



# TEST REPORT

**APPLICANT** : Nubia Technology Co., Ltd.  
**PRODUCT NAME** : 5G Mobile Phone  
**MODEL NAME** : NX709J  
**BRAND NAME** : REDMAGIC  
**FCC ID** : 2AHJO-NX709J  
**STANDARD(S)** : 47 CFR Part 2  
: 47 CFR Part 27, Subpart M&O  
**RECEIPT DATE** : 2022-01-25  
**TEST DATE** : 2022-01-28 to 2022-03-02  
**ISSUE DATE** : 2022-03-30

*Chen Haiju*

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<b>Change History</b>		
<b>Version</b>	<b>Date</b>	<b>Reason for change</b>
1.0	2022-03-30	First edition



# 1. Technical Information

**Note:** Provide by applicant.

## 1.1. Applicant and Manufacturer Information

<b>Applicant:</b>	Nubia Technology Co., Ltd.
<b>Applicant Address:</b>	Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan, No.3370, Liuxian Rd, Nanshan District, Shenzhen City, Guangdong Province, P. R. China
<b>Manufacturer:</b>	Nubia Technology Co., Ltd.
<b>Manufacturer Address:</b>	Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan, No.3370, Liuxian Rd, Nanshan District, Shenzhen City, Guangdong Province, P. R. China

## 1.2. Equipment Under Test (EUT) Description

<b>Product Name:</b>	5G Mobile Phone	
<b>Hardware Version:</b>	NX709J_V1AMB	
<b>Software Version:</b>	NX709J_UNCommon_V4.01	
<b>IMEI:</b>	860451060022385	
<b>Modulation Type:</b>	DFT-s-OFDM	PI/2 BPSK, QPSK, 16QAM,64QAM,256QAM
	CP-OFDM	QPSK, 16QAM,64QAM,256QAM
<b>Operation Band:</b>	n41, n77	
<b>Frequency Range:</b>	n41	Tx: 2496MHz-2690MHz
		Rx: 2496MHz-2690MHz
	n77	Tx: 3700MHz-3980MHz
		Rx: 3700MHz-3980MHz
<b>Channel Bandwidth</b>	n41	20MHz, 30MHz, 40MHz, 50MHz, 60MHz,80MHz,90MHz,100MHz
	n77	20MHz, 30MHz, 40MHz, 60MHz, 80MHz, 100MHz
<b>Antenna Type:</b>	Fixed Internal Antenna	
<b>Antenna Gain:</b>	n41	-1.50dBi
	n77	-1.79dBi
<b>Accessory Information:</b>	<b>AC Adapter</b>	
	Brand Name:	nubia
	Model No.:	STC-A59152050AC-Z



Serial No.:	(N/A, marked #1 by test site)
Rated Input:	100-240V~1.5A, 50/60Hz
Rated Output:	5.0V/3.0A, 9.0V/3.0A, 15.0V/3.0A, 20.0V/3.25A PPS: 5.0V-11.0V/5.0A, 5.0V-20.0V/3.25A
Manufacturer	ShenZhen KunXing Technology Co., Ltd.
<b>Battery</b>	
Brand Name:	nubia
Model No.:	Li3923T89P8h636590
Serial No.:	(N/A, marked #1 by test site)
Capacity:	2380mAh
Rated Voltage:	7.78V
Charge Limit:	8.96V
Manufacturer:	Dongguan Amperex Technology Limited

**Note 1:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



### 1.3. Maximum ERP/EIRP and Emission Designator

n41	Maximum ERP/EIRP (W)					
	DFT-s-OFDM					CP-OFDM
BW(MHz)	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK
100	0.252	0.253	0.199	0.133	0.086	0.180
90	0.252	/	/	/	/	/
80	0.250	/	/	/	/	/
60	0.256	/	/	/	/	/
50	0.257	/	/	/	/	/
40	0.258	/	/	/	/	/
30	0.249	/	/	/	/	/
20	0.248	/	/	/	/	/

n41	Emission Designator (99%OBW)					
	DFT-s-OFDM					CP-OFDM
BW(MHz)	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK
100	97M5G7D	97M6G7D	97M5W7D	97M3D7W	97M4D7W	97M4G7D
90	86M7G7D	86M7G7D	86M7W7D	86M6D7W	86M6D7W	87M7G7D
80	78M1G7D	78M0G7D	78M0W7D	77M9D7W	78M0D7W	77M8G7D
60	58M4G7D	58M5G7D	58M5W7D	58M6D7W	58M5D7W	58M4G7D
50	46M2G7D	46M3G7D	46M3W7D	46M3D7W	46M2D7W	46M1G7D
40	36M2G7D	36M1G7D	36M1W7D	36M0D7W	36M1D7W	36M1G7D
30	27M0G7D	27M0G7D	27M0W7D	27M0D7W	27M1D7W	27M0G7D
20	18M0G7D	18M0G7D	18M0W7D	18M0D7W	18M0D7W	18M0G7D



n77	Maximum ERP/EIRP (W)					
	DFT-s-OFDM					CP-OFDM
BW(MHz)	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK
100	0.140	0.140	0.106	0.106	0.072	0.095
80	0.133	/	/	/	/	/
60	0.137	/	/	/	/	/
40	0.138	/	/	/	/	/
30	0.138	/	/	/	/	/
20	0.136	/	/	/	/	/

n77	Emission Designator (99%OBW)					
	DFT-s-OFDM					CP-OFDM
BW(MHz)	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK
100	97M6G7D	97M6G7D	97M5W7D	97M3D7W	97M3D7W	97M4G7D
80	77M9G7D	78M0G7D	78M0W7D	77M9D7W	77M8D7W	77M8G7D
60	58M5G7D	58M5G7D	58M5W7D	58M3D7W	58M5D7W	58M3G7D
40	36M1G7D	36M1G7D	36M1W7D	36M1D7W	36M1D7W	36M1G7D
30	27M0G7D	27M0G7D	27M0W7D	27M1D7W	27M0D7W	27M1G7D
20	18M0G7D	18M0G7D	18M0W7D	18M0D7W	18M0D7W	18M0G7D



## 1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part27 for the EUT FCC ID Certification:

No	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 27	Miscellaneous Wireless Communications Services



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

Section	Description	Test Date	Test Engineer	Result	Method Determination /Remark
2.1046 27.50(h)(2) 27.50(j)(3)	Transmitter Conducted Output Power and ERP/EIRP	Jan. 28 to Feb.8, 2022	Chen Haiju	PASS	No deviation
2.1049	Occupied Bandwidth	Feb. 10 to11, 2022	Chen Haiju	PASS	No deviation
2.1055	Frequency Stability	Feb. 13 to15, 2022	Chen Haiju	PASS	No deviation
27.50(j)(4)	Peak to Average Radio	Feb. 17 to18, 2022	Chen Haiju	PASS	No deviation
2.1051 27.53(m)(4) 27.53(l)(2)	Conducted Spurious Emissions	Feb. 20to 21, 2022	Chen Haiju	PASS	No deviation
2.1051 27.53(m)(4) 27.53(l)(2)	Band Edge	Feb. 22 to.21, 2022	Chen Haiju	PASS	No deviation
2.1051 27.53(m)(4)	Radiated Spurious Emissions	Feb. 22 to.24, 2022	Lin Jiayong	PASS	No deviation

**Note 1:** The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

**Note 2:** The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 26.5dB contains two parts that cable loss 16.5dB and Attenuator 10dB.

