FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT2171-2
FCC ID	:	IHDT56ZX4
STANDARD	:	47 CFR Part 2, 22, 27
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S)	:	Sep. 24, 2021 ~ Sep. 28, 2021

We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.
The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (ShenZhen) Inc., the test report shall not be reproduced except in full.

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED
Cert #5145.01

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People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG180410C	Rev. 01	Initial issue of report	Oct. 08, 2021

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(5)	Effective Radiated Power (5G NR n5)	ERP < 7 Watt		
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77, n78)	EIRP < 1Watt		
3.5	§27.50(j)(4)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n5) (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §27.53(l)(2)	Conducted Spurious Emission (5G NR n5) (5G NR n77, n78)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §27.53(l)(2)	Radiated Spurious Emission (5G NR n5) (5G NR n77, n78)	< 43+10$\log_{10}$(P[Watts])	PASS	Under limit 23.48 dB at 10372.000 MHz

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Applicant

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC
222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2171-2
FCC ID	IHDT56ZX4
IMEI Code	Conducted: 353121920026991 Radiation: 352867310021536/352867310021544
HW Version	DVT2
SW Version	RRYA31.Q3-23
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n5 : 824 MHz ~ 849 MHz 5G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Rx Frequency	5G NR n5 : 869 MHz ~ 894 MHz G NR n77: 3700 MHz ~ 3980 MHz 5G NR n78: 3700 MHz ~ 3800 MHz
Bandwidth	n77, n78: 30kHz
SCS	n77: 30MHz / 40MHz / 60MHz / 80MHz / 100MHz n78: 20MHz / 30MHz / 40MHz / 50MHz / 60MHz / 70MHz / 80MHz / 90MHz / 100MHz
Maximum Output Power to Antenna	5G NR n77 : 23.16 dBm 5G NR n78 : 25.85 dBm
Antenna Gain	5G NR n77: -3.3 dBi 5G NR n78: -3.3 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. 5G NR bands supports NSA mode only. For NSA mode of all 5G NR, we only show the combination of the maximum power among all NSA combinations in the report.
2. For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report.
3. The EN-DC combination declared by the manufacturer is as follows:

EN-DC Combination	EN-DC Combination
DC_5A_n78A	DC_41A_n77A
DC_7A_n78A	DC_7A_n5A
DC_38A_n78A	
DC_41A_n78A	

4. 5G NR n78 supports HPUE.

1.5 Modification of EUT

No modifications are made to the EUT during all test items.

1.6 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-101
AC Adapter 1(EU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-102
AC Adapter 1(UK)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-103
AC Adapter 1(AU)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-105
AC Adapter 2(US)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-101
AC Adapter 2(EU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-102
AC Adapter 2(UK)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-103
AC Adapter 2(AU)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-105
AC Adapter 3(US)	**Brand Name**	Motorola(Aohai)	**Model Name**	MC-101
AC Adapter 3(EU)	**Brand Name**	Motorola(Aohai)	**Model Name**	MC-102
AC Adapter 3(UK)	**Brand Name**	Motorola(Aohai)	**Model Name**	MC-103
AC Adapter 3(AU)	**Brand Name**	Motorola(Aohai)	**Model Name**	MC-105
AC Adapter 4(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-201
AC Adapter 4(AR)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-206
AC Adapter 5(US)	**Brand Name**	Motorola(Acbel)	**Model Name**	MC-201
AC Adapter 5(AR)	**Brand Name**	Motorola(Acbel)	**Model Name**	MC-206
AC Adapter 5(Chile)	**Brand Name**	Motorola(Acbel)	**Model Name**	MC-209
AC Adapter 6(IN)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-204
AC Adapter 7(IN)	**Brand Name**	Motorola(Aohai)	**Model Name**	MC-204
AC Adapter 8 (BR Local build)	**Brand Name**	Motorola(Salcomp)	**Model Name**	MC-207
AC Adapter 9 (BR Local build)	**Brand Name**	Motorola(Flex)	**Model Name**	MC-207
AC Adapter 10(US)	**Brand Name**	Motorola(Chenyang)	**Model Name**	MC-201
Earphone 1	**Brand Name**	Motorola(Juwei)	**Model Name**	MH202(JWEP1182-T03H)
Earphone 2	**Brand Name**	Motorola(New Leader)	**Model Name**	MH202(NLD-EM313A-11SF)
Earphone 3	**Brand Name**	Motorola(Juwei)	**Model Name**	MH191(JWEP1209-T03H)
Earphone 4	**Brand Name**	Motorola(New Leader)	**Model Name**	MH191(NLD-EM313A-21SF)
USB Cable 1	**Brand Name**	Motorola(Chuangyitong)	**Model Name**	88806-024
USB Cable 2	**Brand Name**	Motorola(SUNTOPS)	**Model Name**	336258
USB Cable 3	**Brand Name**	Motorola(I SHENG)	**Model Name**	SC18C28955
Battery	**Brand Name**	Motorola(ATL)	**Model Name**	JK50

1.7 Re-use of Measured Data

1.7.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT2171-2, FCC ID: IHDT56ZX4) is electrically identical to the reference device (Model: XT2171-1, FCC ID: IHDT56ZX3) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 484596 D01.

1.7.2 Difference Section

The **main** difference between FCC ID: IHDT56ZX3and FCC ID: IHDT56ZX4 is as below:

- Remove WCDMA Band IV, LTE Band 4/12/13/17/66 and 5G NR n66.
- Add WCDMA Band XIX, LTE Band 18/19/20/32/41 and 5G NR n20/n38/n41/n77.

Other differences and all the details of similarity and difference can be found in the confidential documents (XT2171-2_Operational Description of Product Equality Declaration).

1.7.3 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
PCE	IHDT56ZX3	Part22.27 (5G NR) (Report No. FG180409C)	All sections applicable for 5G NR n5

1.7.4 Spot Check Verification Data Section

Conducted power test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model and 5G NR n77/78 to full test.

Summary for power spot check for each rule entry and technology is listed as below:

Test Item	Mode	IHDT56ZX3 Worst Result	IHDT56ZX4 Worst Result	Difference (dB)
Conducted Power (dBm)	5G NR n5	23.65	23.28	0.37

Conclusion:

Based on the spot check test result, the test data from the original model is representative for the variant model. The power level spot check are shown within expected level compliant to limit line.

We are using power and ERP measurements from the original parent model reports to list on the grant.

We confirm that the test data reuse policy of FCC KDB 484596 D01 Referencing Test Data v01 has been followed and the test data as referenced from the parent model report represents compliance with new FCC ID.

1.8 Maximum ERP/EIRP Power and Emission Designator

5G NR n77 (EN DC_41A-n77A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**
30	3715.02 ~ 3964.98	0.0959	27M9G7D	0.0759	27M9W7D
40	3720.00 ~ 3960.00	0.0968	37M8G7D	0.0757	37M9W7D
60	3730.02 ~ 3949.98	0.0927	58M0G7D	0.0740	57M8W7D
80	3740.01 ~ 3939.99	0.0914	77M6G7D	0.0728	77M6W7D
100	3750.00 ~ 3930.00	0.0899	97M3G7D	0.0716	97M4W7D

5G NR n78 (EN DC_5A-n78A)		PI/2 BPSK / QPSK		16QAM / 64QAM / 256QAM	
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**	**Maximum EIRP(W)**	**Emission Designator (99%OBW)**
20	3710.01 ~ 3789.99	0.1730	18M2G7D	0.1400	18M2W7D
30	3715.02 ~ 3784.98	0.1754	27M9G7D	0.1432	27M9W7D
40	3720.00 ~ 3780.00	0.1799	37M8G7D	0.1435	37M9W7D
50	3725.01 ~ 3774.99	0.1702	47M4G7D	0.1352	47M5W7D
60	3730.02 ~ 3769.98	0.1726	58M0G7D	0.1426	57M9W7D
70	3735.00 ~ 3765.00	0.1679	67M6G7D	0.1361	67M4W7D
80	3740.01 ~ 3759.99	0.1667	77M4G7D	0.1315	77M6W7D
90	3745.02 ~ 3754.98	0.1660	87M4G7D	0.1337	87M5W7D
100	3750.00	0.1578	97M4G7D	0.1285	97M5W7D

Note: All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

1.9 Testing Location

Sporton International (Shenzhen) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH01-SZ	CN1256	421272

1.10 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24

1.11 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR Part 2, 22, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

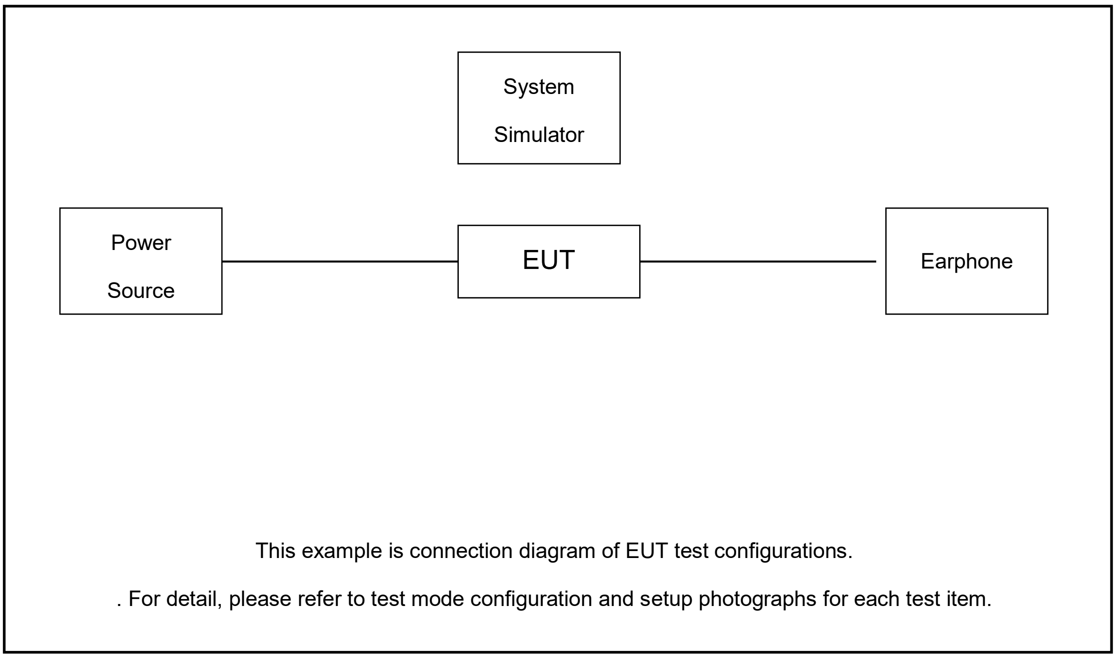
The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane
			

Test Items	5G NR		Bandwidth (MHz)								Modulation					RB #		Test Channel		
		20	30	40	50	60	70	80	90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n77		v	v		v		v		v	v	v	v	v	v	v	v	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n77		v								v	v					v	v	v	v
	n78	v									v	v					v	v	v	v
26dB and 99% Bandwidth	n77		v	v		v		v		v	v	v	v	v	v		v		v	
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v		v	
Conducted Band Edge	n77		v			v				v	v	v				v	v	v		v
	n78	v				v				v	v	v				v	v	v		v
Conducted Spurious Emission	n77		v			v				v	v	v				v	v	v	v	v
	n78	v				v				v	v	v				v	v	v	v	v
Frequency Stability	n77		v									v					v		v	
	n78	v										v					v		v	
E.I.R.P	n77		v	v		v		v		v	v	v	v	v	v	v	v	v	v	v
	n78	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v

Radiated Spurious Emission	n77	Worst Case		v	
	n78	Worst Case		v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. Based on engineering evaluation, only the worst modulations test results are shown in the report.				

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted 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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 4.80 dB.

Example :

Offset(dB) = RF cable loss(dB).

