
0.1 %	4.64 dB																								
0.01 %	4.75 dB																								
0.001 %	4.82 dB																								
0.0001 %	4.85 dB																								
10.8 %	3.77 dB																								
1.0 %	5.57 dB																								
0.1 %	6.93 dB																								
0.01 %	7.54 dB																								
0.001 %	8.49 dB																								
0.0001 %	8.76 dB																								

**99% Occupied Bandwidth and 26dB Emission Bandwidth**

NR Band	SCS (kHz)	Bandwidth (MHz)	Freq (MHz)	Modulation	RB Configuration	99% OBW (MHz)	26dB EBW (MHz)
n5	15	5	836.5	DFT-s-OFDM PI/2 BPSK	25@0	4.5087	5.186
n5	15	5	836.5	DFT-s-OFDM QPSK	25@0	4.4877	5.093
n5	15	5	836.5	DFT-s-OFDM 16 QAM	25@0	4.5099	5.157
n5	15	10	836.5	DFT-s-OFDM PI/2 BPSK	50@0	8.9142	9.497
n5	15	10	836.5	DFT-s-OFDM QPSK	50@0	8.9065	9.541
n5	15	10	836.5	DFT-s-OFDM 16 QAM	50@0	8.9366	9.677
n5	15	15	836.5	DFT-s-OFDM PI/2 BPSK	75@0	13.466	14.50
n5	15	15	836.5	DFT-s-OFDM QPSK	75@0	13.444	14.47
n5	15	15	836.5	DFT-s-OFDM 16 QAM	75@0	13.401	14.36
n5	15	20	836.5	DFT-s-OFDM PI/2 BPSK	100@0	17.802	18.84
n5	15	20	836.5	DFT-s-OFDM QPSK	100@0	17.866	18.95
n5	15	20	836.5	DFT-s-OFDM 16 QAM	100@0	17.840	18.81



NR Band	SCS (kHz)	Bandwidth (MHz)	Freq (MHz)	Modulation	RB Configuration	99% OBW (MHz)	26dB EBW (MHz)
n41	30	20	2592.99	DFT-s-OFDM PI/2 BPSK	50@0	17.872	19.30
n41	30	20	2592.99	DFT-s-OFDM QPSK	50@0	17.897	19.30
n41	30	20	2592.99	DFT-s-OFDM 16 QAM	50@0	17.884	19.63
n41	30	40	2592.99	DFT-s-OFDM PI/2 BPSK	100@0	35.735	37.53
n41	30	40	2592.99	DFT-s-OFDM QPSK	100@0	35.751	37.70
n41	30	40	2592.99	DFT-s-OFDM 16 QAM	100@0	35.668	37.49
n41	30	60	2592.99	DFT-s-OFDM PI/2 BPSK	162@0	57.889	60.29
n41	30	60	2592.99	DFT-s-OFDM QPSK	162@0	57.807	60.39
n41	30	60	2592.99	DFT-s-OFDM 16 QAM	162@0	57.866	60.31
n41	30	80	2592.99	DFT-s-OFDM PI/2 BPSK	216@0	77.192	79.82
n41	30	80	2592.99	DFT-s-OFDM QPSK	216@0	77.265	80.15
n41	30	80	2592.99	DFT-s-OFDM 16 QAM	216@0	77.190	79.98
n41	30	100	2592.99	DFT-s-OFDM PI/2 BPSK	270@0	96.681	100.2
n41	30	100	2592.99	DFT-s-OFDM QPSK	270@0	96.642	100.1
n41	30	100	2592.99	DFT-s-OFDM 16 QAM	270@0	96.648	100.3

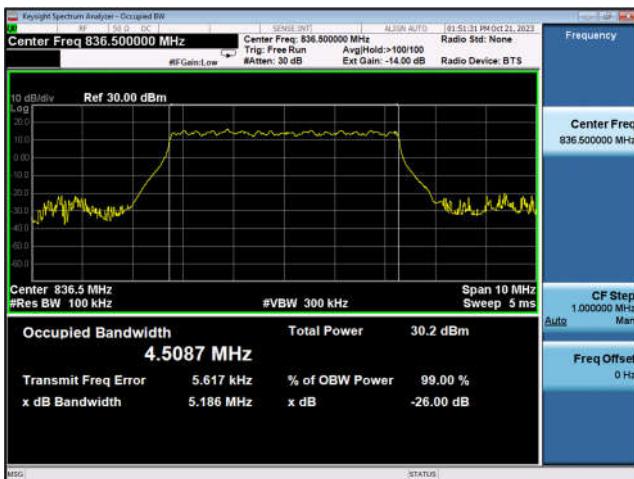


NR Band	SCS (kHz)	Bandwidth (MHz)	Freq (MHz)	Modulation	RB Configuration	99% OBW (MHz)	26dB EBW (MHz)
n77	30	20	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	17.827	19.15
n77	30	20	3500.01	DFT-s-OFDM QPSK	50@0	17.907	19.39
n77	30	20	3500.01	DFT-s-OFDM 16 QAM	50@0	17.864	19.33
n77	30	40	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	35.732	37.81
n77	30	40	3500.01	DFT-s-OFDM QPSK	100@0	35.737	37.65
n77	30	40	3500.01	DFT-s-OFDM 16 QAM	100@0	35.761	37.63
n77	30	60	3500.01	DFT-s-OFDM PI/2 BPSK	162@0	57.852	60.06
n77	30	60	3500.01	DFT-s-OFDM QPSK	162@0	57.864	60.39
n77	30	60	3500.01	DFT-s-OFDM 16 QAM	162@0	57.734	60.36
n77	30	80	3500.01	DFT-s-OFDM PI/2 BPSK	216@0	76.904	79.79
n77	30	80	3500.01	DFT-s-OFDM QPSK	216@0	77.098	79.99
n77	30	80	3500.01	DFT-s-OFDM 16 QAM	216@0	77.221	79.91
n77	30	100	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	96.372	99.73
n77	30	100	3500.01	DFT-s-OFDM QPSK	270@0	96.068	99.73
n77	30	100	3500.01	DFT-s-OFDM 16 QAM	270@0	96.468	99.77

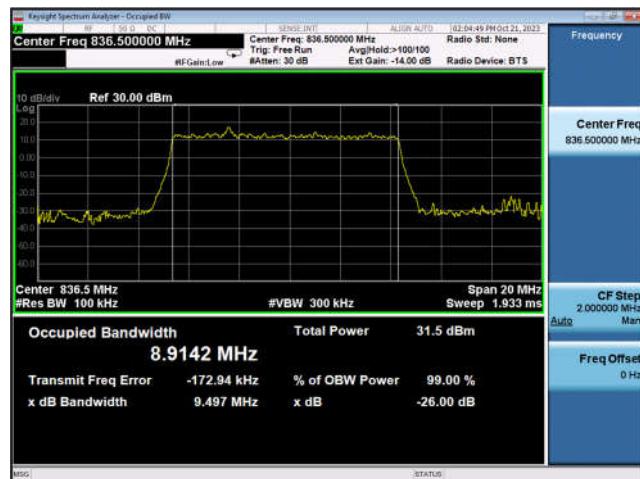


NR Band	SCS (kHz)	Bandwidth (MHz)	Freq (MHz)	Modulation	RB Configuration	99% OBW (MHz)	26dB EBW (MHz)
n78	30	20	3500.01	DFT-s-OFDM PI/2 BPSK	50@0	17.846	19.22
n78	30	20	3500.01	DFT-s-OFDM QPSK	50@0	17.908	19.38
n78	30	20	3500.01	DFT-s-OFDM 16 QAM	50@0	17.871	19.41
n78	30	40	3500.01	DFT-s-OFDM PI/2 BPSK	100@0	35.676	37.92
n78	30	40	3500.01	DFT-s-OFDM QPSK	100@0	35.712	37.73
n78	30	40	3500.01	DFT-s-OFDM 16 QAM	100@0	35.681	37.61
n78	30	60	3500.01	DFT-s-OFDM PI/2 BPSK	162@0	57.907	60.38
n78	30	60	3500.01	DFT-s-OFDM QPSK	162@0	57.775	60.48
n78	30	60	3500.01	DFT-s-OFDM 16 QAM	162@0	57.874	60.44
n78	30	80	3500.01	DFT-s-OFDM PI/2 BPSK	216@0	77.068	79.89
n78	30	80	3500.01	DFT-s-OFDM QPSK	216@0	77.120	80.08
n78	30	80	3500.01	DFT-s-OFDM 16 QAM	216@0	77.043	80.27
n78	30	100	3500.01	DFT-s-OFDM PI/2 BPSK	270@0	96.345	99.92
n78	30	100	3500.01	DFT-s-OFDM QPSK	270@0	96.370	99.86
n78	30	100	3500.01	DFT-s-OFDM 16 QAM	270@0	96.191	99.86

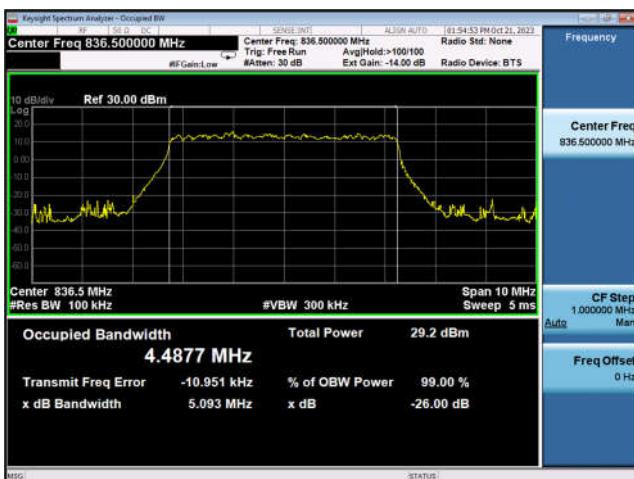
Band n5_5MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH



Band n5_10MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH



Band n5_5MHz_DFT-s-OFDM_QPSK_ Outer_Full_Mid_CH



Band n5_10MHz_DFT-s-OFDM_QPSK_ Outer_Full_Mid_CH



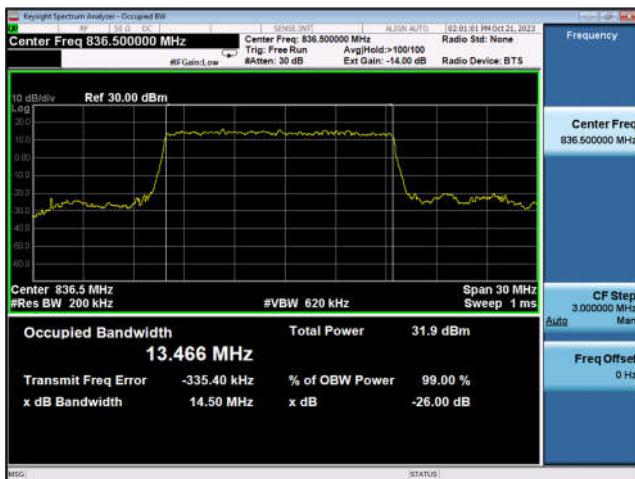
Band n5_5MHz_DFT-s-OFDM_16QAM_ Outer_Full_Mid_CH



Band n5_10MHz_DFT-s-OFDM_16QAM_ Outer_Full_Mid_CH



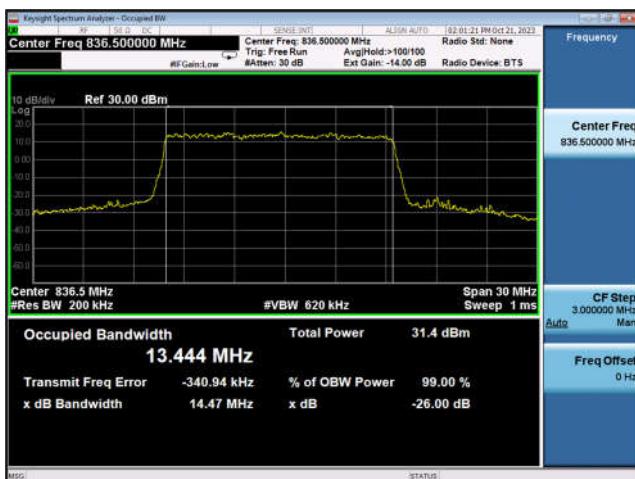
Band n5_15MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH



Band n5_20MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH



Band n5_15MHz_DFT-s-OFDM_QPSK_ Outer_Full_Mid_CH



Band n5_20MHz_DFT-s-OFDM_QPSK_ Outer_Full_Mid_CH



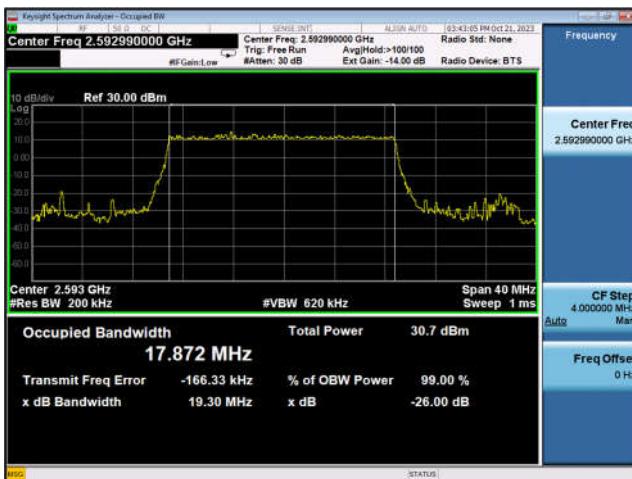
Band n5_15MHz_DFT-s-OFDM_16QAM_ Outer_Full_Mid_CH



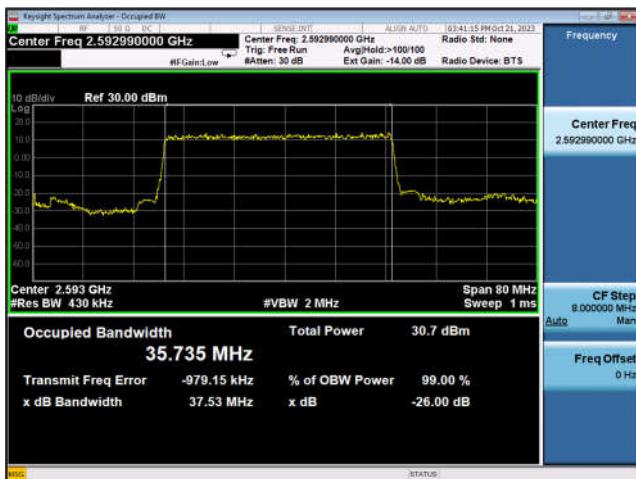
Band n5_20MHz_DFT-s-OFDM_16QAM_ Outer_Full_Mid_CH



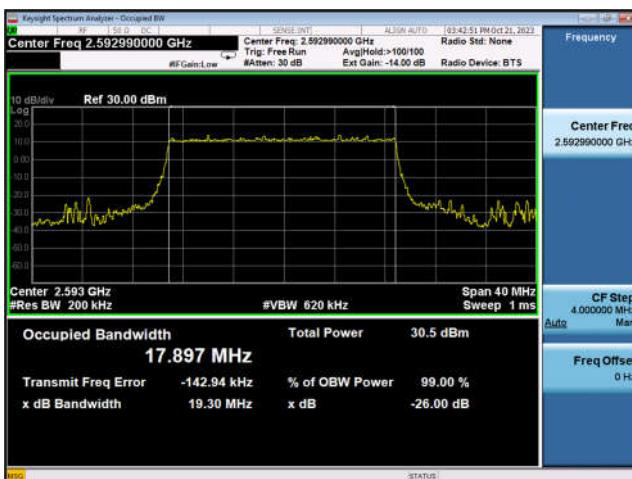
Band n41_20MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH



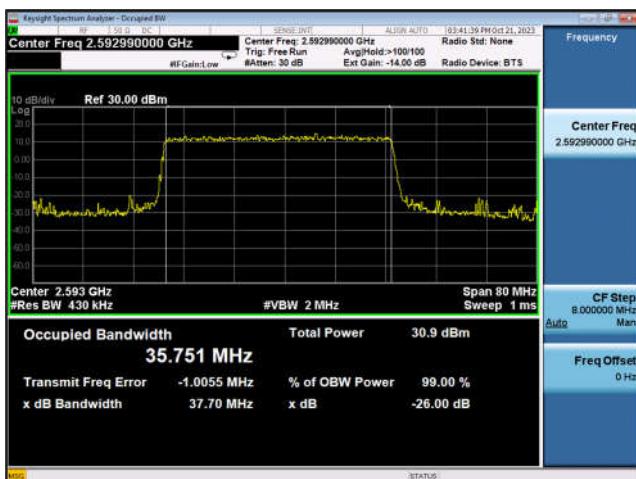
Band n41_40MHz_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_Mid_CH



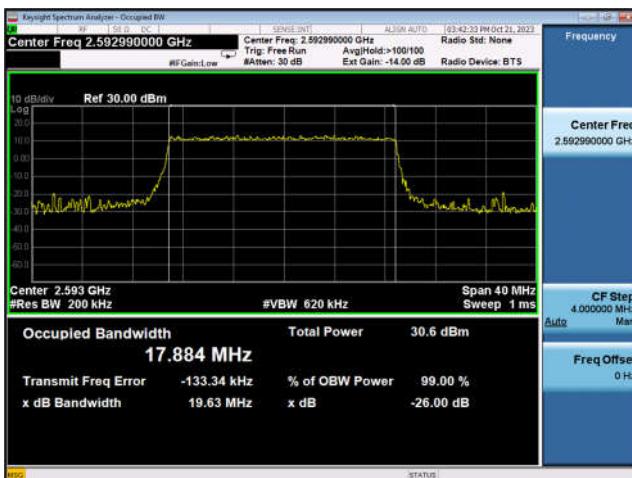
Band n41_20MHz_DFT-s-OFDM_QPSK_ Outer_Full_Mid_CH



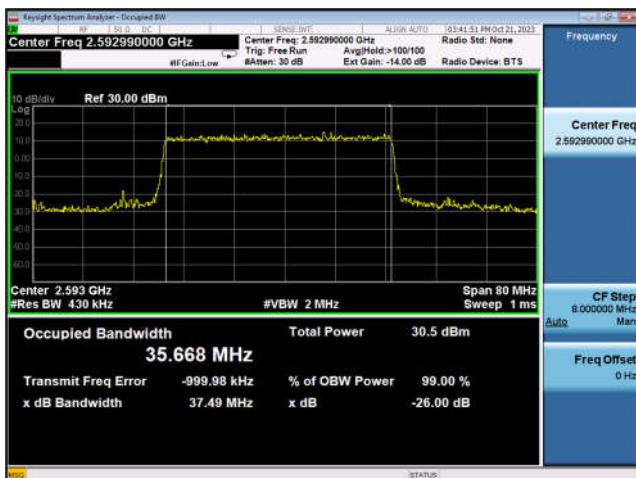
Band n41_40MHz_DFT-s-OFDM_QPSK_ Outer_Full_Mid_CH



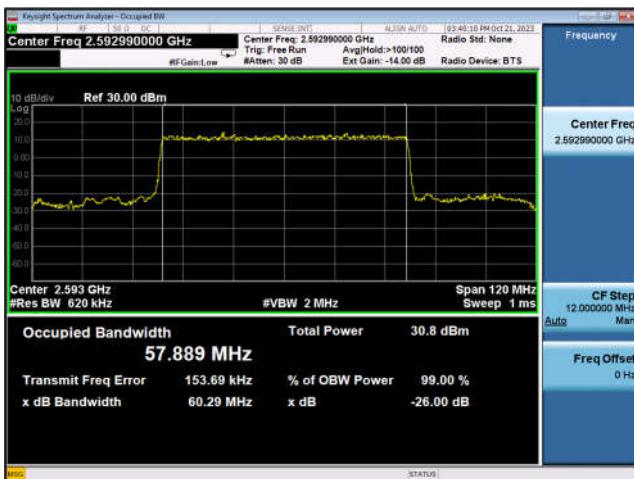
Band n41_20MHz_DFT-s-OFDM_16QAM_ Outer_Full_Mid_CH