**Note 3:** When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.





## 1.5. Environmental Conditions

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

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

## 2.47 CFR Part 2, Part 27M&O Requirements

### 2.1. Transmitter Conducted Output Power And ERP/EIRP

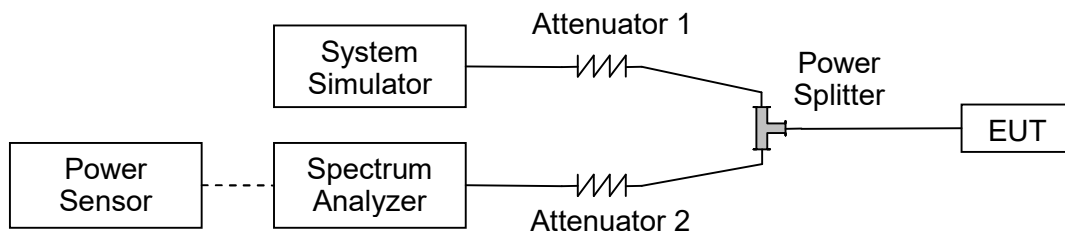
#### 2.1.1. Requirement

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).

According to FCC section 27.50(h)(2) for n41, Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

According to FCC section 27.50(j)(3) for n77, Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

#### 2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

#### 2.1.3. Test procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

$EIRP \text{ (dBm)} = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$ERP \text{ (dBm)} = EIPR \text{ (dBm)} - 2.15$



2.1.4. Conducted Output Power:

n41

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel
Channel				509202	518598	528000
Frequency (MHz)				2546	2593	2640
100	DFT-s-OFDM PI/2 BPSK	1	1	25.10	25.35	25.46
100		1	136	25.27	25.31	25.51
100		1	272	25.49	22.20	22.35
100		135	1	24.76	25.02	25.07
100		135	67	25.35	25.51	25.36
100		135	136	24.82	25.12	25.28
100		270	0	24.86	25.02	25.17
100	DFT-s-OFDM QPSK	1	1	25.46	25.53	25.46
100		1	136	25.33	25.42	25.41
100		1	272	25.34	25.36	25.40
100		135	1	25.06	25.23	25.14
100		135	67	25.09	25.06	25.29
100		135	136	25.08	25.14	25.12
100		270	0	25.05	25.22	25.42
100	DFT-s-OFDM 16QAM	1	1	24.21	24.32	24.48
100	DFT-s-OFDM 64QAM	1	1	22.38	22.69	22.74
100	DFT-s-OFDM 256QAM	1	1	20.52	20.81	20.84
Channel				508200	518598	528996
Frequency (MHz)				2541	2593	2645
90	DFT-s-OFDM PI/2 BPSK	1	1	25.17	25.35	25.52
Channel				507204	518598	529998
Frequency (MHz)				2536	2593	2650
80	DFT-s-OFDM PI/2 BPSK	1	1	25.12	25.28	25.48
Channel				506200	518598	531996
Frequency (MHz)				2526	2593	2660



70	DFT-s-OFDM PI/2 BPSK	1	1	25.33	25.17	25.59
Channel				504204	518598	532998
Frequency (MHz)				2521	2593	2665
60	DFT-s-OFDM PI/2 BPSK	1	1	25.55	25.60	25.57
Channel				503202	518598	534000
Frequency (MHz)				2516	2593	2670
50	DFT-s-OFDM PI/2 BPSK	1	1	25.45	25.61	25.56
Channel				502200	518598	534996
Frequency (MHz)				2511	2593	2675
40	DFT-s-OFDM PI/2 BPSK	1	1	25.47	25.47	25.42
Channel				501204	518598	535998
Frequency (MHz)				2506	2593	2680
30	DFT-s-OFDM PI/2 BPSK	1	1	25.04	25.26	25.45
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel
Channel				509202	518598	528000
Frequency (MHz)				2546	2593	2640
100	CP-OFDM QPSK	1	1	23.77	23.94	24.05
100	CP-OFDM 16QAM	1	1	23.21	23.46	23.51
100	CP-OFDM 64QAM	1	1	21.57	21.88	21.92
100	CP-OFDM 256QAM	1	1	18.63	18.80	18.94

## n77

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel
Channel				650000	656000	662000
Frequency (MHz)				3750	3840	3930
100	DFT-s-OFDM PI/2 BPSK	1	1	22.84	22.78	23.10
100		1	136	22.93	23.09	23.20
100		1	272	22.32	22.66	22.79
100		135	1	22.42	22.50	22.73
100		135	67	22.89	23.08	23.25
100		135	136	22.32	22.57	22.67
100		270	0	22.35	22.53	22.72
100	DFT-s-OFDM QPSK	1	1	22.98	23.26	23.15
100		1	136	22.87	23.01	23.03
100		1	272	21.82	22.16	22.20
100		135	1	23.07	23.06	23.00
100		135	67	22.93	23.01	23.04
100		135	136	22.68	22.91	22.98
100		270	0	22.73	22.80	22.98
100	DFT-s-OFDM 16QAM	1	1	21.83	21.77	22.06
100	DFT-s-OFDM 64QAM	1	1	20.12	20.10	20.35
100	DFT-s-OFDM 256QAM	1	1	18.28	18.22	18.43
Channel				649334	656000	662666
Frequency (MHz)				3740	3840	3940
80	DFT-s-OFDM PI/2 BPSK	1	1	22.87	22.78	23.03
Channel				648668	656000	663332
Frequency (MHz)				3730	3840	3950
60	DFT-s-OFDM PI/2 BPSK	1	1	23.09	22.70	23.15
Channel				648000	656000	664000
Frequency (MHz)				3720	3840	3960
40	DFT-s-OFDM PI/2 BPSK	1	1	23.16	23.19	23.19



Channel				647668	656000	664332
Frequency (MHz)				3715	3840	3965
30	DFT-s-OFDM PI/2 BPSK	1	1	23.10	23.13	23.18
Channel				647334	656000	664666
Frequency (MHz)				3710	3840	3970
20	DFT-s-OFDM PI/2 BPSK	1	1	23.11	23.12	23.02
BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel
Channel				650000	656000	662000
Frequency (MHz)				3750	3840	3930
100	CP-OFDM QPSK	1	1	21.34	21.31	21.58
100	CP-OFDM 16QAM	1	1	20.85	20.83	21.11
100	CP-OFDM 64QAM	1	1	19.40	19.24	19.58
100	CP-OFDM 256QAM	1	1	16.39	16.37	16.57