= 4.80 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n77 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
80	Channel	649334	656000	662666
	Frequency	3740.01	3840	3939.99
60	Channel	648668	656000	663332
	Frequency	3730.02	3840	3949.98
40	Channel	648000	656000	664000
	Frequency	3720	3840	3960
30	Channel	647668	656000	664332
	Frequency	3715.02	3840	3964.98

5G NR n78 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
100	Channel		650000	
	Frequency		3750	
90	Channel	649668	650000	650332
	Frequency	3745.02	3750	3754.98
80	Channel	649334	650000	650666
	Frequency	3740.01	3750	3759.99
70	Channel	649000	650000	651000
	Frequency	3735	3750	3765
60	Channel	648668	650000	651332
	Frequency	3730.02	3750	3769.98
50	Channel	648334	650000	651666
	Frequency	3725.01	3750	3774.99
40	Channel	648000	650000	652000
	Frequency	3720	3750	3780
30	Channel	647668	650000	652332
	Frequency	3715.02	3750	3784.98
20	Channel	647334	650000	652666
	Frequency	3710.01	3750	3789.99

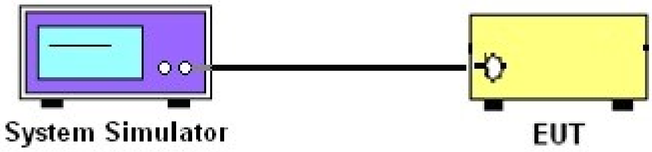
3 Conducted Test Items

3.1 Measuring Instruments

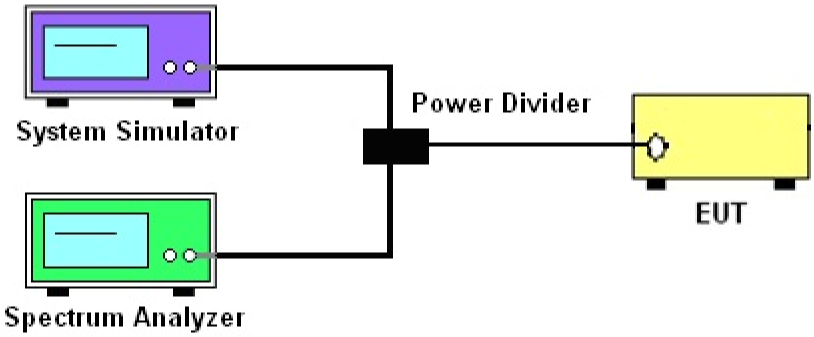
See list of measuring instruments of this test report.

3.2 Test Setup

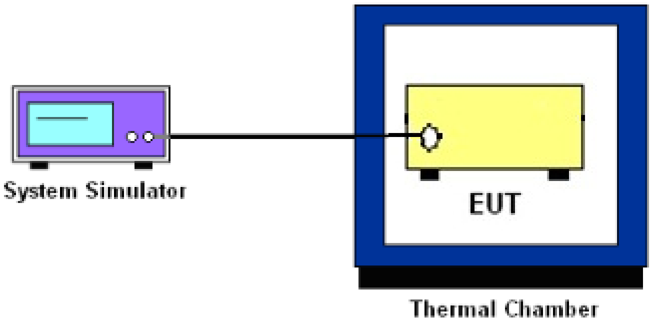
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and EIRP

3.4.1 Description of the Conducted Output Power Measurement and EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n77, n78.

According to KDB 412172 D01 Power Approach,

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

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

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 ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

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.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the "-26 dB down amplitude" as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "–X dB down amplitude" determined in step 6. If a marker is below this "-X dB down amplitude" value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

27.53(l)(2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph 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, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 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.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

   Example:

   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

   = P(W)- [43 + 10log(P)] (dB)

   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

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.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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 ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. 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.
4. 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.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

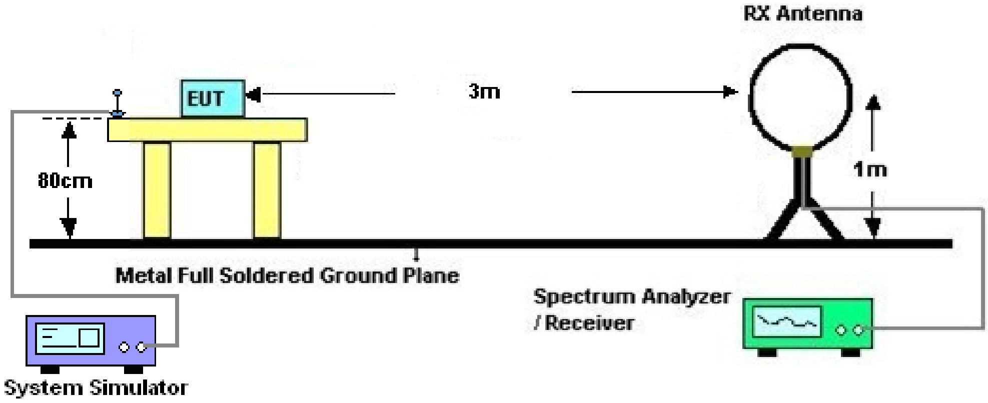
4 Radiated Test Items

4.1 Measuring Instruments

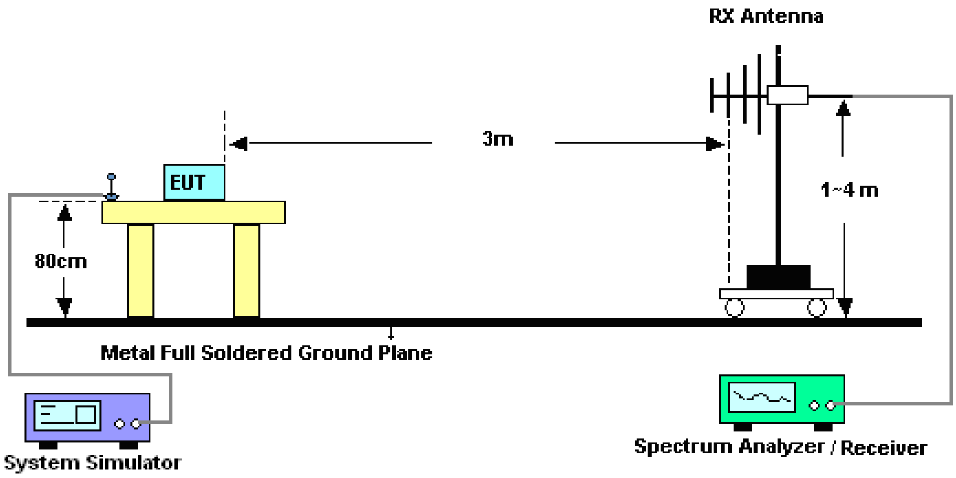
See list of measuring instruments of this test report.

4.2 Test Setup

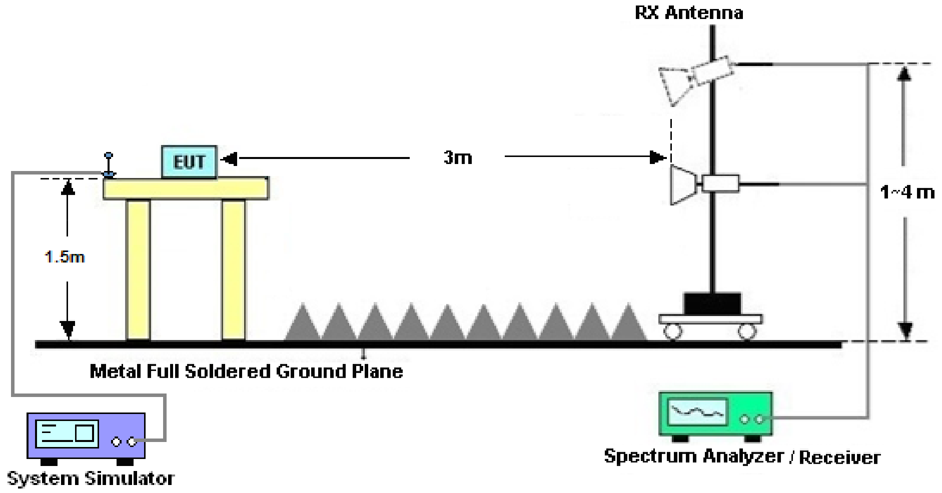
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For 5G NR n7

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

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EXA Signal Analyzer	KEYSIGHT	N9010B	MY60240803	10Hz~44GHz	Apr. 03, 2021	Sep. 24, 2021~ Sep. 27, 2021	Apr. 02, 2022	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 15, 2020	Sep. 24, 2021~ Sep. 27, 2021	Oct. 14, 2021	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04 265	60.06.020.007 7	0.4GHz~26.5GHz	Dec. 26, 2020	Sep. 24, 2021~ Sep. 27, 2021	Dec. 25, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 14, 2021	Sep. 24, 2021~ Sep. 27, 2021	Jul. 13, 2022	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 03, 2020	Sep. 28, 2021	Dec. 02, 2021	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2021	Sep. 28, 2021	Jun. 21, 2022	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 15, 2021	Sep. 28, 2021	Jul. 14, 2022	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 25, 2021	Sep. 28, 2021	Jul. 24, 2022	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 11, 2021	Sep. 28, 2021	Apr. 10, 2022	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 07, 2021	Sep. 28, 2021	Apr. 06, 2022	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 16, 2020	Sep. 28, 2021	Oct. 15, 2021	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 16, 2020	Sep. 28, 2021	Oct. 15, 2021	Radiation (03CH01-SZ
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 21, 2021	Sep. 28, 2021	Jul. 20, 2022	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Sep. 28, 2021	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Sep. 28, 2021	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Sep. 28, 2021	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required

6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. 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 Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.48dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.53dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.02dB**

----------- THE END -----------

Appendix A. Test Results of Conducted Test

Software Version: 21.02.091701

FR1 N77

LTE Band: 41, LTE BW: 10M, LTE ARFCN: Mid

Transmitter Conducted Output Power And ERP/EIRP, (G_T - L_C)=-3.3dB

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power(dBm)	EIRP (dBm)	EIRP (W)
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	36@18	22.98	19.68	0.0929
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@1	22.95	19.65	0.0923
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@76	22.94	19.64	0.0920
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	36@18	23.02	19.72	0.0938
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@1	23.03	19.73	0.0940
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@76	22.96	19.66	0.0925
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	36@18	22	18.7	0.0741
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@1	21.85	18.55	0.0716
77	30	30	647668	3715.02	DFT-s-OFDM 16 QAM	1@76	22.1	18.8	0.0759
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	36@18	20.45	17.15	0.0519
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	1@1	20.64	17.34	0.0542
77	30	30	647668	3715.02	DFT-s-OFDM 64 QAM	1@76	20.66	17.36	0.0545
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	36@18	18.51	15.21	0.0332
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	1@1	18.58	15.28	0.0337
77	30	30	647668	3715.02	DFT-s-OFDM 256 QAM	1@76	18.54	15.24	0.0334
77	30	30	647668	3715.02	CP-OFDM QPSK	39@19	21.51	18.21	0.0662
77	30	30	647668	3715.02	CP-OFDM QPSK	1@1	21.49	18.19	0.0659
77	30	30	647668	3715.02	CP-OFDM QPSK	1@76	21.45	18.15	0.0653
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	36@18	22.92	19.62	0.0916

77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	22.79	19.49	0.0889
77	30	30	656000	3840	DFT-s-OFDM PI/2 BPSK	1@76	22.73	19.43	0.0877
77	30	30	656000	3840	DFT-s-OFDM QPSK	36@18	22.83	19.53	0.0897
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@1	22.85	19.55	0.0902
77	30	30	656000	3840	DFT-s-OFDM QPSK	1@76	22.77	19.47	0.0885
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	36@18	21.8	18.5	0.0708
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@1	21.73	18.43	0.0697
77	30	30	656000	3840	DFT-s-OFDM 16 QAM	1@76	21.76	18.46	0.0701
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	36@18	20.3	17	0.0501
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.34	17.04	0.0506
77	30	30	656000	3840	DFT-s-OFDM 64 QAM	1@76	20.38	17.08	0.0511
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	36@18	18.24	14.94	0.0312
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.38	15.08	0.0322
77	30	30	656000	3840	DFT-s-OFDM 256 QAM	1@76	18.33	15.03	0.0318
77	30	30	656000	3840	CP-OFDM QPSK	39@19	21.31	18.01	0.0632
77	30	30	656000	3840	CP-OFDM QPSK	1@1	21.28	17.98	0.0628
77	30	30	656000	3840	CP-OFDM QPSK	1@76	21.23	17.93	0.0621
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	36@18	22.97	19.67	0.0927
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@1	23.02	19.72	0.0938
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@76	22.92	19.62	0.0916
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	36@18	22.91	19.61	0.0914
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@1	23.12	19.82	0.0959
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@76	22.89	19.59	0.0910

77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	36@18	21.96	18.66	0.0735
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@1	22.06	18.76	0.0752
77	30	30	664332	3964.98	DFT-s-OFDM 16 QAM	1@76	21.88	18.58	0.0721
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	36@18	20.52	17.22	0.0527
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	1@1	20.64	17.34	0.0542
77	30	30	664332	3964.98	DFT-s-OFDM 64 QAM	1@76	20.51	17.21	0.0526
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	36@18	18.43	15.13	0.0326
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	1@1	18.64	15.34	0.0342
77	30	30	664332	3964.98	DFT-s-OFDM 256 QAM	1@76	18.48	15.18	0.0330
77	30	30	664332	3964.98	CP-OFDM QPSK	39@19	21.48	18.18	0.0658
77	30	30	664332	3964.98	CP-OFDM QPSK	1@1	21.54	18.24	0.0667
77	30	30	664332	3964.98	CP-OFDM QPSK	1@76	21.4	18.1	0.0646
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	50@25	23	19.7	0.0933
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@1	23.14	19.84	0.0964
77	30	40	648000	3720	DFT-s-OFDM PI/2 BPSK	1@104	23	19.7	0.0933
77	30	40	648000	3720	DFT-s-OFDM QPSK	50@25	23.06	19.76	0.0946
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@1	23.16	19.86	0.0968
77	30	40	648000	3720	DFT-s-OFDM QPSK	1@104	23.05	19.75	0.0944
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	50@25	22	18.7	0.0741
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@1	22.09	18.79	0.0757
77	30	40	648000	3720	DFT-s-OFDM 16 QAM	1@104	21.98	18.68	0.0738
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	50@25	20.5	17.2	0.0525
77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@1	20.71	17.41	0.0551

77	30	40	648000	3720	DFT-s-OFDM 64 QAM	1@104	20.52	17.22	0.0527
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	50@25	18.57	15.27	0.0337
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@1	18.58	15.28	0.0337
77	30	40	648000	3720	DFT-s-OFDM 256 QAM	1@104	18.62	15.32	0.0340
77	30	40	648000	3720	CP-OFDM QPSK	53@26	21.51	18.21	0.0662
77	30	40	648000	3720	CP-OFDM QPSK	1@1	21.7	18.4	0.0692
77	30	40	648000	3720	CP-OFDM QPSK	1@104	21.63	18.33	0.0681
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	50@25	22.84	19.54	0.0899
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	22.82	19.52	0.0895
77	30	40	656000	3840	DFT-s-OFDM PI/2 BPSK	1@104	22.6	19.3	0.0851
77	30	40	656000	3840	DFT-s-OFDM QPSK	50@25	22.84	19.54	0.0899
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@1	22.83	19.53	0.0897
77	30	40	656000	3840	DFT-s-OFDM QPSK	1@104	22.59	19.29	0.0849
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	50@25	21.82	18.52	0.0711
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@1	21.82	18.52	0.0711
77	30	40	656000	3840	DFT-s-OFDM 16 QAM	1@104	21.72	18.42	0.0695
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	50@25	20.36	17.06	0.0508
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.31	17.01	0.0502
77	30	40	656000	3840	DFT-s-OFDM 64 QAM	1@104	20.25	16.95	0.0495
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	50@25	18.39	15.09	0.0323
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.41	15.11	0.0324
77	30	40	656000	3840	DFT-s-OFDM 256 QAM	1@104	18.13	14.83	0.0304
77	30	40	656000	3840	CP-OFDM QPSK	53@26	21.29	17.99	0.0630
77	30	40	656000	3840	CP-OFDM QPSK	1@1	21.33	18.03	0.0635

77	30	40	656000	3840	CP-OFDM QPSK	1@104	21.13	17.83	0.0607
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	50@25	23.02	19.72	0.0938
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@1	23.04	19.74	0.0942
77	30	40	664000	3960	DFT-s-OFDM PI/2 BPSK	1@104	22.98	19.68	0.0929
77	30	40	664000	3960	DFT-s-OFDM QPSK	50@25	22.96	19.66	0.0925
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@1	23.09	19.79	0.0953
77	30	40	664000	3960	DFT-s-OFDM QPSK	1@104	23	19.7	0.0933
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	50@25	22.03	18.73	0.0746
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@1	22.02	18.72	0.0745
77	30	40	664000	3960	DFT-s-OFDM 16 QAM	1@104	21.95	18.65	0.0733
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	50@25	20.51	17.21	0.0526
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@1	20.63	17.33	0.0541
77	30	40	664000	3960	DFT-s-OFDM 64 QAM	1@104	20.52	17.22	0.0527
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	50@25	18.51	15.21	0.0332
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@1	18.6	15.3	0.0339
77	30	40	664000	3960	DFT-s-OFDM 256 QAM	1@104	18.63	15.33	0.0341
77	30	40	664000	3960	CP-OFDM QPSK	53@26	21.52	18.22	0.0664
77	30	40	664000	3960	CP-OFDM QPSK	1@1	21.55	18.25	0.0668
77	30	40	664000	3960	CP-OFDM QPSK	1@104	21.54	18.24	0.0667
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	81@40	22.77	19.47	0.0885
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@1	22.8	19.5	0.0891
77	30	60	648668	3730.02	DFT-s-OFDM PI/2 BPSK	1@160	22.81	19.51	0.0893
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	81@40	22.87	19.57	0.0906
77	30	60	648668	3730.02	DFT-s-OFDM	1@1	22.87	19.57	0.0906

					QPSK				
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@160	22.81	19.51	0.0893
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	81@40	21.82	18.52	0.0711
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@1	21.67	18.37	0.0687
77	30	60	648668	3730.02	DFT-s-OFDM 16 QAM	1@160	21.62	18.32	0.0679
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	81@40	20.38	17.08	0.0511
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@1	20.45	17.15	0.0519
77	30	60	648668	3730.02	DFT-s-OFDM 64 QAM	1@160	20.33	17.03	0.0505
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	81@40	18.31	15.01	0.0317
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@1	18.34	15.04	0.0319
77	30	60	648668	3730.02	DFT-s-OFDM 256 QAM	1@160	18.38	15.08	0.0322
77	30	60	648668	3730.02	CP-OFDM QPSK	81@40	21.33	18.03	0.0635
77	30	60	648668	3730.02	CP-OFDM QPSK	1@1	21.36	18.06	0.0640
77	30	60	648668	3730.02	CP-OFDM QPSK	1@160	21.36	18.06	0.0640
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	81@40	22.96	19.66	0.0925
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	22.8	19.5	0.0891
77	30	60	656000	3840	DFT-s-OFDM PI/2 BPSK	1@160	22.83	19.53	0.0897
77	30	60	656000	3840	DFT-s-OFDM QPSK	81@40	22.97	19.67	0.0927
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@1	22.83	19.53	0.0897
77	30	60	656000	3840	DFT-s-OFDM QPSK	1@160	22.79	19.49	0.0889
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	81@40	21.99	18.69	0.0740
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@1	21.86	18.56	0.0718
77	30	60	656000	3840	DFT-s-OFDM 16 QAM	1@160	21.81	18.51	0.0710
77	30	60	656000	3840	DFT-s-OFDM 64	81@40	20.54	17.24	0.0530

					QAM				
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.5	17.2	0.0525
77	30	60	656000	3840	DFT-s-OFDM 64 QAM	1@160	20.42	17.12	0.0515
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	81@40	18.46	15.16	0.0328
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.39	15.09	0.0323
77	30	60	656000	3840	DFT-s-OFDM 256 QAM	1@160	18.29	14.99	0.0316
77	30	60	656000	3840	CP-OFDM QPSK	81@40	21.44	18.14	0.0652
77	30	60	656000	3840	CP-OFDM QPSK	1@1	21.39	18.09	0.0644
77	30	60	656000	3840	CP-OFDM QPSK	1@160	21.31	18.01	0.0632
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	81@40	22.92	19.62	0.0916
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@1	22.93	19.63	0.0918
77	30	60	663332	3949.98	DFT-s-OFDM PI/2 BPSK	1@160	22.87	19.57	0.0906
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	81@40	22.95	19.65	0.0923
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@1	22.88	19.58	0.0908
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@160	22.87	19.57	0.0906
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	81@40	21.97	18.67	0.0736
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@1	21.99	18.69	0.0740
77	30	60	663332	3949.98	DFT-s-OFDM 16 QAM	1@160	21.91	18.61	0.0726
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	81@40	20.42	17.12	0.0515
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@1	20.51	17.21	0.0526
77	30	60	663332	3949.98	DFT-s-OFDM 64 QAM	1@160	20.51	17.21	0.0526
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	81@40	18.34	15.04	0.0319
77	30	60	663332	3949.98	DFT-s-OFDM 256 QAM	1@1	18.42	15.12	0.0325
77	30	60	663332	3949.98	DFT-s-OFDM 256	1@160	18.39	15.09	0.0323

					QAM				
77	30	60	663332	3949.98	CP-OFDM QPSK	81@40	21.44	18.14	0.0652
77	30	60	663332	3949.98	CP-OFDM QPSK	1@1	21.44	18.14	0.0652
77	30	60	663332	3949.98	CP-OFDM QPSK	1@160	21.52	18.22	0.0664
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	108@54	22.79	19.49	0.0889
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@1	22.69	19.39	0.0869
77	30	80	649334	3740.01	DFT-s-OFDM PI/2 BPSK	1@215	22.66	19.36	0.0863
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	108@54	22.8	19.5	0.0891
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@1	22.72	19.42	0.0875
77	30	80	649334	3740.01	DFT-s-OFDM QPSK	1@215	22.65	19.35	0.0861
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	108@54	21.82	18.52	0.0711
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@1	21.48	18.18	0.0658
77	30	80	649334	3740.01	DFT-s-OFDM 16 QAM	1@215	21.65	18.35	0.0684
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	108@54	20.27	16.97	0.0498
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@1	20.01	16.71	0.0469
77	30	80	649334	3740.01	DFT-s-OFDM 64 QAM	1@215	20.04	16.74	0.0472
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	108@54	18.22	14.92	0.0310
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@1	18.23	14.93	0.0311
77	30	80	649334	3740.01	DFT-s-OFDM 256 QAM	1@215	18.19	14.89	0.0308
77	30	80	649334	3740.01	CP-OFDM QPSK	109@54	21.29	17.99	0.0630
77	30	80	649334	3740.01	CP-OFDM QPSK	1@1	21.19	17.89	0.0615
77	30	80	649334	3740.01	CP-OFDM QPSK	1@215	21.14	17.84	0.0608
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	108@54	22.86	19.56	0.0904
77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	22.69	19.39	0.0869

