REPORT No.: SZ21020185W11

TEST REPORT

APPLICANT	:	Nubia Technology Co., Ltd.
PRODUCT NAME	:	5G Mobile Phone
MODEL NAME	:	NX666J
BRAND NAME	:	REDMAGIC
FCC ID	:	2AHJO-NX666J
STANDARD(S)	:	47 CFR Part 27, Subpart M
RECEIPT DATE	:	2021-03-19
TEST DATE	:	2021-03-20 to 2021-04-23
ISSUE DATE	:	2021-05-10

Edited by: Zhou Xiaolong

Zhou Xiaolong (Rapporteur)

Approved by:

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Change History		
Version	**Date**	**Reason for change**
1.0	2021-05-10	First edition

1. Technical Information

Note: Provide by applicant.

1.1. Applicant and Manufacturer Information

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

Product Name:	5G Mobile Phone		
Hardware Version:	NX666J_EUHW1.0		
Software Version:	NX666J_ENCommon_V2.06		
Modulation Type:	DFT-s-OFDM	PI/2 BPSK, QPSK, 16QAM,64QAM,256QAM	
	CP-OFDM	QPSK, 16QAM,64QAM,256QAM	
Operation Band:	N41		
Frequency Range:	N41	Tx: 2515MHz-2675MHz	
		Rx: 2515MHz-2675MHz	
Channel Bandwidth	N41	20MHz, 40MHz, 50MHz, 60MHz, 80MHz, 90MHz, 100MHz	
Antenna Type:	Fixed Internal antenna		
Antenna Gain:	N41	Down:2.00 dBi; up:-5 dBi	
Accessory Information:	**AC Adapter**		
	Brand Name:	NUBIA	
	Model No.:	STC-A5101230A-Z	
	Serial No.:	(N/A, marked #1 by test site)	
	Rated Input:	100-240V～ 50/60HZ, 0.70A	
	Rated Output:	5V⎓3A;10V⎓3A; 12V⎓2.5A; 20V⎓1.5A	
	Manufacturer:	Shenzhen Ruijing Industrial Co., Ltd	
	Battery		

	Brand Name:	nubia
	Model No.:	Li3941T44PGh836548
	Serial No.:	(N/A, marked #1 by test site)
	Capacity:	4100.00mAh
	Rated Voltage:	3.87V
	Charge Limit:	4.45V
	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	16QAM	64QAM	256QAM
100	0.394	0.393	0.299	0.233	0.120	0.299	0.234	0.096	0.049
90	0.366	/	/	/	/	/	/	/	/
80	0.395	/	/	/	/	/	/	/	/
60	0.359	/	/	/	/	/	/	/	/
50	0.352	/	/	/	/	/	/	/	/
40	0.353	/	/	/	/	/	/	/	/
20	0.355	/	/	/	/	/	/	/	/

Emission Designator (99%OBW)					
DFT-s-OFDM					CP-OFDM
PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK
97M7G7D	98M7G7D	98M0W7D	98M9D7W	97M3D7W	99M3G7D
87M4G7D	96M6G7D	87M7W7D	87M5D7W	85M7D7W	88M0G7D
78M6G7D	78M5G7D	78M7W7D	78M9D7W	79M0D7W	78M8G7D
59M3G7D	59M2G7D	59M1W7D	59M2D7W	58M2D7W	59M3G7D
46M6G7D	46M7G7D	46M7W7D	46M8D7W	46M7D7W	46M7G7D
36M6G7D	36M5G7D	36M6W7D	36M3D7W	36M6D7W	36M5G7D
18M1G7D	18M1G7D	18M2W7D	18M1D7W	18M2D7W	18M1G7D

1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 27 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
4	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(d)(4)	Transmitter Conducted Output Power and ERP/EIRP	Mar 19 ,2021 to Mar 24,2021	Chen Haiju Gao Jianrou	PASS	No deviation
2.1049	Occupied Bandwidth	Apr 19, 2021	Chen Haiju	PASS	No deviation
2.1055,27.54	Frequency Stability	Mar 26 to Mar 27, 2021	Chen Haiju	PASS	No deviation
2.1051, 27.53(m)(4)	Conducted Spurious Emissions	Apr 19 and 22, 2021	Chen Haiju	PASS	No deviation
2.1051, 27.53(m)(4)	Band Edge	Apr 20, and 21, 2021	Chen Haiju	PASS	No deviation
2.1051, 27.53(m)(4)	Radiated Spurious Emissions	Apr 23,2021	Gao Jianrou	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.

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 27L Requirements

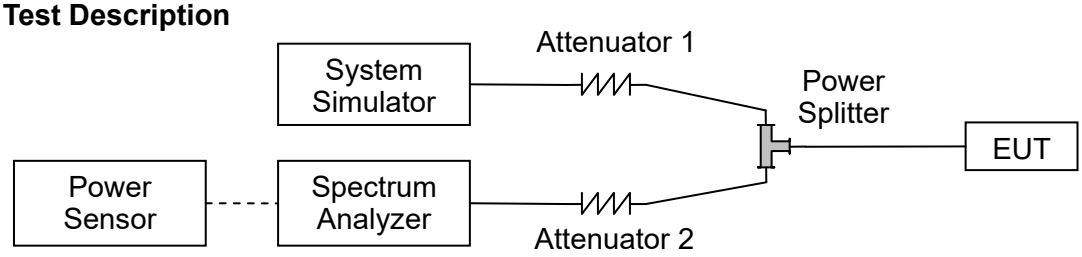
2.1. Transmitter Conducted Output Power And ERP/EIRP

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 watts E.I.R.P. All user stations are limited to 2 watts transmitter output power.

2.1.2. Test Description



The EUTis 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 (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi)
ERP (dBm) = EIPR (dBm) - 2.15

2.1.4. Result

Conducted Output Power:

Top Antenna

N41

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel
Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	DFT-s-OFDM PI/2 BPSK	1	1	23.05	23.43	23.03
100		1	136	22.98	23.11	22.80
100		1	272	23.07	23.16	22.88
100		135	1	21.54	21.99	22.06
100		135	67	22.08	22.21	22.20
100		135	136	21.76	21.55	21.32
100		270	0	21.68	21.92	22.11
100	DFT-s-OFDM QPSK	1	1	23.24	23.42	23.21
100		1	136	22.92	23.27	23.29
100		1	272	23.05	23.33	23.10
100		135	1	22.50	22.43	22.45
100		135	67	22.15	22.11	22.10
100		135	136	22.41	22.35	22.33
100		270	0	22.31	22.31	22.39
100	DFT-s-OFDM-16QAM	1	1	21.04	21.19	21.15
100	DFT-s-OFDM-64QAM	1	1	19.51	19.99	19.59
100	DFT-s-OFDM-256QAM	1	1	18.64	18.50	17.96
Channel				512004	519000	525996
Frequency (MHz)				2560	2595	2630
90	DFT-s-OFDM-PI/2 BPSK	1	1	22.75	22.71	22.42
Channel				511002	519000	526998
Frequency (MHz)				2555	2595	2635
80	DFT-s-OFDM-PI/2 BPSK	1	1	22.80	22.77	22.52
Channel				509004	519000	528996
Frequency (MHz)				2545	2595	2645
60	DFT-s-OFDM-PI/2 BPSK	1	1	22.97	22.91	23.10
Channel				508002	519000	529998
Frequency (MHz)				2540	2595	2650
50	DFT-s-OFDM-PI/2 BPSK	1	1	23.04	23.12	22.86
Channel				507000	519000	531000
Frequency (MHz)				2535	2595	2655

40	DFT-s-OFDM-PI/2 BPSK	1	1	23.09	23.15	22.99
Channel				505002	519000	532998
Frequency (MHz)				2525	2595	2665
20	DFT-s-OFDM-PI/2 BPSK	1	1	22.33	22.74	22.90
Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	CP-OFDM-QPSK	1	1	20.49	20.60	20.08
100	CP-OFDM-16QAM	1	1	19.96	19.90	19.81
100	CP-OFDM-64QAM	1	1	18.69	18.81	18.27
100	CP-OFDM-256QAM	1	1	16.58	15.85	16.04

Bottom Antenna

N41

BW [MHz]	Modulation	RB Size	RB Offset	Low Channel	Middle Channel	High Channel
Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	DFT-s-OFDM PI/2 BPSK	1	1	23.48	23.95	23.59
100		1	136	23.47	23.42	23.81
100		1	272	23.14	23.41	23.08
100		135	1	22.80	22.93	23.11
100		135	67	23.15	23.06	23.26
100		135	136	22.70	23.22	22.67
100		270	0	22.84	22.72	22.77
100	DFT-s-OFDM QPSK	1	1	23.52	23.75	23.94
100		1	136	23.40	23.88	23.77
100		1	272	23.67	23.68	23.41
100		135	1	23.26	23.34	23.24
100		135	67	22.99	22.99	22.96
100		135	136	22.91	22.93	22.90
100		270	0	23.38	22.24	22.61
100	DFT-s-OFDM-16QAM	1	1	22.61	22.76	22.56
100	DFT-s-OFDM-64QAM	1	1	21.67	21.54	21.41
100	DFT-s-OFDM-256QAM	1	1	18.70	18.80	18.60
Channel				512004	519000	525996
Frequency (MHz)				2560	2595	2630
90	DFT-s-OFDM-PI/2 BPSK	1	1	23.64	23.04	23.35
Channel				511002	519000	526998
Frequency (MHz)				2555	2595	2635
80	DFT-s-OFDM-PI/2 BPSK	1	1	23.97	23.07	23.45
Channel				509004	519000	528996
Frequency (MHz)				2545	2595	2645
60	DFT-s-OFDM-PI/2 BPSK	1	1	23.32	23.55	23.33
Channel				508002	519000	529998
Frequency (MHz)				2540	2595	2650
50	DFT-s-OFDM-PI/2 BPSK	1	1	23.40	23.46	23.43
Channel				507000	519000	531000
Frequency (MHz)				2535	2595	2655

40	DFT-s-OFDM-PI/2 BPSK	1	1	23.41	23.48	23.37
Channel				505002	519000	532998
Frequency (MHz)				2525	2595	2665
20	DFT-s-OFDM-PI/2 BPSK	1	1	23.50	23.24	23.42
Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	CP-OFDM-QPSK	1	1	22.63	22.75	22.36
100	CP-OFDM-16QAM	1	1	20.91	21.02	21.69
100	CP-OFDM-64QAM	1	1	17.68	17.70	17.81
100	CP-OFDM-256QAM	1	1	14.87	14.50	14.67

Effective Radiated Power and Effective Isotropic Radiated Power:

Top Antenna

N41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	LowCh. /Freq.	MiddlCh./Freq.	HighCh. / Freq.	LowCh. / EIRP	MiddleCh./EIRP	HighCh. / EIRP
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
				dBm			W		
100	DFT-s-OFDM PI/2 BPSK	1	1	18.05	18.43	18.03	0.064	0.070	0.064
100		1	136	17.98	18.11	17.80	0.063	0.065	0.060
100		1	272	18.07	18.16	17.88	0.064	0.065	0.061
100		135	1	16.54	16.99	17.06	0.045	0.050	0.051
100		135	67	17.08	17.21	17.20	0.051	0.053	0.052
100		135	136	16.76	16.55	16.32	0.047	0.045	0.043
100		270	0	16.68	16.92	17.11	0.047	0.049	0.051
100	DFT-s-OFDM QPSK	1	1	18.24	18.42	18.21	0.067	0.070	0.066
100		1	136	17.92	18.27	18.29	0.062	0.067	0.067
100		1	272	18.05	18.33	18.10	0.064	0.068	0.065
100		135	1	17.50	17.43	17.45	0.056	0.055	0.056
100		135	67	17.15	17.11	17.10	0.052	0.051	0.051
100		135	136	17.41	17.35	17.33	0.055	0.054	0.054
100		270	0	17.31	17.31	17.39	0.054	0.054	0.055
100	DFT-s-OFDM 16QAM	1	1	16.04	16.19	16.15	0.040	0.042	0.041
100	DFT-s-OFDM 64QAM	1	1	14.51	14.99	14.59	0.028	0.032	0.029
100	DFT-s-OFDM 256QAM	1	1	13.64	13.50	12.96	0.023	0.022	0.020
Channel				512004	519000	525996	512004	519000	525996
Frequency (MHz)				2560	2595	2630	2560	2595	2630
90	DFT-s-OFDM PI/2 BPSK	1	1	17.75	17.71	17.42	0.060	0.059	0.055
Channel				511002	519000	526998	511002	519000	526998
Frequency (MHz)				2555	2595	2635	2555	2595	2635
80	DFT-s-OFDM PI/2 BPSK	1	1	17.80	17.77	17.52	0.060	0.060	0.056
Channel				509004	519000	528996	509004	519000	528996
Frequency (MHz)				2545	2595	2645	2545	2595	2645

60	DFT-s-OFDM PI/2 BPSK	1	1	17.97	17.91	18.10	0.063	0.062	0.065
Channel				508002	519000	529998	508002	519000	529998
Frequency (MHz)				2540	2595	2650	2540	2595	2650
50	DFT-s-OFDM PI/2 BPSK	1	1	18.04	18.12	17.86	0.064	0.065	0.061
Channel				507000	519000	531000	507000	519000	531000
Frequency (MHz)				2535	2595	2655	2535	2595	2655
40	DFT-s-OFDM PI/2 BPSK	1	1	18.09	18.15	17.99	0.064	0.065	0.063
Channel				505002	519000	532998	505002	519000	532998
Frequency (MHz)				2525	2595	2665	2525	2595	2665
20	DFT-s-OFDM PI/2 BPSK	1	1	17.33	17.74	17.90	0.054	0.059	0.062
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
100	CP-OFDM QPSK	1	1	15.49	15.60	15.08	0.035	0.036	0.032
100	CP-OFDM 16QAM	1	1	14.96	14.90	14.81	0.031	0.031	0.030
100	CP-OFDM 64QAM	1	1	13.69	13.81	13.27	0.023	0.024	0.021
100	CP-OFDM 256QAM	1	1	11.58	10.85	11.04	0.014	0.012	0.013

Bottom Antenna

N41				Measured EIRP					
BW [MHz]	Modulation	RB Size	RB Offset	LowCh. /Freq.	MiddlCh./Freq.	HighCh. / Freq.	LowCh. / EIRP	MiddleCh./EIRP	HighCh. / EIRP
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
				dBm			W		
100	DFT-s-OFDM PI/2 BPSK	1	1	25.48	25.95	25.59	0.353	0.394	0.362
100		1	136	25.47	25.42	25.81	0.352	0.348	0.381
100		1	272	25.14	25.41	25.08	0.327	0.348	0.322
100		135	1	24.80	24.93	25.11	0.302	0.311	0.324
100		135	67	25.15	25.06	25.26	0.327	0.321	0.336
100		135	136	24.70	25.22	24.67	0.295	0.333	0.293
100		270	0	24.84	24.72	24.77	0.305	0.296	0.300
100	DFT-s-OFDM QPSK	1	1	25.52	25.75	25.94	0.356	0.376	0.393
100		1	136	25.40	25.88	25.77	0.347	0.387	0.378
100		1	272	25.67	25.68	25.41	0.369	0.370	0.348
100		135	1	25.26	25.34	25.24	0.336	0.342	0.334
100		135	67	24.99	24.99	24.96	0.316	0.316	0.313
100		135	136	24.91	24.93	24.90	0.310	0.311	0.309
100		270	0	25.38	24.24	24.61	0.345	0.265	0.289
100	DFT-s-OFDM 16QAM	1	1	24.61	24.76	24.56	0.289	0.299	0.286
100	DFT-s-OFDM 64QAM	1	1	23.67	23.54	23.41	0.233	0.226	0.219
100	DFT-s-OFDM 256QAM	1	1	20.70	20.80	20.60	0.117	0.120	0.115
Channel				512004	519000	525996	512004	519000	525996
Frequency (MHz)				2560	2595	2630	2560	2595	2630
90	DFT-s-OFDM PI/2 BPSK	1	1	25.64	25.04	25.35	0.366	0.319	0.343
Channel				511002	519000	526998	511002	519000	526998
Frequency (MHz)				2555	2595	2635	2555	2595	2635
80	DFT-s-OFDM PI/2 BPSK	1	1	25.97	25.07	25.45	0.395	0.321	0.351
Channel				509004	519000	528996	509004	519000	528996
Frequency (MHz)				2545	2595	2645	2545	2595	2645

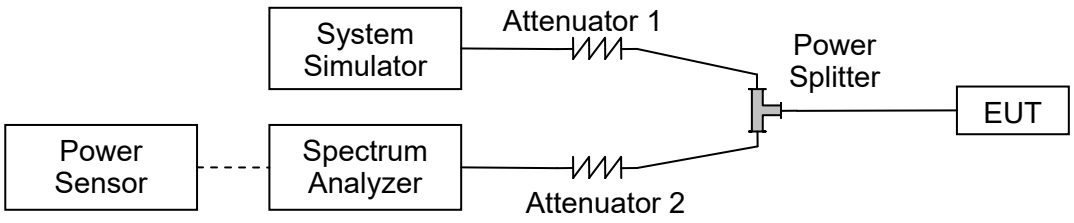
60	DFT-s-OFDM PI/2 BPSK	1	1	25.32	25.55	25.33	0.340	0.359	0.341
Channel				508002	519000	529998	508002	519000	529998
Frequency (MHz)				2540	2595	2650	2540	2595	2650
50	DFT-s-OFDM PI/2 BPSK	1	1	25.40	25.46	25.43	0.347	0.352	0.349
Channel				507000	519000	531000	507000	519000	531000
Frequency (MHz)				2535	2595	2655	2535	2595	2655
40	DFT-s-OFDM PI/2 BPSK	1	1	25.41	25.48	25.37	0.348	0.353	0.344
Channel				505002	519000	532998	505002	519000	532998
Frequency (MHz)				2525	2595	2665	2525	2595	2665
20	DFT-s-OFDM PI/2 BPSK	1	1	25.50	25.24	25.42	0.355	0.334	0.348
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
100	CP-OFDM QPSK	1	1	24.63	24.75	24.36	0.290	0.299	0.273
100	CP-OFDM 16QAM	1	1	22.91	23.02	23.69	0.195	0.200	0.234
100	CP-OFDM 64QAM	1	1	19.68	19.70	19.81	0.093	0.093	0.096
100	CP-OFDM 256QAM	1	1	16.87	16.50	16.67	0.049	0.045	0.046

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 EUTis 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

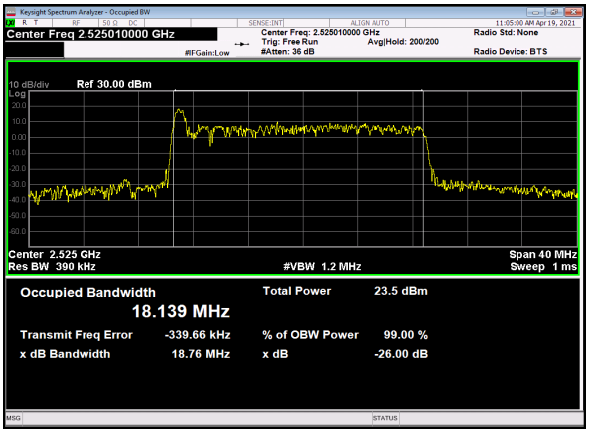
N41					
BW(MHz)	ChannelLevel	Modulation		99% BW(MHz)	26dB BW(MHz)
20	Low	DFT-s-OFDM	PI/2 BPSK	18.14	18.76
	Low		QPSK	17.73	18.51
	Low		16QAM	18.07	18.66
	Low		64QAM	18.04	18.56
	Low		256QAM	18.18	18.79
	Low	CP-OFDM	QPSK	18.05	18.80
	Mid	DFT-s-OFDM	PI/2 BPSK	18.10	18.78
	Mid		QPSK	18.08	18.77
	Mid		16QAM	18.21	18.95
	Mid		64QAM	18.11	18.98
	Mid		256QAM	18.16	18.63
	Mid	CP-OFDM	QPSK	18.11	18.78
	High	DFT-s-OFDM	PI/2 BPSK	17.86	19.58
	High		QPSK	18.07	18.97
	High		16QAM	18.04	18.66
	High		64QAM	18.01	18.71
	High		256QAM	18.14	18.83
	High	CP-OFDM	QPSK	17.96	18.63
40	Low	DFT-s-OFDM	PI/2 BPSK	36.38	37.48
	Low		QPSK	36.53	37.61
	Low		16QAM	36.61	37.58
	Low		64QAM	36.40	37.65
	Low		256QAM	36.41	37.63
	Low	CP-OFDM	QPSK	36.40	37.61
	Mid	DFT-s-OFDM	PI/2 BPSK	36.48	37.77
	Mid		QPSK	36.52	37.74
	Mid		16QAM	36.56	37.75
	Mid		64QAM	36.19	37.70
	Mid		256QAM	35.82	37.75
	Mid	CP-OFDM	QPSK	36.53	37.76
	High	DFT-s-OFDM	PI/2 BPSK	36.62	37.49
	High		QPSK	35.99	37.84
	High		16QAM	35.90	37.75

	High		64QAM	36.25	37.43
	High		256QAM	36.51	37.48
	High	CP-OFDM	QPSK	36.22	37.52
50	Low	DFT-s-OFDM	PI/2 BPSK	46.59	48.05
	Low		QPSK	46.67	47.95
	Low		16QAM	46.56	47.86
	Low		64QAM	46.82	48.15
	Low		256QAM	46.71	48.27
	Low	CP-OFDM	QPSK	46.52	47.94
	Mid	DFT-s-OFDM	PI/2 BPSK	46.06	48.29
	Mid		QPSK	46.59	47.99
	Mid		16QAM	46.71	47.73
	Mid		64QAM	45.87	48.21
	Mid		256QAM	46.60	47.93
	Mid	CP-OFDM	QPSK	46.69	47.88
	High	DFT-s-OFDM	PI/2 BPSK	46.57	47.89
	High		QPSK	46.55	47.84
	High		16QAM	46.55	47.97
	High		64QAM	46.06	47.84
	High		256QAM	46.66	47.90
	High	CP-OFDM	QPSK	46.74	48.21
60	Low	DFT-s-OFDM	PI/2 BPSK	58.61	60.12
	Low		QPSK	59.16	60.83
	Low		16QAM	59.01	60.82
	Low		64QAM	58.91	60.44
	Low		256QAM	57.87	60.05
	Low	CP-OFDM	QPSK	58.14	61.57
	Mid	DFT-s-OFDM	PI/2 BPSK	59.32	60.80
	Mid		QPSK	59.09	60.77
	Mid		16QAM	59.13	60.63
	Mid		64QAM	59.20	60.64
	Mid		256QAM	58.07	60.87
	Mid	CP-OFDM	QPSK	59.26	60.59
	High	DFT-s-OFDM	PI/2 BPSK	57.89	60.95
	High		QPSK	59.24	60.99
	High		16QAM	58.86	60.80
	High		64QAM	58.94	60.82
	High		256QAM	58.22	60.84

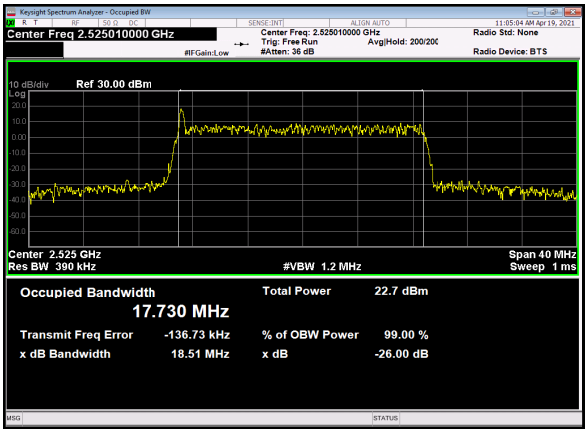
	High	CP-OFDM	QPSK	58.95	60.30
80	Low	DFT-s-OFDM	PI/2 BPSK	77.36	81.04
	Low		QPSK	78.53	81.25
	Low		16QAM	78.59	80.92
	Low		64QAM	78.86	80.94
	Low		256QAM	78.99	81.01
	Low	CP-OFDM	QPSK	78.81	80.76
	Mid	DFT-s-OFDM	PI/2 BPSK	78.61	80.82
	Mid		QPSK	77.52	81.04
	Mid		16QAM	78.73	80.63
	Mid		64QAM	78.72	80.72
	Mid		256QAM	78.58	81.00
	Mid	CP-OFDM	QPSK	77.49	81.70
	High	DFT-s-OFDM	PI/2 BPSK	78.47	80.54
	High		QPSK	78.24	80.11
	High		16QAM	77.27	81.6
	High		64QAM	78.72	81.09
	High		256QAM	78.67	80.78
	High	CP-OFDM	QPSK	78.79	81.1
90	Low	DFT-s-OFDM	PI/2 BPSK	85.91	90.60
	Low		QPSK	86.62	88.99
	Low		16QAM	87.69	90.32
	Low		64QAM	87.49	90.03
	Low		256QAM	85.49	88.56
	Low	CP-OFDM	QPSK	87.96	92.23
	Mid	DFT-s-OFDM	PI/2 BPSK	86.76	90.08
	Mid		QPSK	86.55	89.20
	Mid		16QAM	87.47	90.52
	Mid		64QAM	87.45	90.35
	Mid		256QAM	85.66	89.26
	Mid	CP-OFDM	QPSK	87.41	91.17
	High	DFT-s-OFDM	PI/2 BPSK	87.40	91.08
	High		QPSK	86.09	90.09
	High		16QAM	86.05	90.09
	High		64QAM	85.66	90.03
	High		256QAM	85.37	88.30
	High	CP-OFDM	QPSK	87.52	92.24
	Low		PI/2 BPSK	96.74	101.61

100	Low	DFT-s-OFDM	QPSK	97.32	100.23
	Low		16QAM	97.87	101.11
	Low		64QAM	98.32	101.67
	Low		256QAM	96.54	101.72
	Low	CP-OFDM	QPSK	97.47	102.23
	Mid	DFT-s-OFDM	PI/2 BPSK	97.64	101.06
	Mid		QPSK	97.45	101.13
	Mid		16QAM	97.96	101.41
	Mid		64QAM	97.26	99.99
	Mid		256QAM	97.34	100.87
	Mid	CP-OFDM	QPSK	99.29	102.36
	High	DFT-s-OFDM	PI/2 BPSK	97.66	100.07
	High		QPSK	98.74	101.58
	High		16QAM	98.03	101.25
	High		64QAM	98.88	101.41
	High		256QAM	97.10	100.86
	High	CP-OFDM	QPSK	97.73	102.46

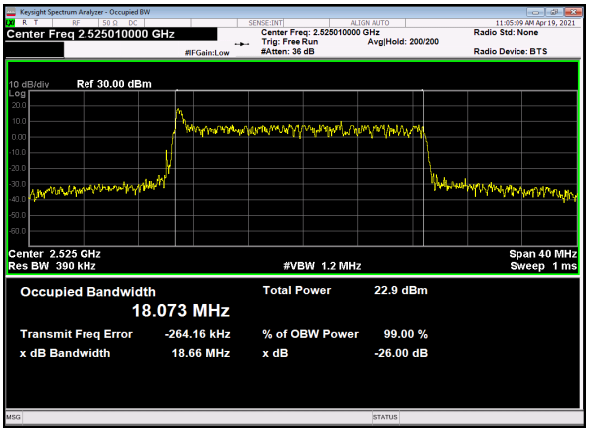
N41(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



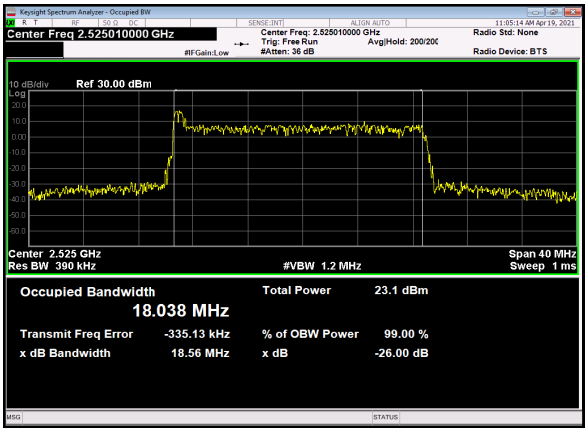
N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



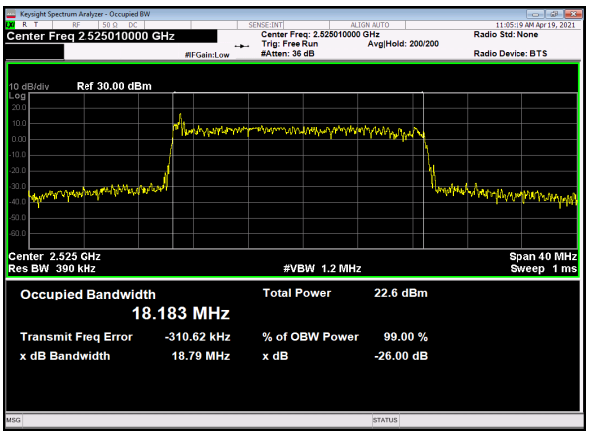
N41(20M)_DFT-s-OFDM_16QAM_Outer_Full_Low_CH



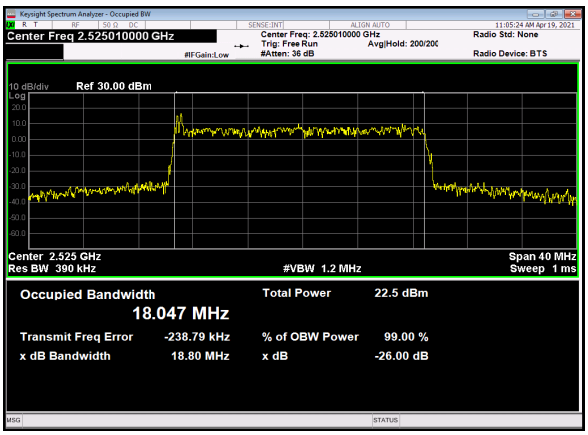
N41(20M)_DFT-s-OFDM_64QAM_Outer_Full_Low_CH



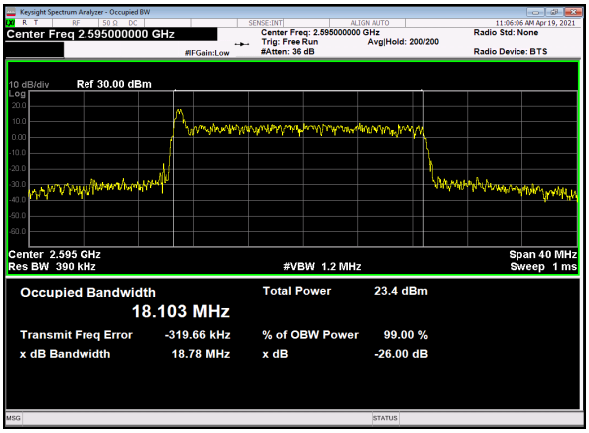
N41(20M)_DFT-s-OFDM_256QAM_Outer_Full_Low_CH



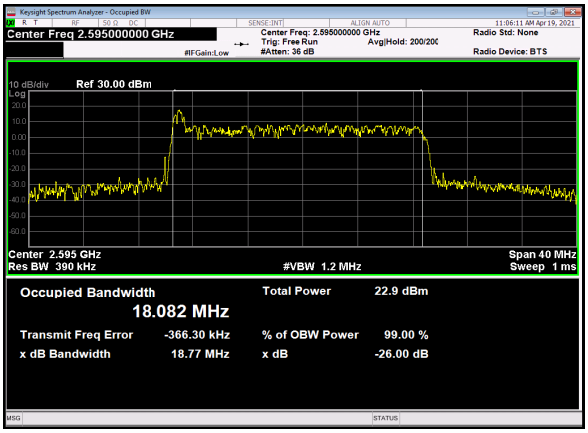
N41(20M)_CP-OFDM_QPSK_Outer_Full_Low_CH



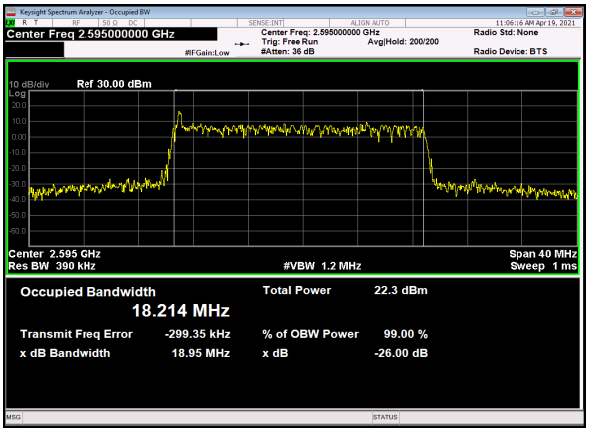
N41(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



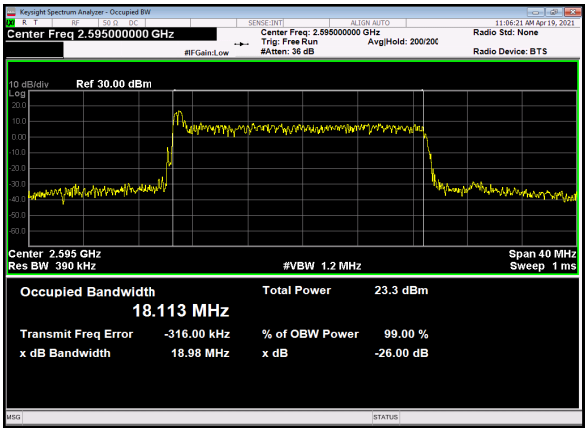
N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



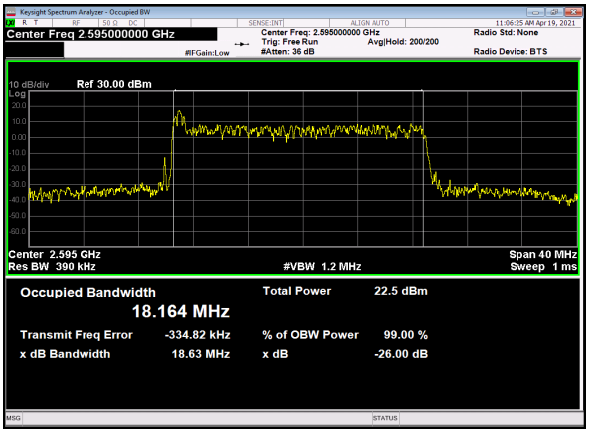
N41(20M)_DFT-s-OFDM_16 QAM_Outer_Full_Mid_CH



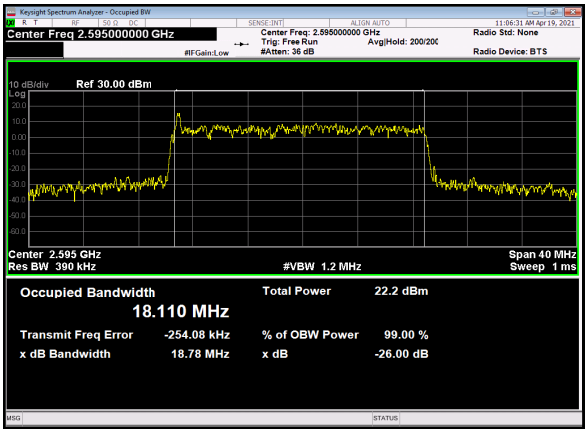
N41(20M)_DFT-s-OFDM_64 QAM_Outer_Full_Mid_CH



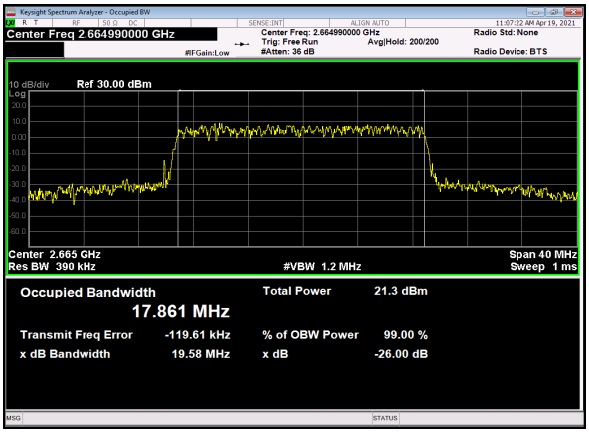
N41(20M)_DFT-s-OFDM_256 QAM_Outer_Full_Mid_CH



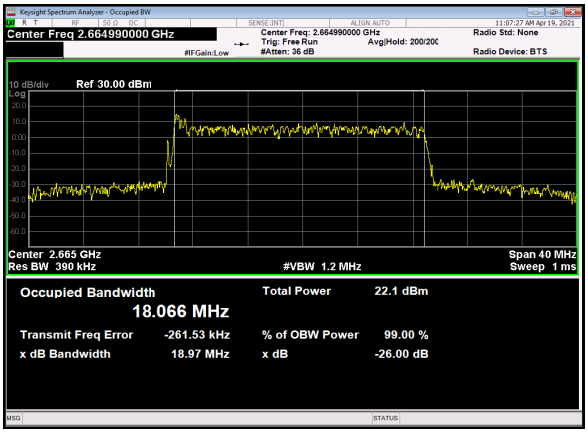
N41(20M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



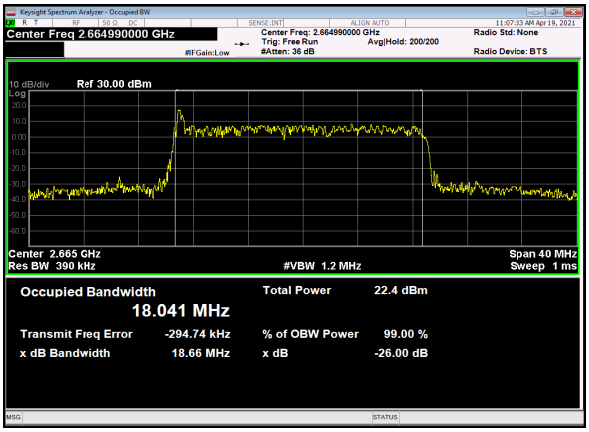
N41(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



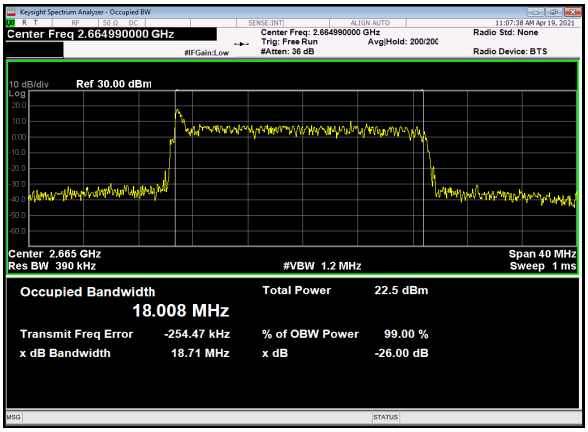
N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



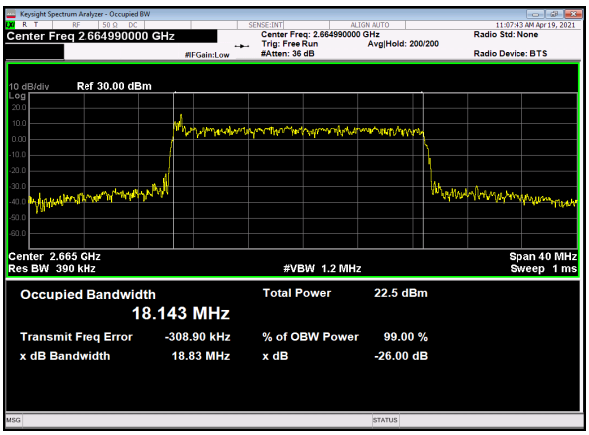
N41(20M)_DFT-s-OFDM_16QAM_Outer_Full_High_CH



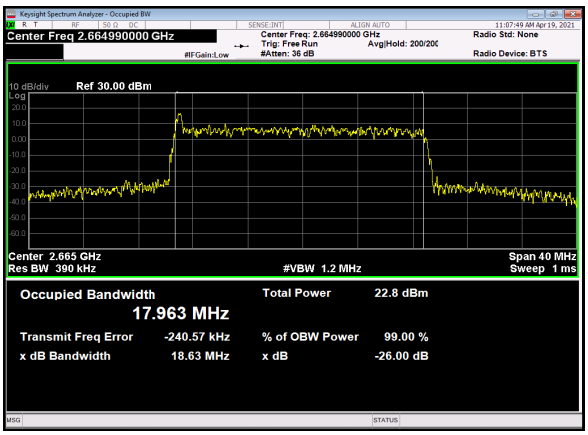
N41(20M)_DFT-s-OFDM_64QAM_Outer_Full_High_CH



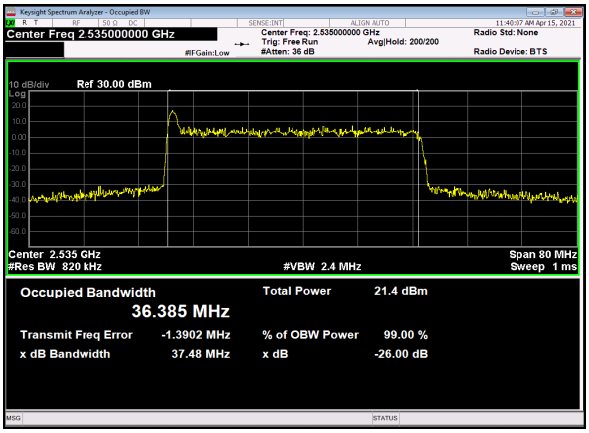
N41(20M)_DFT-s-OFDM_256QAM_Outer_Full_High_CH



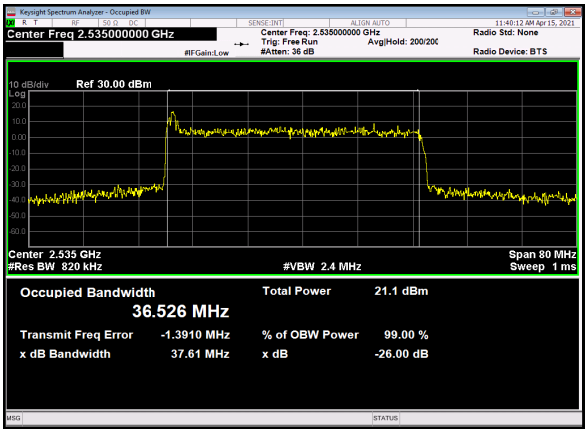
N41(20M)_CP-OFDM_QPSK_Outer_Full_High_CH



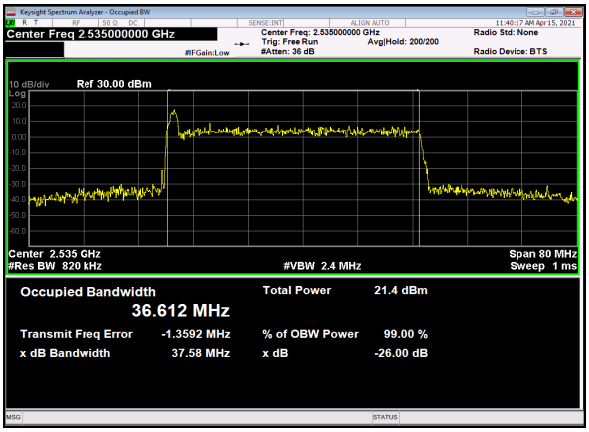
N41(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



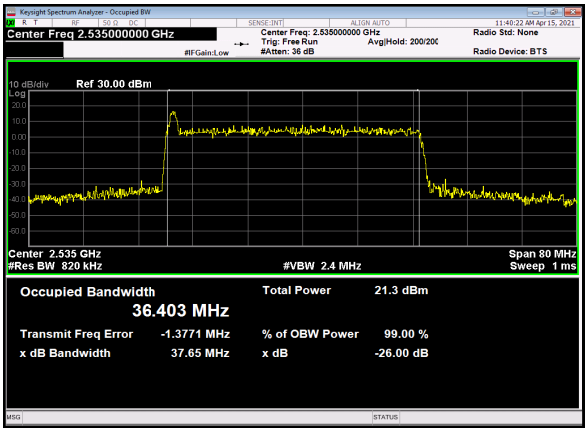
N41(40M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



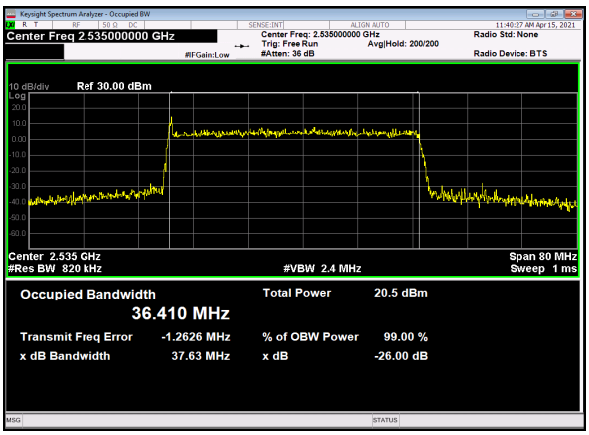
N41(40M)_DFT-s-OFDM_16 QAM_Outer_Full_Low_CH



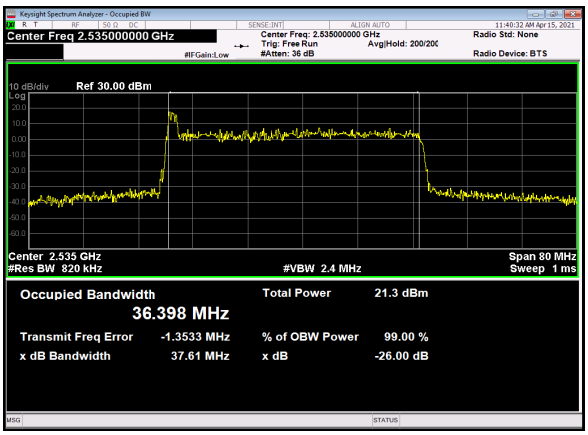
N41(40M)_DFT-s-OFDM_64 QAM_Outer_Full_Low_CH



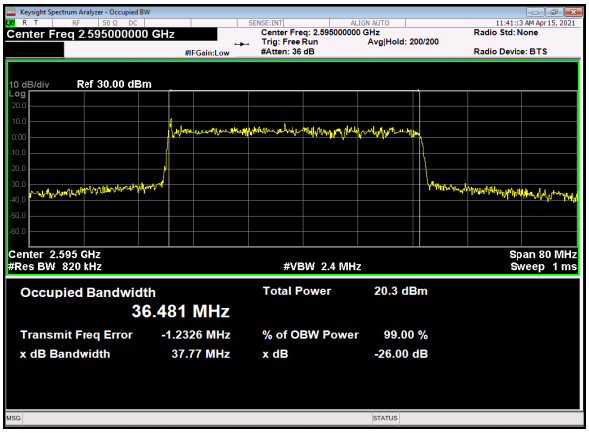
N41(40M)_DFT-s-OFDM_256 QAM_Outer_Full_Low_CH



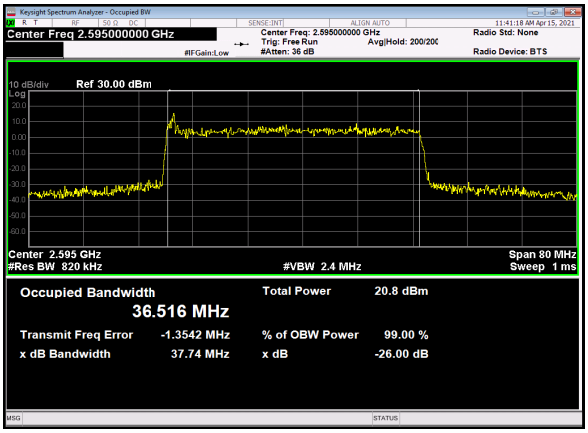
N41(40M)_CP-OFDM_QPSK_Outer_Full_Low_CH



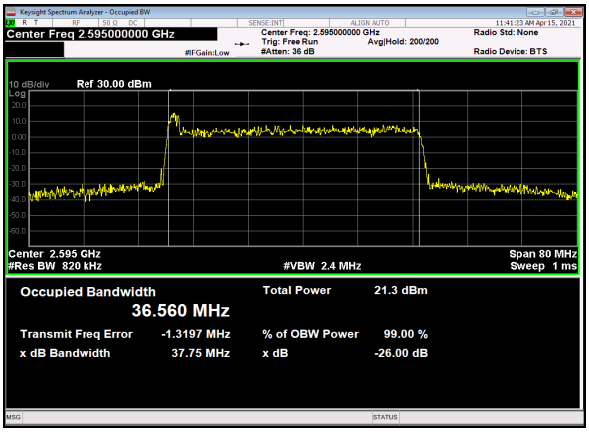
N41(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



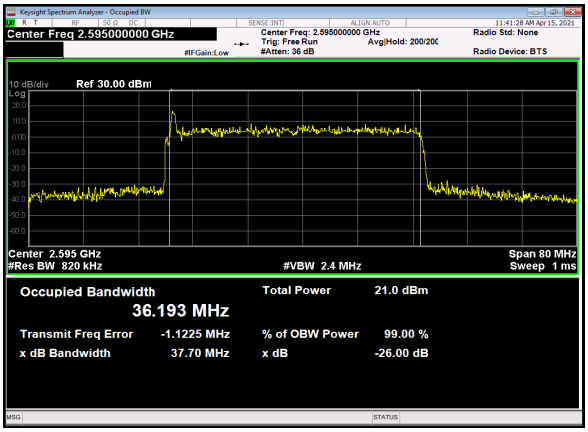
N41(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



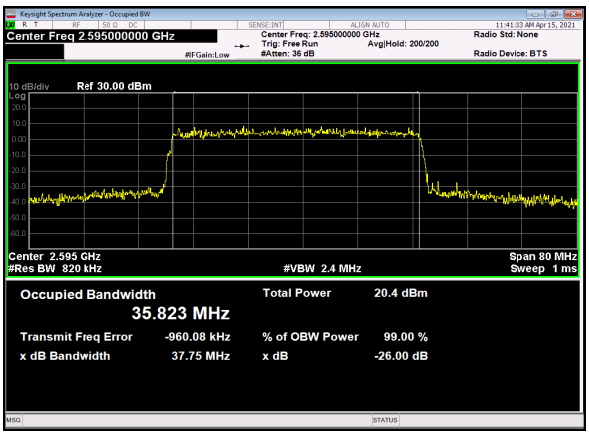
N41(40M)_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



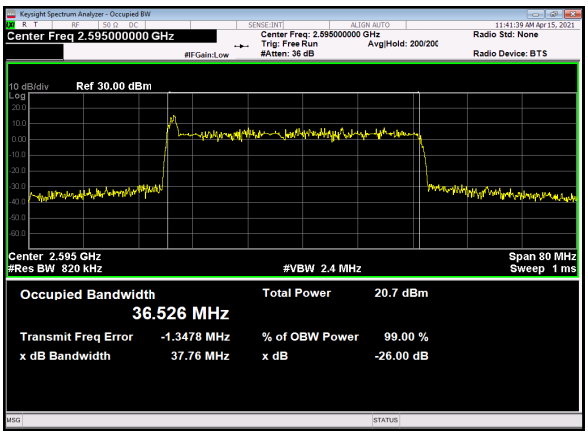
N41(40M)_DFT-s-OFDM_64QAM_Outer_Full_Mid_CH



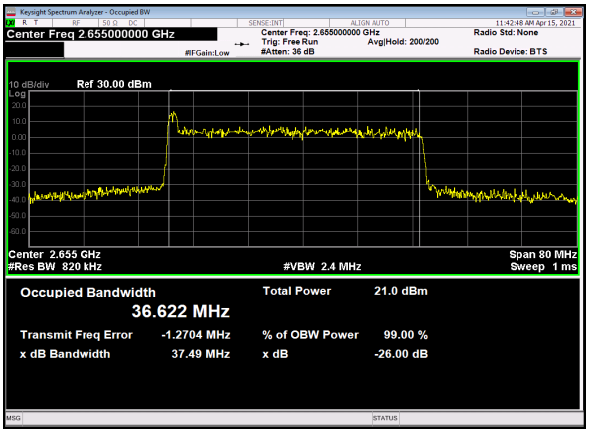
N41(40M)_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH



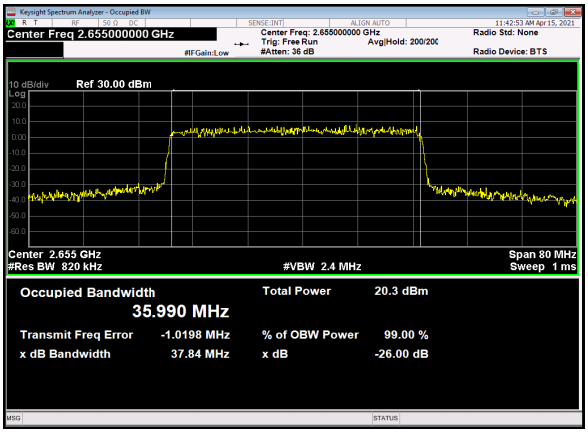
N41(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



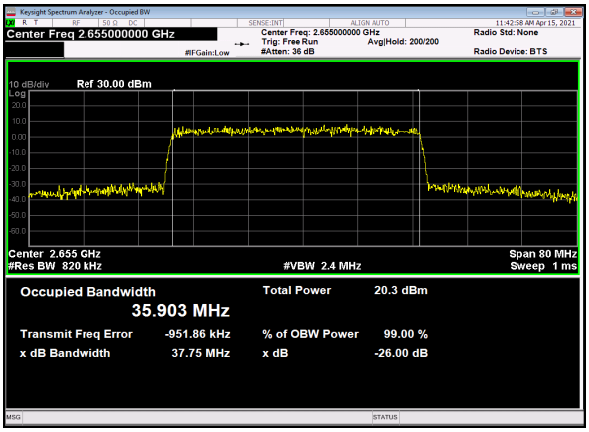
N41(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



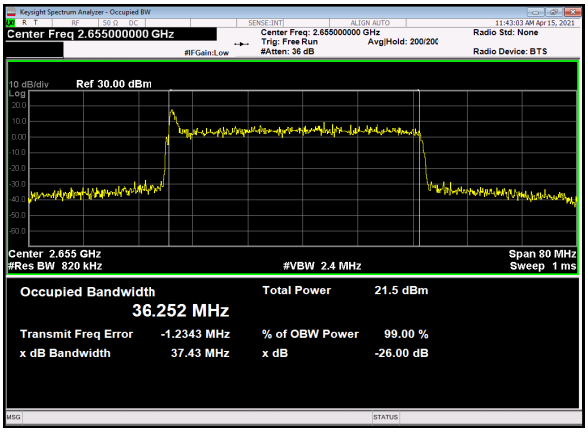
N41(40M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



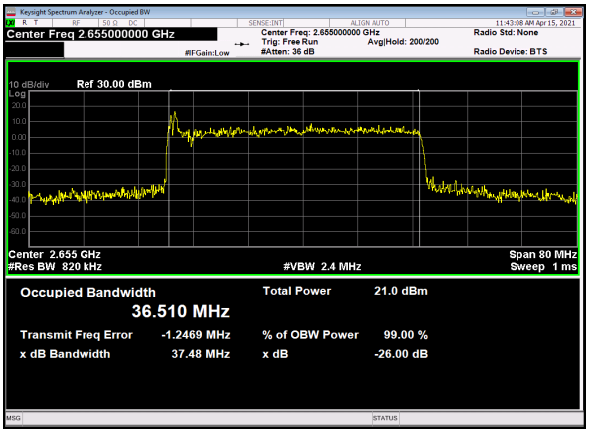
N41(40M)_DFT-s-OFDM_16QAM_Outer_Full_High_CH



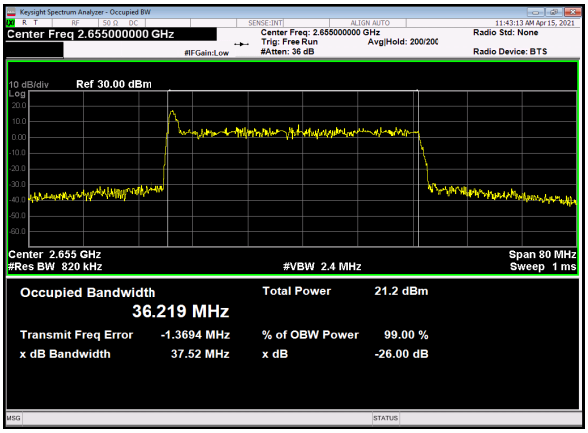
N41(40M)_DFT-s-OFDM_64QAM_Outer_Full_High_CH



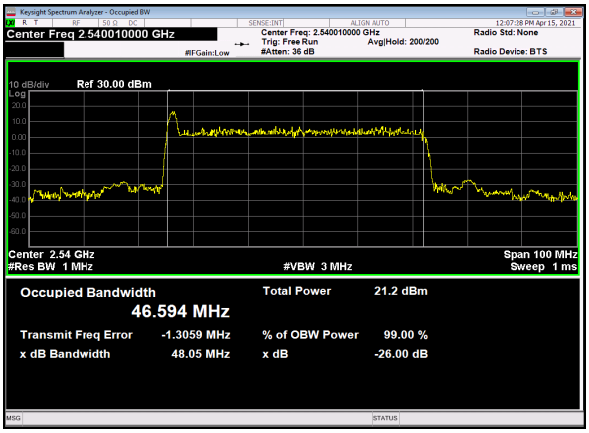
N41(40M)_DFT-s-OFDM_256QAM_Outer_Full_High_CH



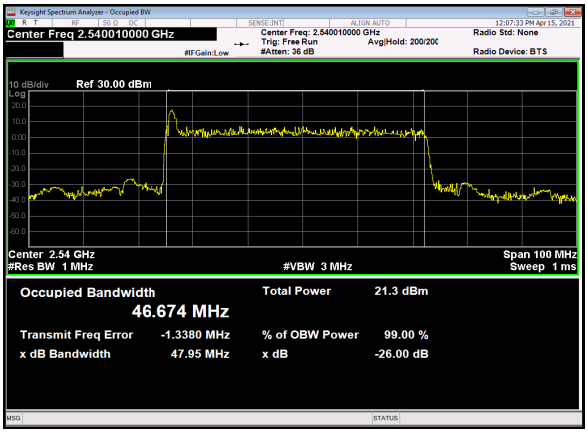
N41(40M)_CP-OFDM_QPSK_Outer_Full_High_CH



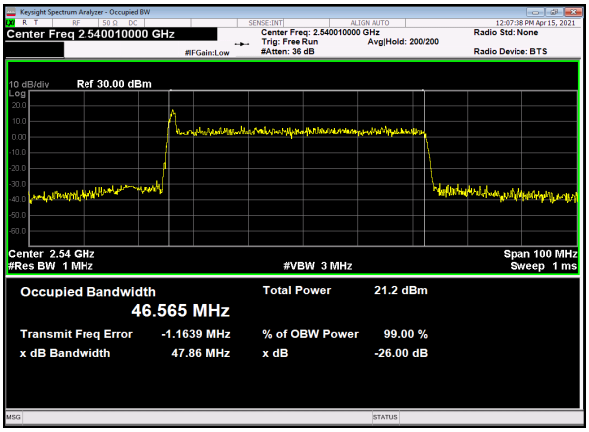
N41(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



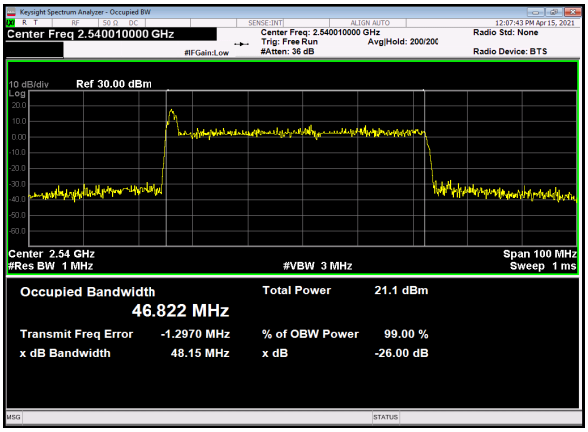
N41(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



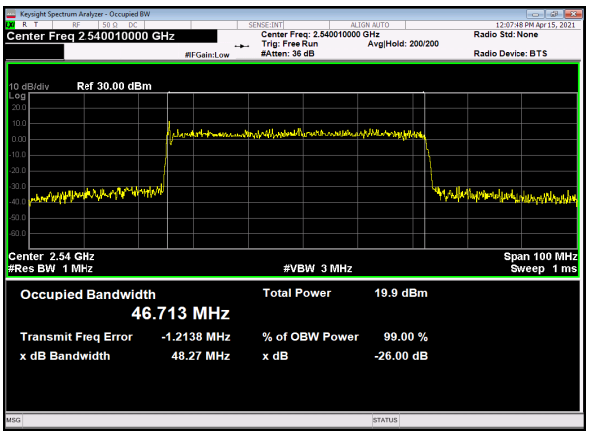
N41(50M)_DFT-s-OFDM_16 QAM_Outer_Full_Low_CH



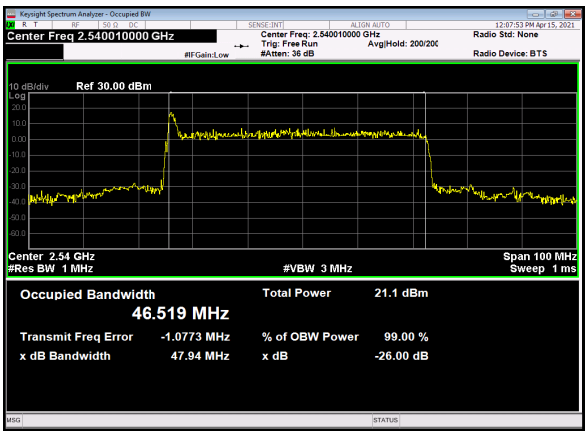
N41(50M)_DFT-s-OFDM_64 QAM_Outer_Full_Low_CH



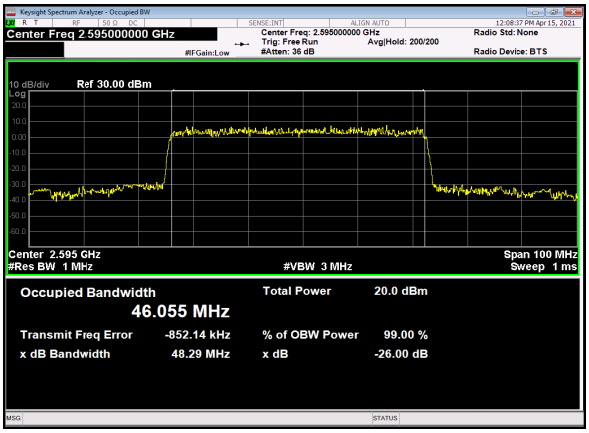
N41(50M)_DFT-s-OFDM_256 QAM_Outer_Full_Low_CH



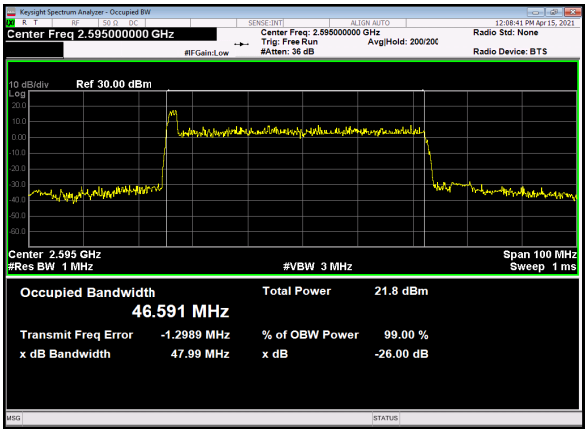
N41(50M)_CP-OFDM_QPSK_Outer_Full_Low_CH



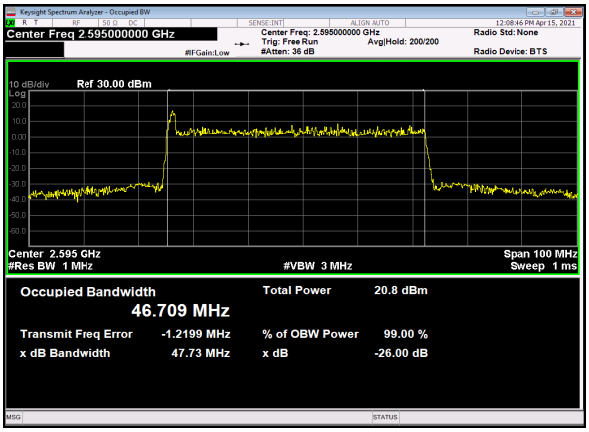
N41(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



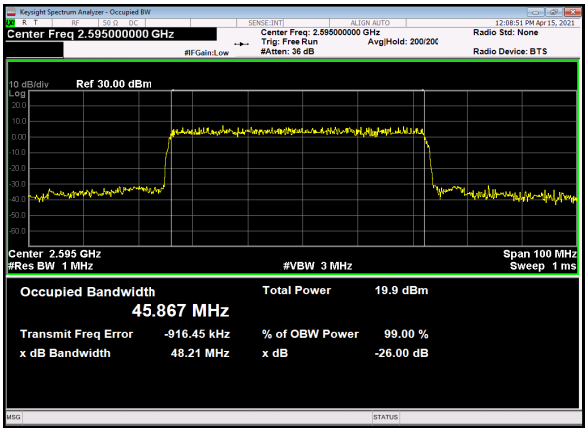
N41(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



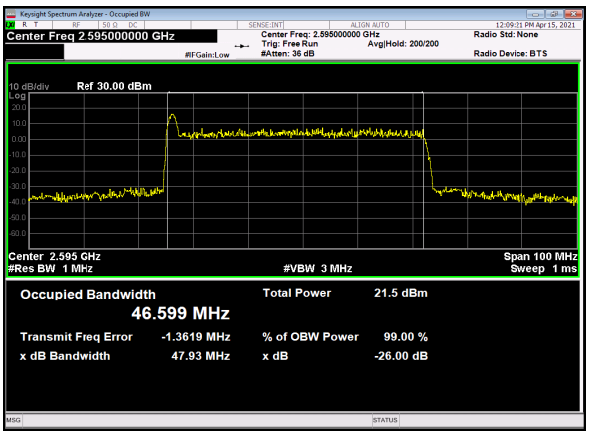
N41(50M)_DFT-s-OFDM_16 QAM_Outer_Full_Mid_CH



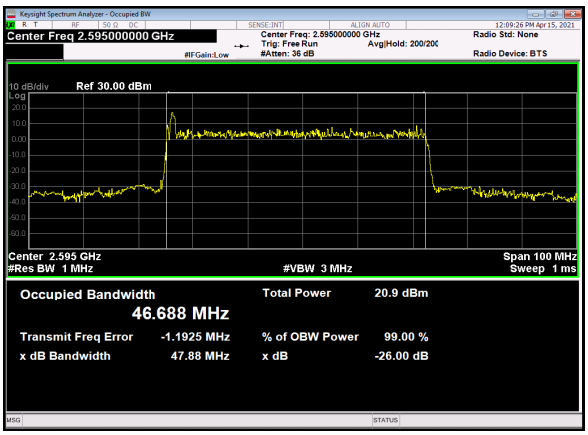
N41(50M)_DFT-s-OFDM_64 QAM_Outer_Full_Mid_CH



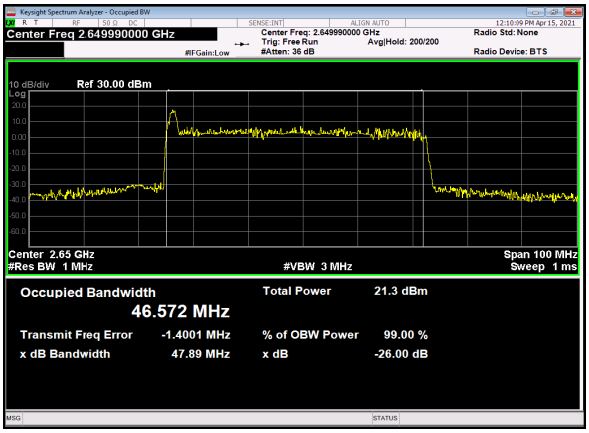
N41(50M)_DFT-s-OFDM_256 QAM_Outer_Full_Mid_CH



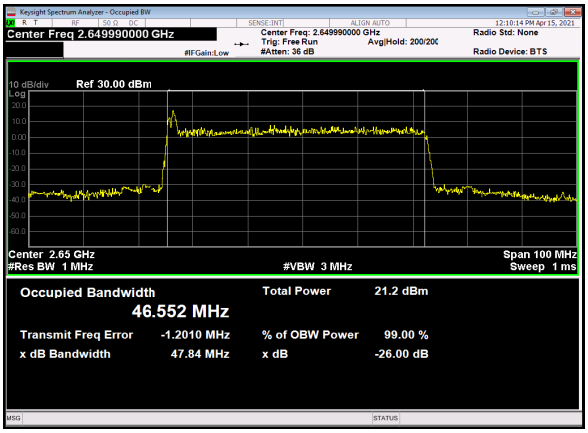
N41(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



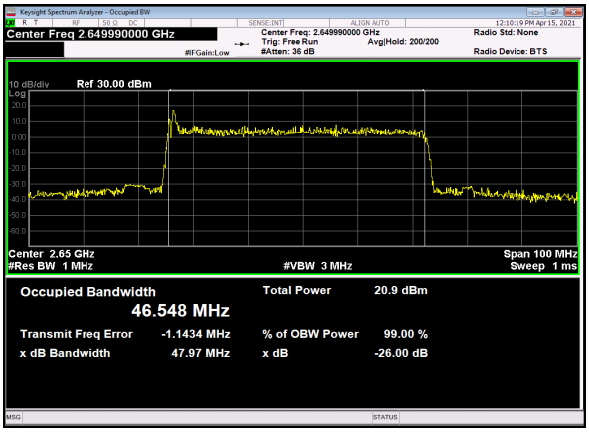
N41(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



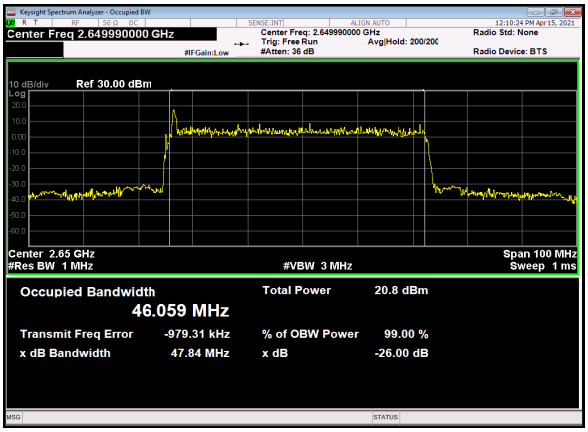
N41(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



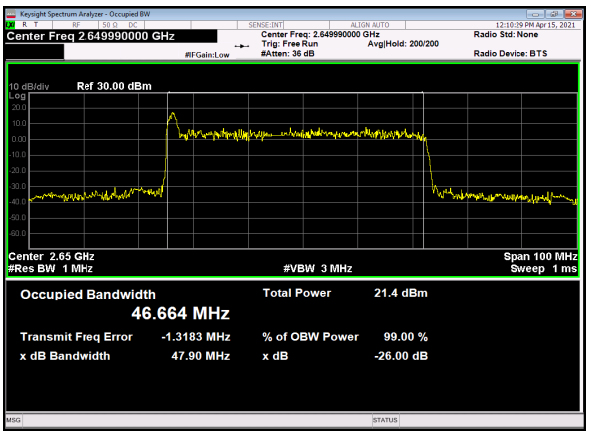
N41(50M)_DFT-s-OFDM_16QAM_Outer_Full_High_CH



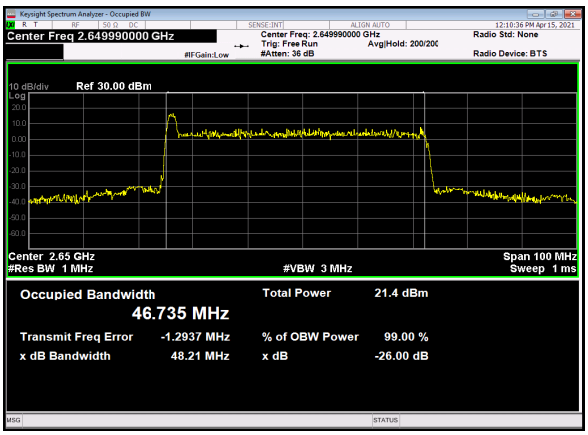
N41(50M)_DFT-s-OFDM_64QAM_Outer_Full_High_CH



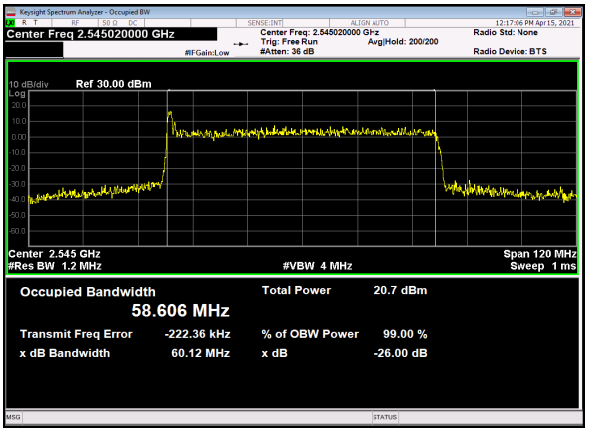
N41(50M)_DFT-s-OFDM_256QAM_Outer_Full_High_CH



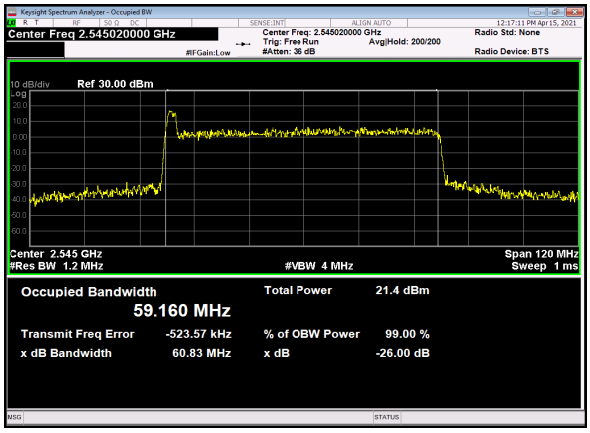
N41(50M)_CP-OFDM_QPSK_Outer_Full_High_CH



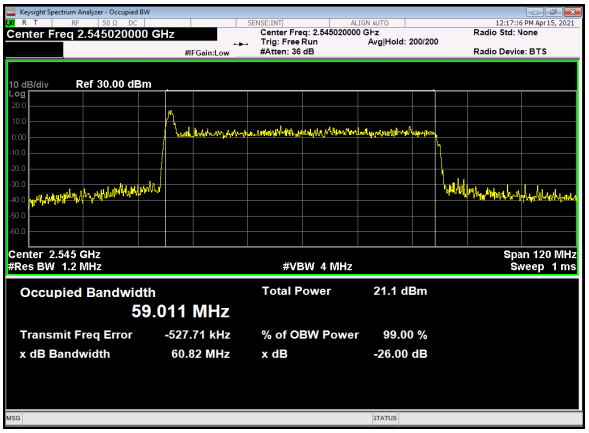
N41(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



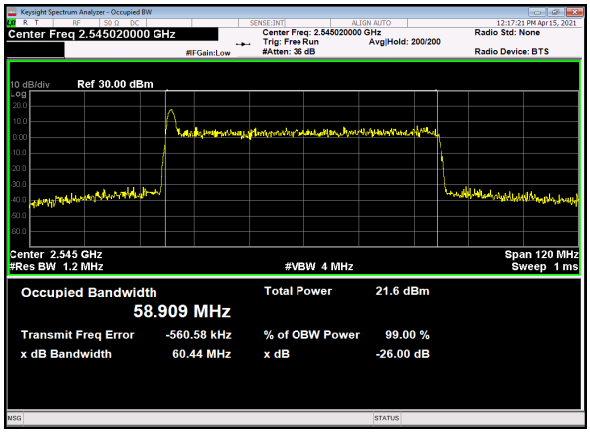
N41(60M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



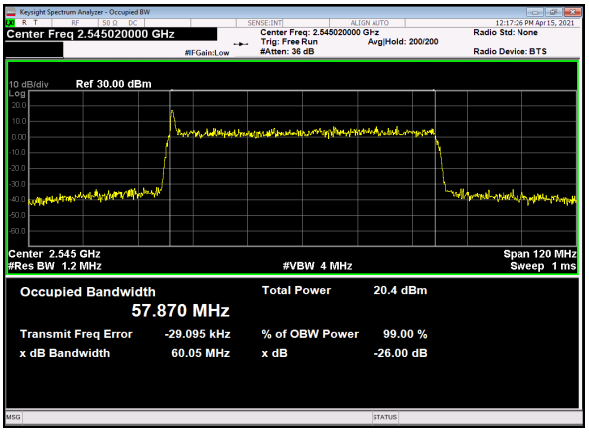
N41(60M)_DFT-s-OFDM_16QAM_Outer_Full_Low_CH



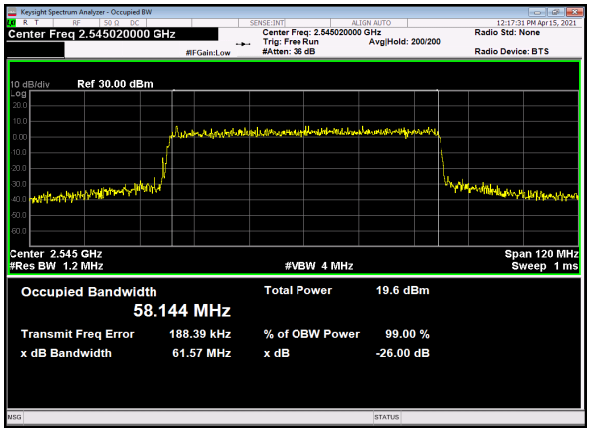
N41(60M)_DFT-s-OFDM_64QAM_Outer_Full_Low_CH



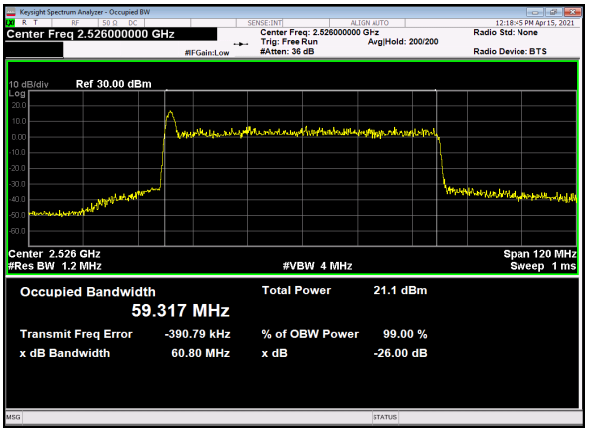
N41(60M)_DFT-s-OFDM_256QAM_Outer_Full_Low_CH



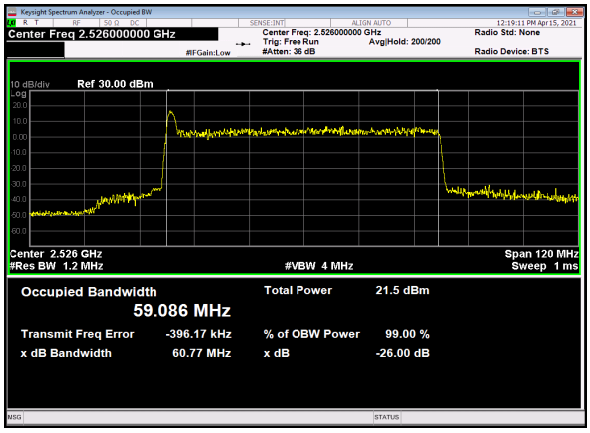
N41(60M)_CP-OFDM_QPSK_Outer_Full_Low_CH



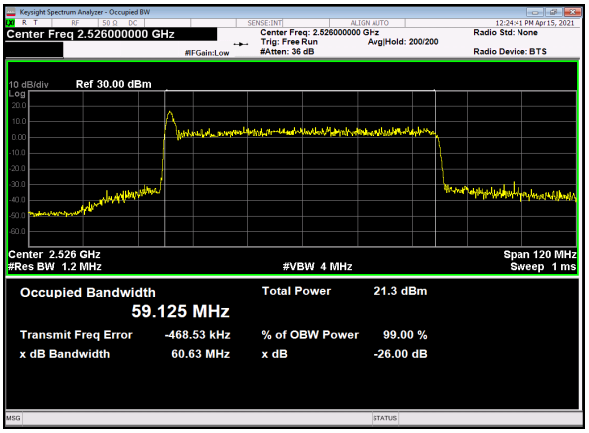
N41(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



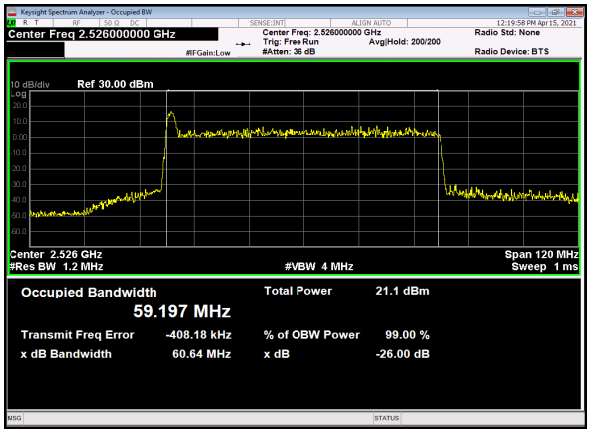
N41(60M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



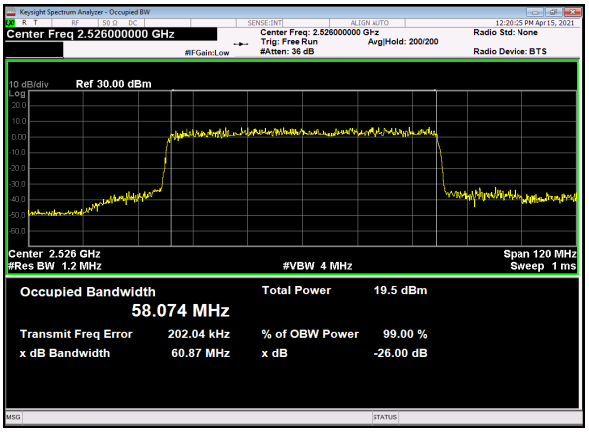
N41(60M)_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



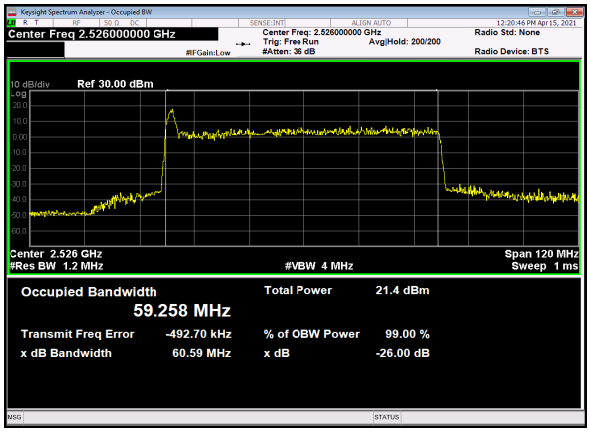
N41(60M)_DFT-s-OFDM_64QAM_Outer_Full_Mid_CH



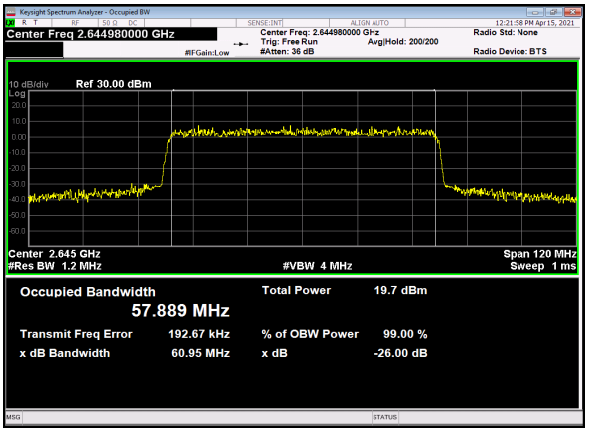
N41(60M)_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH



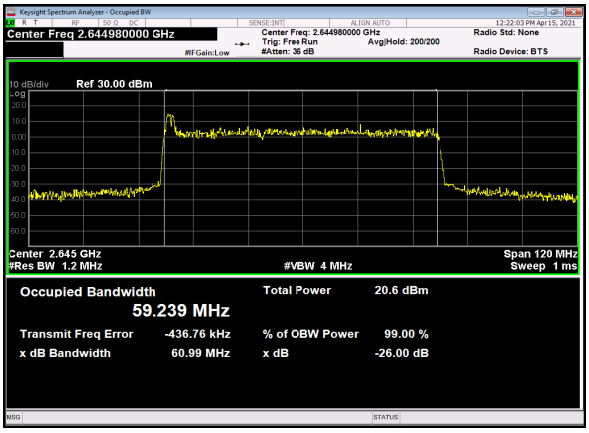
N41(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



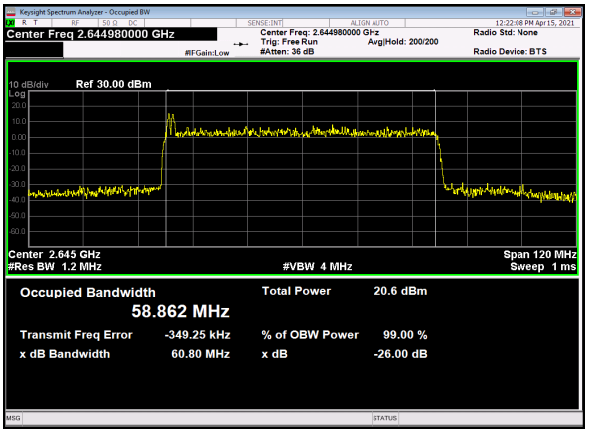
N41(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



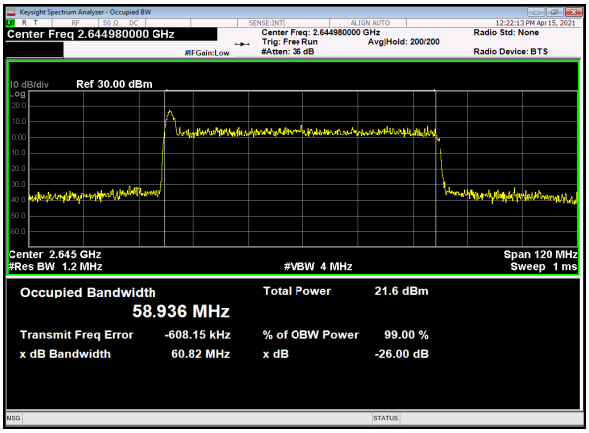
N41(60M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



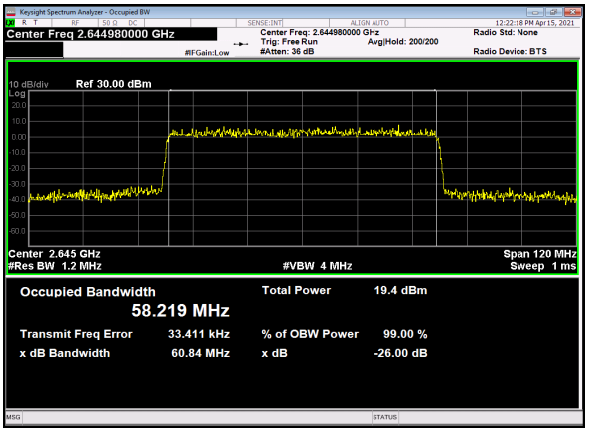
N41(60M)_DFT-s-OFDM_16QAM_Outer_Full_High_CH



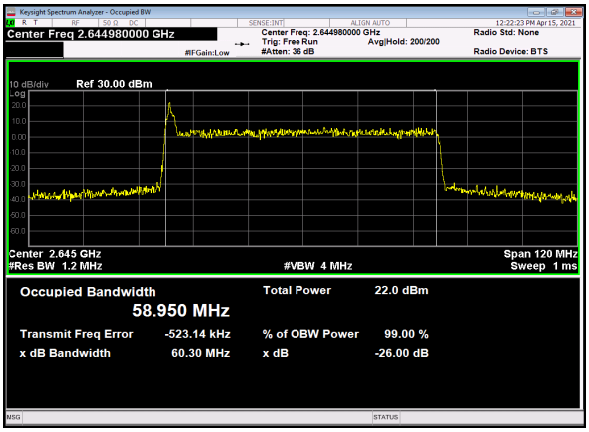
N41(60M)_DFT-s-OFDM_64QAM_Outer_Full_High_CH



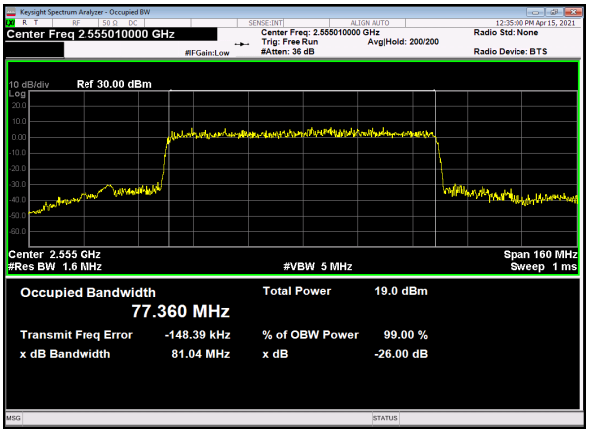
N41(60M)_DFT-s-OFDM_256QAM_Outer_Full_High_CH



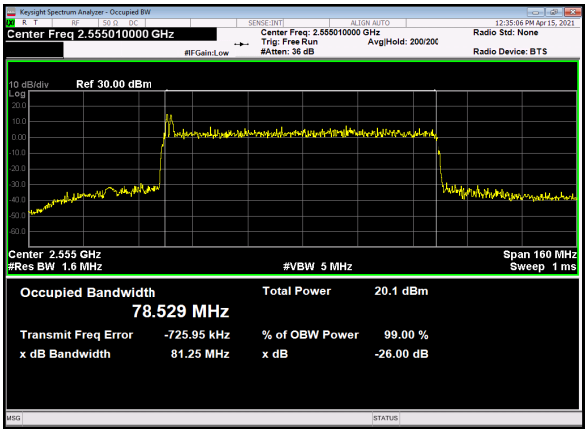
N41(60M)_CP-OFDM_QPSK_Outer_Full_High_CH



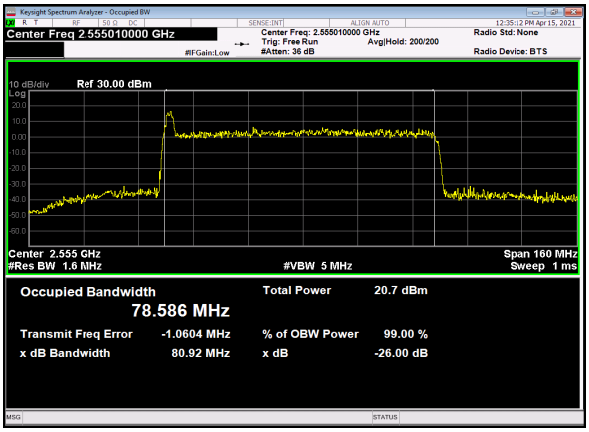
N41(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



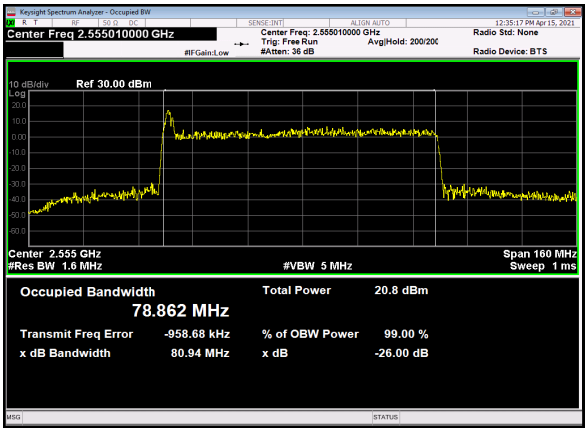
N41(80M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



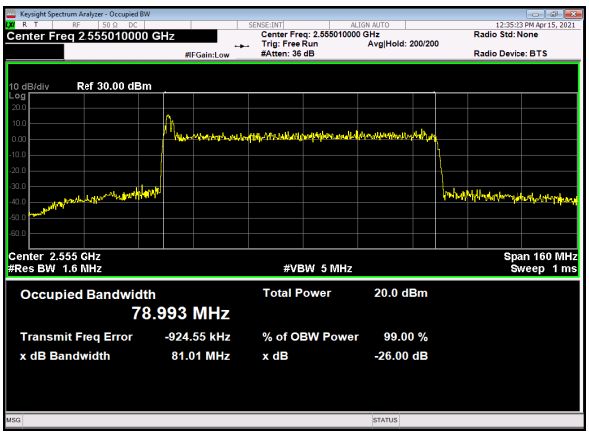
N41(80M)_DFT-s-OFDM_16 QAM_Outer_Full_Low_CH



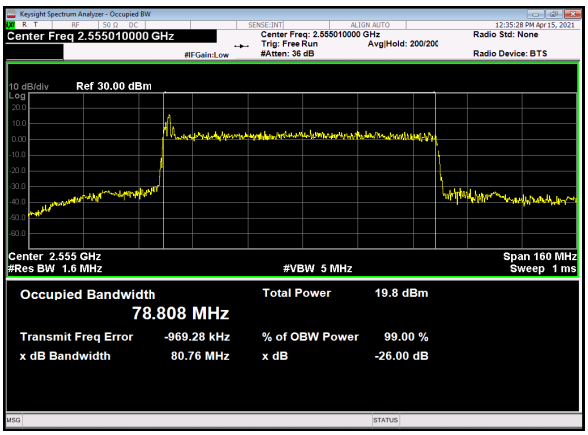
N41(80M)_DFT-s-OFDM_64 QAM_Outer_Full_Low_CH



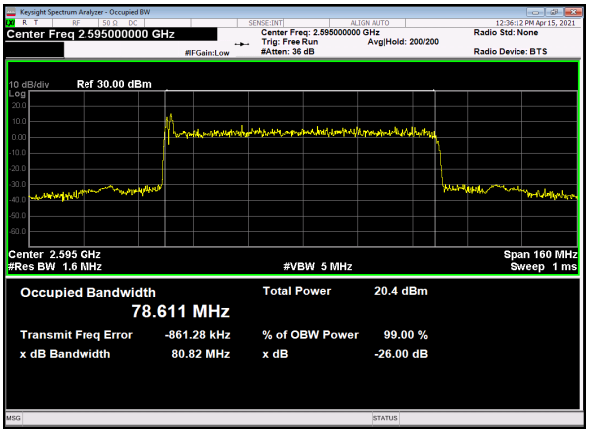
N41(80M)_DFT-s-OFDM_256 QAM_Outer_Full_Low_CH



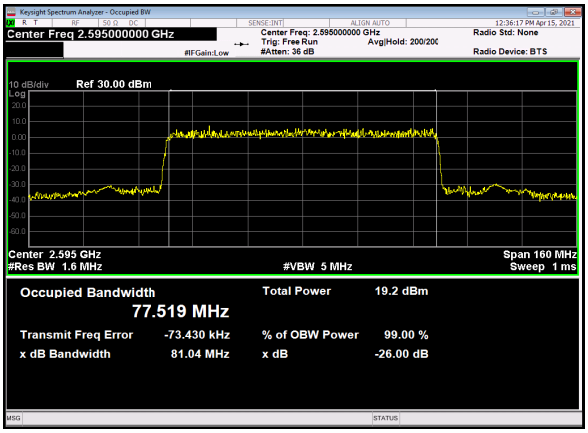
N41(80M)_CP-OFDM_QPSK_Outer_Full_Low_CH



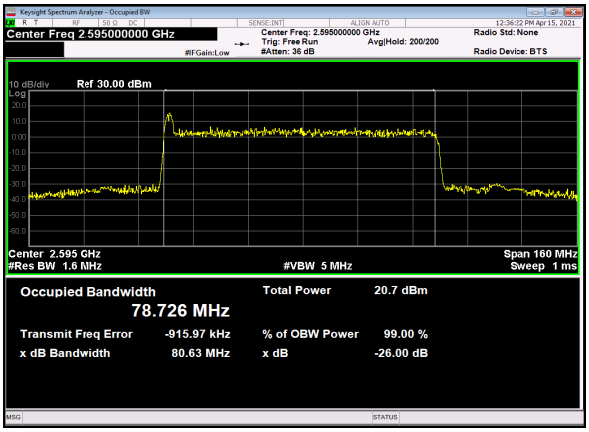
N41(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



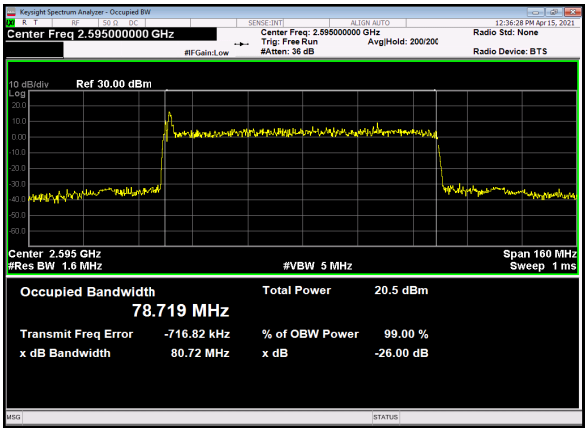
N41(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



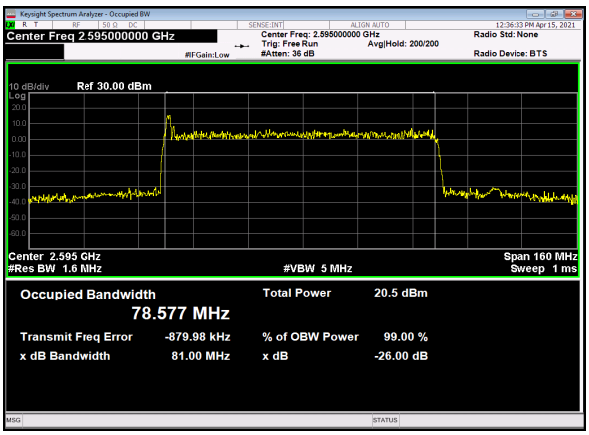
N41(80M)_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



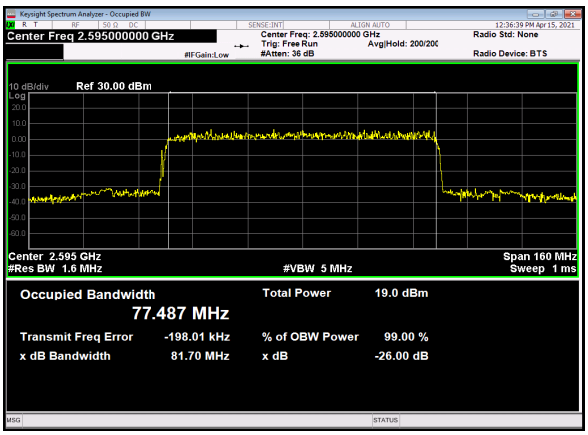
N41(80M)_DFT-s-OFDM_64QAM_Outer_Full_Mid_CH



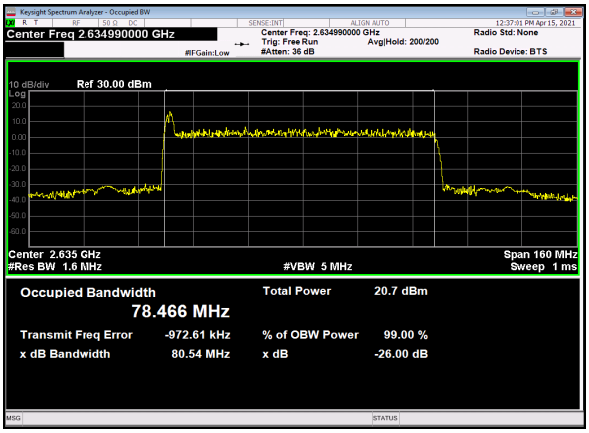
N41(80M)_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH



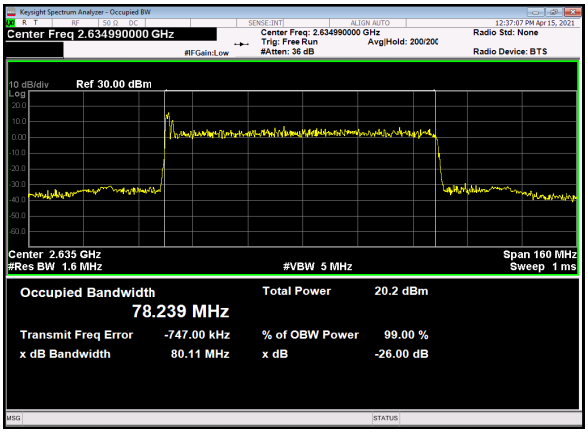
N41(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



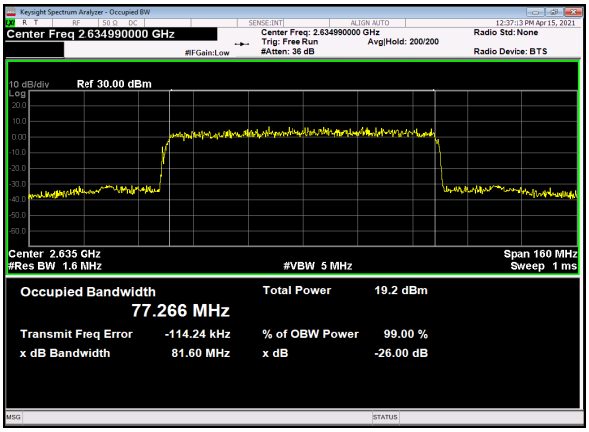
N41(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



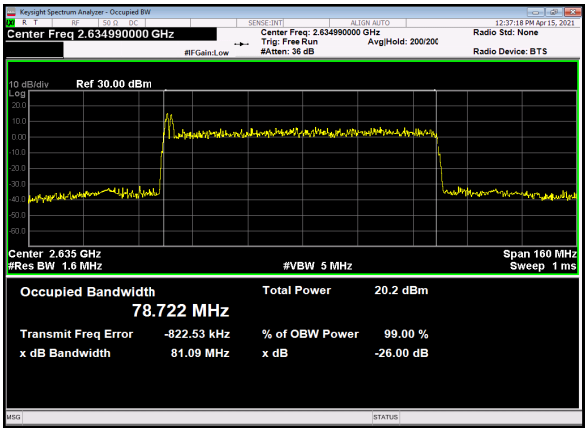
N41(80M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



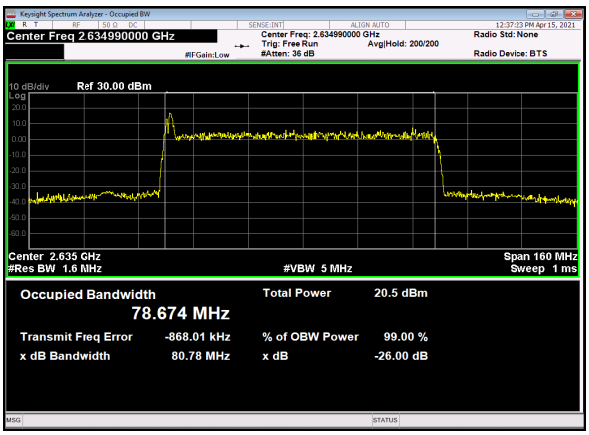
N41(80M)_DFT-s-OFDM_16QAM_Outer_Full_High_CH



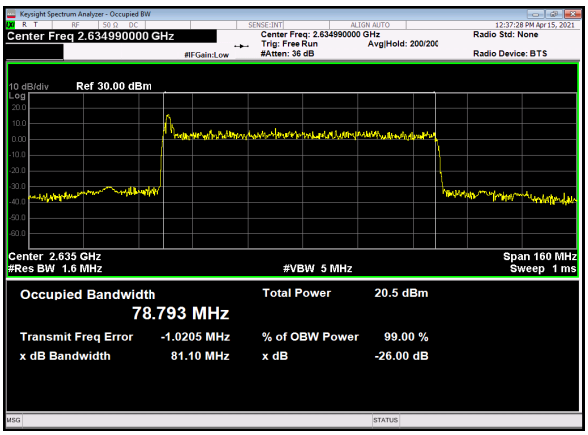
N41(80M)_DFT-s-OFDM_64QAM_Outer_Full_High_CH



N41(80M)_DFT-s-OFDM_256QAM_Outer_Full_High_CH



N41(80M)_CP-OFDM_QPSK_Outer_Full_High_CH



B2_N41(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH

B2_N41(90M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

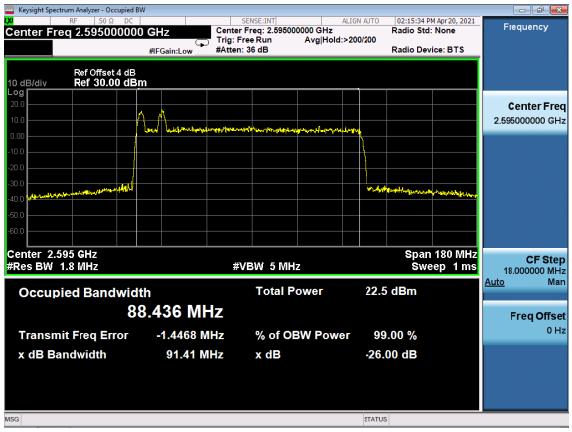
B2_N41(90M)_DFT-s-OFDM_16QAM_Outer_Full_Low_CH

B2_N41(90M)_DFT-s-OFDM_64QAM_Outer_Full_Low_CH

B2_N41(90M)_DFT-s-OFDM_256QAM_Outer_Full_Low_CH

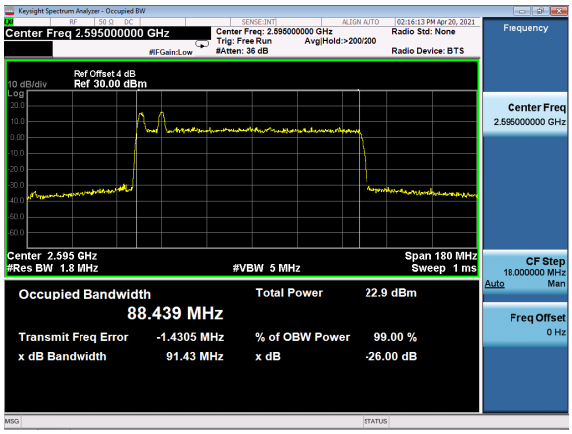
B2_N41(90M)_CP-OFDM_QPSK_Outer_Full_Low_CH

B2_N41(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



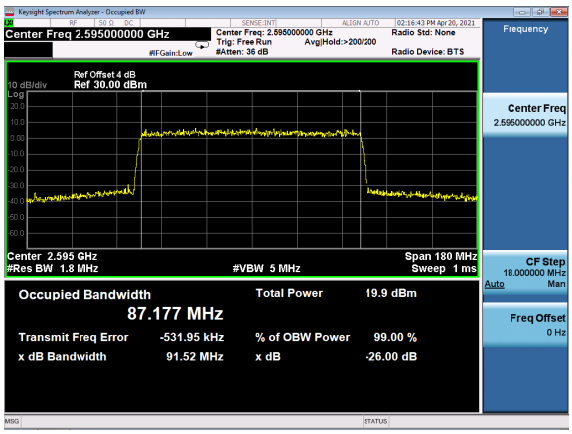
B2_N41(90M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

B2_N41(90M)_DFT-s-OFDM_16 QAM_Outer_Full_Mid_CH



B2_N41(90M)_DFT-s-OFDM_64 QAM_Outer_Full_Mid_CH

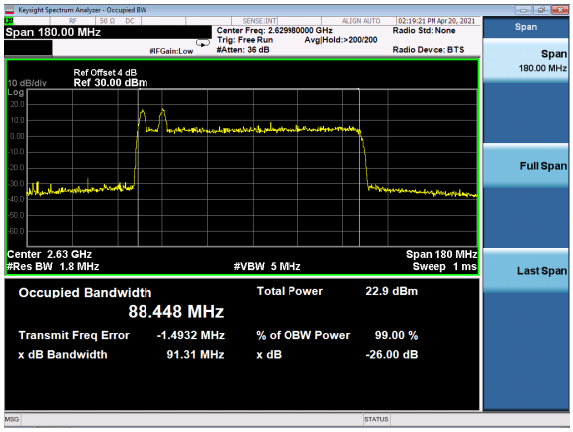
B2_N41(90M)_DFT-s-OFDM_256 QAM_Outer_Full_Mid_CH



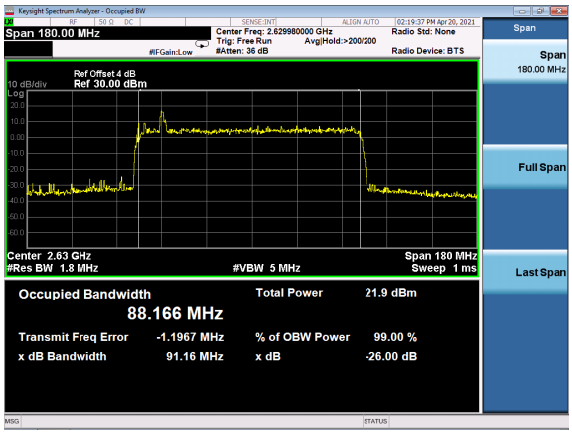
B2_N41(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

B2_N41(90M)_DFT-s-OFDM_PI_2-BPSK_ Outer_Full_High_CH

B2_N41(90M)_DFT-s-OFDM_QPSK_Outer_ Full_High_CH



B2_N41(90M)_DFT-s-OFDM_16 QAM_Outer_Full_High_CH

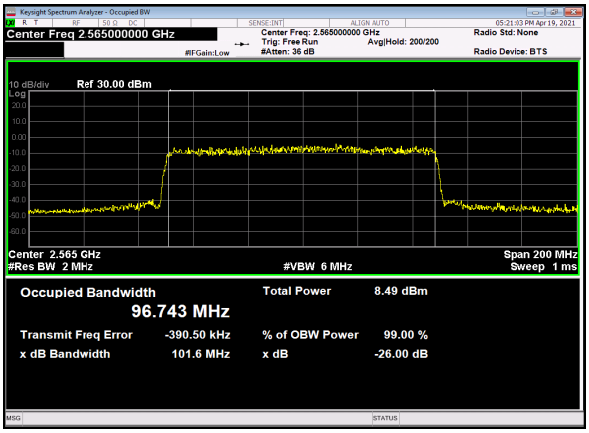


B2_N41(90M)_DFT-s-OFDM_64 QAM_Outer_Full_High_CH

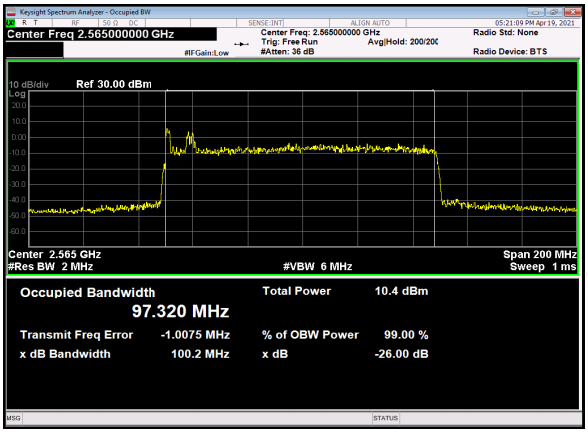
B2_N41(90M)_DFT-s-OFDM_256 QAM_Outer_Full_High_CH

B2_N41(90M)_CP-OFDM_QPSK_Outer_ Full_High_CH

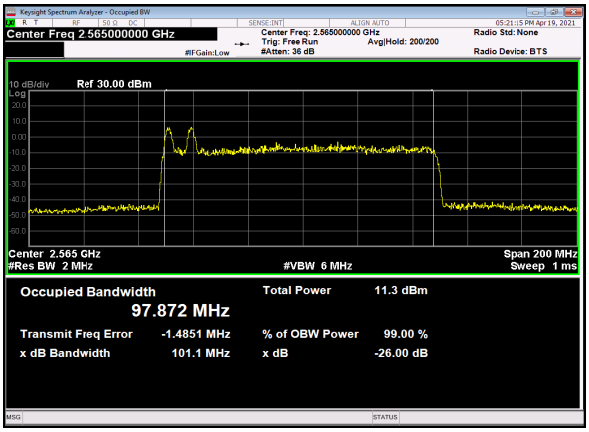
B2_N41(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



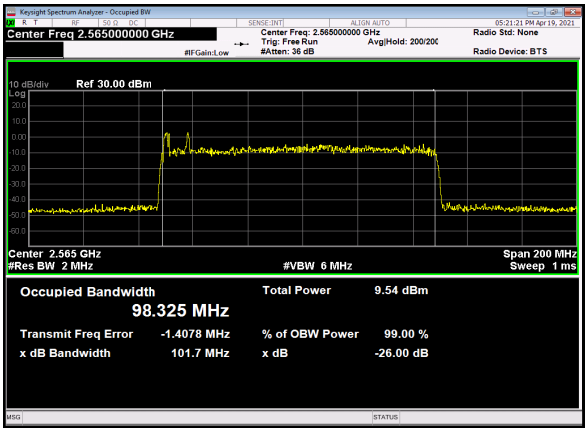
B2_N41(100M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



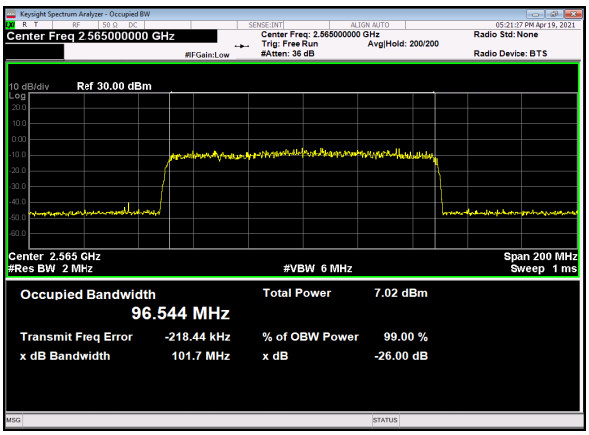
B2_N41(100M)_DFT-s-OFDM_16QAM_Outer_Full_Low_CH



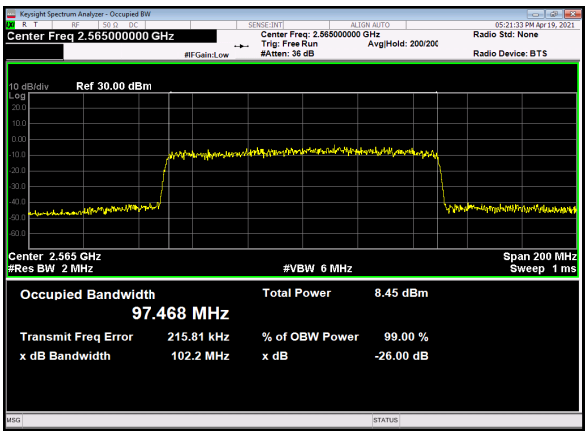
B2_N41(100M)_DFT-s-OFDM_64QAM_Outer_Full_Low_CH



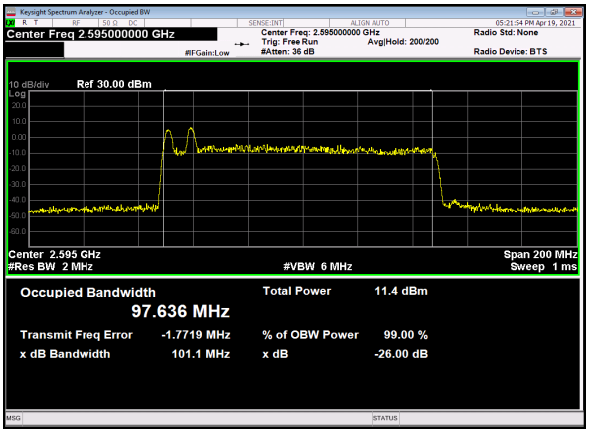
B2_N41(100M)_DFT-s-OFDM_256QAM_Outer_Full_Low_CH



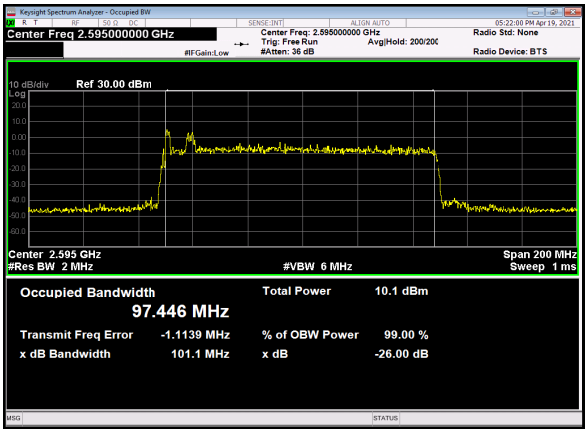
B2_N41(100M)_CP-OFDM_QPSK_Outer_Full_Low_CH



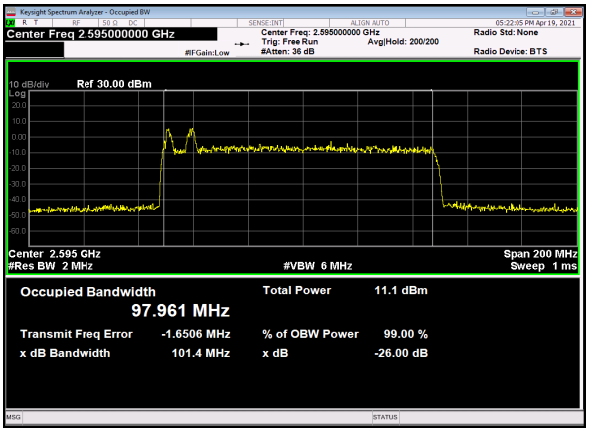
B2_N41(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



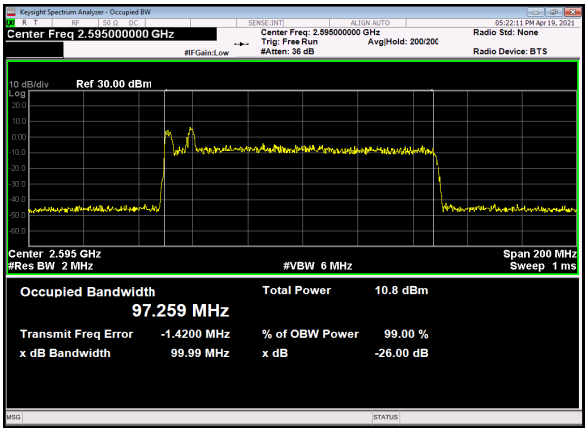
B2_N41(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



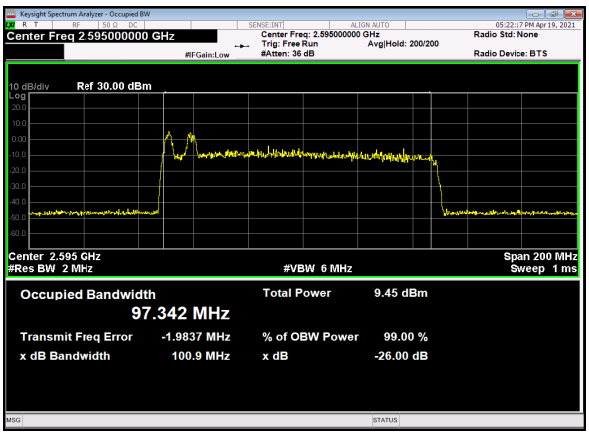
B2_N41(100M)_DFT-s-OFDM_16QAM_Outer_Full_Mid_CH



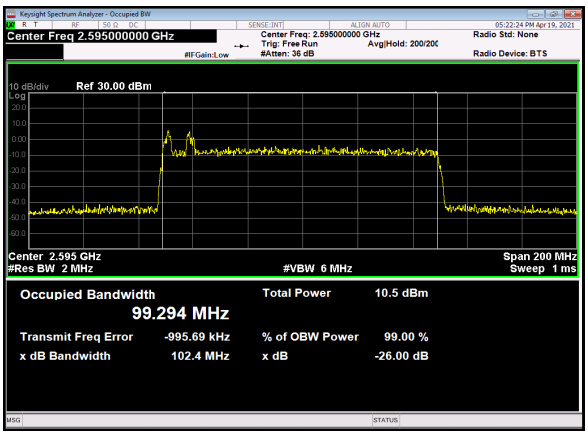
B2_N41(100M)_DFT-s-OFDM_64QAM_Outer_Full_Mid_CH



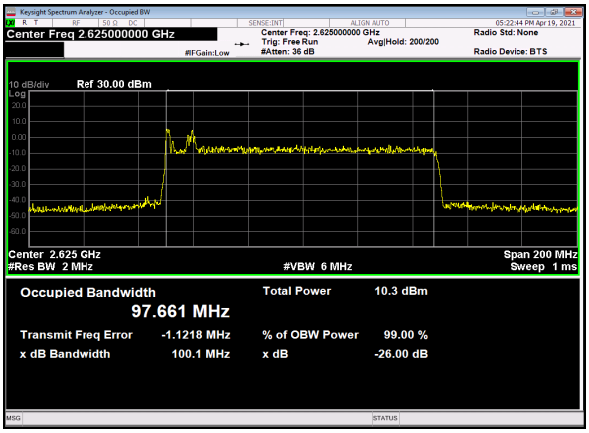
B2_N41(100M)_DFT-s-OFDM_256QAM_Outer_Full_Mid_CH



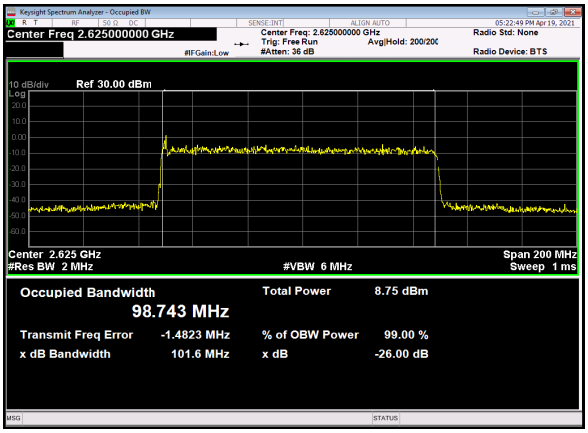
B2_N41(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



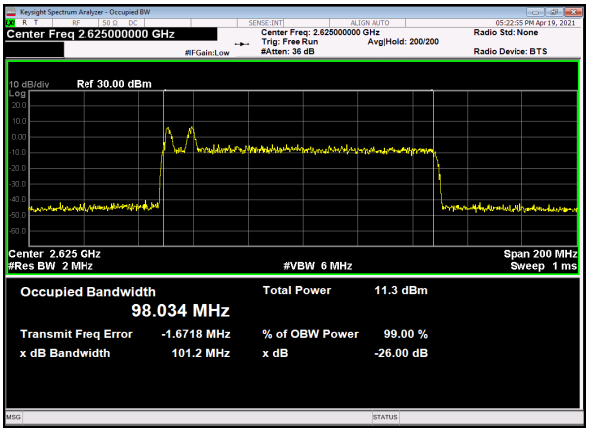
B2_N41(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



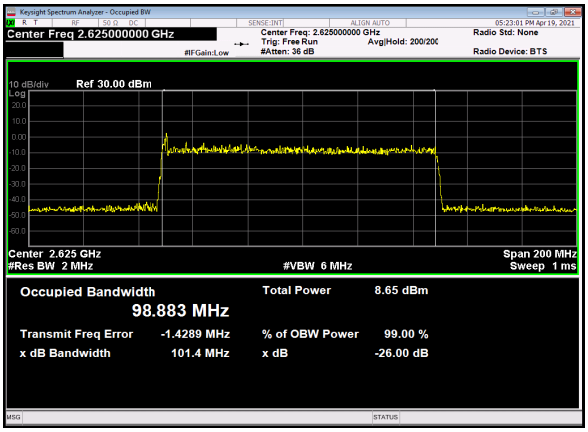
B2_N41(100M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



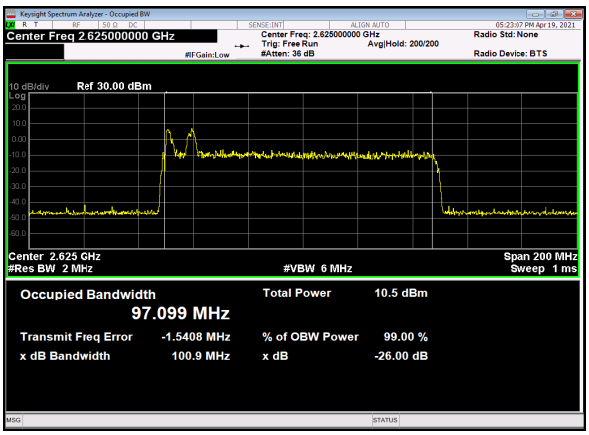
B2_N41(100M)_DFT-s-OFDM_16QAM_Outer_Full_High_CH



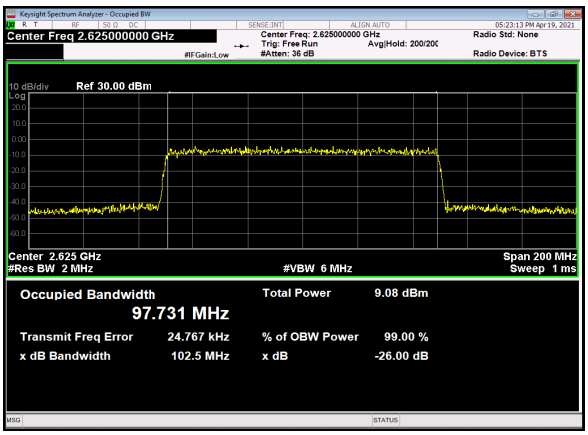
B2_N41(100M)_DFT-s-OFDM_64QAM_Outer_Full_High_CH



B2_N41(100M)_DFT-s-OFDM_256QAM_Outer_Full_High_CH



B2_N41(100M)_CP-OFDM_QPSK_Outer_Full_High_CH



2.3. Frequency Stability

2.3.1. Requirement

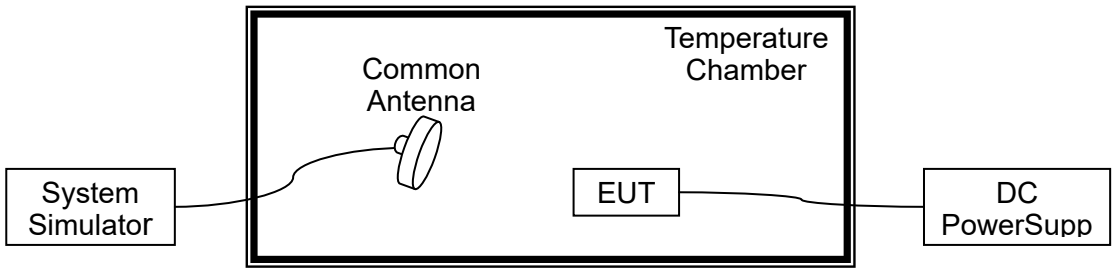
According to FCC section 2.1055 & 27.54, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. According to FCC section 2.1055, the test conditions are:

(a) The temperature is varied from -30°C to +50°C at intervals of not more than 10°C.

(b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

Note: The operating temperature of EUT is from 0°C to 45°C, which are specified by the applicant.

2.3.2. Test Description



The EUT which is powered by the DC Power Supply directly, is located in the Temperature Chamber. The EUT is commanded by the System Simulator (SS) to operate at the maximum output power. A call is established between the EUT and the SS via a Common Antenna.

2.3.3. Test procedure

KDB 971168 D01v03 Section 9.0 and ANSI/TIA-603-E-2016.

2.3.4. Test Result

The nominal, highest and lowest extreme voltages are separately 3.87VDC, 4.45VDC and 3.00VDC, which are specified by the applicant; the normal temperature here used is 20°C.

NR n41, QPSK, Channel 519000, SCS 30kHz, Frequency 2595MHz Limit =±2.5ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.87	+20（Ref）	25	0.010	PASS
100		0	-32	-0.012	
100		+10	26	0.010	
100		+20	-13	-0.005	
100		+30	-24	-0.009	
100		+40	47	0.018	
100		+45	20	0.008	
115	4.45	+20	55	0.021	
85	3.00	+20	57	0.022	

2.4. Conducted Spurious Emissions

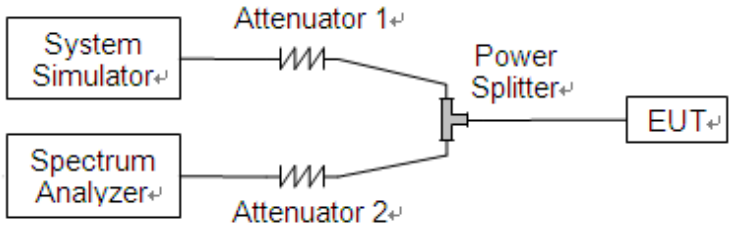
2.4.1. Requirement

According to FCC section 2.1051, the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43+10*log(P)dB. This calculated to be -13dBm.

Additional requirement for N41:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 55 + 10 log(P) dB. This calculated to be -25dBm.

2.4.2. Test Description



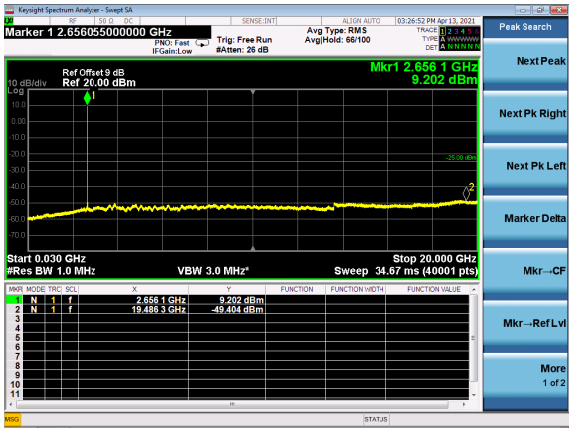
The EUTis coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum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

2.4.3. Test procedure

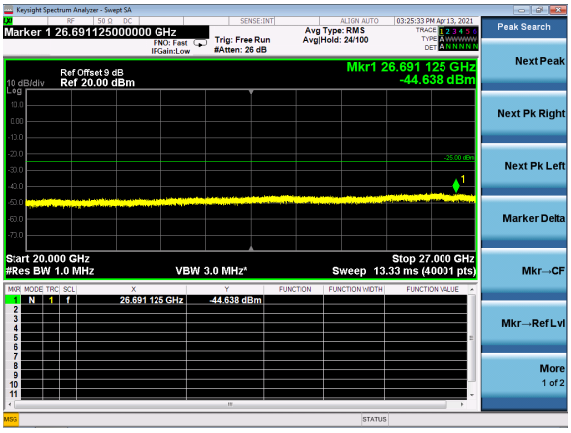
KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

2.4.4. Test Result

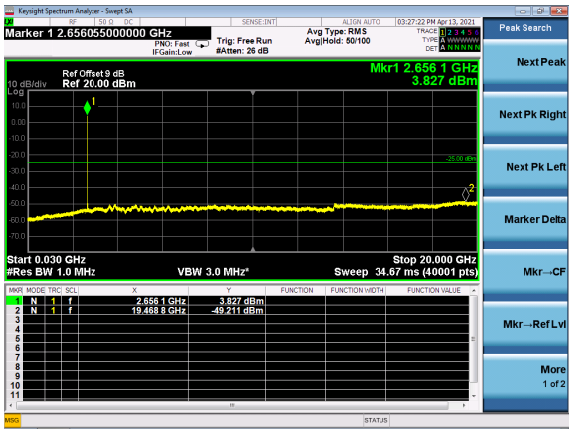
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_ Left_High_CH



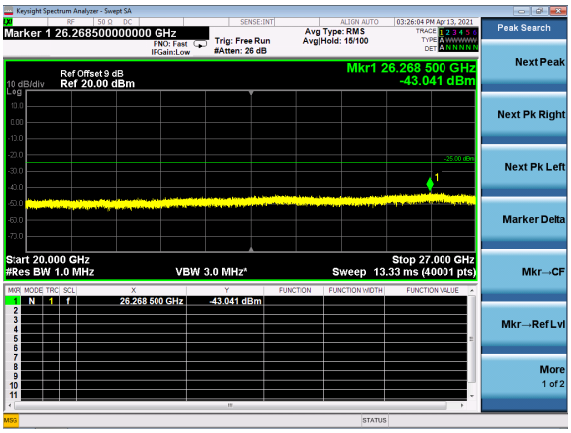
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_ Left_High_CH



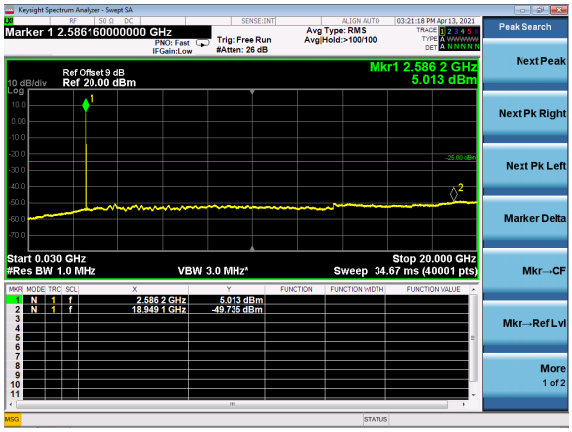
N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_ Left_High_CH



N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_ Left_High_CH



N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_ Left_Mid_CH



N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_ Left_Mid_CH