Band n41_40MHz_DFT-s-OFDM_16QAM_ Outer_Full_Mid_CH



Band n41_60MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n41_80MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n41_60MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



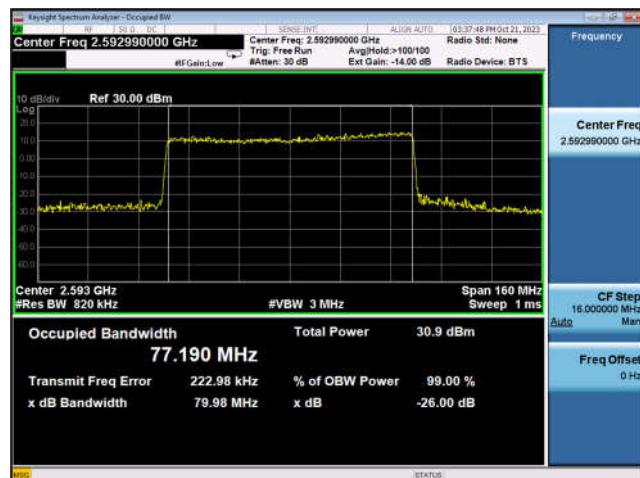
Band n41_80MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n41_60MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



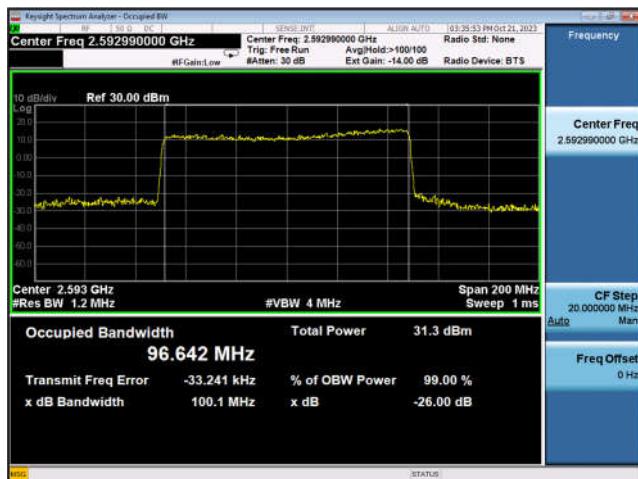
Band n41_80MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



Band n41_100MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



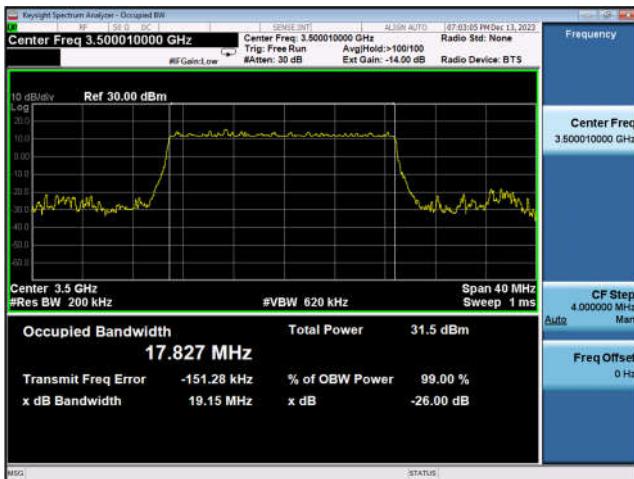
Band n41_100MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



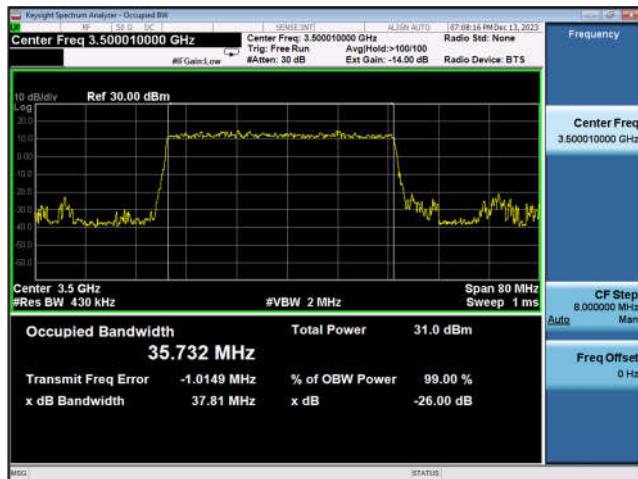
Band n41_100MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



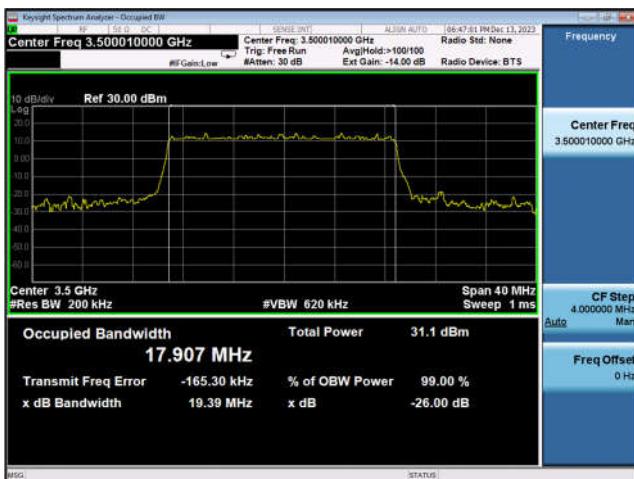
Band n77_20MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n77_40MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



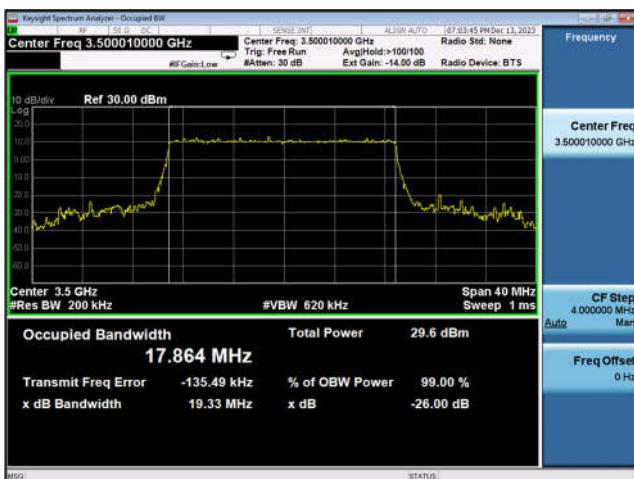
Band n77_20MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



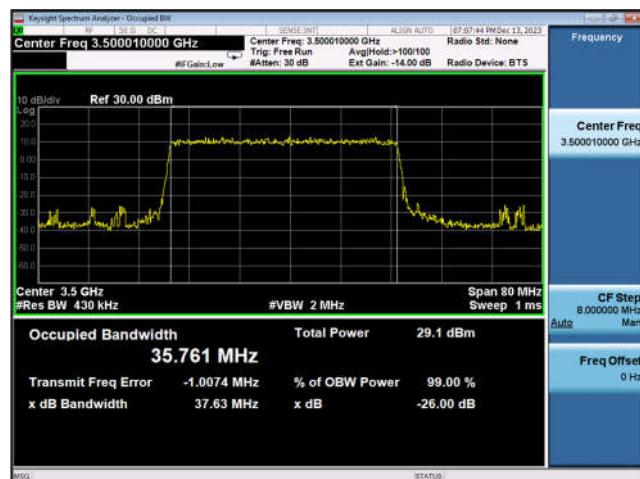
Band n77_40MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n77_20MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



Band n77_40MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



Band n77_60MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n77_80MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n77_60MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



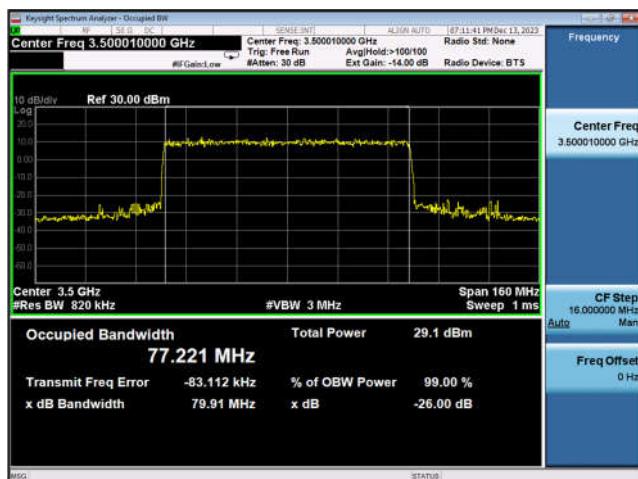
Band n77_80MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n77_60MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



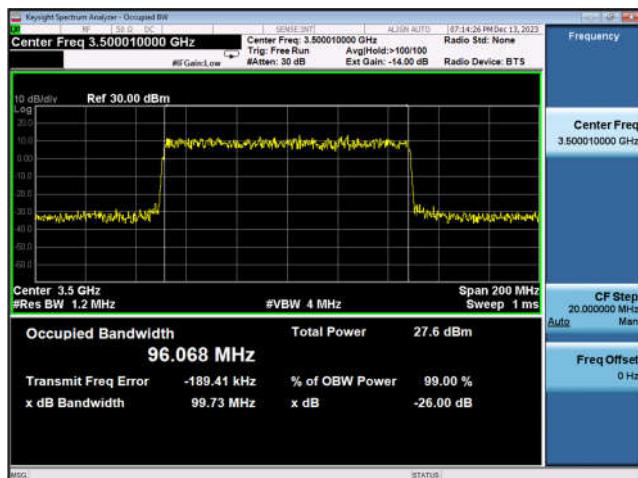
Band n77_80MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