77	30	80	656000	3840	DFT-s-OFDM PI/2 BPSK	1@215	22.64	19.34	0.0859
77	30	80	656000	3840	DFT-s-OFDM QPSK	108@54	22.86	19.56	0.0904
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@1	22.78	19.48	0.0887
77	30	80	656000	3840	DFT-s-OFDM QPSK	1@215	22.66	19.36	0.0863
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	108@54	21.8	18.5	0.0708
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@1	21.68	18.38	0.0689
77	30	80	656000	3840	DFT-s-OFDM 16 QAM	1@215	21.62	18.32	0.0679
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	108@54	20.36	17.06	0.0508
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.25	16.95	0.0495
77	30	80	656000	3840	DFT-s-OFDM 64 QAM	1@215	20.15	16.85	0.0484
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	108@54	18.28	14.98	0.0315
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.16	14.86	0.0306
77	30	80	656000	3840	DFT-s-OFDM 256 QAM	1@215	18.1	14.8	0.0302
77	30	80	656000	3840	CP-OFDM QPSK	109@54	21.28	17.98	0.0628
77	30	80	656000	3840	CP-OFDM QPSK	1@1	21.23	17.93	0.0621
77	30	80	656000	3840	CP-OFDM QPSK	1@215	21.19	17.89	0.0615
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	108@54	22.91	19.61	0.0914
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@1	22.87	19.57	0.0906
77	30	80	662666	3939.99	DFT-s-OFDM PI/2 BPSK	1@215	22.72	19.42	0.0875
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	108@54	22.86	19.56	0.0904
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@1	22.86	19.56	0.0904
77	30	80	662666	3939.99	DFT-s-OFDM QPSK	1@215	22.61	19.31	0.0853
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	108@54	21.84	18.54	0.0714

77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@1	21.92	18.62	0.0728
77	30	80	662666	3939.99	DFT-s-OFDM 16 QAM	1@215	21.52	18.22	0.0664
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	108@54	20.42	17.12	0.0515
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@1	20.45	17.15	0.0519
77	30	80	662666	3939.99	DFT-s-OFDM 64 QAM	1@215	20.21	16.91	0.0491
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	108@54	18.34	15.04	0.0319
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@1	18.34	15.04	0.0319
77	30	80	662666	3939.99	DFT-s-OFDM 256 QAM	1@215	18.11	14.81	0.0303
77	30	80	662666	3939.99	CP-OFDM QPSK	109@54	21.34	18.04	0.0637
77	30	80	662666	3939.99	CP-OFDM QPSK	1@1	21.41	18.11	0.0647
77	30	80	662666	3939.99	CP-OFDM QPSK	1@215	21.24	17.94	0.0622
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	135@67	22.75	19.45	0.0881
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@1	22.58	19.28	0.0847
77	30	100	650000	3750	DFT-s-OFDM PI/2 BPSK	1@271	22.76	19.46	0.0883
77	30	100	650000	3750	DFT-s-OFDM QPSK	135@67	22.68	19.38	0.0867
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@1	22.68	19.38	0.0867
77	30	100	650000	3750	DFT-s-OFDM QPSK	1@271	22.65	19.35	0.0861
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	135@67	21.74	18.44	0.0698
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@1	21.58	18.28	0.0673
77	30	100	650000	3750	DFT-s-OFDM 16 QAM	1@271	21.63	18.33	0.0681
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	135@67	20.19	16.89	0.0489
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@1	20.21	16.91	0.0491
77	30	100	650000	3750	DFT-s-OFDM 64 QAM	1@271	20.24	16.94	0.0494

77	30	100	650000	3750	DFT-s-OFDM 256 QAM	135@67	18.25	14.95	0.0313
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@1	18.05	14.75	0.0299
77	30	100	650000	3750	DFT-s-OFDM 256 QAM	1@271	18.27	14.97	0.0314
77	30	100	650000	3750	CP-OFDM QPSK	137@68	21.23	17.93	0.0621
77	30	100	650000	3750	CP-OFDM QPSK	1@1	21.18	17.88	0.0614
77	30	100	650000	3750	CP-OFDM QPSK	1@271	21.2	17.9	0.0617
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	135@67	22.82	19.52	0.0895
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@1	22.58	19.28	0.0847
77	30	100	656000	3840	DFT-s-OFDM PI/2 BPSK	1@271	22.57	19.27	0.0845
77	30	100	656000	3840	DFT-s-OFDM QPSK	135@67	22.82	19.52	0.0895
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@1	22.62	19.32	0.0855
77	30	100	656000	3840	DFT-s-OFDM QPSK	1@271	22.6	19.3	0.0851
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	135@67	21.71	18.41	0.0693
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@1	21.47	18.17	0.0656
77	30	100	656000	3840	DFT-s-OFDM 16 QAM	1@271	21.56	18.26	0.0670
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	135@67	20.26	16.96	0.0497
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@1	20.13	16.83	0.0482
77	30	100	656000	3840	DFT-s-OFDM 64 QAM	1@271	20.19	16.89	0.0489
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	135@67	18.35	15.05	0.0320
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@1	18.11	14.81	0.0303
77	30	100	656000	3840	DFT-s-OFDM 256 QAM	1@271	18.15	14.85	0.0305
77	30	100	656000	3840	CP-OFDM QPSK	137@68	21.29	17.99	0.0630
77	30	100	656000	3840	CP-OFDM QPSK	1@1	21.1	17.8	0.0603
77	30	100	656000	3840	CP-OFDM QPSK	1@271	21.13	17.83	0.0607

77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	135@67	22.78	19.48	0.0887
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@1	22.79	19.49	0.0889
77	30	100	662000	3930	DFT-s-OFDM PI/2 BPSK	1@271	22.56	19.26	0.0843
77	30	100	662000	3930	DFT-s-OFDM QPSK	135@67	22.72	19.42	0.0875
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@1	22.84	19.54	0.0899
77	30	100	662000	3930	DFT-s-OFDM QPSK	1@271	22.62	19.32	0.0855
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	135@67	21.78	18.48	0.0705
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@1	21.85	18.55	0.0716
77	30	100	662000	3930	DFT-s-OFDM 16 QAM	1@271	21.59	18.29	0.0675
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	135@67	20.29	16.99	0.0500
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@1	20.26	16.96	0.0497
77	30	100	662000	3930	DFT-s-OFDM 64 QAM	1@271	20.08	16.78	0.0476
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	135@67	18.3	15	0.0316
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@1	18.27	14.97	0.0314
77	30	100	662000	3930	DFT-s-OFDM 256 QAM	1@271	18.14	14.84	0.0305
77	30	100	662000	3930	CP-OFDM QPSK	137@68	21.26	17.96	0.0625
77	30	100	662000	3930	CP-OFDM QPSK	1@1	21.28	17.98	0.0628
77	30	100	662000	3930	CP-OFDM QPSK	1@271	21.09	17.79	0.0601

Frequency Stability

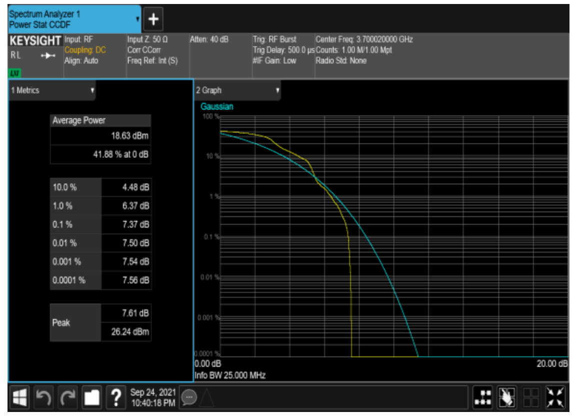
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (ppm)	Verdict	Environment
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00318	**PASS**	NV
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00245	**PASS**	LV
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00653	**PASS**	HV
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00125	**PASS**	-30℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00631	**PASS**	-20℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00253	**PASS**	-10℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00566	**PASS**	0℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00612	**PASS**	10℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00312	**PASS**	20℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00254	**PASS**	30℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00524	**PASS**	40℃
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	-0.00351	**PASS**	50℃

Peak to Average Radio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	75@0	10.29	13	**PASS**
77	30	30	647668	3715.02	DFT-s-OFDM PI/2 BPSK	1@0	7.37	13	**PASS**
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	75@0	10.05	13	**PASS**
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@0	8.4	13	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM PI/2 BPSK	75@0	10.24	13	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM PI/2 BPSK	1@0	7.33	13	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	10.01	13	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	1@0	8.39	13	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	75@0	10.23	13	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM PI/2 BPSK	1@0	7.35	13	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	75@0	9.99	13	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@0	8.42	13	**PASS**

B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH

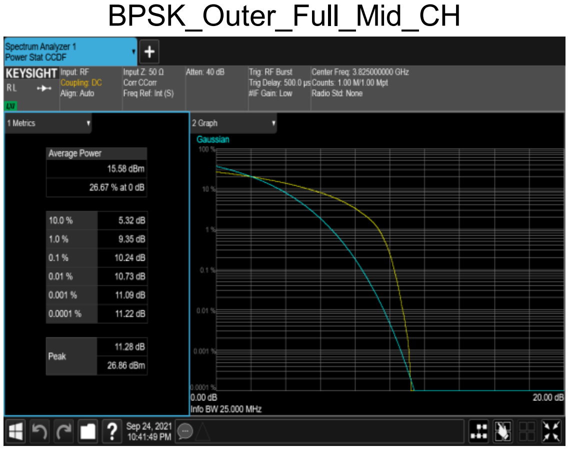
B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Low_CH



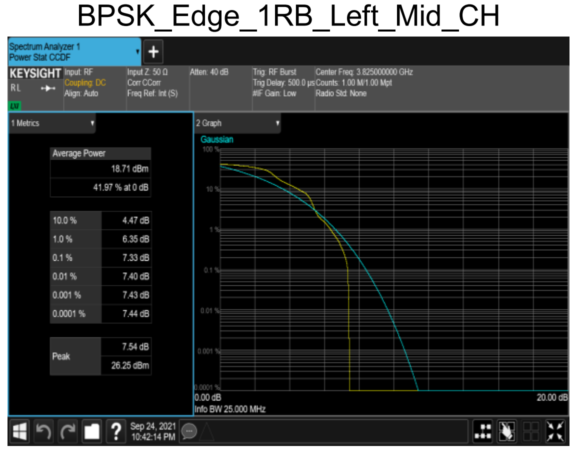
B41_N77(30M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

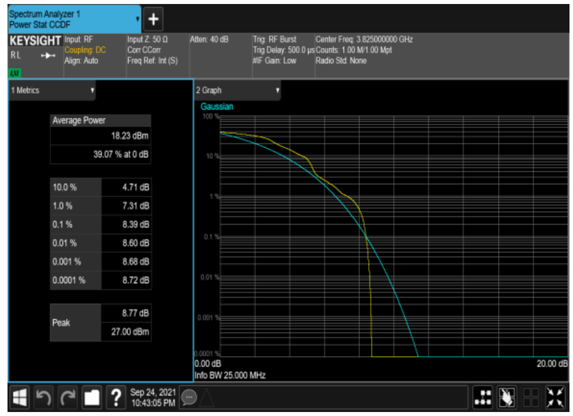


B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_Mid_CH



B41_N77(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

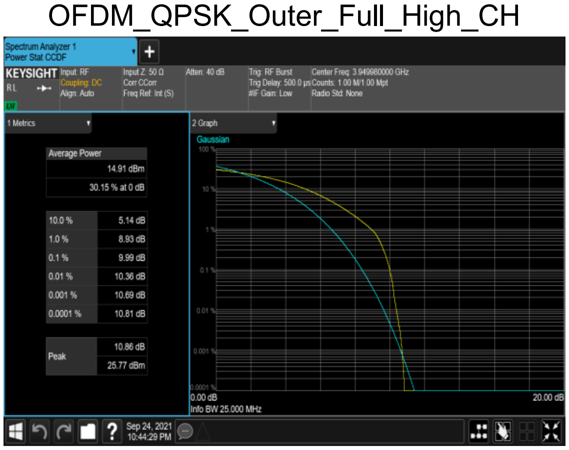
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



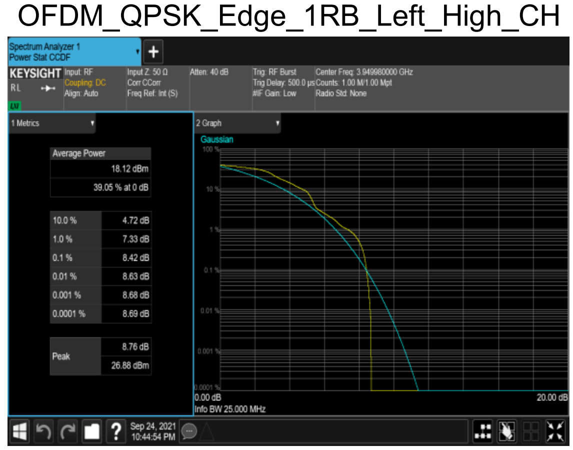
B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH

B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Edge_1RB_Left_High_CH

B41_N77(30M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB OBW (MHz)
77	30	30	656000	3840.0	DFT-s-OFDM PI/2 BPSK	75@0	26.793	28.25
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	75@0	26.814	28.08
77	30	30	656000	3840.0	CP-OFDM QPSK	78@0	27.867	28.95
77	30	30	656000	3840.0	CP-OFDM 16 QAM	78@0	27.833	29.04
77	30	30	656000	3840.0	CP-OFDM 64 QAM	78@0	27.793	29.17
77	30	30	656000	3840.0	CP-OFDM 256 QAM	78@0	27.879	29.25
77	30	40	656000	3840.0	DFT-s-OFDM PI/2 BPSK	100@0	35.693	37.23
77	30	40	656000	3840.0	DFT-s-OFDM QPSK	100@0	35.74	37.14
77	30	40	656000	3840.0	CP-OFDM QPSK	106@0	37.769	39.36
77	30	40	656000	3840.0	CP-OFDM 16 QAM	106@0	37.786	39.44
77	30	40	656000	3840.0	CP-OFDM 64 QAM	106@0	37.851	39.5
77	30	40	656000	3840.0	CP-OFDM 256 QAM	106@0	37.87	39.45
77	30	60	656000	3840.0	DFT-s-OFDM PI/2 BPSK	162@0	57.949	59.8
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	162@0	57.979	60.09
77	30	60	656000	3840.0	CP-OFDM QPSK	162@0	57.834	59.84
77	30	60	656000	3840.0	CP-OFDM 16 QAM	162@0	57.767	60.11
77	30	60	656000	3840.0	CP-OFDM 64 QAM	162@0	57.845	59.73
77	30	60	656000	3840.0	CP-OFDM 256 QAM	162@0	57.813	59.83
77	30	80	656000	3840.0	DFT-s-OFDM PI/2 BPSK	216@0	77.15	79.6
77	30	80	656000	3840.0	DFT-s-OFDM QPSK	216@0	77.247	79.71
77	30	80	656000	3840.0	CP-OFDM QPSK	217@0	77.601	79.98
77	30	80	656000	3840.0	CP-OFDM 16 QAM	217@0	77.513	79.96
77	30	80	656000	3840.0	CP-OFDM 64 QAM	217@0	77.609	80.04
77	30	80	656000	3840.0	CP-OFDM 256 QAM	217@0	77.416	80.03

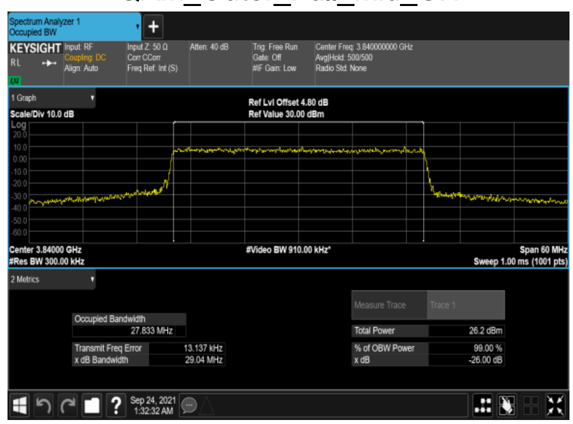
77	30	100	656000	3840.0	DFT-s-OFDM PI/2 BPSK	270@0	96.508	99.48
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	270@0	96.297	99.47
77	30	100	656000	3840.0	CP-OFDM QPSK	273@0	97.346	100.5
77	30	100	656000	3840.0	CP-OFDM 16 QAM	273@0	97.373	100.5
77	30	100	656000	3840.0	CP-OFDM 64 QAM	273@0	97.383	100.7
77	30	100	656000	3840.0	CP-OFDM 256 QAM	273@0	97.348	100.6

B41_N77(30M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

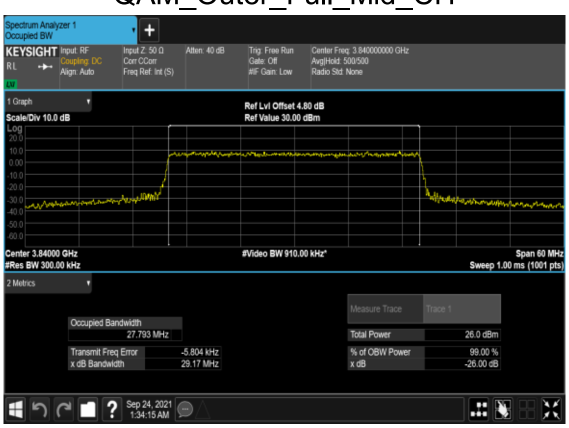
B41_N77(30M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

B41_N77(30M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

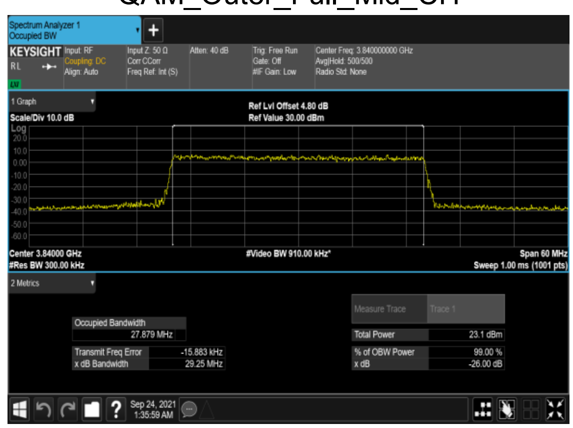
B41_N77(30M)_CP-OFDM_16QAM_Outer_Full_Mid_CH



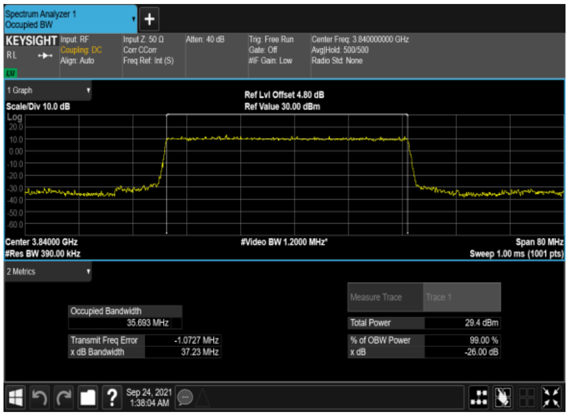
B41_N77(30M)_CP-OFDM_64QAM_Outer_Full_Mid_CH



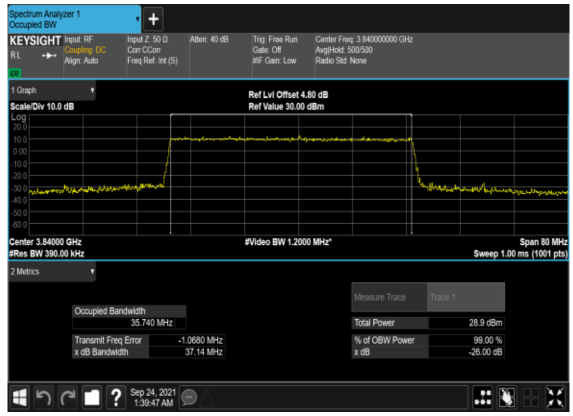
B41_N77(30M)_CP-OFDM_256QAM_Outer_Full_Mid_CH



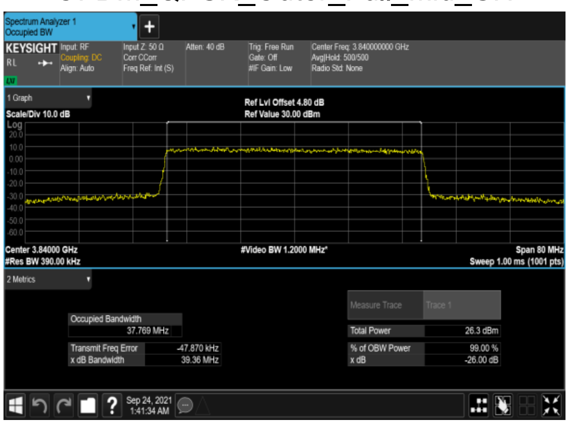
B41_N77(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



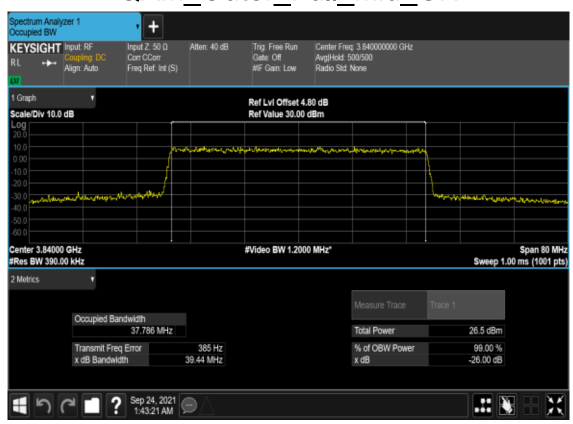
B41_N77(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



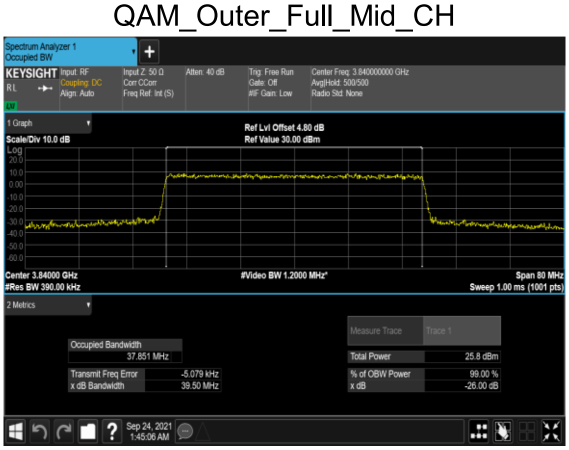
B41_N77(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



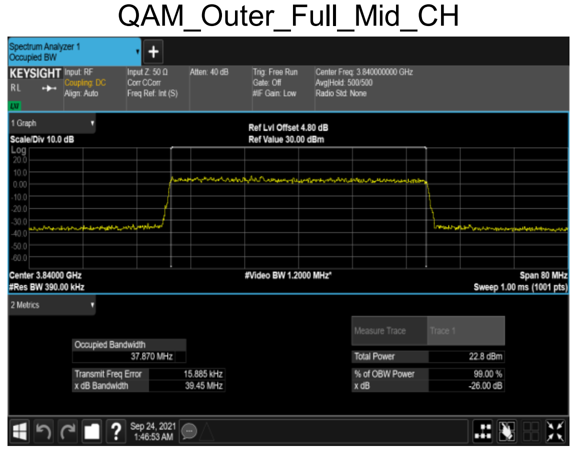
B41_N77(40M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



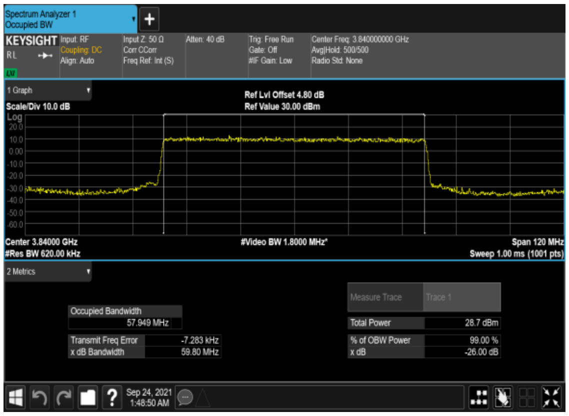
B41_N77(40M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



B41_N77(40M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

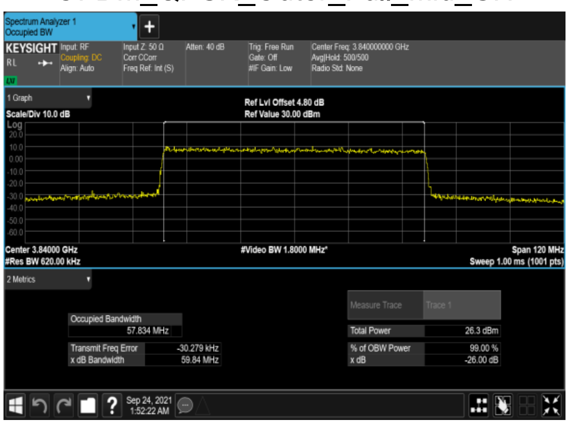


B41_N77(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

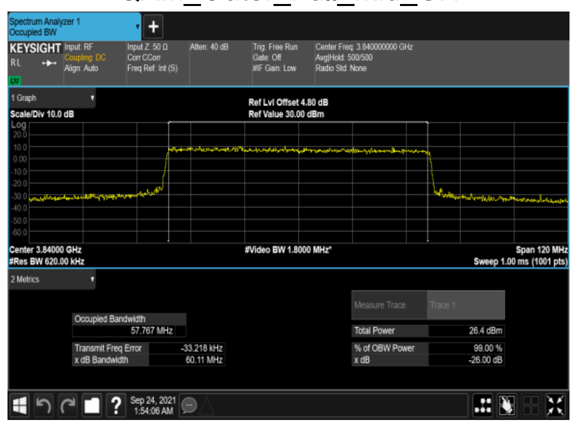


B41_N77(60M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

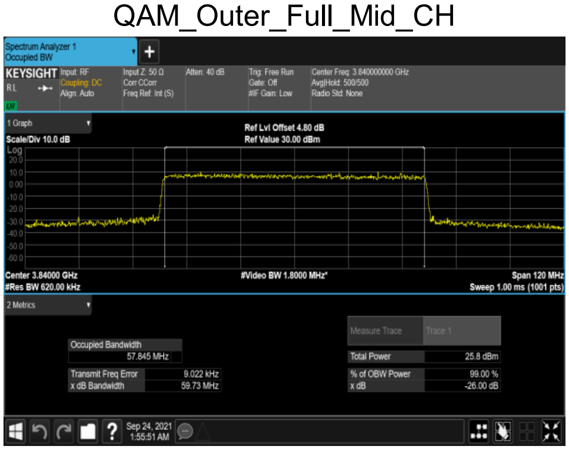
B41_N77(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



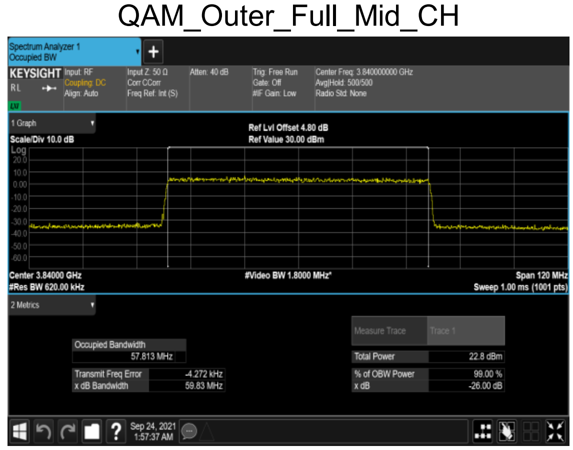
B41_N77(60M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



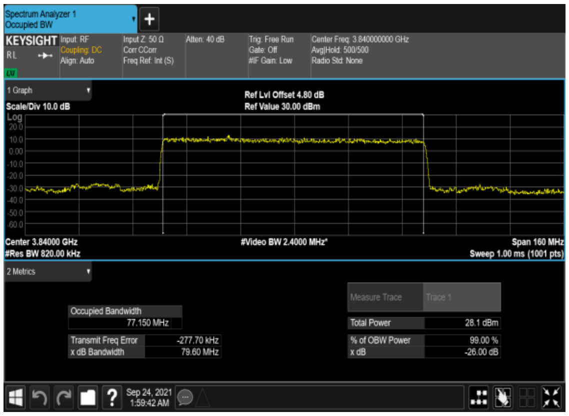
B41_N77(60M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



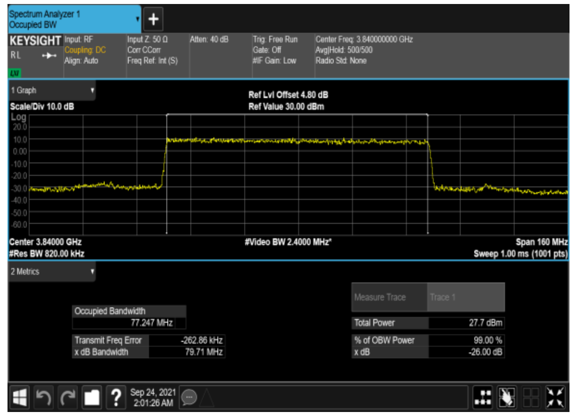
B41_N77(60M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



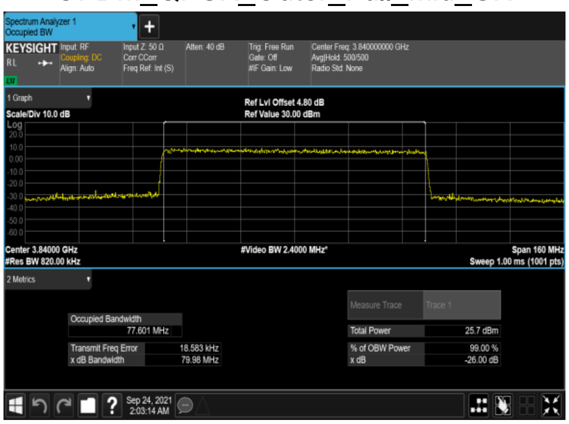
B41_N77(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



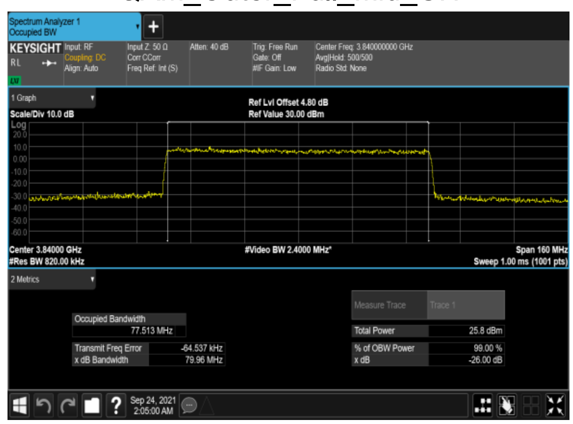
B41_N77(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



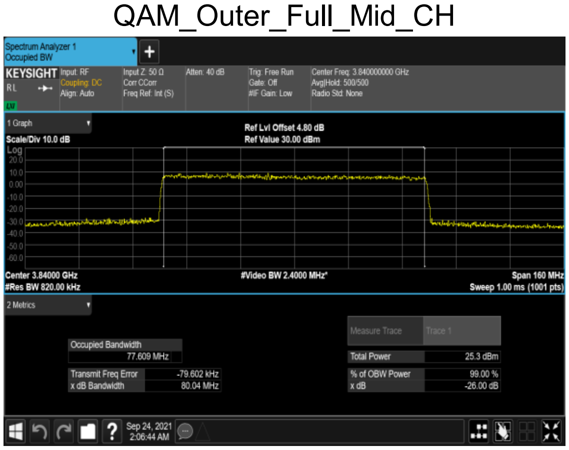
B41_N77(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



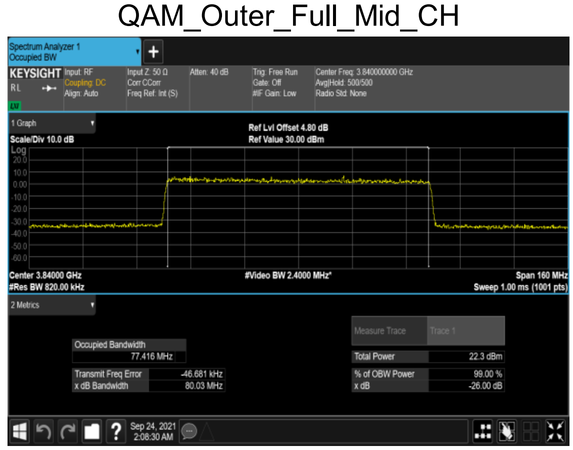
B41_N77(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



B41_N77(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



B41_N77(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

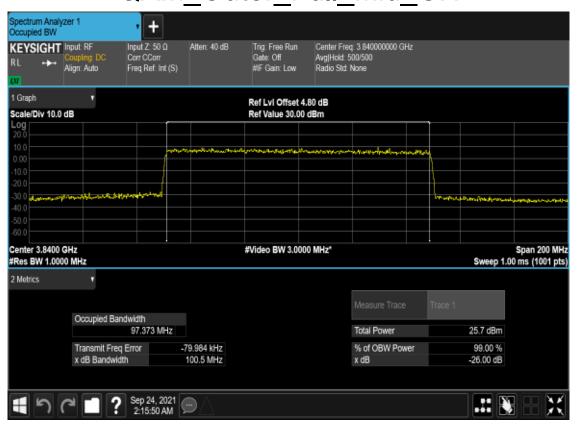


B41_N77(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

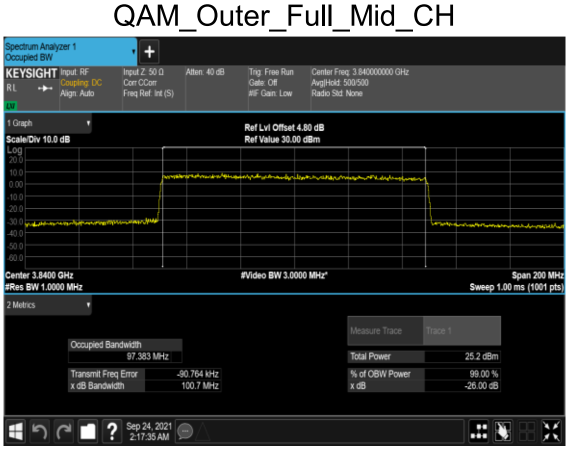
B41_N77(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

B41_N77(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

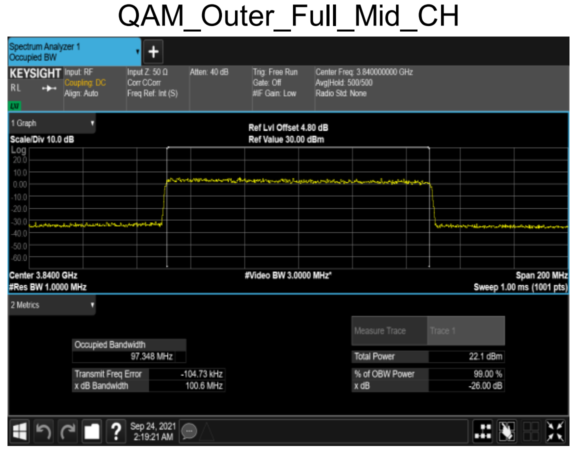
B41_N77(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



B41_N77(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



B41_N77(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



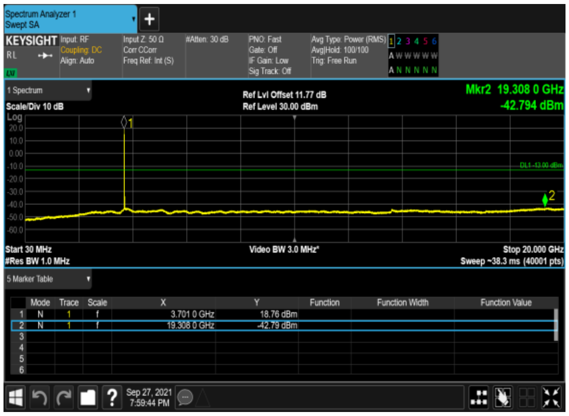
Conducted Spurious Emissions

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
77	30	30	647668	3715.02	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	30	647668	3715.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	30	647668	3715.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	30	647668	3715.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	30	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	30	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	30	664332	3964.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	30	664332	3964.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	---