Effective Radiated Power and Effective Isotropic Radiated Power:

n41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	LowCh. /Freq.	MiddleC h./Freq.	HighCh . / Freq.	LowCh. / EIRP	MiddleC h./EIRP	HighCh . / EIRP
Channel				509202	518598	528000	509202	518598	528000
Frequency (MHz)				2546	2593	2640	2546	2593	2640
				dBm			W		
100	DFT-s-OFDM PI/2 BPSK	1	1	23.60	23.85	23.96	0.229	0.243	0.249
100		1	136	23.77	23.81	24.01	0.238	0.240	0.252
100		1	272	23.99	20.70	20.85	0.251	0.117	0.122
100		135	1	23.26	23.52	23.57	0.212	0.225	0.228
100		135	67	23.85	24.01	23.86	0.243	0.252	0.243
100		135	136	23.32	23.62	23.78	0.215	0.230	0.239
100		270	0	23.36	23.52	23.67	0.217	0.225	0.233
100	DFT-s-OFDM QPSK	1	1	23.96	24.03	23.96	0.249	0.253	0.249
100		1	136	23.83	23.92	23.91	0.242	0.247	0.246
100		1	272	23.84	23.86	23.90	0.242	0.243	0.245
100		135	1	23.56	23.73	23.64	0.227	0.236	0.231
100		135	67	23.59	23.56	23.79	0.229	0.227	0.239
100		135	136	23.58	23.64	23.62	0.228	0.231	0.230
100		270	0	23.55	23.72	23.92	0.226	0.236	0.247
100	DFT-s-OFDM 16QAM	1	1	22.71	22.82	22.98	0.187	0.191	0.199
100	DFT-s-OFDM 64QAM	1	1	20.88	21.19	21.24	0.122	0.132	0.133
100	DFT-s-OFDM 256QAM	1	1	19.02	19.31	19.34	0.080	0.085	0.086
Channel				508200	518598	528996	508200	518598	528996
Frequency (MHz)				2541	2593	2645	2541	2593	2645
90	DFT-s-OFDM PI/2 BPSK	1	1	23.67	23.85	24.02	0.233	0.243	0.252
Channel				507204	518598	529998	507204	518598	529998
Frequency (MHz)				2536	2593	2650	2536	2593	2650
80	DFT-s-OFDM PI/2 BPSK	1	1	23.62	23.78	23.98	0.230	0.239	0.250
Channel				505200	518598	531996	505200	518598	531996
Frequency (MHz)				2526	2593	2660	2526	2593	2660
60	DFT-s-OFDM	1	1	23.83	23.67	24.09	0.242	0.233	0.256



	PI/2 BPSK								
Channel				504204	518598	532998	504204	518598	532998
Frequency (MHz)				2521	2593	2665	2521	2593	2665
50	DFT-s-OFDM PI/2 BPSK	1	1	24.05	24.10	24.07	0.254	0.257	0.255
Channel				503202	518598	534000	503202	518598	534000
Frequency (MHz)				2516	2593	2670	2516	2593	2670
40	DFT-s-OFDM PI/2 BPSK	1	1	23.95	24.11	24.06	0.248	0.258	0.255
Channel				502200	518598	534996	502200	518598	534996
Frequency (MHz)				2511	2593	2675	2511	2593	2675
30	DFT-s-OFDM PI/2 BPSK	1	1	23.97	23.97	23.92	0.249	0.249	0.247
Channel				501204	518598	535998	501204	518598	535998
Frequency (MHz)				2506	2593	2680	2506	2593	2680
20	DFT-s-OFDM PI/2 BPSK	1	1	23.54	23.76	23.95	0.226	0.238	0.248
Channel				509202	518598	528000	509202	518598	528000
Frequency (MHz)				2546	2593	2640	2546	2593	2640
100	CP-OFDM QPSK	1	1	22.27	22.44	22.55	0.169	0.175	0.180
100	CP-OFDM 16QAM	1	1	21.71	21.96	22.01	0.148	0.157	0.159
100	CP-OFDM 64QAM	1	1	20.07	20.38	20.42	0.102	0.109	0.110
100	CP-OFDM 256QAM	1	1	17.13	17.30	17.44	0.052	0.054	0.055





n77				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	LowCh. /Freq.	MiddleC h./Freq.	HighCh . / Freq.	LowCh. / EIRP	MiddleC h./EIRP	HighCh . / EIRP
Channel				650000	656000	662000	650000	656000	662000
Frequency (MHz)				3750	3840	3930	3750	3840	3930
				dBm			W		
100	DFT-s-OFDM PI/2 BPSK	1	1	21.05	20.99	21.31	0.127	0.126	0.135
100		1	136	21.14	21.30	21.41	0.130	0.135	0.138
100		1	272	20.53	20.87	21.00	0.113	0.122	0.126
100		135	1	20.63	20.71	20.94	0.116	0.118	0.124
100		135	67	21.10	21.29	21.46	0.129	0.135	0.140
100		135	136	20.53	20.78	20.88	0.113	0.120	0.122
100		270	0	20.56	20.74	20.93	0.114	0.119	0.124
100	DFT-s-OFDM QPSK	1	1	21.19	21.47	21.36	0.132	0.140	0.137
100		1	136	21.08	21.22	21.24	0.128	0.132	0.133
100		1	272	20.03	20.37	20.41	0.101	0.109	0.110
100		135	1	21.28	21.27	21.21	0.134	0.134	0.132
100		135	67	21.14	21.22	21.25	0.130	0.132	0.133
100		135	136	20.89	21.12	21.19	0.123	0.129	0.132
100		270	0	20.94	21.01	21.19	0.124	0.126	0.132
100	DFT-s-OFDM 16QAM	1	1	20.04	19.98	20.27	0.101	0.100	0.106
100	DFT-s-OFDM 64QAM	1	1	18.33	18.31	18.56	0.068	0.068	0.072
100	DFT-s-OFDM 256QAM	1	1	16.49	16.43	16.64	0.045	0.044	0.046
Channel				649334	656000	662666	649334	656000	662666
Frequency (MHz)				3740	3840	3940	3740	3840	3940
80	DFT-s-OFDM PI/2 BPSK	1	1	21.08	20.99	21.24	0.128	0.126	0.133
Channel				648668	656000	663332	648668	656000	663332
Frequency (MHz)				3730	3840	3950	3730	3840	3950
60	DFT-s-OFDM PI/2 BPSK	1	1	21.30	20.91	21.36	0.135	0.123	0.137
Channel				648000	656000	664000	648000	656000	664000
Frequency (MHz)				3720	3840	3960	3720	3840	3960
40	DFT-s-OFDM PI/2 BPSK	1	1	21.37	21.40	21.40	0.137	0.138	0.138



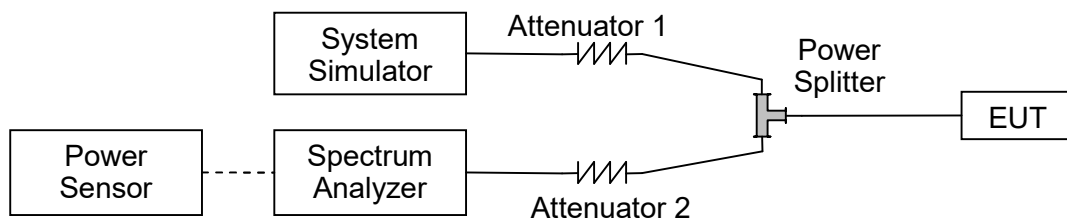
Channel				647668	656000	664332	647668	656000	664332
Frequency (MHz)				3715	3840	3965	3715	3840	3965
30	DFT-s-OFDM PI/2 BPSK	1	1	21.31	21.34	21.39	0.135	0.136	0.138
Channel				647334	656000	664666	647334	656000	664666
Frequency (MHz)				3710	3840	3970	3710	3840	3970
20	DFT-s-OFDM PI/2 BPSK	1	1	21.32	21.33	21.23	0.136	0.136	0.133
Channel				650000	656000	662000	650000	656000	662000
Frequency (MHz)				3750	3840	3930	3750	3840	3930
100	CP-OFDM QPSK	1	1	19.55	19.52	19.79	0.090	0.090	0.095
100	CP-OFDM 16QAM	1	1	19.06	19.04	19.32	0.081	0.080	0.086
100	CP-OFDM 64QAM	1	1	17.61	17.45	17.79	0.058	0.056	0.060
100	CP-OFDM 256QAM	1	1	14.60	14.58	14.78	0.029	0.029	0.030

## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.2.3. Test procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.