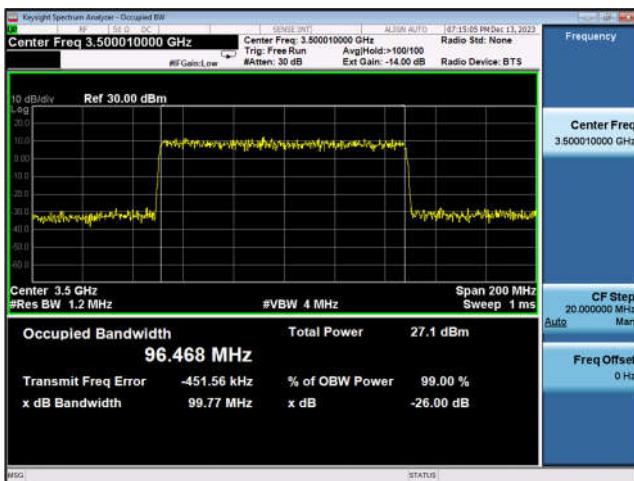
Band n77_100MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



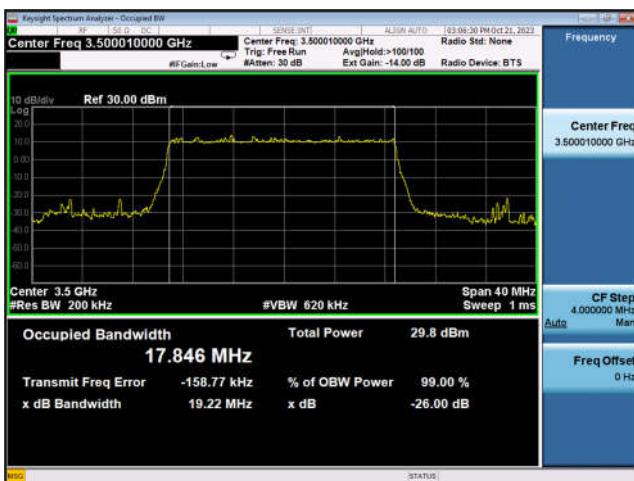
Band n77_100MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



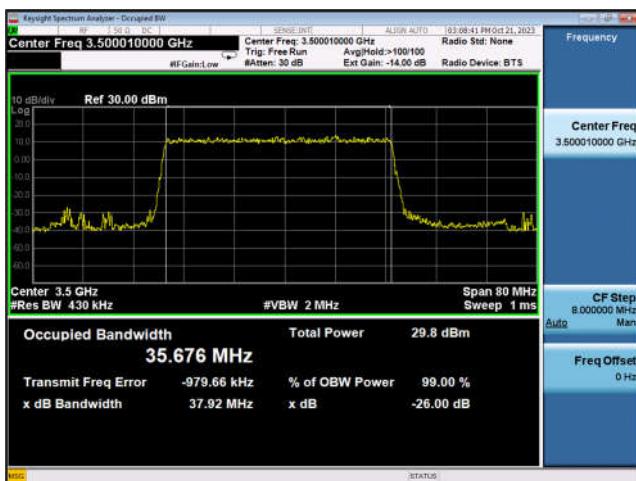
Band n77_100MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



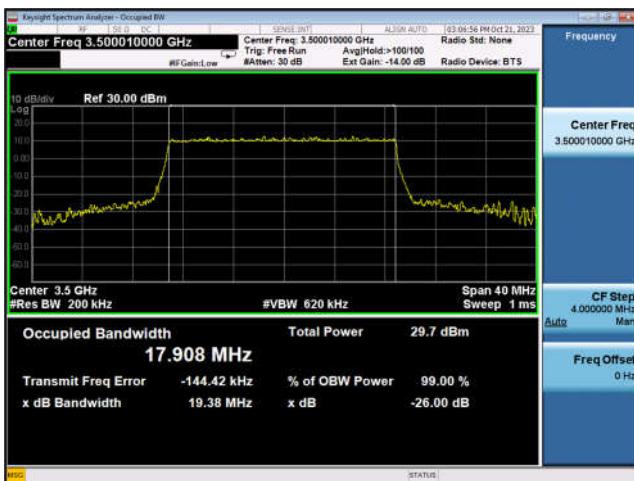
Band n78_20MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n78_40MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



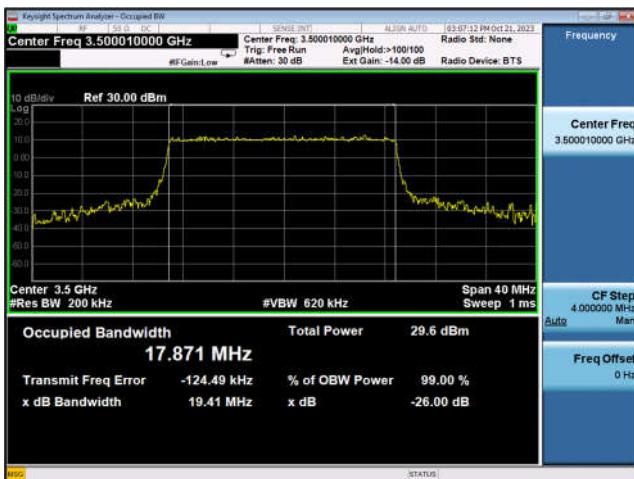
Band n78_20MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



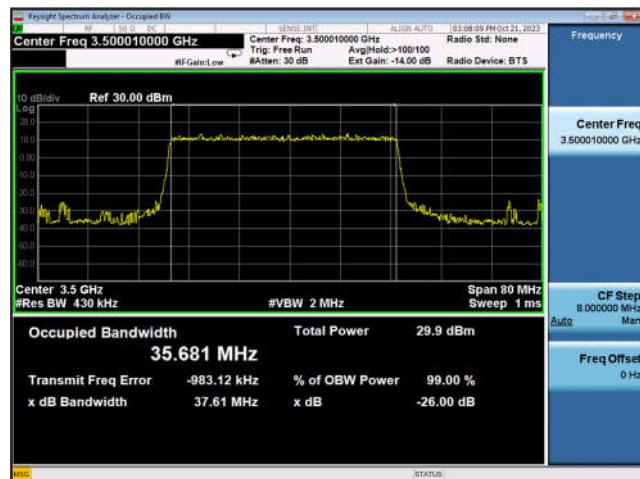
Band n78_40MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n78_20MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



Band n78_40MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



Band n78_60MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



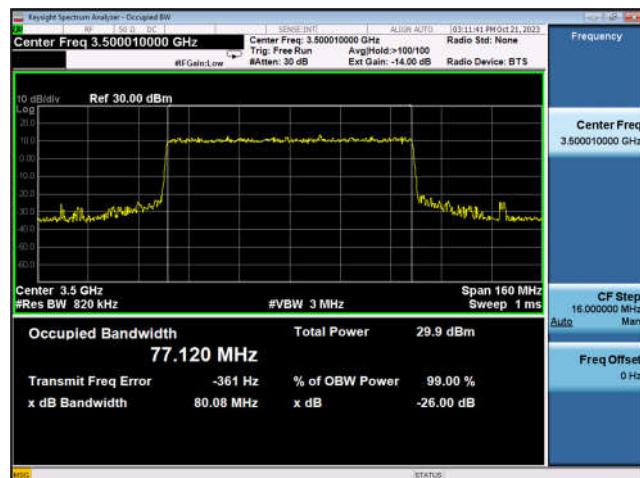
Band n78_80MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n78_60MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n78_80MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n78_60MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



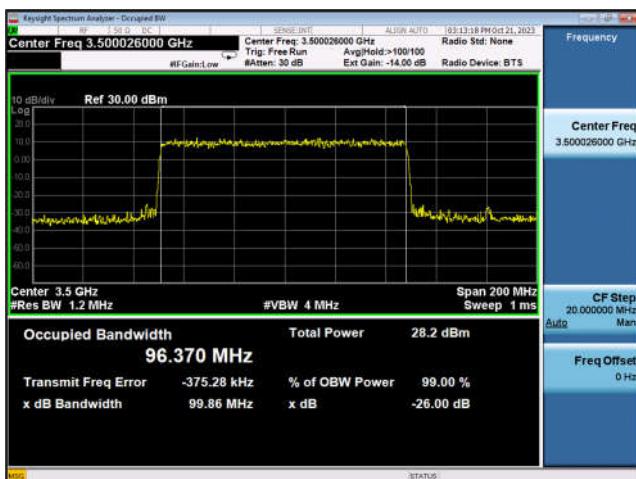
Band n78_80MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



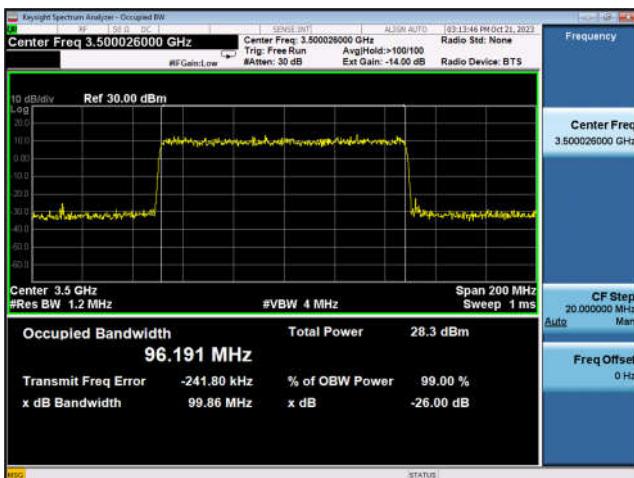
Band n78_100MHz_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



Band n78_100MHz_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



Band n78_100MHz_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



Frequency Stability

NR Band	Bandwidth (MHz)	Freq (MHz)	Modulation	Temperature	Voltage	Deviation (ppm)	Limit (ppm)	Verdict
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	Normal	Low	-0.00868	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	Normal	Normal	-0.00352	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	Normal	High	-0.01156	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	50	Normal	-0.00972	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	40	Normal	-0.00944	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	30	Normal	-0.00532	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	20	Normal	-0.00381	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	10	Normal	-0.01325	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	0	Normal	-0.01416	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	-10	Normal	-0.00405	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	-20	Normal	-0.01339	±2.5	PASS
n5	20	826.5	DFT-s-OFDM_PI_2-BPSK	-30	Normal	-0.00665	±2.5	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	Normal	Low	-0.00422	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	Normal	Normal	-0.00180	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	Normal	High	-0.00104	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	50	Normal	-0.00247	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	40	Normal	-0.00216	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	30	Normal	-0.01112	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	20	Normal	-0.01329	/	PASS
n41	100	2592.99	DFT-s-OFDM_	10	Normal	-0.00826	/	PASS



			PI_2-BPSK					
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	0	Normal	-0.00996	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	-10	Normal	-0.00191	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	-20	Normal	-0.00413	/	PASS
n41	100	2592.99	DFT-s-OFDM_PI_2-BPSK	-30	Normal	-0.00251	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	Normal	Low	-0.01063	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	Normal	Normal	-0.00470	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	Normal	High	-0.00382	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	50	Normal	-0.00613	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	40	Normal	-0.01318	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	30	Normal	-0.00556	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	20	Normal	-0.00235	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	10	Normal	-0.01048	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	0	Normal	-0.00978	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	-10	Normal	-0.01315	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	-20	Normal	-0.00724	/	PASS
n77	100	3500.01	DFT-s-OFDM_PI_2-BPSK	-30	Normal	-0.00370	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	Normal	Low	-0.00414	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	Normal	Normal	-0.00686	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	Normal	High	-0.01312	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	50	Normal	-0.00503	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	40	Normal	-0.01381	/	PASS



n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	30	Normal	-0.00607	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	20	Normal	-0.00167	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	10	Normal	-0.00744	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	0	Normal	-0.00917	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	-10	Normal	-0.00689	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	-20	Normal	-0.00673	/	PASS
n78	100	3500.01	DFT-s-OFDM_PI_2-BPSK	-30	Normal	-0.00856	/	PASS

Note 1: Normal Voltage = 3.91V, Low Voltage = 3.65V, High Voltage = 4.50V, Normal Temperature = 20°C.

Note 2: Judge based on the measured frequency error result, the fundamental wave emission of Band n41/n77/n78 is kept within the authorized frequency band.

Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Freq (MHz)	Modulation	RB Configuration	Result	Verdict
n5	15	5	826.5	DFT-s-OFDM PI/2 BPSK	1@0	see graph	PASS
n5	15	5	826.5	DFT-s-OFDM PI/2 BPSK	25@0	see graph	PASS
n5	15	5	846.5	DFT-s-OFDM PI/2 BPSK	1@24	see graph	PASS
n5	15	5	846.5	DFT-s-OFDM PI/2 BPSK	25@0	see graph	PASS
n5	15	10	829.0	DFT-s-OFDM PI/2 BPSK	1@0	see graph	PASS
n5	15	10	829.0	DFT-s-OFDM PI/2 BPSK	50@0	see graph	PASS
n5	15	10	844.0	DFT-s-OFDM PI/2 BPSK	1@51	see graph	PASS
n5	15	10	844.0	DFT-s-OFDM PI/2 BPSK	50@0	see graph	PASS
n5	15	15	831.5	DFT-s-OFDM PI/2 BPSK	1@0	see graph	PASS
n5	15	15	831.5	DFT-s-OFDM PI/2 BPSK	75@0	see graph	PASS
n5	15	15	841.5	DFT-s-OFDM PI/2 BPSK	1@78	see graph	PASS
n5	15	15	841.5	DFT-s-OFDM PI/2 BPSK	75@0	see graph	PASS
n5	15	20	834.0	DFT-s-OFDM PI/2 BPSK	1@0	see graph	PASS
n5	15	20	834.0	DFT-s-OFDM PI/2 BPSK	106@0	see graph	PASS
n5	15	20	839.0	DFT-s-OFDM PI/2 BPSK	1@105	see graph	PASS
n5	15	20	839.0	DFT-s-OFDM PI/2 BPSK	100@0	see graph	PASS
n41	30	20	2506.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
n41	30	20	2506.02	DFT-s-OFDM BPSK	50@0	see graph	PASS
n41	30	20	2679.99	DFT-s-OFDM BPSK	1@50	see graph	PASS
n41	30	20	2679.99	DFT-s-OFDM BPSK	50@0	see graph	PASS
n41	30	40	2511.00	DFT-s-OFDM BPSK	1@0	see graph	PASS
n41	30	40	2511.00	DFT-s-OFDM BPSK	75@0	see graph	PASS
n41	30	40	2674.98	DFT-s-OFDM BPSK	1@77	see graph	PASS
n41	30	40	2674.98	DFT-s-OFDM BPSK	75@0	see graph	PASS
n41	30	60	2526.00	DFT-s-OFDM BPSK	1@0	see graph	PASS
n41	30	60	2526.00	DFT-s-OFDM BPSK	162@0	see graph	PASS
n41	30	60	2659.98	DFT-s-OFDM BPSK	1@161	see graph	PASS
n41	30	60	2659.98	DFT-s-OFDM BPSK	162@0	see graph	PASS



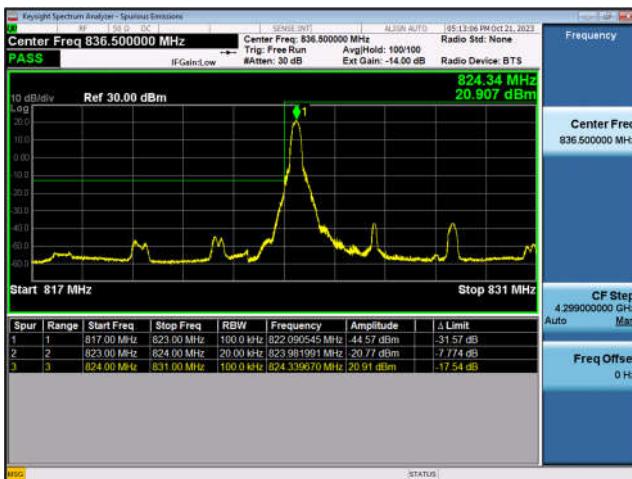
n41	30	80	2536.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
n41	30	80	2536.02	DFT-s-OFDM BPSK	216@0	see graph	PASS
n41	30	80	2649.99	DFT-s-OFDM BPSK	1@216	see graph	PASS
n41	30	80	2649.99	DFT-s-OFDM BPSK	216@0	see graph	PASS
n41	30	100	2546.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
n41	30	100	2546.01	DFT-s-OFDM BPSK	270@0	see graph	PASS
n41	30	100	2640.00	DFT-s-OFDM BPSK	1@272	see graph	PASS
n41	30	100	2640.00	DFT-s-OFDM BPSK	270@0	see graph	PASS
n77	30	20	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
n77	30	20	3460.02	DFT-s-OFDM BPSK	50@0	see graph	PASS
n77	30	20	3540.00	DFT-s-OFDM BPSK	1@50	see graph	PASS
n77	30	20	3540.00	DFT-s-OFDM BPSK	50@0	see graph	PASS
n77	30	40	3470.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
n77	30	40	3470.01	DFT-s-OFDM BPSK	75@0	see graph	PASS
n77	30	40	3529.98	DFT-s-OFDM BPSK	1@77	see graph	PASS
n77	30	40	3529.98	DFT-s-OFDM BPSK	75@0	see graph	PASS
n77	30	60	3480.00	DFT-s-OFDM BPSK	1@0	see graph	PASS
n77	30	60	3480.00	DFT-s-OFDM BPSK	162@0	see graph	PASS
n77	30	60	3519.99	DFT-s-OFDM BPSK	1@161	see graph	PASS
n77	30	60	3519.99	DFT-s-OFDM BPSK	162@0	see graph	PASS
n77	30	80	3490.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
n77	30	80	3490.02	DFT-s-OFDM BPSK	216@0	see graph	PASS
n77	30	80	3510.00	DFT-s-OFDM BPSK	1@216	see graph	PASS
n77	30	80	3510.00	DFT-s-OFDM BPSK	216@0	see graph	PASS
n77	30	100	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
n77	30	100	3500.01	DFT-s-OFDM BPSK	1@272	see graph	PASS
n77	30	100	3500.01	DFT-s-OFDM BPSK	270@0	see graph	PASS
n78	30	20	3460.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
n78	30	20	3460.02	DFT-s-OFDM BPSK	50@0	see graph	PASS
n78	30	20	3540.00	DFT-s-OFDM BPSK	1@50	see graph	PASS



n78	30	20	3540.00	DFT-s-OFDM BPSK	50@0	see graph	PASS
n78	30	40	3470.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
n78	30	40	3470.01	DFT-s-OFDM BPSK	75@0	see graph	PASS
n78	30	40	3529.98	DFT-s-OFDM BPSK	1@77	see graph	PASS
n78	30	40	3529.98	DFT-s-OFDM BPSK	75@0	see graph	PASS
n78	30	60	3480.00	DFT-s-OFDM BPSK	1@0	see graph	PASS
n78	30	60	3480.00	DFT-s-OFDM BPSK	162@0	see graph	PASS
n78	30	60	3519.99	DFT-s-OFDM BPSK	1@161	see graph	PASS
n78	30	60	3519.99	DFT-s-OFDM BPSK	162@0	see graph	PASS
n78	30	80	3490.02	DFT-s-OFDM BPSK	1@0	see graph	PASS
n78	30	80	3490.02	DFT-s-OFDM BPSK	216@0	see graph	PASS
n78	30	80	3510.00	DFT-s-OFDM BPSK	1@216	see graph	PASS
n78	30	80	3510.00	DFT-s-OFDM BPSK	216@0	see graph	PASS
n78	30	100	3500.01	DFT-s-OFDM BPSK	1@0	see graph	PASS
n78	30	100	3500.01	DFT-s-OFDM BPSK	1@272	see graph	PASS
n78	30	100	3500.01	DFT-s-OFDM BPSK	270@0	see graph	PASS

N5_5MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH

N5_5MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



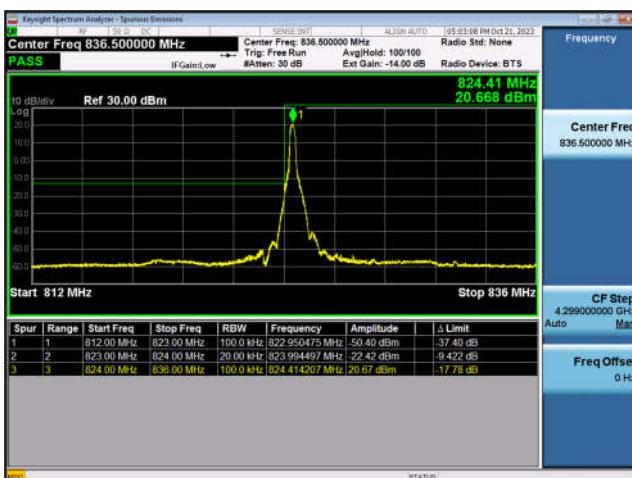
N5_5MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH

N5_5MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH

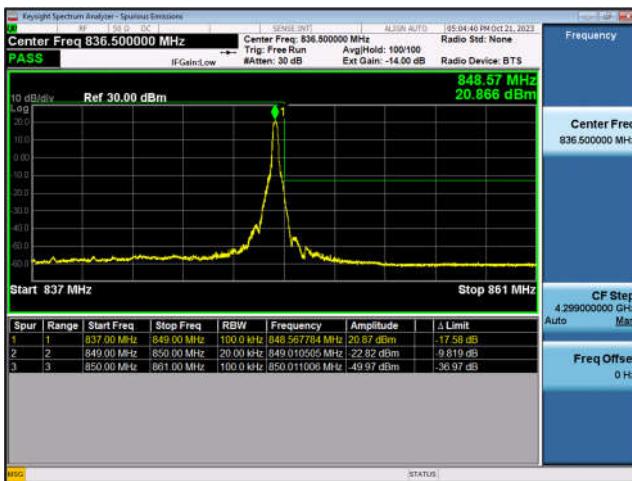


N5_10MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH

N5_10MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



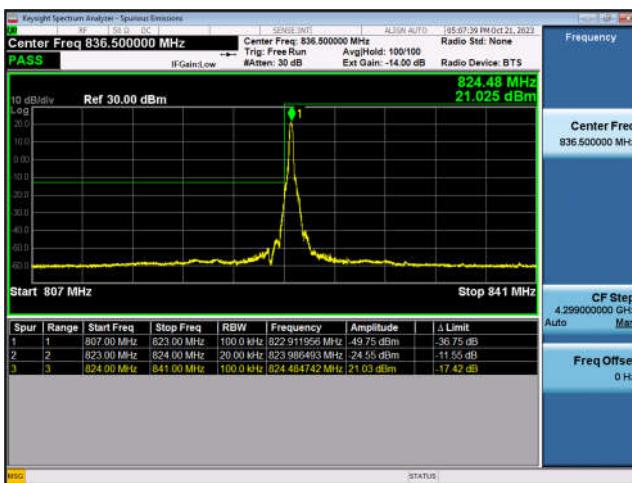
N5_10MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



N5_10MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



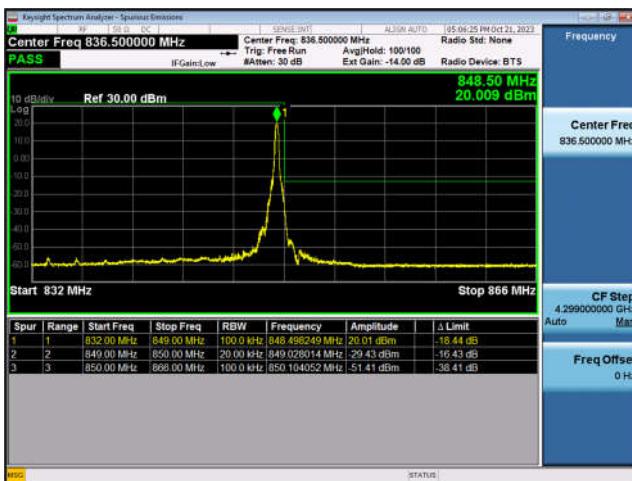
N5_15MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N5_15MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



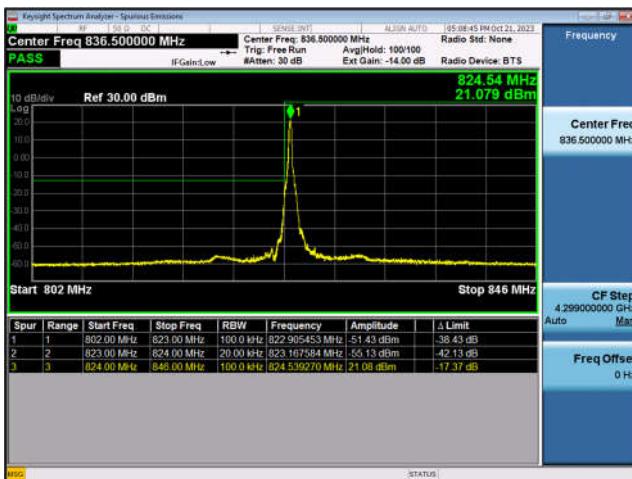
N5_15MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



N5_15MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



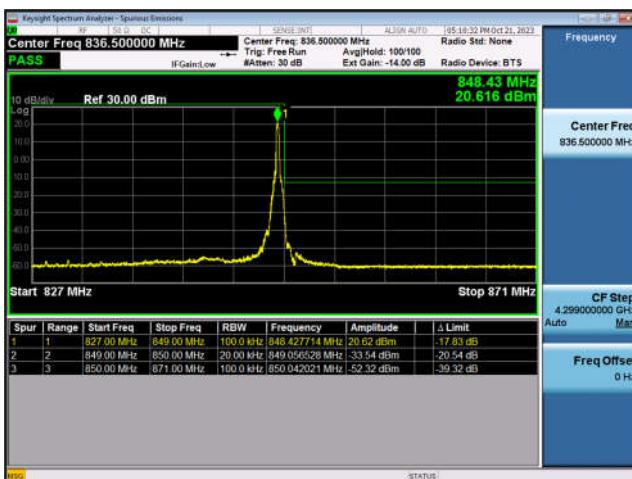
N5_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N5_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



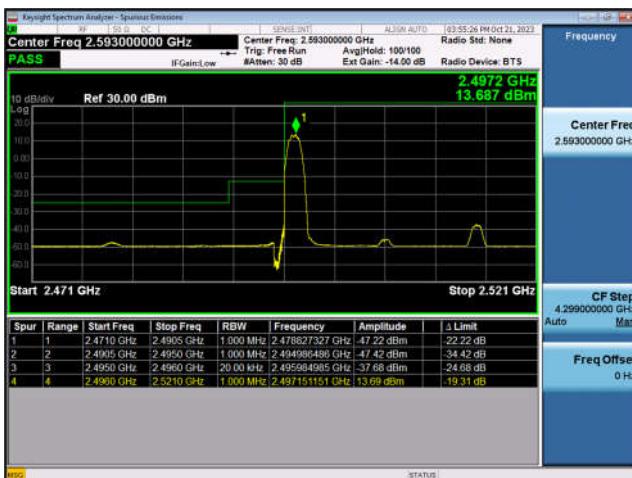
N5_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



N5_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



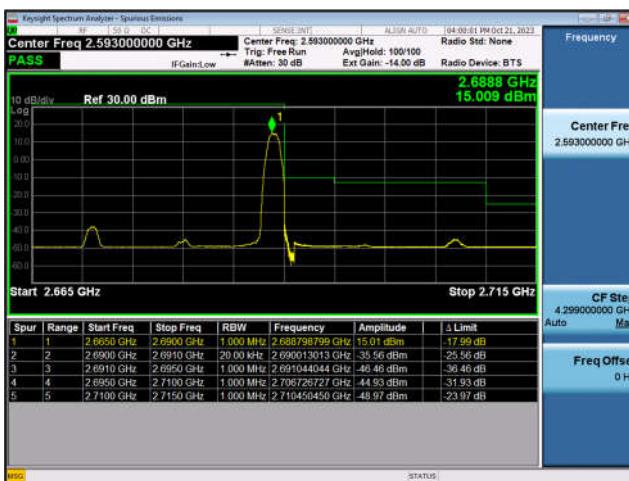
N41_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N41_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



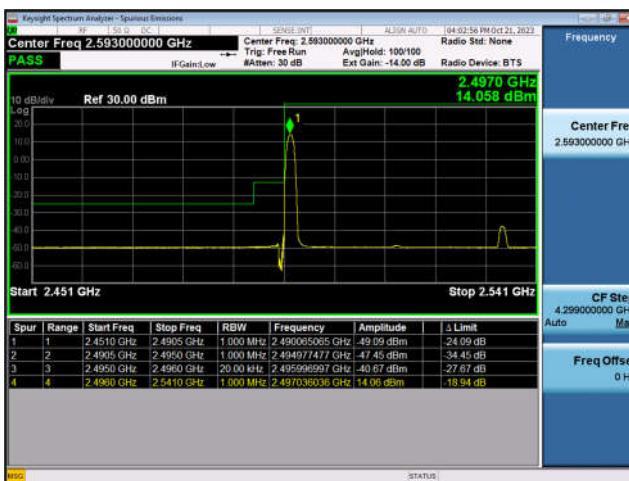
N41_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



N41_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



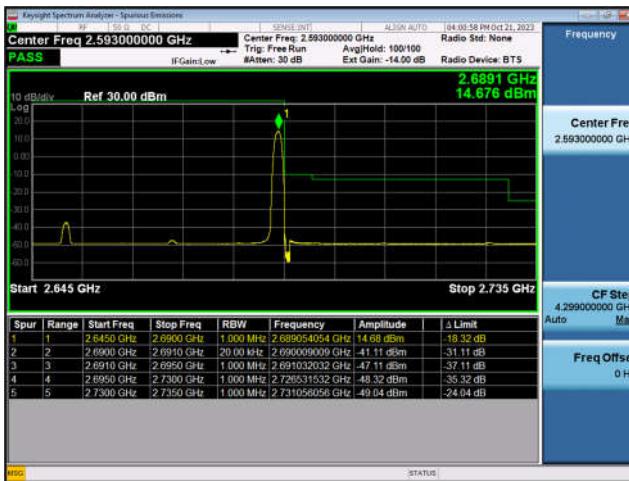
N41_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N41_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