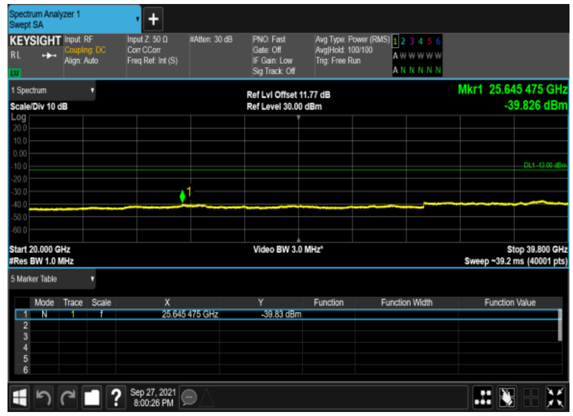
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	648668	3730.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	60	663332	3949.98	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	---
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	---
77	30	100	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	---

77	30	100	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	656000	3840.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
77	30	100	662000	3930.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

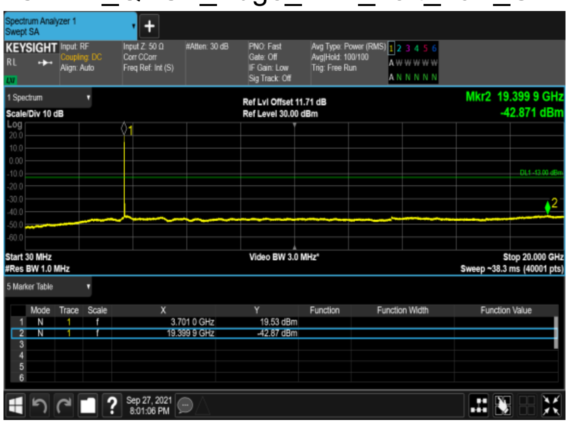
B41_N77(30M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



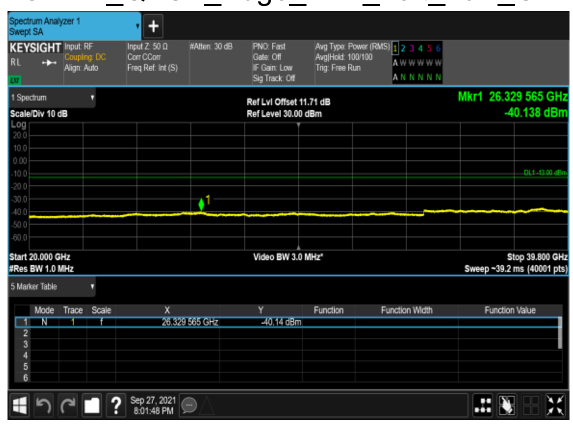
B41_N77(30M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



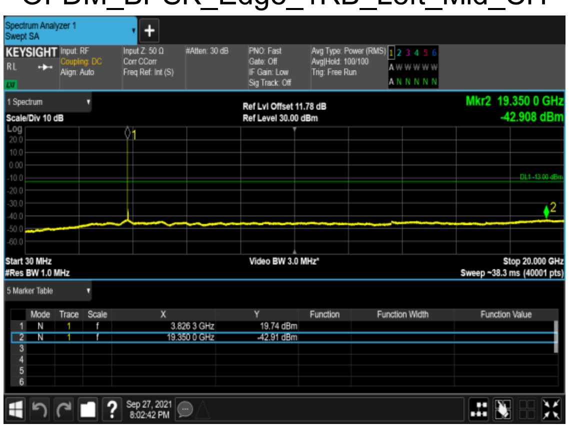
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



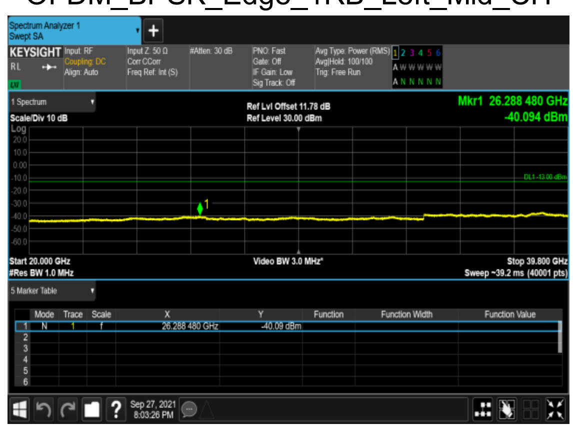
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



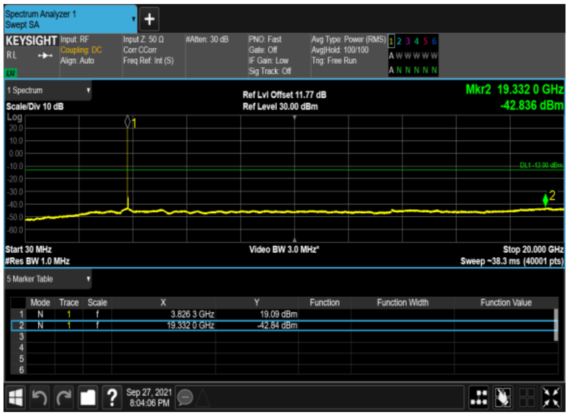
B41_N77(30M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



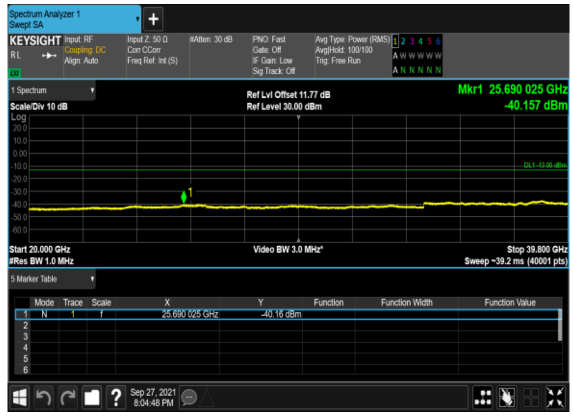
B41_N77(30M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



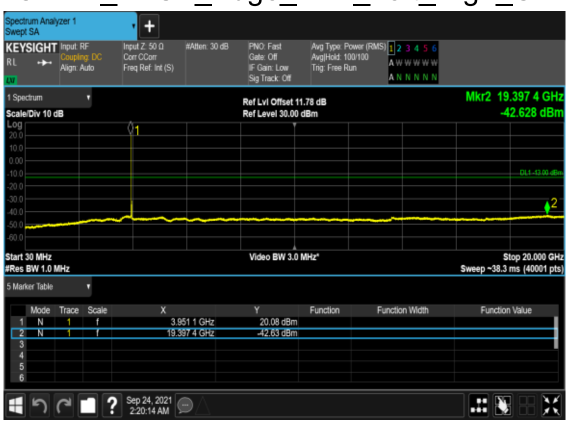
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



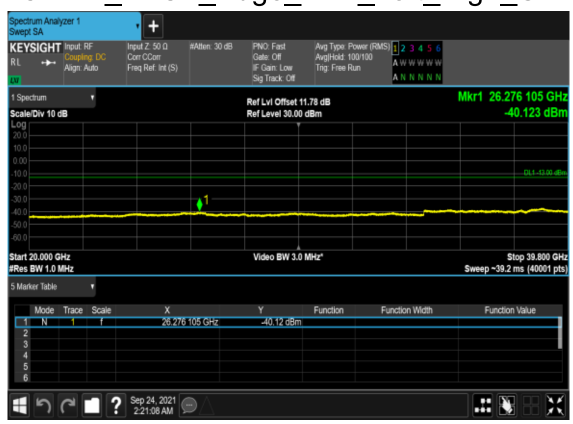
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



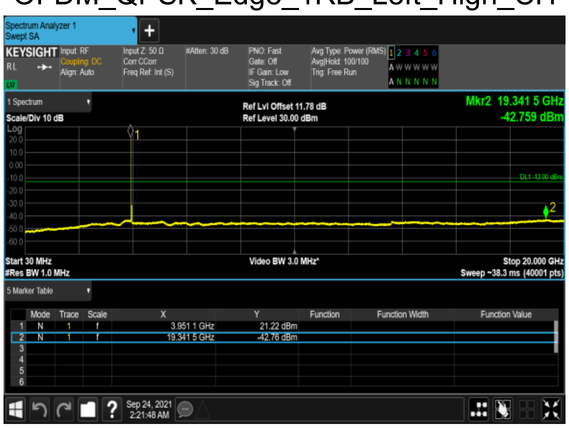
B41_N77(30M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



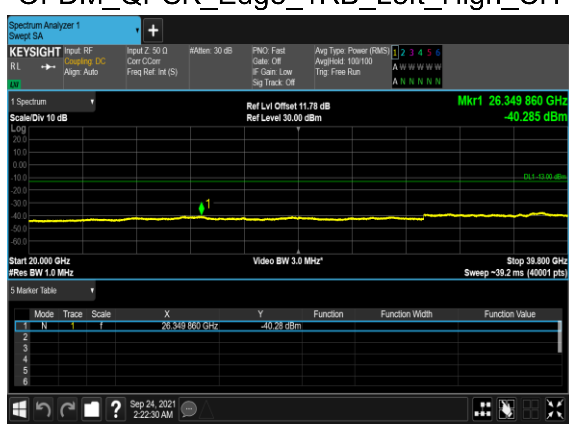
B41_N77(30M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



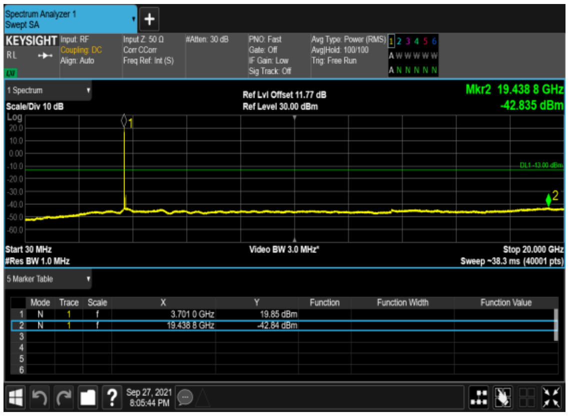
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



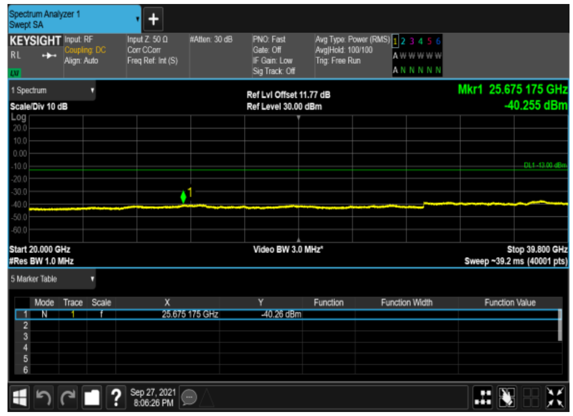
B41_N77(30M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



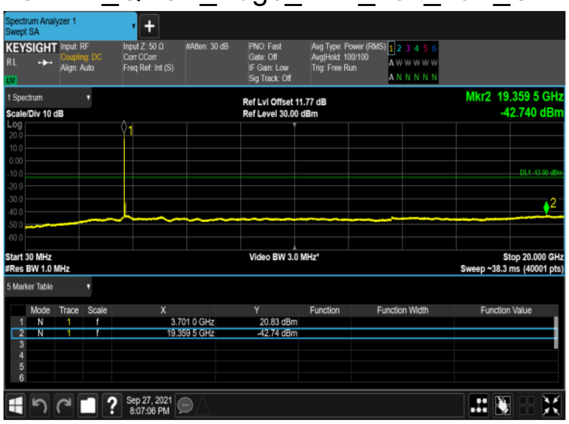
B41_N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