2.2.4. Test Result

n41					
BW(MHz)	Channel Level	Modulation		99% BW(MHz)	26dB BW(MHz)
20	Low	DFT-s-OFDM	PI/2 BPSK	18.034	18.80
	Low		QPSK	17.950	18.61
	Low		16QAM	17.954	18.40
	Low		64QAM	17.962	18.46
	Low		256QAM	17.999	18.41
	Low	CP-OFDM	QPSK	17.977	18.55
	Mid	DFT-s-OFDM	PI/2 BPSK	17.795	19.15
	Mid		QPSK	17.912	18.67
	Mid		16QAM	17.947	18.51
	Mid		64QAM	17.941	18.77
	Mid		256QAM	17.936	18.39
	Mid	CP-OFDM	QPSK	17.983	18.45
	High	DFT-s-OFDM	PI/2 BPSK	18.010	18.61
	High		QPSK	17.920	18.68
	High		16QAM	17.921	18.41
	High		64QAM	17.983	18.68
	High		256QAM	17.963	18.62
	High	CP-OFDM	QPSK	17.950	18.67
30	Low	DFT-s-OFDM	PI/2 BPSK	26.951	27.63
	Low		QPSK	27.044	27.70
	Low		16QAM	26.964	27.96
	Low		64QAM	27.027	27.75
	Low		256QAM	27.081	27.69
	Low	CP-OFDM	QPSK	26.723	28.25
	Mid	DFT-s-OFDM	PI/2 BPSK	26.858	27.74
	Mid		QPSK	26.930	27.61
	Mid		16QAM	26.821	27.50
	Mid		64QAM	26.953	27.73
	Mid		256QAM	26.924	27.59
	Mid	CP-OFDM	QPSK	26.963	27.85
	High	DFT-s-OFDM	PI/2 BPSK	26.999	28.15
	High		QPSK	26.913	27.62
	High		16QAM	26.967	27.63



	High	CP-OFDM	64QAM	26.984	27.65
	High		256QAM	26.992	27.67
	High		QPSK	26.932	27.68
40	Low	DFT-s-OFDM	PI/2 BPSK	36.163	37.06
	Low		QPSK	36.019	36.73
	Low		16QAM	36.096	36.89
	Low		64QAM	36.031	36.85
	Low		256QAM	36.034	36.84
	Low	CP-OFDM	QPSK	35.977	36.93
	Mid	DFT-s-OFDM	PI/2 BPSK	35.998	36.88
	Mid		QPSK	35.927	36.77
	Mid		16QAM	35.995	36.79
	Mid		64QAM	36.019	36.93
	Mid		256QAM	35.955	36.75
	Mid	CP-OFDM	QPSK	35.911	36.79
	High	DFT-s-OFDM	PI/2 BPSK	36.121	37.09
	High		QPSK	36.120	37.00
	High		16QAM	36.070	36.94
	High		64QAM	35.982	36.91
	High		256QAM	36.081	36.88
	High	CP-OFDM	QPSK	36.138	36.86
50	Low	DFT-s-OFDM	PI/2 BPSK	46.180	47.17
	Low		QPSK	46.253	47.14
	Low		16QAM	46.254	47.26
	Low		64QAM	46.254	47.16
	Low		256QAM	46.171	46.97
	Low	CP-OFDM	QPSK	46.122	47.08
	Mid	DFT-s-OFDM	PI/2 BPSK	46.198	47.17
	Mid		QPSK	46.120	46.95
	Mid		16QAM	45.807	47.90
	Mid		64QAM	46.030	47.03
	Mid		256QAM	46.022	46.94
	Mid	CP-OFDM	QPSK	46.118	47.05
	High	DFT-s-OFDM	PI/2 BPSK	46.049	47.33
	High		QPSK	46.151	47.20
	High		16QAM	45.968	47.05
	High		64QAM	46.158	47.12
	High		256QAM	45.941	46.98



	High	CP-OFDM	QPSK	46.105	47.09
60	Low	DFT-s-OFDM	PI/2 BPSK	58.406	59.39
	Low		QPSK	58.539	59.59
	Low		16QAM	58.471	59.45
	Low		64QAM	58.561	59.59
	Low		256QAM	58.528	59.54
	Low		CP-OFDM	QPSK	58.269
	Mid	DFT-s-OFDM	PI/2 BPSK	58.303	59.57
	Mid		QPSK	58.447	59.93
	Mid		16QAM	58.332	59.49
	Mid		64QAM	58.283	59.45
	Mid		256QAM	58.342	59.39
	Mid	CP-OFDM	QPSK	58.261	59.36
	High	DFT-s-OFDM	PI/2 BPSK	58.446	59.69
	High		QPSK	58.228	59.54
	High		16QAM	58.304	59.68
	High		64QAM	58.277	59.40
	High		256QAM	58.511	59.55
	High	CP-OFDM	QPSK	58.359	59.53
80	Low	DFT-s-OFDM	PI/2 BPSK	78.083	79.54
	Low		QPSK	77.962	79.43
	Low		16QAM	77.975	79.24
	Low		64QAM	77.741	79.46
	Low		256QAM	78.027	79.49
	Low	CP-OFDM	QPSK	77.753	79.22
	Mid	DFT-s-OFDM	PI/2 BPSK	77.824	79.40
	Mid		QPSK	77.877	79.31
	Mid		16QAM	77.900	79.43
	Mid		64QAM	77.706	79.27
	Mid		256QAM	77.631	79.07
	Mid	CP-OFDM	QPSK	77.645	79.27
	High	DFT-s-OFDM	PI/2 BPSK	77.942	79.54
	High		QPSK	77.909	79.11
	High		16QAM	77.793	79.46
	High		64QAM	77.894	79.46
	High		256QAM	77.658	79.06
	High	CP-OFDM	QPSK	77.768	79.18



90	Low	DFT-s-OFDM	PI/2 BPSK	86.550	88.34
	Low		QPSK	86.678	88.37
	Low		16QAM	86.675	88.38
	Low		64QAM	86.420	87.97
	Low		256QAM	86.621	88.04
	Low	CP-OFDM	QPSK	87.629	89.27
	Mid	DFT-s-OFDM	PI/2 BPSK	86.668	88.23
	Mid		QPSK	86.499	88.30
	Mid		16QAM	86.482	88.14
	Mid		64QAM	86.587	88.33
	Mid		256QAM	86.461	88.14
	Mid	CP-OFDM	QPSK	87.504	89.01
	High	DFT-s-OFDM	PI/2 BPSK	86.534	88.40
	High		QPSK	86.532	88.17
	High		16QAM	86.630	88.23
	High		64QAM	86.585	88.30
High	256QAM		86.585	88.24	
High	CP-OFDM	QPSK	87.697	89.26	
100	Low	DFT-s-OFDM	PI/2 BPSK	97.451	99.32
	Low		QPSK	97.537	99.37
	Low		16QAM	97.470	99.25
	Low		64QAM	97.287	99.11
	Low		256QAM	97.308	99.12
	Low	CP-OFDM	QPSK	97.071	99.13
	Mid	DFT-s-OFDM	PI/2 BPSK	97.165	99.12
	Mid		QPSK	97.223	99.14
	Mid		16QAM	97.443	99.20
	Mid		64QAM	97.330	99.04
	Mid		256QAM	97.408	99.09
	Mid	CP-OFDM	QPSK	97.283	99.11
	High	DFT-s-OFDM	PI/2 BPSK	97.243	99.30
	High		QPSK	97.588	99.28
	High		16QAM	97.390	99.31
	High		64QAM	97.142	99.19
High	256QAM		97.143	98.89	
High	CP-OFDM	QPSK	97.393	99.14	



n77					
BW(MHz)	Channel Level	Modulation		99% BW(MHz)	26dB BW(MHz)
20	Low	DFT-s-OFDM	PI/2 BPSK	17.969	18.47
	Low		QPSK	17.995	18.59
	Low		16QAM	17.889	18.37
	Low		64QAM	17.900	18.86
	Low		256QAM	17.998	18.38
	Low	CP-OFDM	QPSK	17.978	18.42
	Mid	DFT-s-OFDM	PI/2 BPSK	17.913	18.52
	Mid		QPSK	17.922	18.72
	Mid		16QAM	17.972	18.73
	Mid		64QAM	17.890	18.43
	Mid		256QAM	17.838	18.59
	Mid	CP-OFDM	QPSK	17.963	18.44
	High	DFT-s-OFDM	PI/2 BPSK	18.000	18.52
	High		QPSK	17.967	18.54
	High		16QAM	17.982	18.42
	High		64QAM	17.953	18.37
	High		256QAM	17.985	18.39
	High	CP-OFDM	QPSK	17.947	18.52
30	Low	DFT-s-OFDM	PI/2 BPSK	26.955	27.61
	Low		QPSK	27.003	27.59
	Low		16QAM	27.041	27.59
	Low		64QAM	27.054	27.72
	Low		256QAM	26.987	27.60
	Low	CP-OFDM	QPSK	26.984	27.58
	Mid	DFT-s-OFDM	PI/2 BPSK	26.817	27.43
	Mid		QPSK	26.887	27.45
	Mid		16QAM	26.920	27.65
	Mid		64QAM	26.955	27.42
	Mid		256QAM	27.034	27.71
	Mid	CP-OFDM	QPSK	27.015	27.63
	High	DFT-s-OFDM	PI/2 BPSK	26.969	27.90
	High		QPSK	27.039	27.68
	High		16QAM	26.954	27.56
	High		64QAM	26.965	27.67





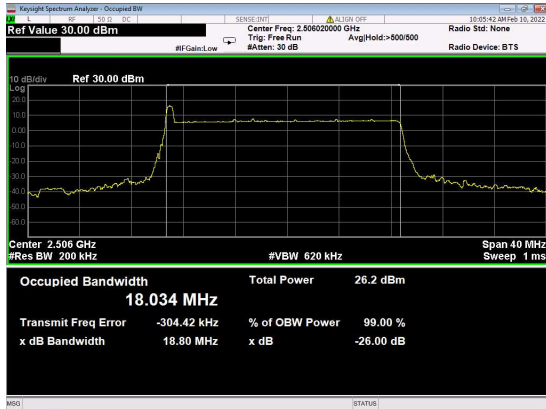
	High		256QAM	26.965	27.71
	High	CP-OFDM	QPSK	27.071	27.63
40	Low	DFT-s-OFDM	PI/2 BPSK	36.120	36.87
	Low		QPSK	36.065	36.89
	Low		16QAM	36.072	36.82
	Low		64QAM	36.137	36.76
	Low		256QAM	36.066	36.74
	Low	CP-OFDM	QPSK	36.071	36.78
	Mid	DFT-s-OFDM	PI/2 BPSK	35.998	38.75
	Mid		QPSK	36.111	36.86
	Mid		16QAM	36.068	36.99
	Mid		64QAM	35.987	36.75
	Mid		256QAM	35.904	36.55
	Mid	CP-OFDM	QPSK	36.030	36.78
	High	DFT-s-OFDM	PI/2 BPSK	36.149	36.94
	High		QPSK	36.114	36.83
	High		16QAM	36.026	36.74
	High		64QAM	36.004	36.83
	High		256QAM	35.966	36.80
	High	CP-OFDM	QPSK	35.981	36.74
60	Low	DFT-s-OFDM	PI/2 BPSK	58.196	59.38
	Low		QPSK	58.451	59.65
	Low		16QAM	58.460	59.58
	Low		64QAM	58.329	59.43
	Low		256QAM	58.503	59.51
	Low	CP-OFDM	QPSK	58.293	59.52
	Mid	DFT-s-OFDM	PI/2 BPSK	58.169	59.44
	Mid		QPSK	58.488	59.55
	Mid		16QAM	58.265	59.40
	Mid		64QAM	58.343	59.49
	Mid		256QAM	58.371	59.41
	Mid	CP-OFDM	QPSK	58.258	59.45
	High	DFT-s-OFDM	PI/2 BPSK	58.505	59.57
	High		QPSK	58.446	59.66
	High		16QAM	58.452	59.53
	High		64QAM	58.330	59.44
	High		256QAM	58.369	59.39
	High	CP-OFDM	QPSK	58.184	59.46



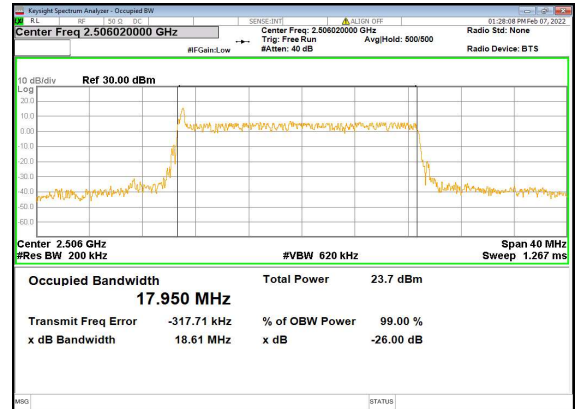
80	Low	DFT-s-OFDM	PI/2 BPSK	77.740	79.17
	Low		QPSK	77.799	79.27
	Low		16QAM	78.042	79.35
	Low		64QAM	77.912	79.26
	Low		256QAM	77.790	79.11
	Low	CP-OFDM	QPSK	77.030	79.27
	Mid	DFT-s-OFDM	PI/2 BPSK	77.801	79.16
	Mid		QPSK	78.006	79.36
	Mid		16QAM	77.917	79.25
	Mid		64QAM	77.758	79.02
	Mid		256QAM	77.606	78.91
	Mid	CP-OFDM	QPSK	77.565	79.64
	High	DFT-s-OFDM	PI/2 BPSK	77.904	79.29
	High		QPSK	77.820	79.25
	High		16QAM	77.674	79.34
	High		64QAM	77.686	79.25
High	256QAM		77.823	79.35	
High	CP-OFDM	QPSK	77.787	79.10	
100	Low	DFT-s-OFDM	PI/2 BPSK	97.090	98.60
	Low		QPSK	97.598	99.16
	Low		16QAM	97.404	99.20
	Low		64QAM	97.129	98.97
	Low		256QAM	97.279	98.86
	Low	CP-OFDM	QPSK	97.252	99.23
	Mid	DFT-s-OFDM	PI/2 BPSK	97.576	99.32
	Mid		QPSK	97.331	99.16
	Mid		16QAM	97.529	99.06
	Mid		64QAM	97.232	99.14
	Mid		256QAM	97.118	99.01
	Mid	CP-OFDM	QPSK	97.341	98.88
	High	DFT-s-OFDM	PI/2 BPSK	97.214	99.13
	High		QPSK	97.217	98.94
	High		16QAM	97.279	99.15
	High		64QAM	97.305	99.12
High	256QAM		97.079	98.90	
High	CP-OFDM	QPSK	97.401	99.04	



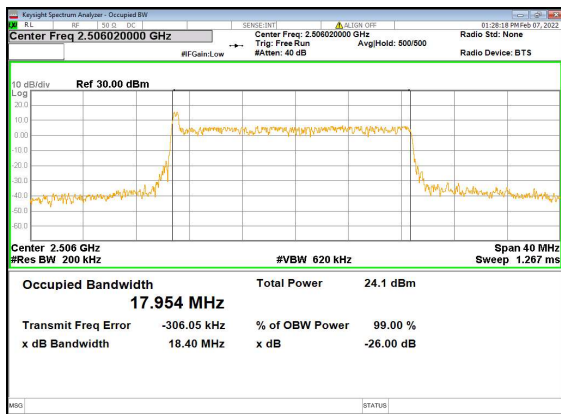
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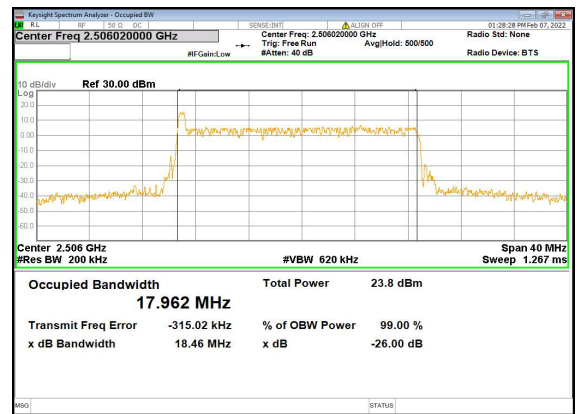
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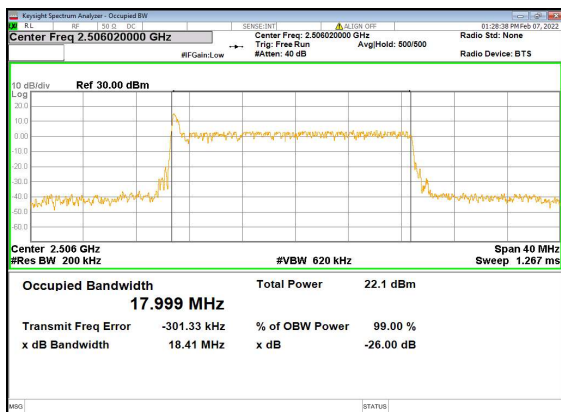
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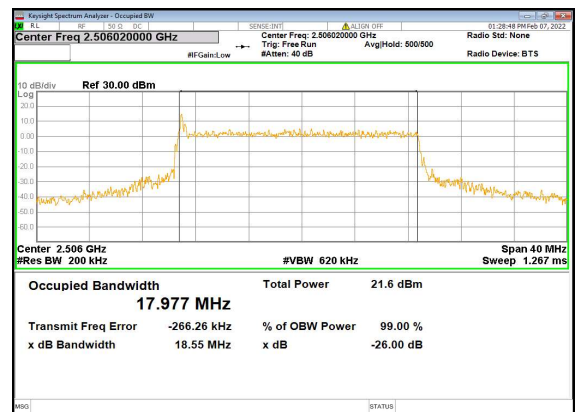
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n41(20M)\_DFT-s-OFDM\_256QAM\_Outer\_Full\_Low\_CH

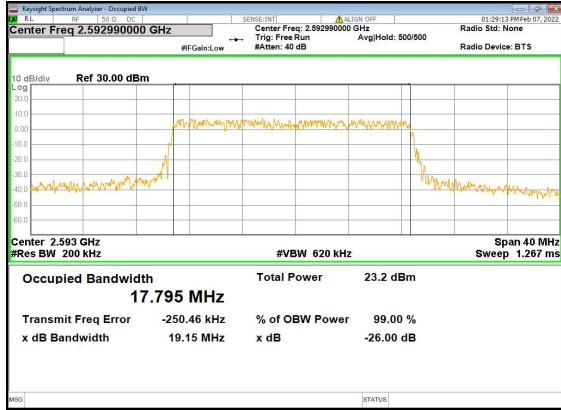


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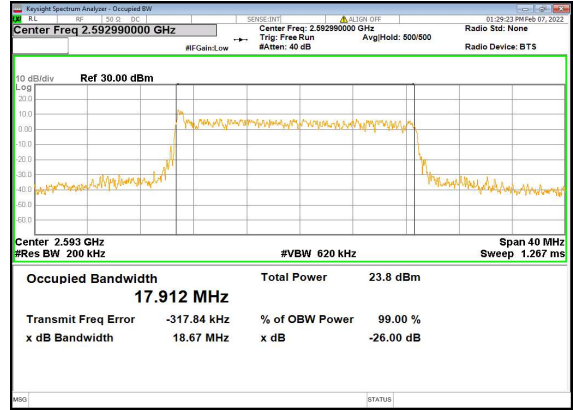




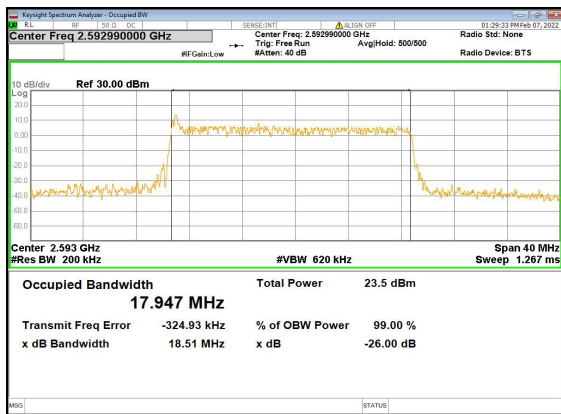
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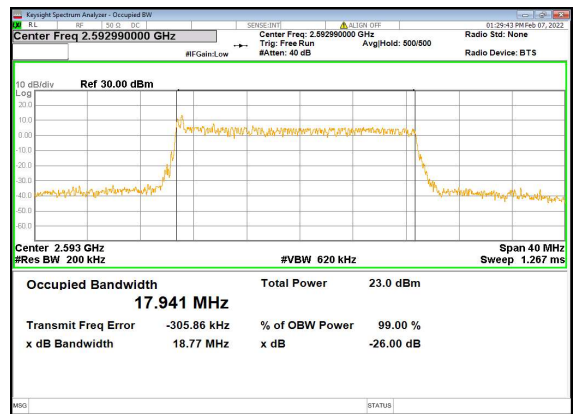
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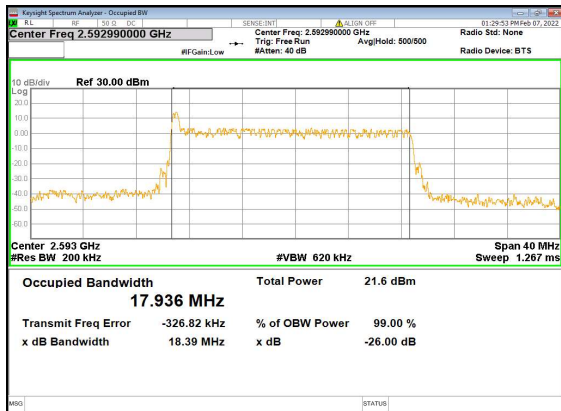
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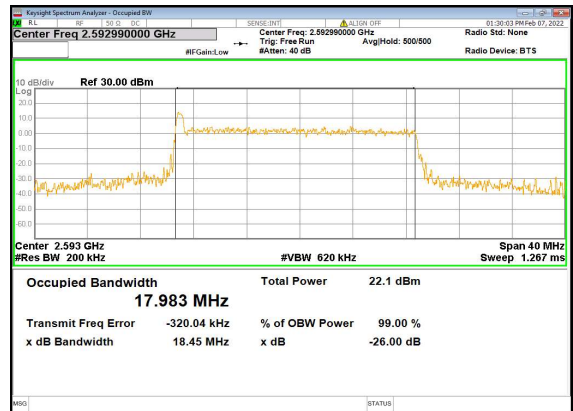
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n41(20M)\_DFT-s-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

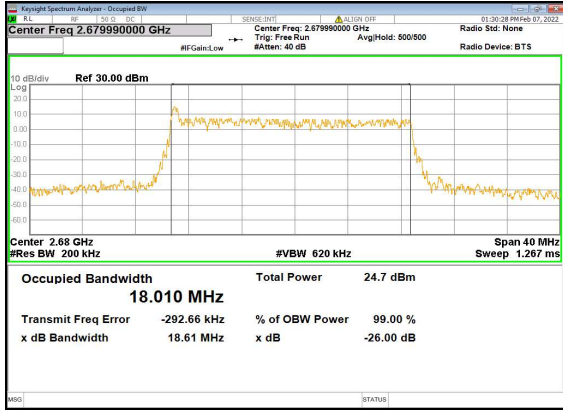


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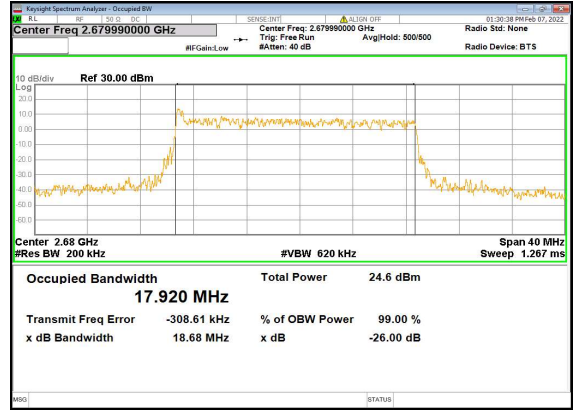




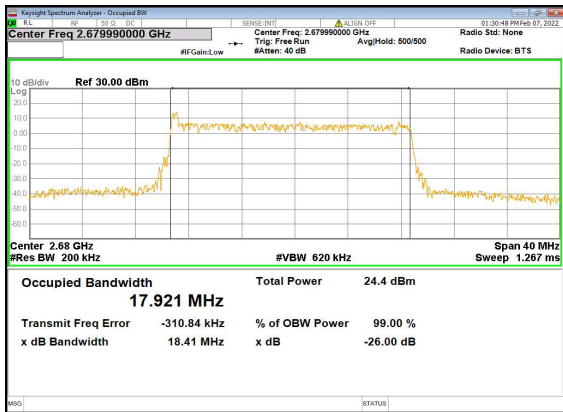
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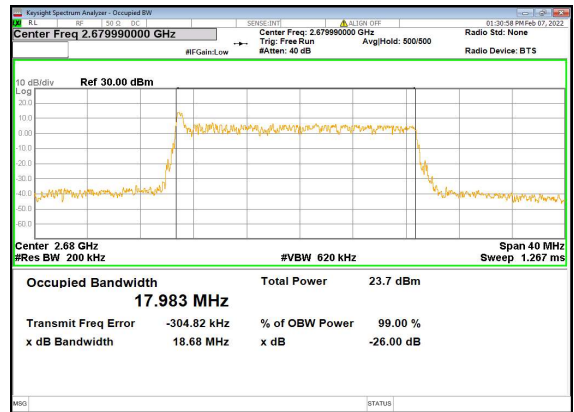
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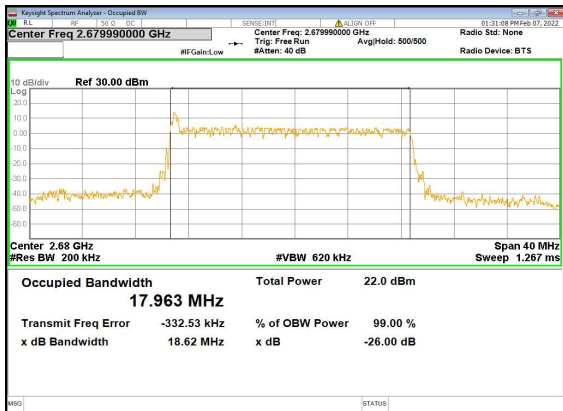
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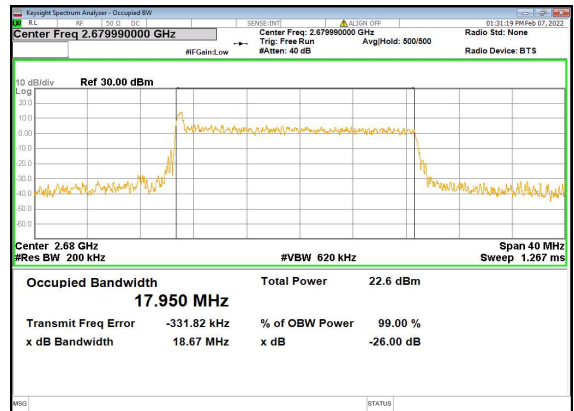
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n41(20M)\_DFT-s-OFDM\_256QAM\_Outer\_Full\_High\_CH

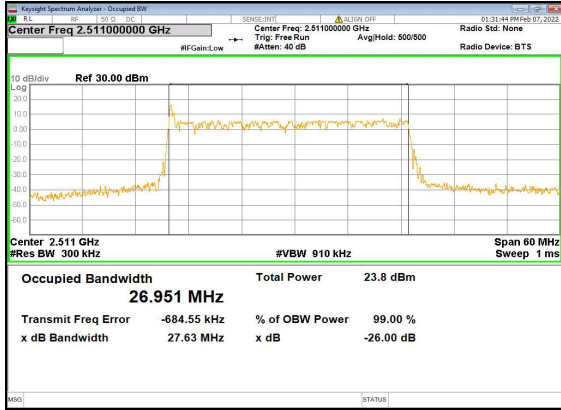


n41(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_High\_CH

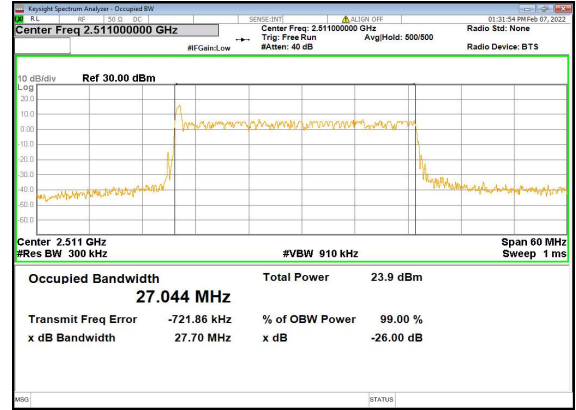




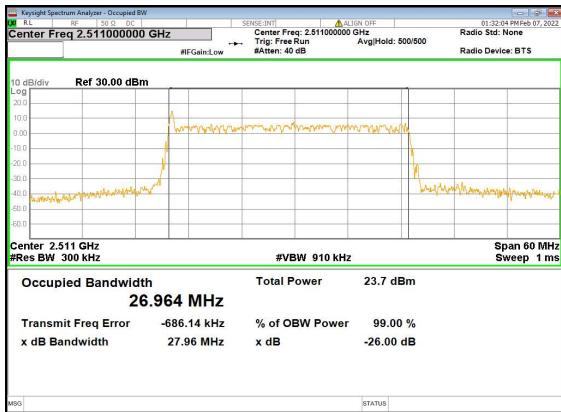
n41(30M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Low\_CH



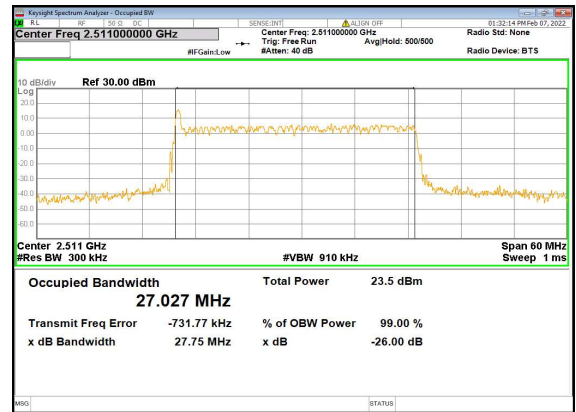
n41(30M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



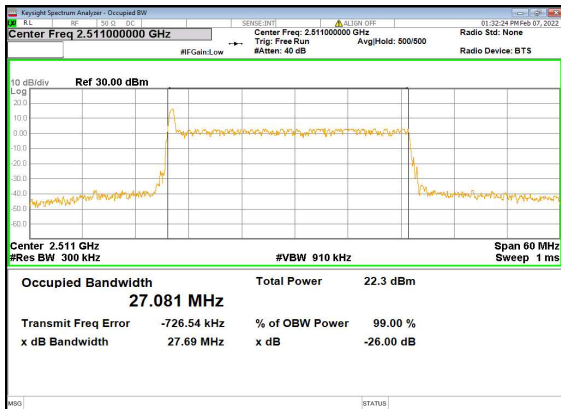
n41(30M)\_DFT-s-OFDM\_16QAM\_Outer\_Full\_Low\_CH



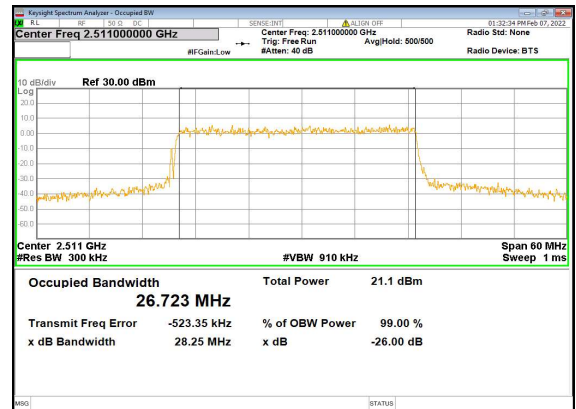
n41(30M)\_DFT-s-OFDM\_64QAM\_Outer\_Full\_Low\_CH



n41(30M)\_DFT-s-OFDM\_256QAM\_Outer\_Full\_Low\_CH

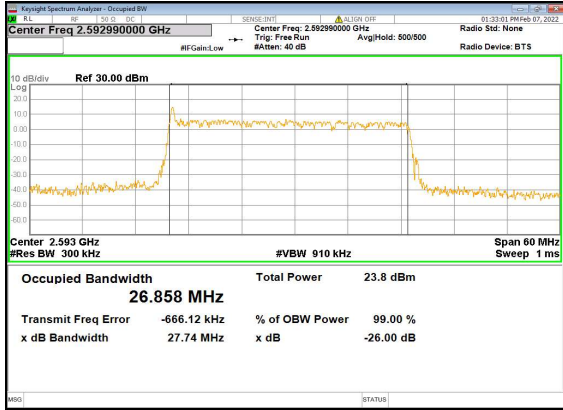


n41(30M)\_CP-OFDM\_QPSK\_Outer\_Full\_Low\_CH

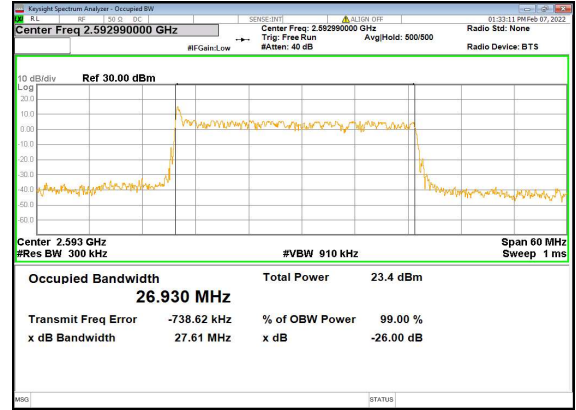




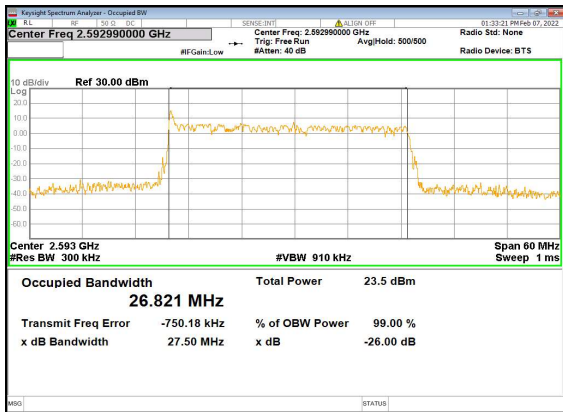
n41(30M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



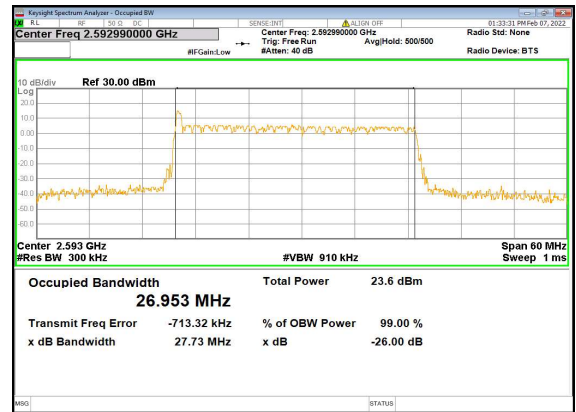
n41(30M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



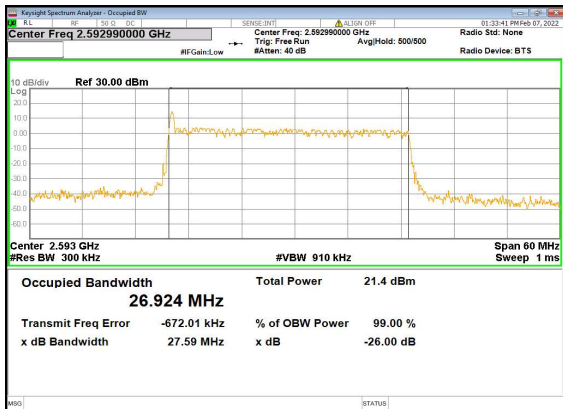
n41(30M)\_DFT-s-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



n41(30M)\_DFT-s-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



n41(30M)\_DFT-s-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



n41(30M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH