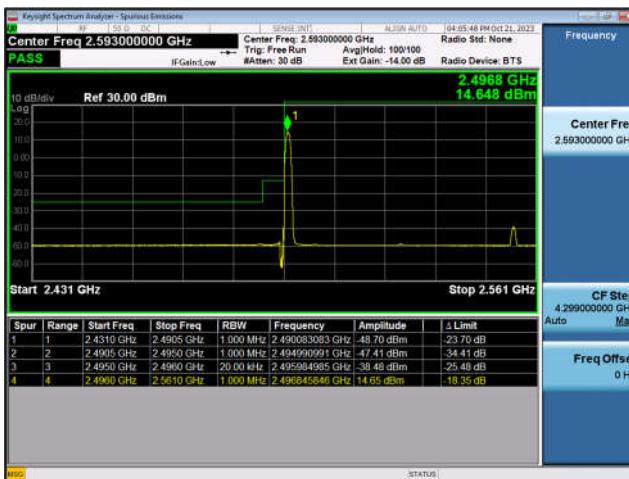
N41_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



N41_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



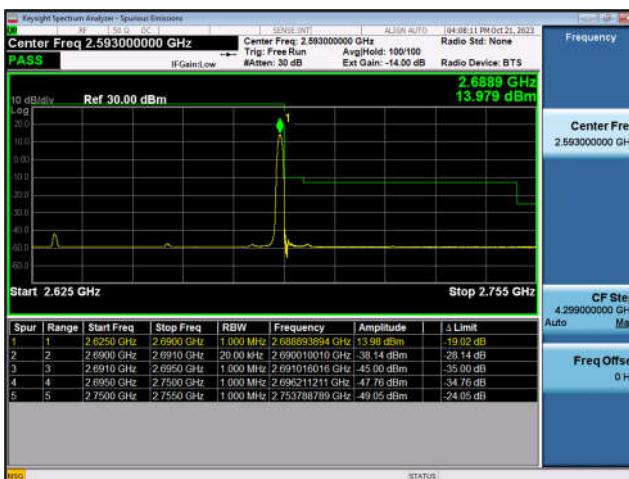
N41_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N41_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



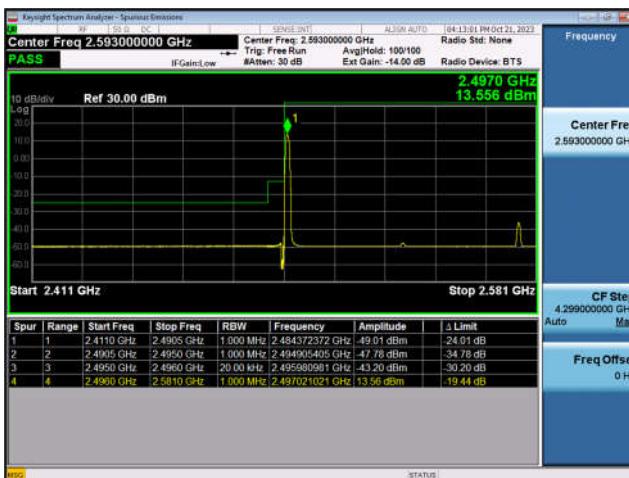
N41_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



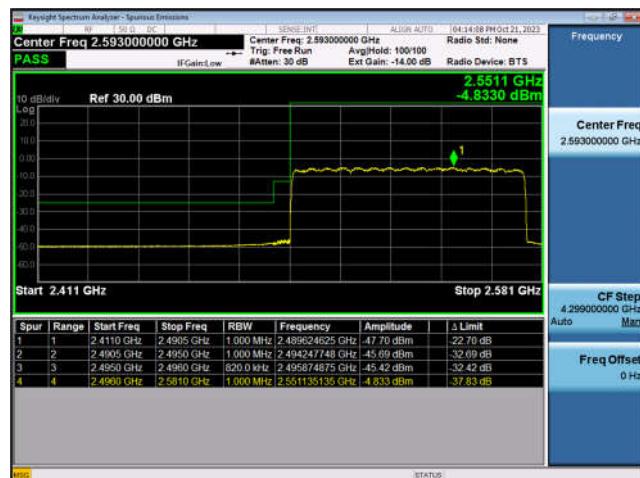
N41_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



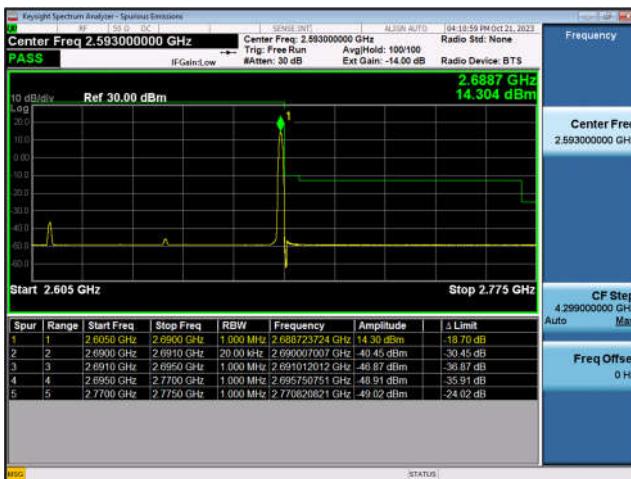
N41_80MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N41_80MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



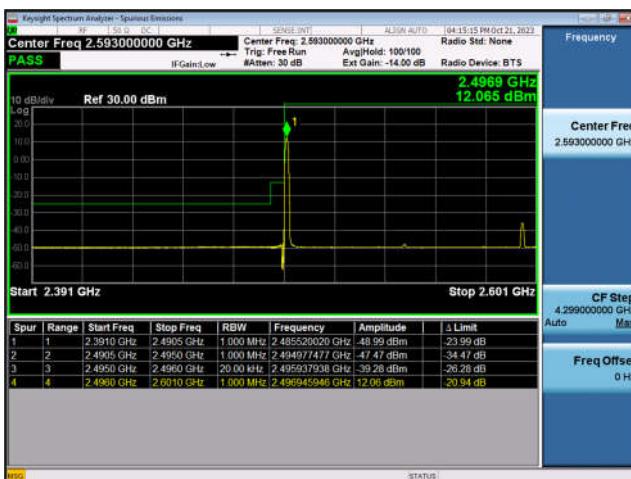
N41_80MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



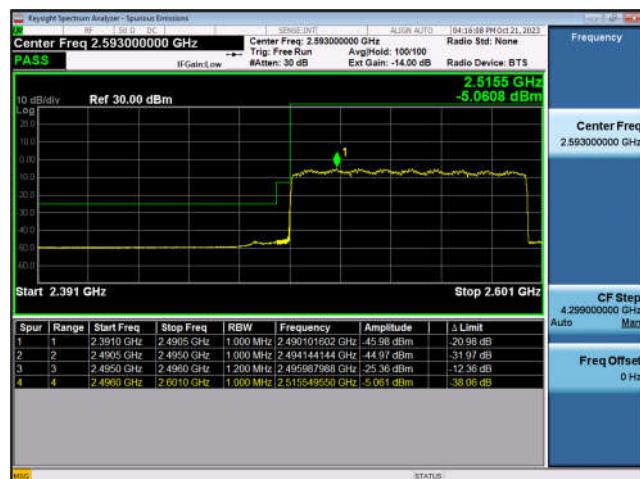
N41_80MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



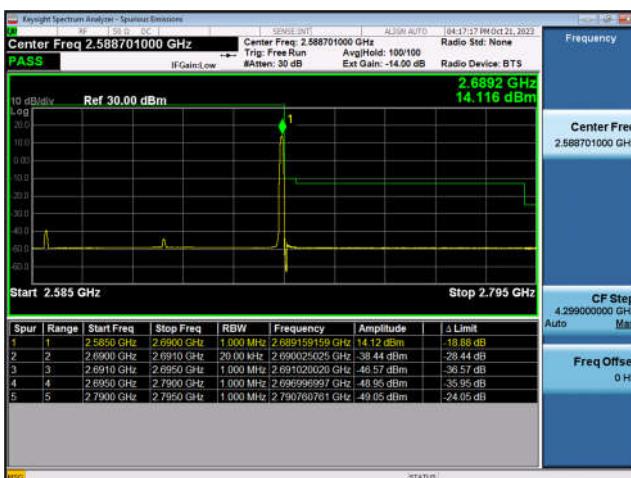
N41_100MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N41_100MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



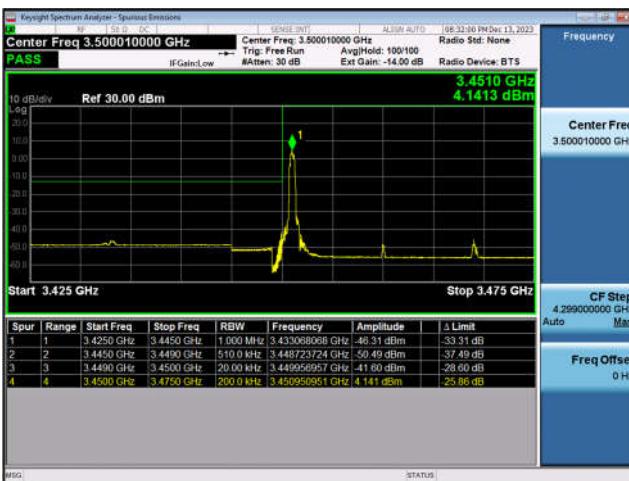
N41_100MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



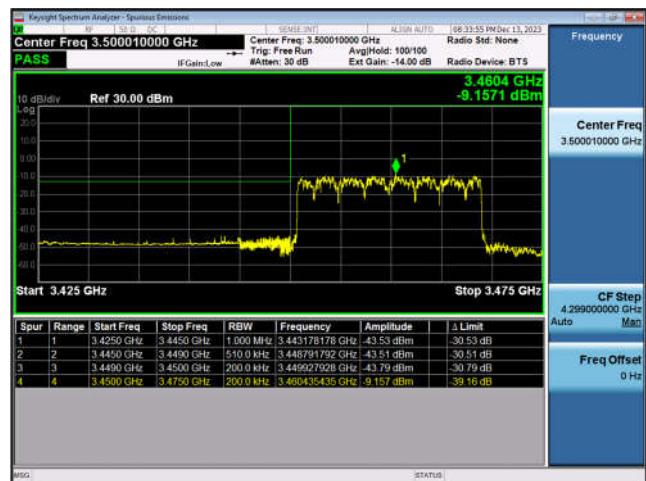
N41_100MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



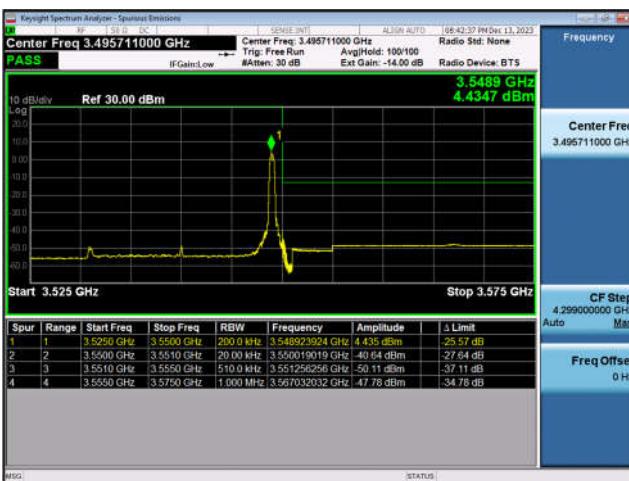
N77_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



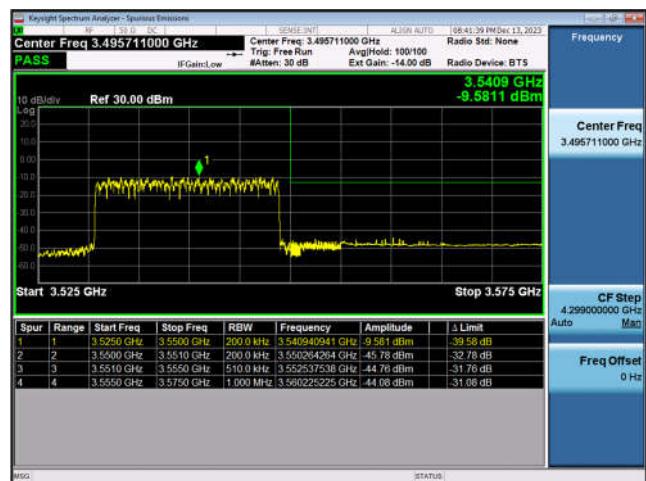
N77_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



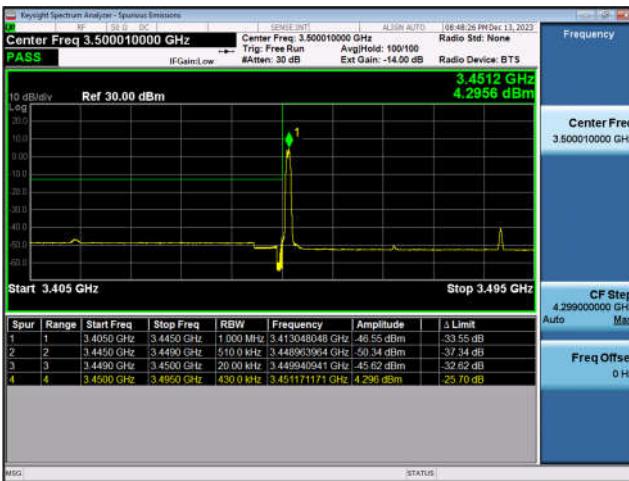
N77_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



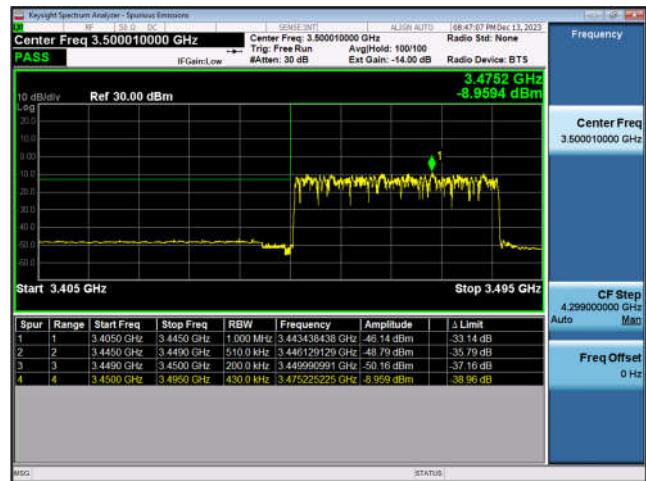
N77_20MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



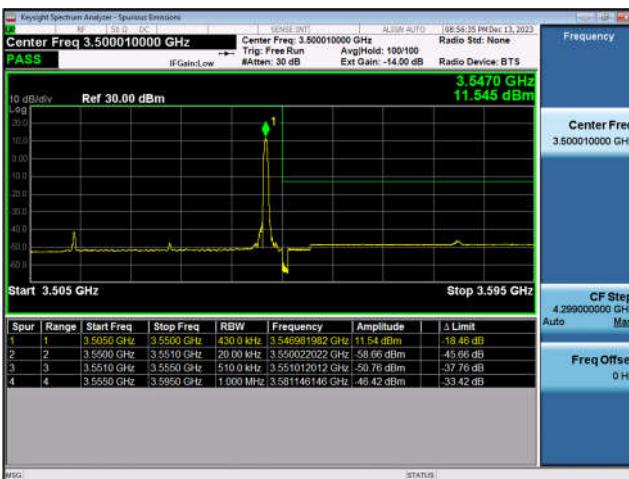
N77_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



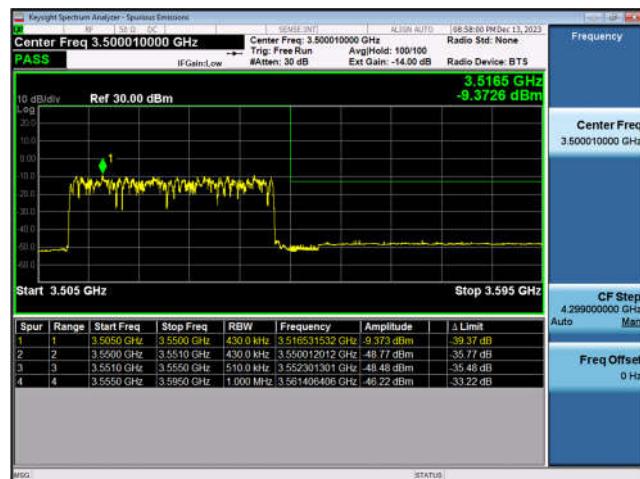
N77_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



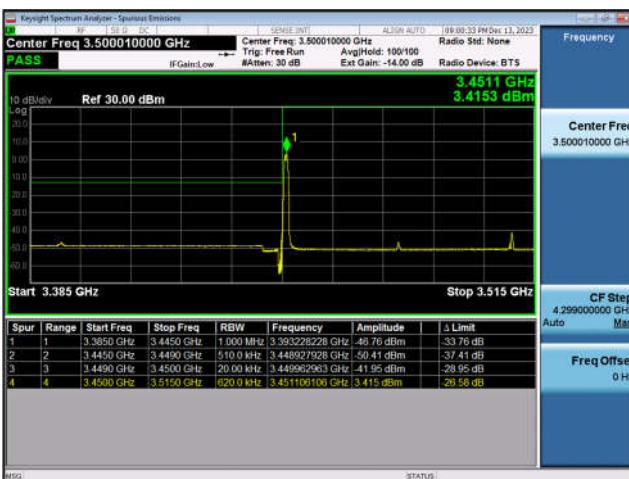
N77_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



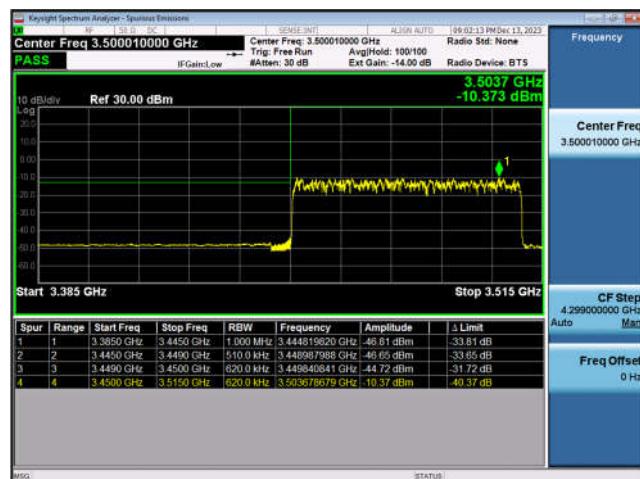
N77_40MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH



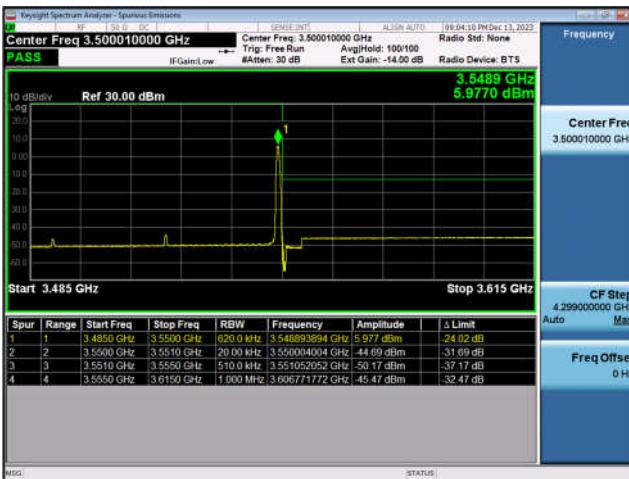
N77_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Left_Low_CH



N77_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_Low_CH



N77_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_1RB_Right_High_CH



N77_60MHz_DFT-s-OFDM_PI/2-BPSK_Edge_Outer_Full_High_CH