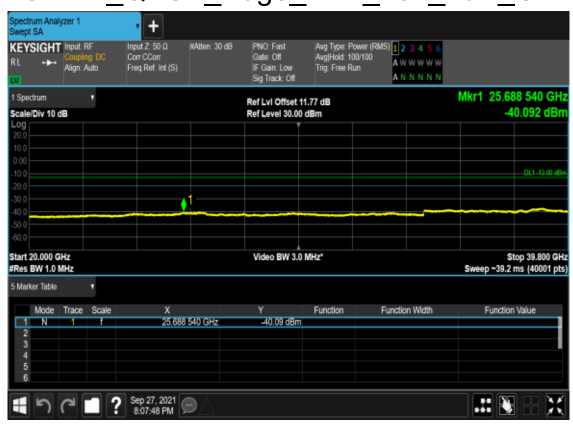
B41_N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



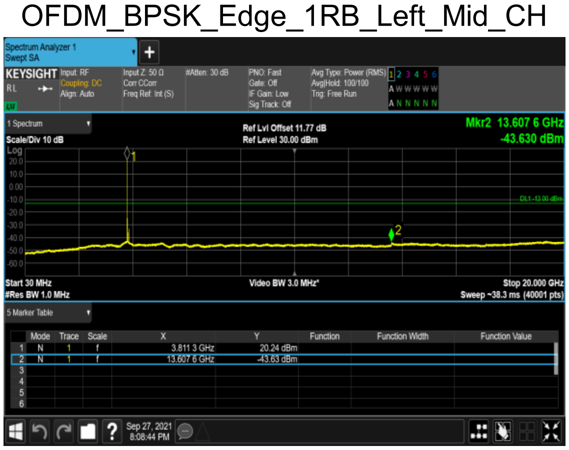
B41_N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



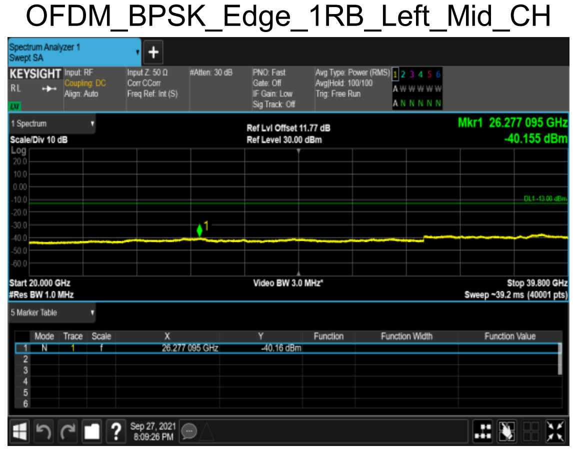
B41_N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



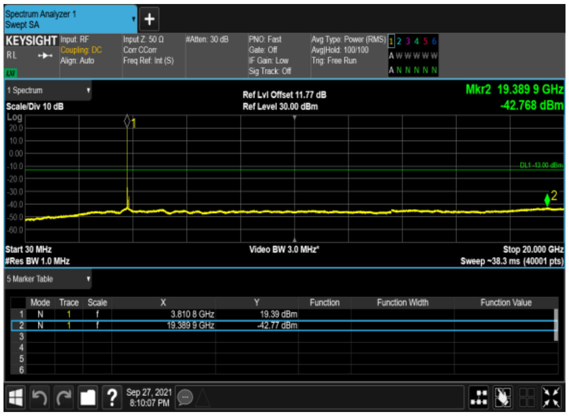
B41_N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



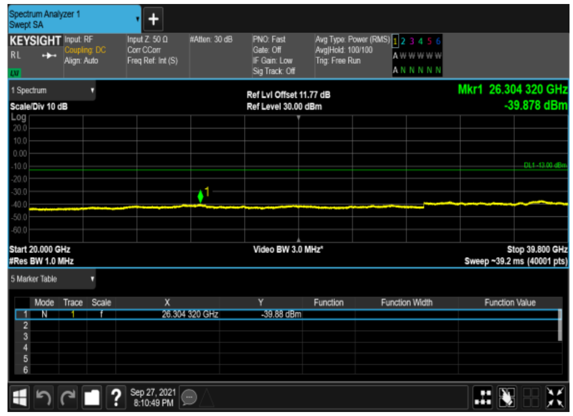
B41_N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



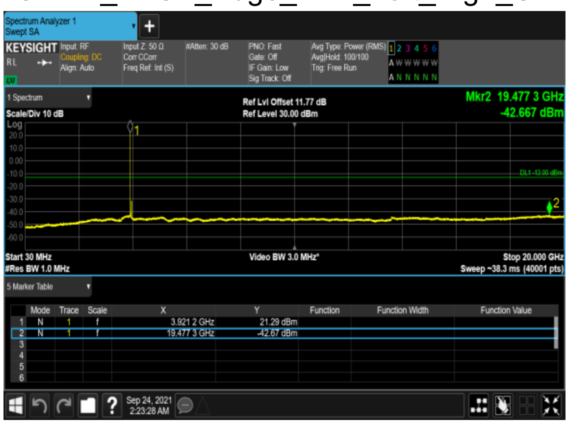
B41_N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



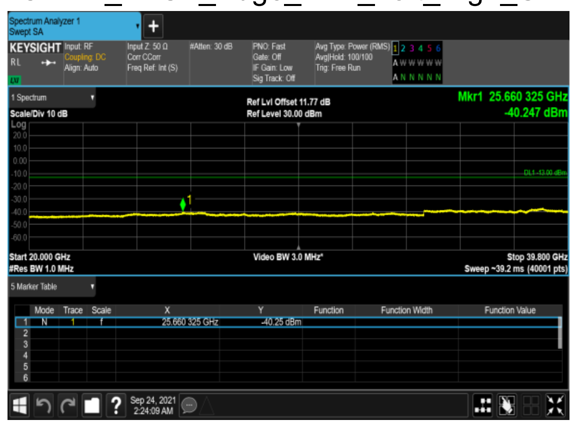
B41_N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



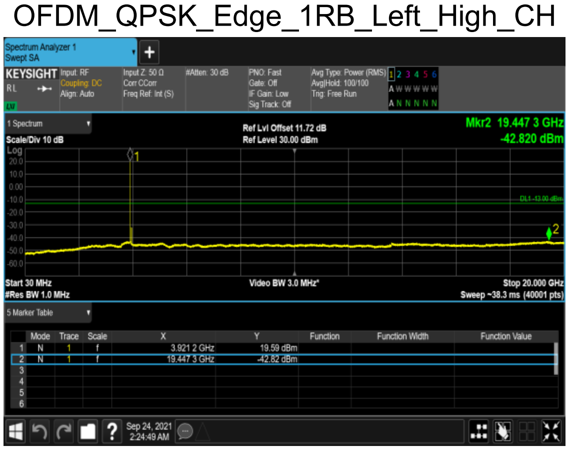
B41_N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



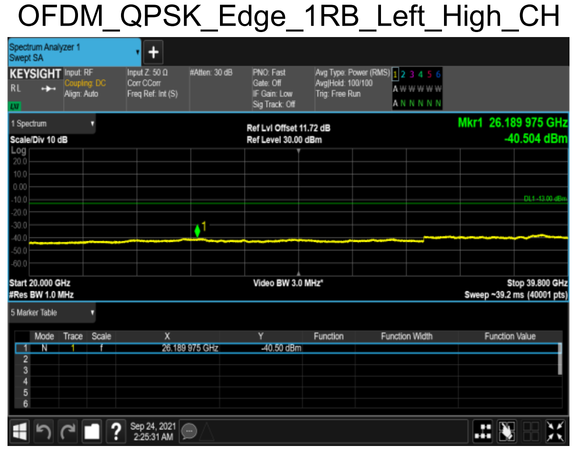
B41_N77(60M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



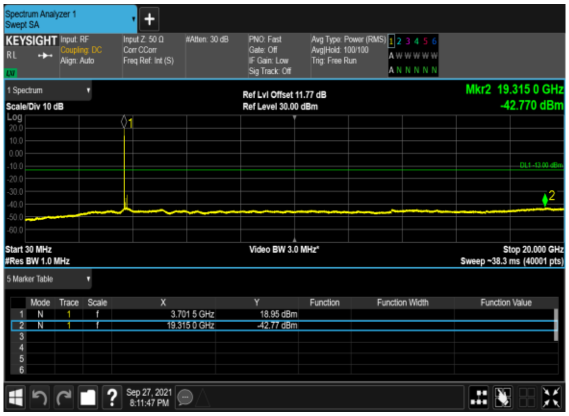
B41_N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



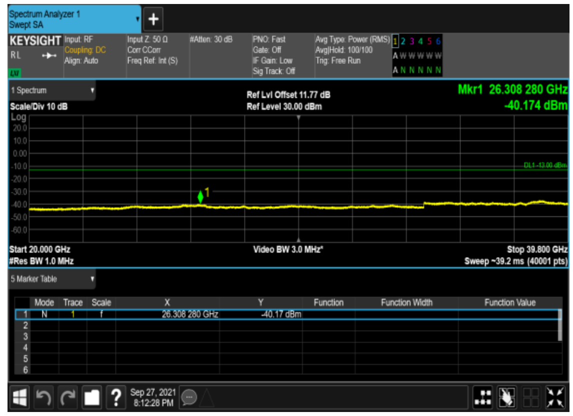
B41_N77(60M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



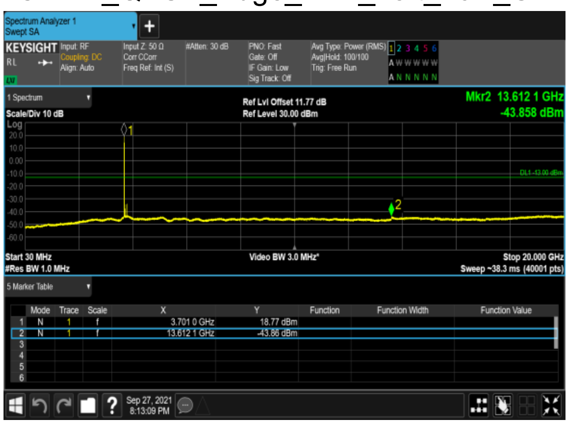
B41_N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



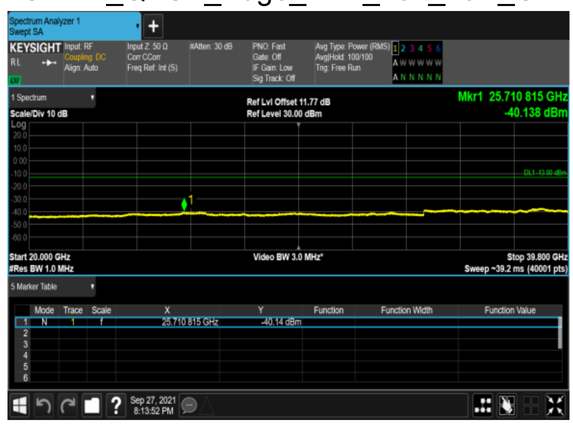
B41_N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



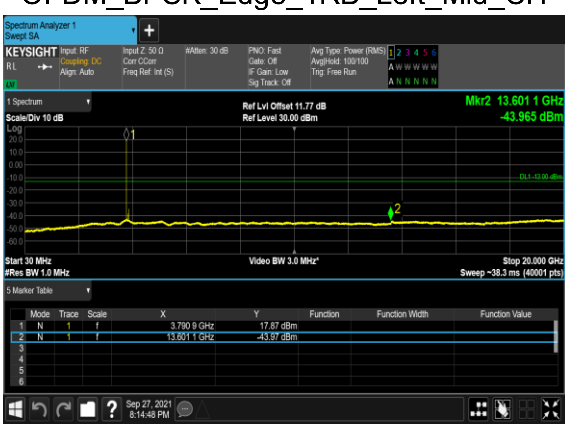
B41_N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



B41_N77(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



B41_N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



B41_N77(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH