



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

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REPORT No.: SZ21020185W12

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:	DC_2A_N41, DC_2C_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
	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 Ampere Technology Limited

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

Note 2: According to the measured power of all frequency bands, The frequency band with the highest power was selected for the same NR frequency band for testing.



1.3. Maximum ERP/EIRP and Emission Designator

DC 2A_N41	Maximum ERP/EIRP (W)								
	DFT-s-OFDM					CP-OFDM			
BW(MHz)	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
100	0.314	0.306	0.265	0.245	0.148	0.275	0.272	0.193	0.092
90	0.258	/	/	/	/	/	/	/	/
80	0.255	/	/	/	/	/	/	/	/
60	0.285	/	/	/	/	/	/	/	/
50	0.276	/	/	/	/	/	/	/	/
40	0.274	/	/	/	/	/	/	/	/
20	0.276	/	/	/	/	/	/	/	/

Emission Designator (99%OBW)					
DFT-s-OFDM					CP-OFDM
PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK
97M7G7D	98M7G7D	98M7W7D	98M9D7W	97M3D7W	98M3G7D
87M4G7D	86M6G7D	87M7W7D	87M5D7W	85M7D7W	88M0G7D
78M2G7D	78M8G7D	78M1W7D	78M8D7W	78M3D7W	79M0G7D
59M0G7D	58M1G7D	59M3W7D	59M2D7W	58M3D7W	58M8G7D
46M4G7D	46M8G7D	46M7W7D	46M7D7W	46M6D7W	48M3G7D
36M1G7D	36M5G7D	36M6W7D	36M6D7W	36M2D7W	38M0G7D
18M2G7D	18M1G7D	18M2W7D	18M2D7W	18M1D7W	18M4G7D



DC 2C_N41	Maximum ERP/EIRP (W)								
	DFT-s-OFDM					CP-OFDM			
BW(MHz)	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM
100	0.255	0.269	0.265	0.234	0.143	0.267	0.266	0.197	0.088
90	0.259	/	/	/	/	/	/	/	/
80	0.255	/	/	/	/	/	/	/	/
60	0.272	/	/	/	/	/	/	/	/
50	0.286	/	/	/	/	/	/	/	/
40	0.284	/	/	/	/	/	/	/	/
20	0.272	/	/	/	/	/	/	/	/



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 ,2021to 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

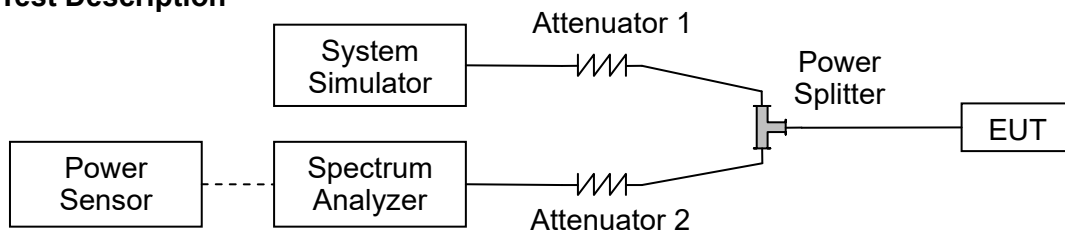
2.1. Transmitter Conducted Output Power And ERP/EIRP

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 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 50 Ohm; 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. Result

Conducted Output Power:



Top Antenna

EN-DC_2A-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	22.00	21.85	21.62
100		135	67	21.89	21.92	21.86
100		1	271	22.02	21.85	22.03
100	DFT-s-OFDM QPSK	1	1	22.01	22.10	21.91
100		135	67	21.92	21.93	21.91
100		1	271	21.86	21.90	21.98
100	DFT-s-OFDM-16QAM	1	1	21.70	21.94	21.72
100	DFT-s-OFDM-64QAM	1	1	20.11	20.68	20.14
100	DFT-s-OFDM-256QAM	1	1	17.51	17.35	17.36
Channel				512004	519000	525996
Frequency (MHz)				2560	2595	2630
90	DFT-s-OFDM-PI/2 BPSK	1	1	22.08	22.08	21.64
Channel				511002	519000	526998
Frequency (MHz)				2555	2595	2635
80	DFT-s-OFDM-PI/2 BPSK	1	1	21.82	21.94	21.78
Channel				509004	519000	528996
Frequency (MHz)				2545	2595	2645
60	DFT-s-OFDM-PI/2 BPSK	1	1	22.08	22.04	22.03
Channel				508002	519000	529998
Frequency (MHz)				2540	2595	2650
50	DFT-s-OFDM-PI/2 BPSK	1	1	21.87	21.93	21.90
Channel				507000	519000	531000
Frequency (MHz)				2535	2595	2655
40	DFT-s-OFDM-PI/2 BPSK	1	1	21.87	21.81	21.91
Channel				505002	519000	532998
Frequency (MHz)				2525	2595	2665
20	DFT-s-OFDM-PI/2 BPSK	1	1	22.10	21.90	22.01



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Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	CP-OFDM-QPSK	1	1	22.04	22.01	21.90
100	CP-OFDM-16QAM	1	1	21.91	22.01	21.79
100	CP-OFDM-64QAM	1	1	20.12	20.65	20.31
100	CP-OFDM-256QAM	1	1	17.40	17.50	17.29



EN-DC_2C-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	21.81	21.57	21.69
100		135	67	21.28	21.20	21.34
100		1	271	21.12	21.33	21.10
100	DFT-s-OFDM QPSK	1	1	21.60	21.44	21.42
100		135	67	21.55	20.94	20.95
100		1	271	21.20	21.45	21.15
100	DFT-s-OFDM-16QAM	1	1	20.76	20.37	20.67
100	DFT-s-OFDM-64QAM	1	1	20.16	20.84	20.31
100	DFT-s-OFDM-256QAM	1	1	18.47	18.15	18.56
Channel				512004	519000	525996
Frequency (MHz)				2560	2595	2630
90	DFT-s-OFDM-PI/2 BPSK	1	1	21.75	22.06	21.81
Channel				511002	519000	526998
Frequency (MHz)				2555	2595	2635
80	DFT-s-OFDM-PI/2 BPSK	1	1	21.76	21.82	21.76
Channel				509004	519000	528996
Frequency (MHz)				2545	2595	2645
60	DFT-s-OFDM-PI/2 BPSK	1	1	20.91	20.84	21.20
Channel				508002	519000	529998
Frequency (MHz)				2540	2595	2650
50	DFT-s-OFDM-PI/2 BPSK	1	1	21.02	21.00	21.01
Channel				507000	519000	531000
Frequency (MHz)				2535	2595	2655
40	DFT-s-OFDM-PI/2 BPSK	1	1	21.08	21.04	21.20
Channel				505002	519000	532998
Frequency (MHz)				2525	2595	2665
20	DFT-s-OFDM-PI/2 BPSK	1	1	20.74	21.11	20.94



Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	CP-OFDM-QPSK	1	1	20.71	20.52	20.41
100	CP-OFDM-16QAM	1	1	21.06	20.89	20.45
100	CP-OFDM-64QAM	1	1	19.79	20.01	19.82
100	CP-OFDM-256QAM	1	1	16.43	16.47	16.26



Bottom Antenna

EN-DC_2A-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	22.11	22.97	22.76
100		135	67	22.34	22.17	22.24
100		1	271	22.25	21.93	21.95
100	DFT-s-OFDM QPSK	1	1	22.64	22.76	22.86
100		135	67	22.68	22.76	22.86
100		1	271	22.59	21.76	21.83
100	DFT-s-OFDM-16QAM	1	1	21.67	22.24	22.11
100	DFT-s-OFDM-64QAM	1	1	21.70	21.89	21.74
100	DFT-s-OFDM-256QAM	1	1	19.70	19.42	19.22
Channel				512004	519000	525996
Frequency (MHz)				2560	2595	2630
90	DFT-s-OFDM-PI/2 BPSK	1	1	22.12	21.71	22.08
Channel				511002	519000	526998
Frequency (MHz)				2555	2595	2635
80	DFT-s-OFDM-PI/2 BPSK	1	1	21.88	21.83	22.07
Channel				509004	519000	528996
Frequency (MHz)				2545	2595	2645
60	DFT-s-OFDM-PI/2 BPSK	1	1	22.49	22.22	22.55
Channel				508002	519000	529998
Frequency (MHz)				2540	2595	2650
50	DFT-s-OFDM-PI/2 BPSK	1	1	22.07	22.41	22.26
Channel				507000	519000	531000
Frequency (MHz)				2535	2595	2655
40	DFT-s-OFDM-PI/2 BPSK	1	1	22.12	22.28	22.37
Channel				505002	519000	532998
Frequency (MHz)				2525	2595	2665
20	DFT-s-OFDM-PI/2 BPSK	1	1	22.41	22.11	22.14



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Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	CP-OFDM-QPSK	1	1	22.19	22.40	22.03
100	CP-OFDM-16QAM	1	1	22.25	22.04	22.34
100	CP-OFDM-64QAM	1	1	20.59	20.85	20.58
100	CP-OFDM-256QAM	1	1	16.97	17.46	17.63



EN_DC_2C_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	21.90	22.02	22.01
100		135	67	22.07	21.92	21.97
100		1	271	21.81	21.98	21.90
100	DFT-s-OFDM QPSK	1	1	21.96	21.76	22.27
100		135	67	21.91	22.29	21.88
100		1	271	21.89	21.82	21.88
100	DFT-s-OFDM-16QAM	1	1	21.80	22.23	21.72
100	DFT-s-OFDM-64QAM	1	1	21.50	21.67	21.69
100	DFT-s-OFDM-256QAM	1	1	19.02	19.45	19.55
Channel				512004	519000	525996
Frequency (MHz)				2560	2595	2630
90	DFT-s-OFDM-PI/2 BPSK	1	1	22.14	21.95	22.02
Channel				511002	519000	526998
Frequency (MHz)				2555	2595	2635
80	DFT-s-OFDM-PI/2 BPSK	1	1	21.65	21.74	22.06
Channel				509004	519000	528996
Frequency (MHz)				2545	2595	2645
60	DFT-s-OFDM-PI/2 BPSK	1	1	22.13	22.35	22.15
Channel				508002	519000	529998
Frequency (MHz)				2540	2595	2650
50	DFT-s-OFDM-PI/2 BPSK	1	1	22.56	22.39	22.13
Channel				507000	519000	531000
Frequency (MHz)				2535	2595	2655
40	DFT-s-OFDM-PI/2 BPSK	1	1	22.11	22.53	22.45
Channel				505002	519000	532998
Frequency (MHz)				2525	2595	2665
20	DFT-s-OFDM-PI/2 BPSK	1	1	22.19	22.34	21.88



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Channel				513000	519000	525000
Frequency (MHz)				2565	2595	2625
100	CP-OFDM-QPSK	1	1	22.12	22.10	22.26
100	CP-OFDM-16QAM	1	1	22.25	21.98	22.13
100	CP-OFDM-64QAM	1	1	20.31	20.68	20.94
100	CP-OFDM-256QAM	1	1	17.40	17.40	17.45



Effective Radiated Power and Effective Isotropic Radiated Power:

Top Antenna

EN_DC_2A_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				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	17.00	16.85	16.62	0.050	0.048	0.046
100		135	67	16.89	16.92	16.86	0.049	0.049	0.049
100		1	271	17.02	16.85	17.03	0.050	0.048	0.050
100	DFT-s-OFDM QPSK	1	1	17.01	17.10	16.91	0.050	0.051	0.049
100		135	67	16.92	16.93	16.91	0.049	0.049	0.049
100		1	271	16.86	16.90	16.98	0.049	0.049	0.050
100	DFT-s-OFDM 16QAM	1	1	16.70	16.94	16.72	0.047	0.049	0.047
100	DFT-s-OFDM 64QAM	1	1	15.11	15.68	15.14	0.032	0.037	0.033
100	DFT-s-OFDM 256QAM	1	1	12.51	12.35	12.36	0.018	0.017	0.017
Channel				512004	519000	525996	512004	519000	525996
Frequency (MHz)				2560	2595	2630	2560	2595	2630
90	DFT-s-OFDM PI/2 BPSK	1	1	17.08	17.08	16.64	0.051	0.051	0.046
Channel				511002	519000	526998	511002	519000	526998
Frequency (MHz)				2555	2595	2635	2555	2595	2635
80	DFT-s-OFDM PI/2 BPSK	1	1	16.82	16.94	16.78	0.048	0.049	0.048
Channel				509004	519000	528996	509004	519000	528996
Frequency (MHz)				2545	2595	2645	2545	2595	2645
60	DFT-s-OFDM PI/2 BPSK	1	1	17.08	17.04	17.03	0.051	0.051	0.050
Channel				508002	519000	529998	508002	519000	529998
Frequency (MHz)				2540	2595	2650	2540	2595	2650
50	DFT-s-OFDM PI/2 BPSK	1	1	16.87	16.93	16.90	0.049	0.049	0.049
Channel				507000	519000	531000	507000	519000	531000
Frequency (MHz)				2535	2595	2655	2535	2595	2655



40	DFT-s-OFDM PI/2 BPSK	1	1	16.87	16.81	16.91	0.049	0.048	0.049
Channel				505002	519000	532998	505002	519000	532998
Frequency (MHz)				2525	2595	2665	2525	2595	2665
20	DFT-s-OFDM PI/2 BPSK	1	1	17.10	16.90	17.01	0.051	0.049	0.050
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
100	CP-OFDM QPSK	1	1	17.04	17.01	16.90	0.051	0.050	0.049
100	CP-OFDM 16QAM	1	1	16.91	17.01	16.79	0.049	0.050	0.048
100	CP-OFDM 64QAM	1	1	15.12	15.65	15.31	0.033	0.037	0.034
100	CP-OFDM 256QAM	1	1	12.40	12.50	12.29	0.017	0.018	0.017



EN_DC_2C_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				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	16.81	16.57	16.69	0.048	0.045	0.047
100		135	67	16.28	16.20	16.34	0.042	0.042	0.043
100		1	271	16.12	16.33	16.10	0.041	0.043	0.041
100	DFT-s-OFDM QPSK	1	1	16.60	16.44	16.42	0.046	0.044	0.044
100		135	67	16.55	15.94	15.95	0.045	0.039	0.039
100		1	271	16.20	16.45	16.15	0.042	0.044	0.041
100	DFT-s-OFDM 16QAM	1	1	15.76	15.37	15.67	0.038	0.034	0.037
100	DFT-s-OFDM 64QAM	1	1	15.16	15.84	15.31	0.033	0.038	0.034
100	DFT-s-OFDM 256QAM	1	1	13.47	13.15	13.56	0.022	0.021	0.023
Channel				512004	519000	525996	512004	519000	525996
Frequency (MHz)				2560	2595	2630	2560	2595	2630
90	DFT-s-OFDM PI/2 BPSK	1	1	16.75	17.06	16.81	0.047	0.051	0.048
Channel				511002	519000	526998	511002	519000	526998
Frequency (MHz)				2555	2595	2635	2555	2595	2635
80	DFT-s-OFDM PI/2 BPSK	1	1	16.76	16.82	16.76	0.047	0.048	0.047
Channel				509004	519000	528996	509004	519000	528996
Frequency (MHz)				2545	2595	2645	2545	2595	2645
60	DFT-s-OFDM PI/2 BPSK	1	1	15.91	15.84	16.20	0.039	0.038	0.042
Channel				508002	519000	529998	508002	519000	529998
Frequency (MHz)				2540	2595	2650	2540	2595	2650
50	DFT-s-OFDM PI/2 BPSK	1	1	16.02	16.00	16.01	0.040	0.040	0.040
Channel				507000	519000	531000	507000	519000	531000
Frequency (MHz)				2535	2595	2655	2535	2595	2655
40	DFT-s-OFDM PI/2 BPSK	1	1	16.08	16.04	16.20	0.041	0.040	0.042



Channel				505002	519000	532998	505002	519000	532998
Frequency (MHz)				2525	2595	2665	2525	2595	2665
20	DFT-s-OFDM PI/2 BPSK	1	1	15.74	16.11	15.94	0.037	0.041	0.039
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
100	CP-OFDM QPSK	1	1	15.71	15.52	15.41	0.037	0.036	0.035
100	CP-OFDM 16QAM	1	1	16.06	15.89	15.45	0.040	0.039	0.035
100	CP-OFDM 64QAM	1	1	14.79	15.01	14.82	0.030	0.032	0.030
100	CP-OFDM 256QAM	1	1	11.43	11.47	11.26	0.014	0.014	0.013



Bottom Antenna

EN_DC_2A_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				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	24.11	24.97	24.76	0.258	0.314	0.299
100		135	67	24.34	24.17	24.24	0.272	0.261	0.265
100		1	271	24.25	23.93	23.95	0.266	0.247	0.248
100	DFT-s-OFDM QPSK	1	1	24.64	24.76	24.86	0.291	0.299	0.306
100		135	67	24.68	24.76	24.86	0.294	0.299	0.306
100		1	271	24.59	23.76	23.83	0.288	0.238	0.242
100	DFT-s-OFDM 16QAM	1	1	23.67	24.24	24.11	0.233	0.265	0.258
100	DFT-s-OFDM 64QAM	1	1	23.70	23.89	23.74	0.234	0.245	0.237
100	DFT-s-OFDM 256QAM	1	1	21.70	21.42	21.22	0.148	0.139	0.132
Channel				512004	519000	525996	512004	519000	525996
Frequency (MHz)				2560	2595	2630	2560	2595	2630
90	DFT-s-OFDM PI/2 BPSK	1	1	24.12	23.71	24.08	0.258	0.235	0.256
Channel				511002	519000	526998	511002	519000	526998
Frequency (MHz)				2555	2595	2635	2555	2595	2635
80	DFT-s-OFDM PI/2 BPSK	1	1	23.88	23.83	24.07	0.244	0.242	0.255
Channel				509004	519000	528996	509004	519000	528996
Frequency (MHz)				2545	2595	2645	2545	2595	2645
60	DFT-s-OFDM PI/2 BPSK	1	1	24.49	24.22	24.55	0.281	0.264	0.285
Channel				508002	519000	529998	508002	519000	529998
Frequency (MHz)				2540	2595	2650	2540	2595	2650
50	DFT-s-OFDM PI/2 BPSK	1	1	24.07	24.41	24.26	0.255	0.276	0.267
Channel				507000	519000	531000	507000	519000	531000
Frequency (MHz)				2535	2595	2655	2535	2595	2655
40	DFT-s-OFDM	1	1	24.12	24.28	24.37	0.258	0.268	0.274



	PI/2 BPSK								
Channel				505002	519000	532998	505002	519000	532998
Frequency (MHz)				2525	2595	2665	2525	2595	2665
20	DFT-s-OFDM PI/2 BPSK	1	1	24.41	24.11	24.14	0.276	0.258	0.259
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
100	CP-OFDM QPSK	1	1	24.19	24.40	24.03	0.262	0.275	0.253
100	CP-OFDM 16QAM	1	1	24.25	24.04	24.34	0.266	0.254	0.272
100	CP-OFDM 64QAM	1	1	22.59	22.85	22.58	0.182	0.193	0.181
100	CP-OFDM 256QAM	1	1	18.97	19.46	19.63	0.079	0.088	0.092



EN_DC_2C_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				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	23.90	24.02	24.01	0.245	0.252	0.252
100		135	67	24.07	23.92	23.97	0.255	0.247	0.249
100		1	271	23.81	23.98	23.90	0.240	0.250	0.245
100	DFT-s-OFDM QPSK	1	1	23.96	23.76	24.27	0.249	0.238	0.267
100		135	67	23.91	24.29	23.88	0.246	0.269	0.244
100		1	271	23.89	23.82	23.88	0.245	0.241	0.244
100	DFT-s-OFDM 16QAM	1	1	23.80	24.23	23.72	0.240	0.265	0.236
100	DFT-s-OFDM 64QAM	1	1	23.50	23.67	23.69	0.224	0.233	0.234
100	DFT-s-OFDM 256QAM	1	1	21.02	21.45	21.55	0.126	0.140	0.143
Channel				512004	519000	525996	512004	519000	525996
Frequency (MHz)				2560	2595	2630	2560	2595	2630
90	DFT-s-OFDM PI/2 BPSK	1	1	24.14	23.95	24.02	0.259	0.248	0.252
Channel				511002	519000	526998	511002	519000	526998
Frequency (MHz)				2555	2595	2635	2555	2595	2635
80	DFT-s-OFDM PI/2 BPSK	1	1	23.65	23.74	24.06	0.232	0.237	0.255
Channel				509004	519000	528996	509004	519000	528996
Frequency (MHz)				2545	2595	2645	2545	2595	2645
60	DFT-s-OFDM PI/2 BPSK	1	1	24.13	24.35	24.15	0.259	0.272	0.260
Channel				508002	519000	529998	508002	519000	529998
Frequency (MHz)				2540	2595	2650	2540	2595	2650
50	DFT-s-OFDM PI/2 BPSK	1	1	24.56	24.39	24.13	0.286	0.275	0.259
Channel				507000	519000	531000	507000	519000	531000
Frequency (MHz)				2535	2595	2655	2535	2595	2655
40	DFT-s-OFDM PI/2 BPSK	1	1	24.11	24.53	24.45	0.258	0.284	0.279



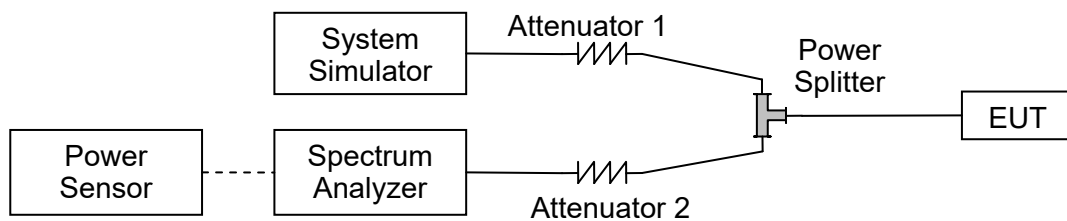
Channel				505002	519000	532998	505002	519000	532998
Frequency (MHz)				2525	2595	2665	2525	2595	2665
20	DFT-s-OFDM PI/2 BPSK	1	1	24.19	24.34	23.88	0.262	0.272	0.244
Channel				513000	519000	525000	513000	519000	525000
Frequency (MHz)				2565	2595	2625	2565	2595	2625
100	CP-OFDM QPSK	1	1	24.12	24.10	24.26	0.258	0.257	0.267
100	CP-OFDM 16QAM	1	1	24.25	23.98	24.13	0.266	0.250	0.259
100	CP-OFDM 64QAM	1	1	22.31	22.68	22.94	0.170	0.185	0.197
100	CP-OFDM 256QAM	1	1	19.40	19.40	19.45	0.087	0.087	0.088

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 50 Ohm; 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

DC 2A_N41					
BW(MHz)	ChannelLevel	Modulation		99% BW(MHz)	26dB BW(MHz)
20	Low	DFT-s-OFDM	PI/2 BPSK	18.19	18.87
	Low		QPSK	17.87	18.62
	Low		16QAM	18.17	18.7
	Low		64QAM	17.98	18.64
	Low		256QAM	18.03	18.69
	Low	CP-OFDM	QPSK	18.15	18.94
	Mid	DFT-s-OFDM	PI/2 BPSK	17.92	18.63
	Mid		QPSK	18.12	18.69
	Mid		16QAM	18.01	18.67
	Mid		64QAM	17.89	18.74
	Mid		256QAM	18.09	18.72
	Mid	CP-OFDM	QPSK	18.35	19.12
	High	DFT-s-OFDM	PI/2 BPSK	18.15	18.68
	High		QPSK	17.97	18.77
	High		16QAM	18.11	18.70
	High		64QAM	18.20	18.70
	High		256QAM	17.74	18.49
	High	CP-OFDM	QPSK	18.18	18.93
40	Low	DFT-s-OFDM	PI/2 BPSK	35.98	37.75
	Low		QPSK	36.51	37.77
	Low		16QAM	35.89	37.94
	Low		64QAM	36.59	37.72
	Low		256QAM	36.21	37.48
	Low	CP-OFDM	QPSK	38.02	39.45
	Mid	DFT-s-OFDM	PI/2 BPSK	35.64	37.12
	Mid		QPSK	36.21	37.51
	Mid		16QAM	36.48	37.65
	Mid		64QAM	35.96	37.63
	Mid		256QAM	35.96	37.23
	Mid	CP-OFDM	QPSK	37.54	39.09
	High	DFT-s-OFDM	PI/2 BPSK	36.14	37.36
	High		QPSK	35.49	37.14
	High		16QAM	36.63	37.76



	High	CP-OFDM	64QAM	35.87	37.49
	High		256QAM	35.42	37.05
	High		QPSK	37.50	39.28
50	Low	DFT-s-OFDM	PI/2 BPSK	46.12	47.74
	Low		QPSK	46.68	48.19
	Low		16QAM	46.73	48.23
	Low		64QAM	45.48	47.33
	Low		256QAM	45.56	47.87
	Low	CP-OFDM	QPSK	47.94	49.47
	Mid	DFT-s-OFDM	PI/2 BPSK	46.39	47.71
	Mid		QPSK	45.91	47.55
	Mid		16QAM	45.91	47.74
	Mid		64QAM	46.29	47.89
	Mid		256QAM	46.61	47.89
	Mid	CP-OFDM	QPSK	47.65	49.74
	High	DFT-s-OFDM	PI/2 BPSK	45.38	46.99
	High		QPSK	46.77	47.97
	High		16QAM	45.70	47.74
	High		64QAM	46.67	48.01
	High		256QAM	46.29	47.73
	High	CP-OFDM	QPSK	48.29	49.93
60	Low	DFT-s-OFDM	PI/2 BPSK	57.29	59.74
	Low		QPSK	58.06	60.06
	Low		16QAM	59.11	60.49
	Low		64QAM	57.67	60.07
	Low		256QAM	58.32	61.57
	Low	CP-OFDM	QPSK	57.92	60.54
	Mid	DFT-s-OFDM	PI/2 BPSK	58.95	60.58
	Mid		QPSK	58.10	60.14
	Mid		16QAM	57.94	59.71
	Mid		64QAM	59.15	61.03
	Mid		256QAM	57.90	59.9
	Mid	CP-OFDM	QPSK	57.80	60.82
	High	DFT-s-OFDM	PI/2 BPSK	58.39	59.74
	High		QPSK	58.14	60.75
	High		16QAM	59.26	60.75
	High		64QAM	59.15	60.67
	High		256QAM	58.23	60.91



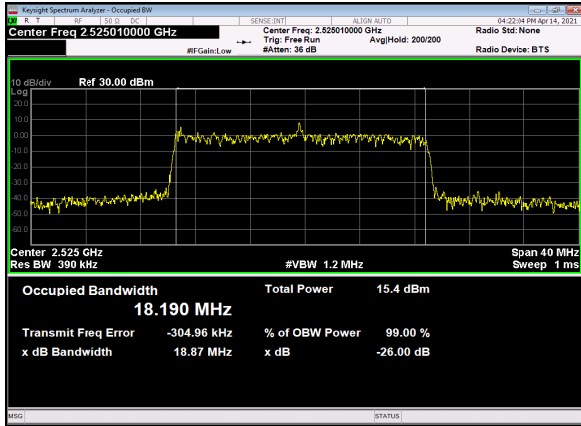
	High	CP-OFDM	QPSK	58.79	60.28
80	Low	DFT-s-OFDM	PI/2 BPSK	78.16	80.82
	Low		QPSK	77.50	81.24
	Low		16QAM	76.86	79.89
	Low		64QAM	78.82	80.31
	Low		256QAM	77.24	80.98
	Low	CP-OFDM	QPSK	78.95	81.05
	Mid	DFT-s-OFDM	PI/2 BPSK	77.27	81.00
	Mid		QPSK	78.77	81.29
	Mid		16QAM	78.14	80.12
	Mid		64QAM	78.59	81.09
	Mid		256QAM	78.28	80.64
	Mid	CP-OFDM	QPSK	77.54	80.29
	High	DFT-s-OFDM	PI/2 BPSK	76.72	79.90
	High		QPSK	78.39	80.45
	High		16QAM	77.33	80.96
	High		64QAM	78.56	80.95
	High		256QAM	77.06	80.57
	High	CP-OFDM	QPSK	77.78	81.23
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



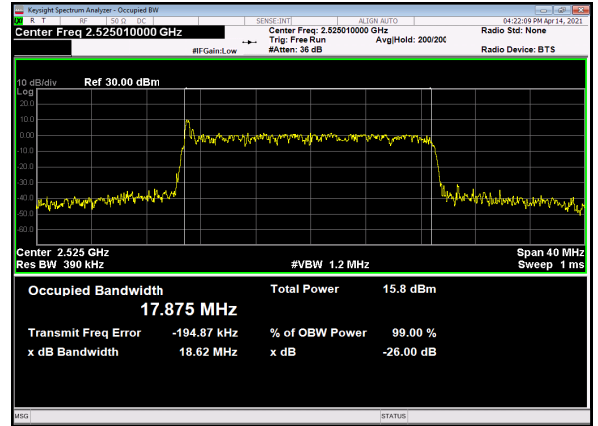
100	Low	DFT-s-OFDM	QPSK	97.32	100.23
	Low		16QAM	97.87	101.11
	Low		64QAM	98.32	101.67
	Low		256QAM	96.54	101.72
	Low	CP-OFDM	QPSK	97.47	102.23
	Mid	DFT-s-OFDM	PI/2 BPSK	97.64	101.06
	Mid		QPSK	97.45	101.13
	Mid		16QAM	97.96	101.41
	Mid		64QAM	97.26	99.99
	Mid		256QAM	97.34	100.87
	Mid	CP-OFDM	QPSK	99.29	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



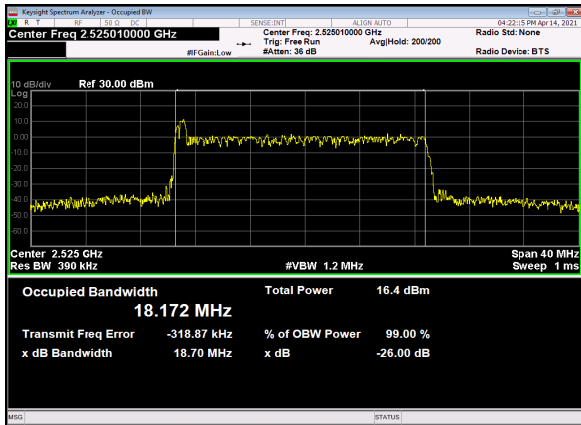
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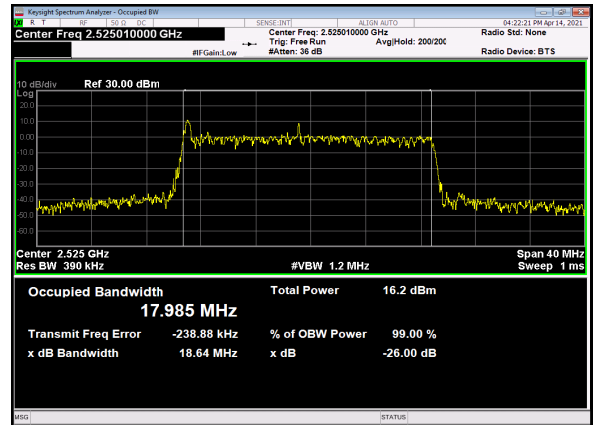
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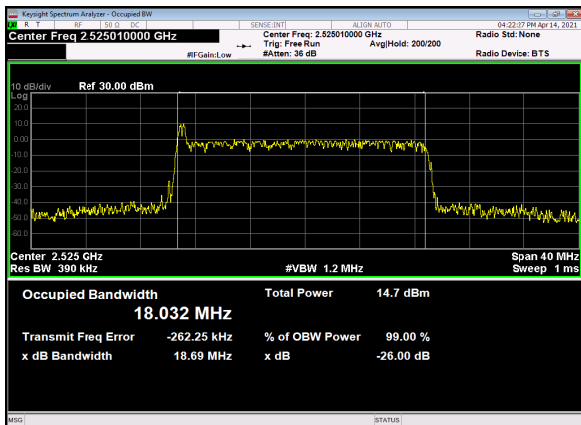
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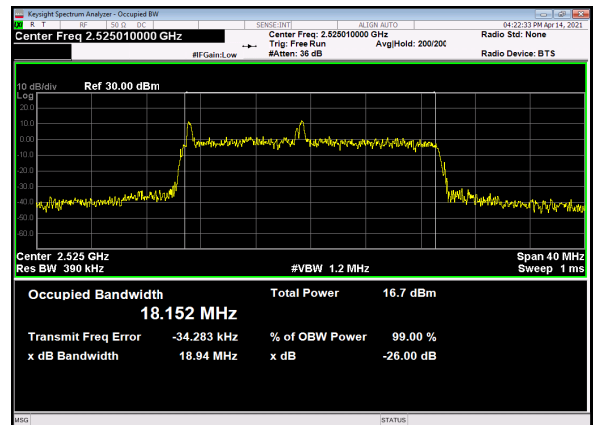
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B2_N41(20M)_DFT-s-OFDM_256_QAM_Outer_Full_Low_CH

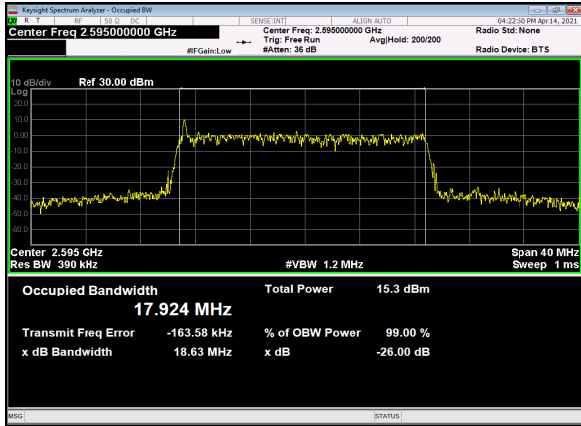


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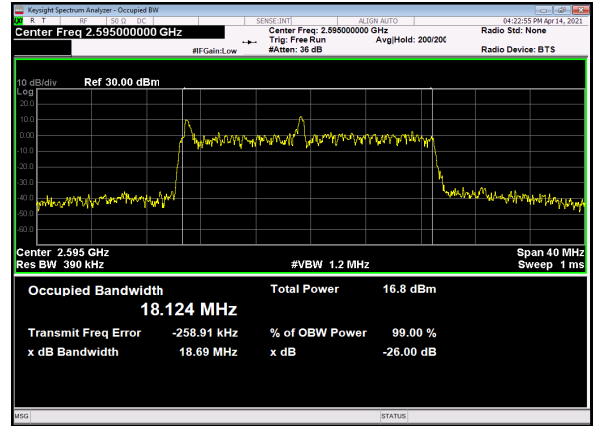




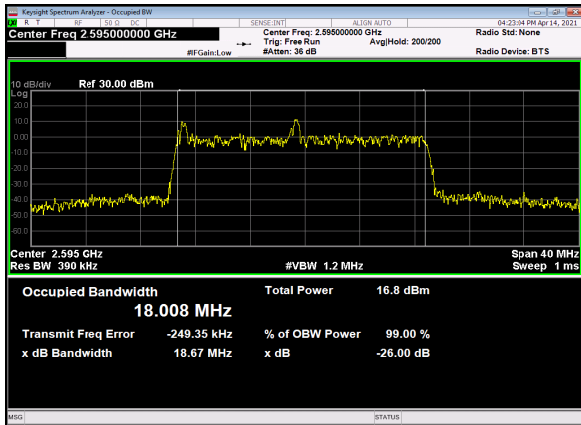
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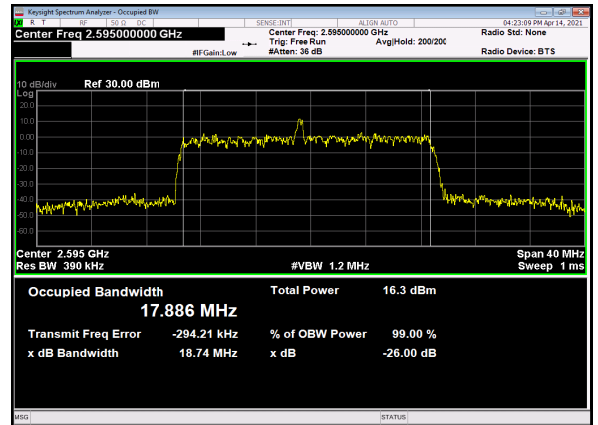
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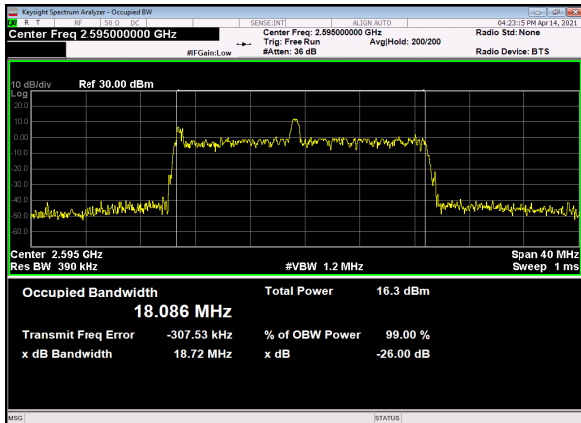
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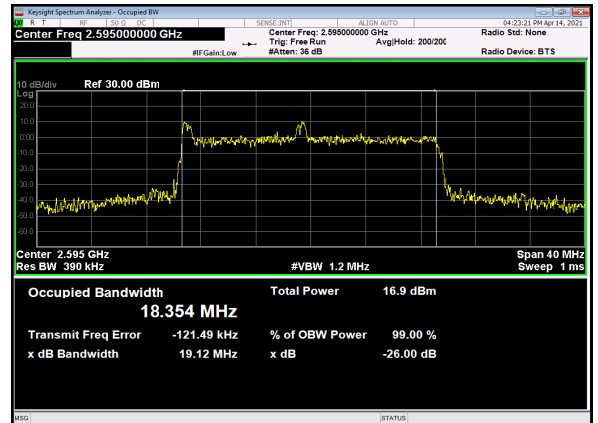
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B2_N41(20M)_DFT-s-OFDM_256_QAM_Outer_Full_Mid_CH

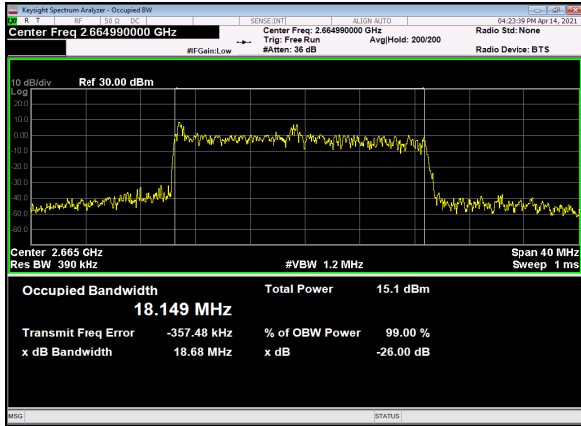


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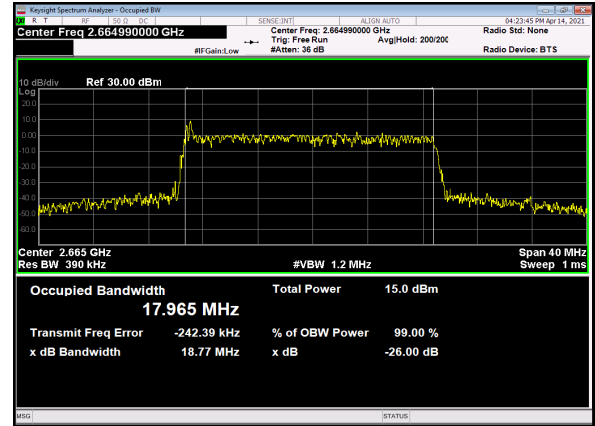




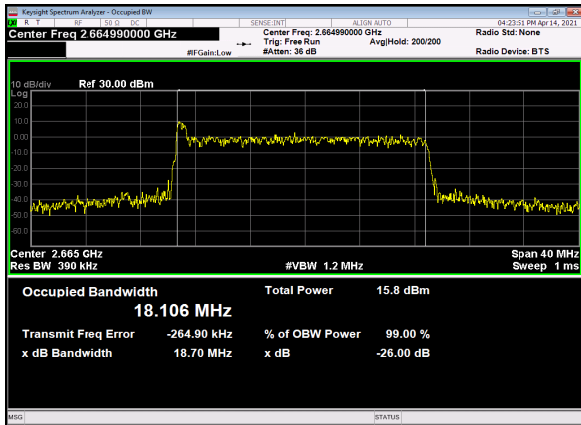
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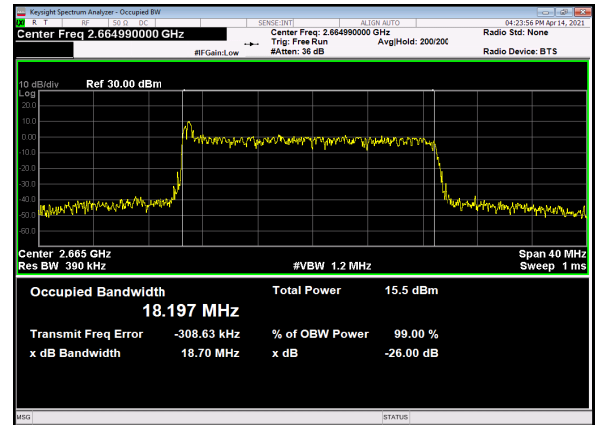
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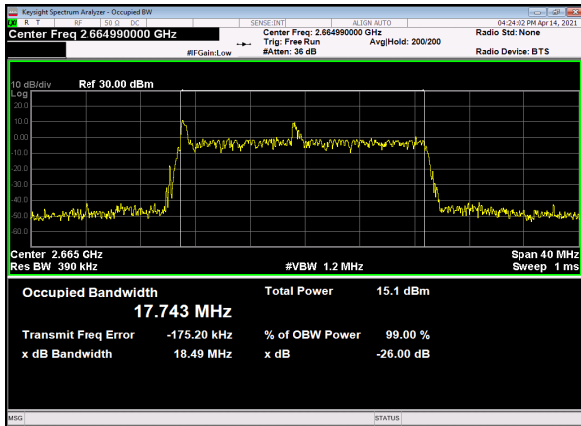
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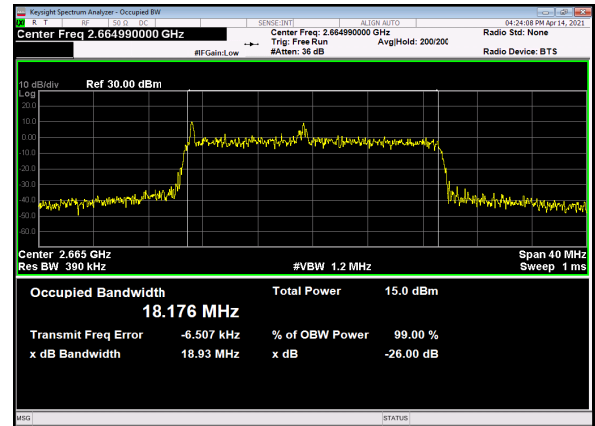
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B2_N41(20M)_DFT-s-OFDM_256_QAM_Outer_Full_High_CH

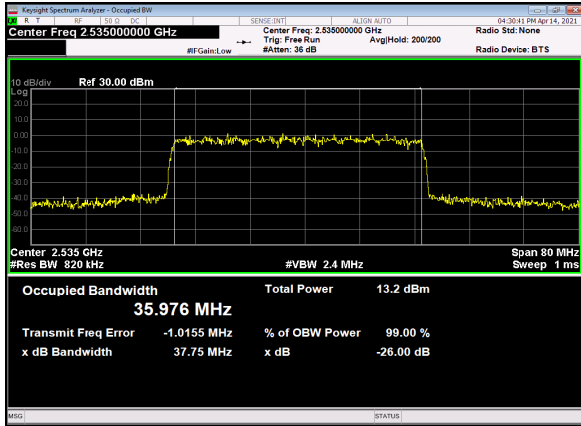


B2_N41(20M)_CP-OFDM_QPSK_Outer_Full_High_CH

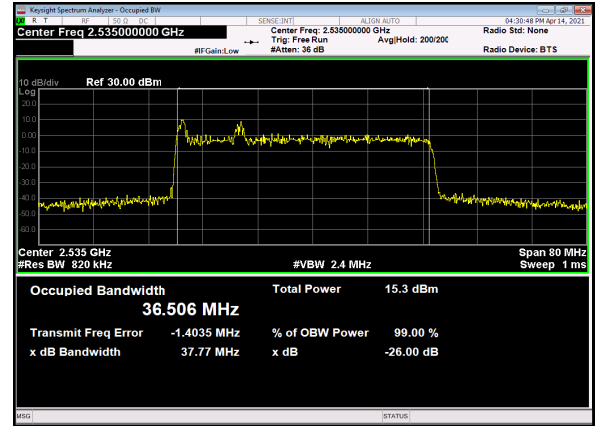




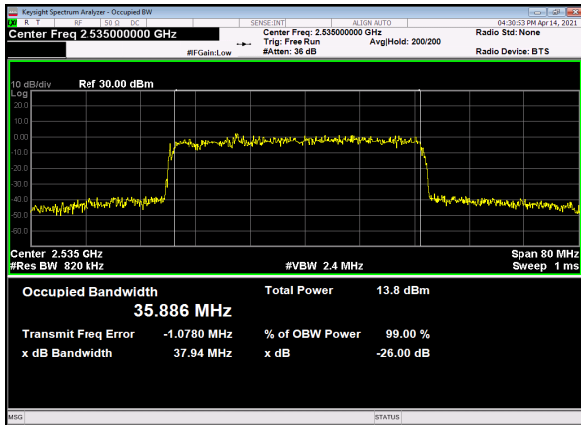
B2_N41(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



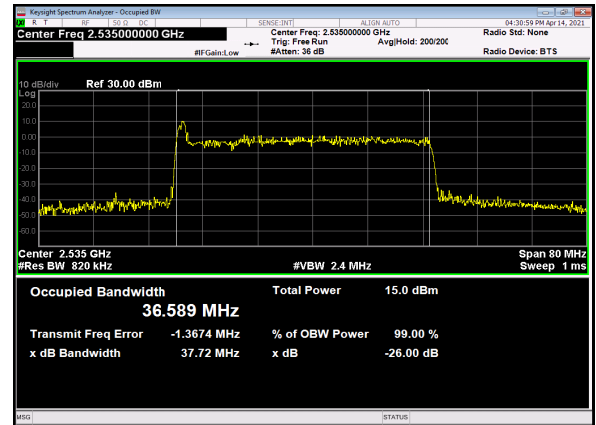
B2_N41(40M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



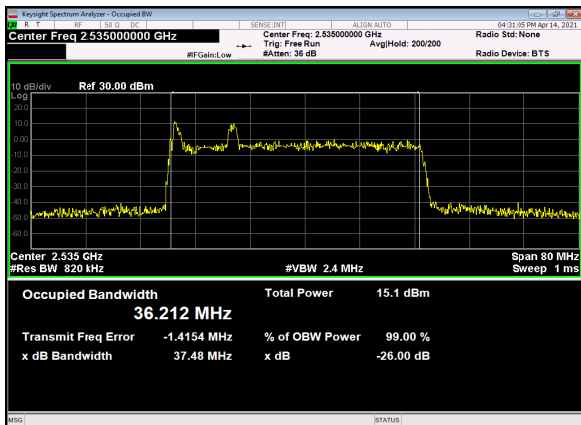
B2_N41(40M)_DFT-s-OFDM_16_QAM_Outer_Full_Low_CH



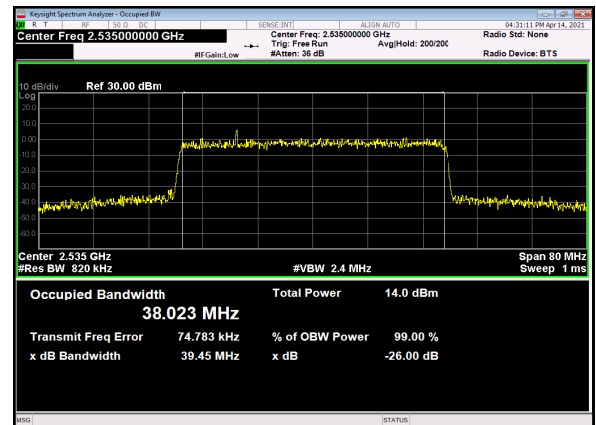
B2_N41(40M)_DFT-s-OFDM_64_QAM_Outer_Full_Low_CH



B2_N41(40M)_DFT-s-OFDM_256_QAM_Outer_Full_Low_CH

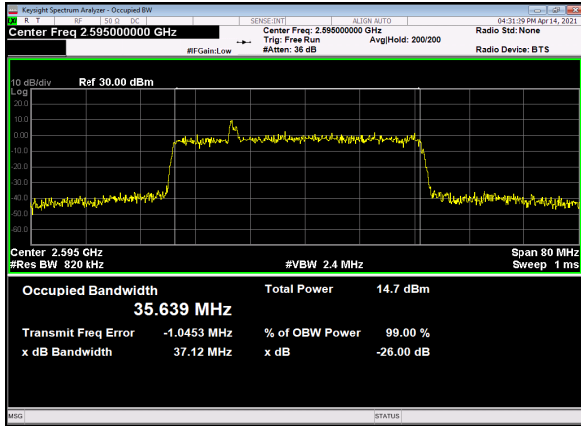


B2_N41(40M)_CP-OFDM_QPSK_Outer_Full_Low_CH

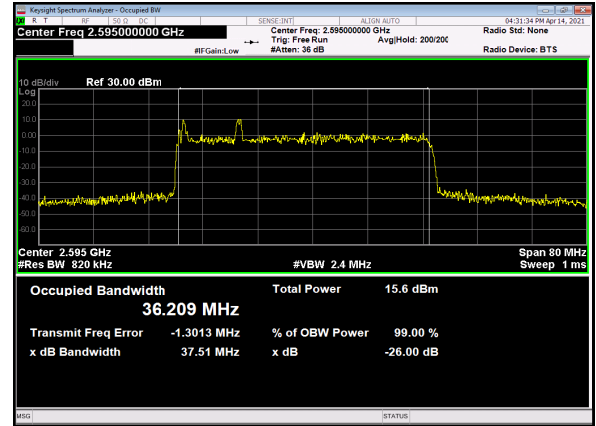




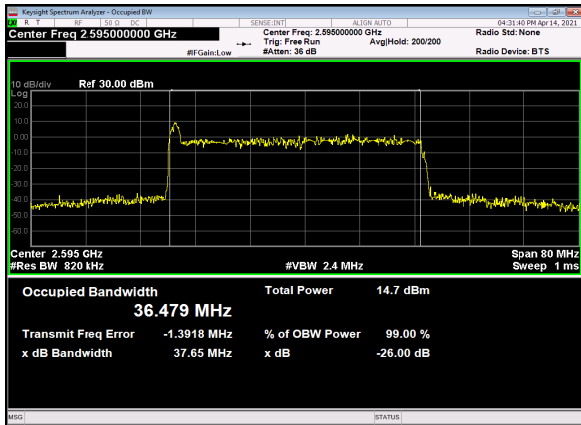
B2_N41(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



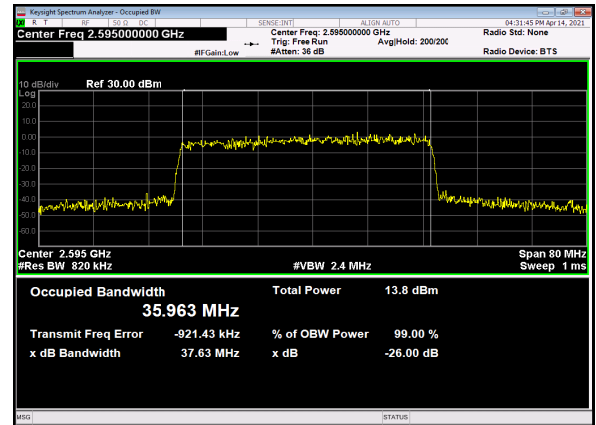
B2_N41(40M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



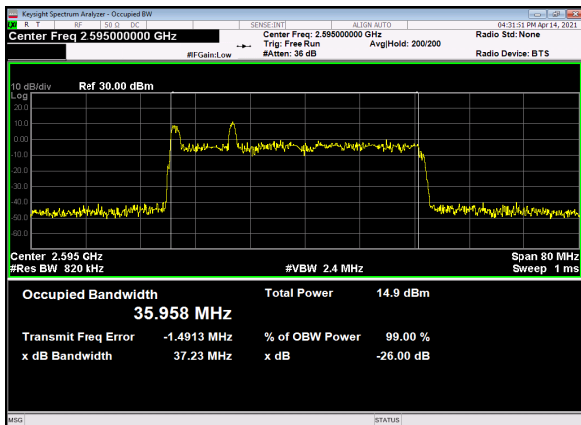
B2_N41(40M)_DFT-s-OFDM_16_QAM_Outer_Full_Mid_CH



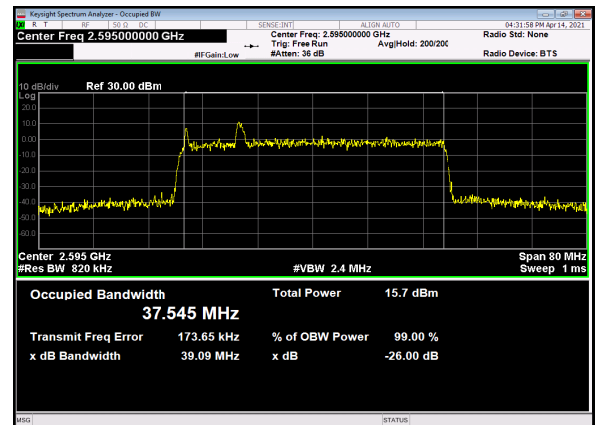
B2_N41(40M)_DFT-s-OFDM_64_QAM_Outer_Full_Mid_CH



B2_N41(40M)_DFT-s-OFDM_256_QAM_Outer_Full_Mid_CH

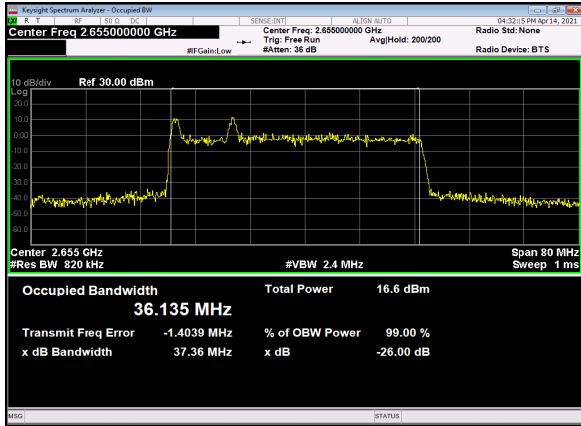


B2_N41(40M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

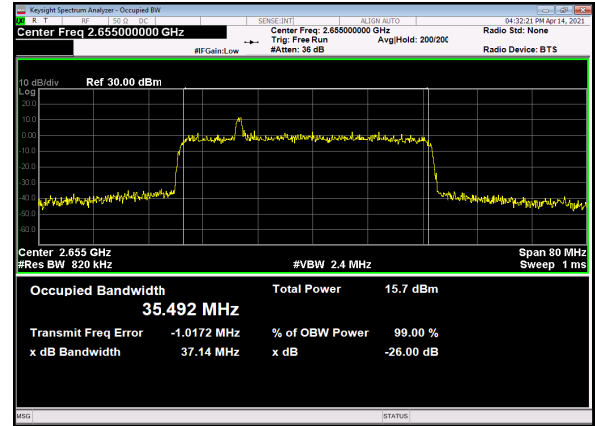




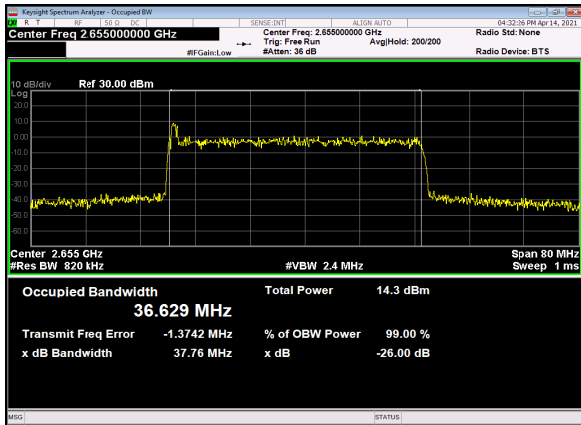
B2_N41(40M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



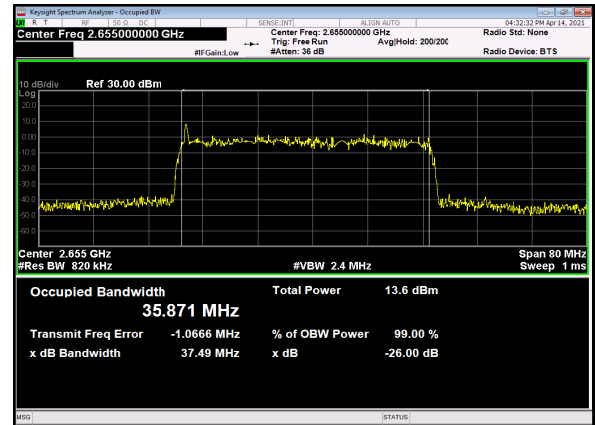
B2_N41(40M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



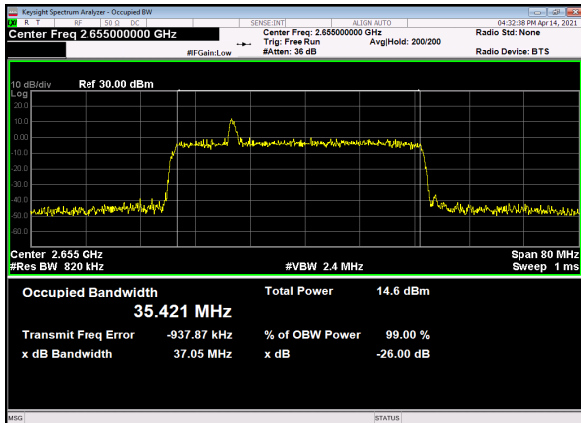
B2_N41(40M)_DFT-s-OFDM_16_QAM_Outer_Full_High_CH



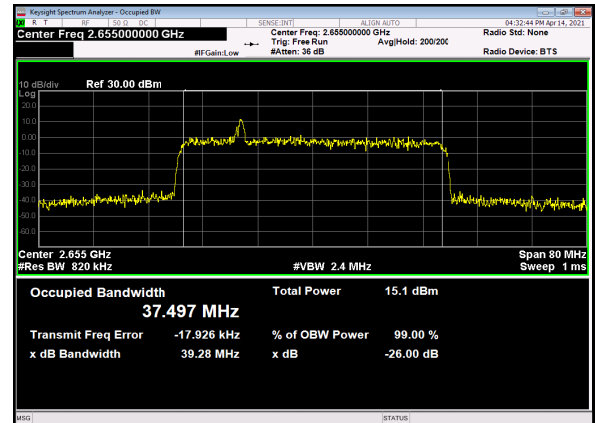
B2_N41(40M)_DFT-s-OFDM_64_QAM_Outer_Full_High_CH



B2_N41(40M)_DFT-s-OFDM_256_QAM_Outer_Full_High_CH

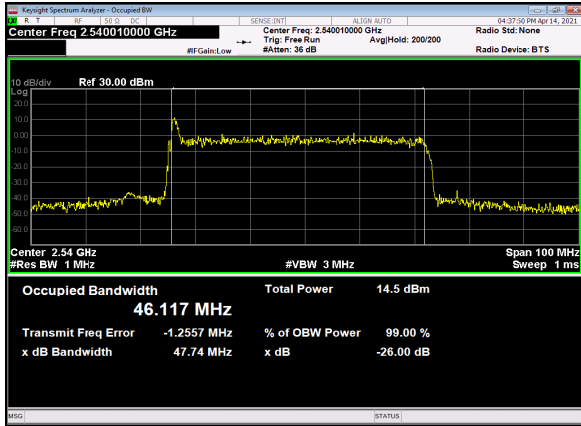


B2_N41(40M)_CP-OFDM_QPSK_Outer_Full_High_CH

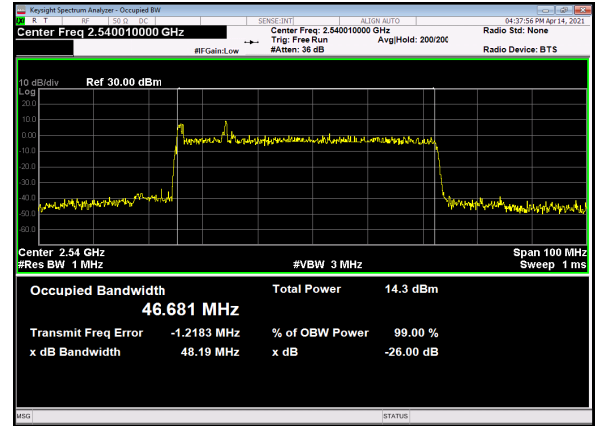




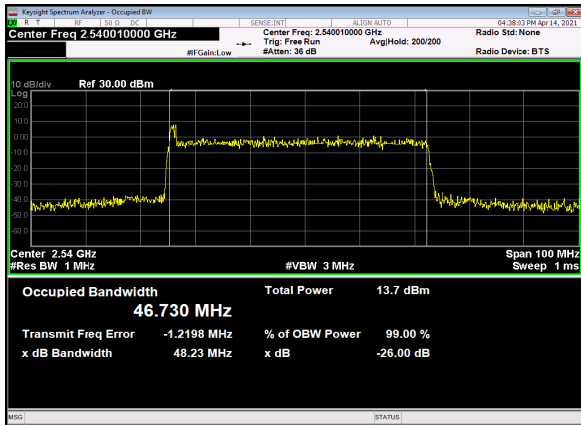
B2_N41(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



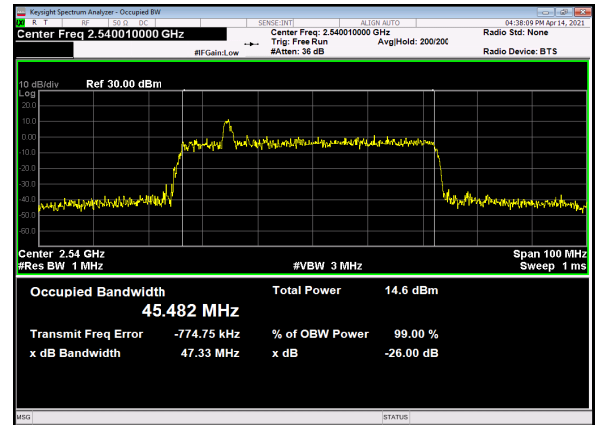
B2_N41(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



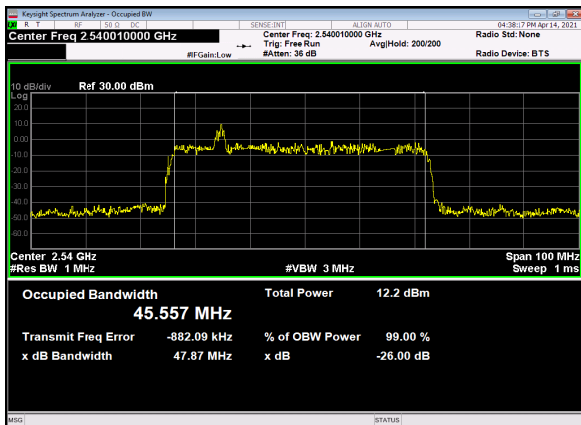
B2_N41(50M)_DFT-s-OFDM_16_QAM_Outer_Full_Low_CH



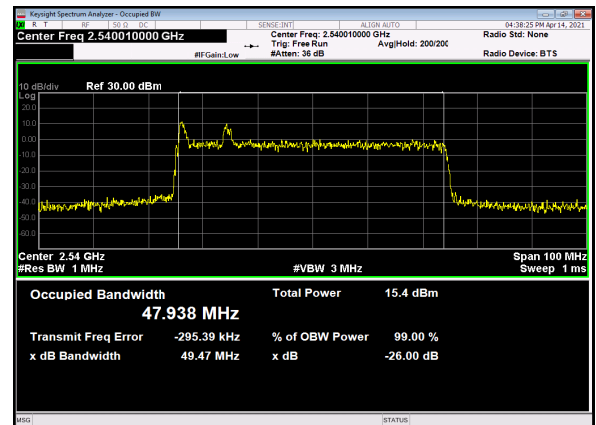
B2_N41(50M)_DFT-s-OFDM_64_QAM_Outer_Full_Low_CH



B2_N41(50M)_DFT-s-OFDM_256_QAM_Outer_Full_Low_CH

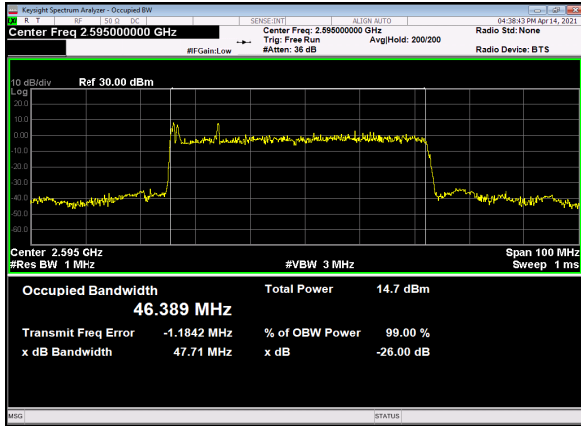


B2_N41(50M)_CP-OFDM_QPSK_Outer_Full_Low_CH

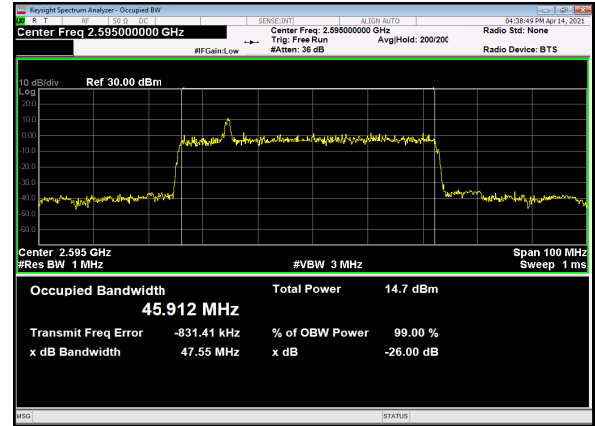




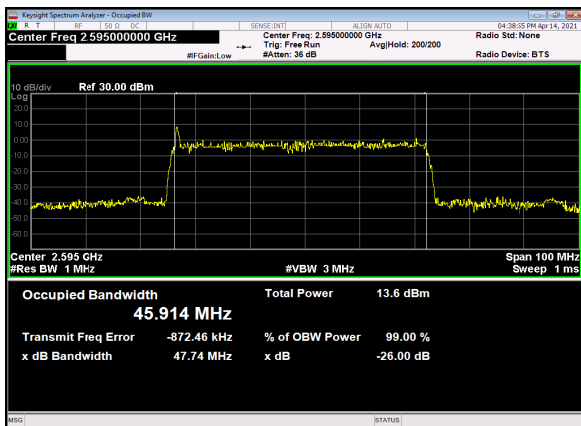
B2_N41(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



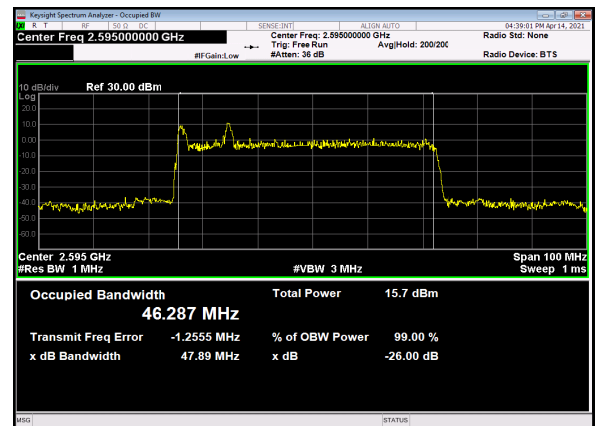
B2_N41(50M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



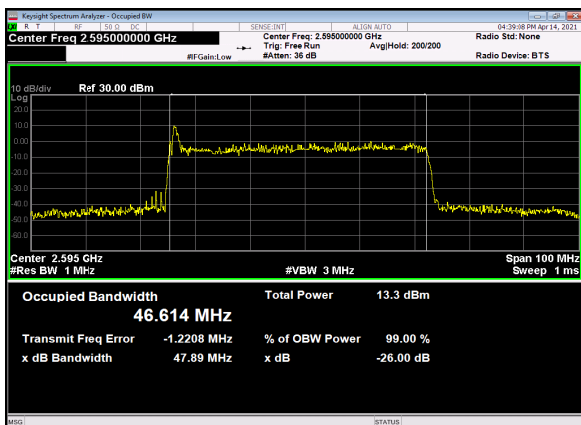
B2_N41(50M)_DFT-s-OFDM_16_QAM_Outer_Full_Mid_CH



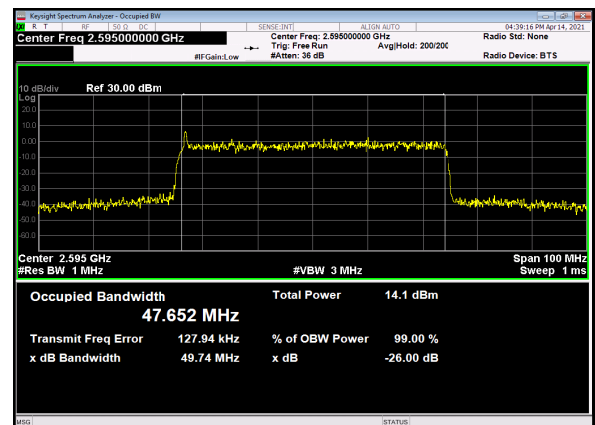
B2_N41(50M)_DFT-s-OFDM_64_QAM_Outer_Full_Mid_CH



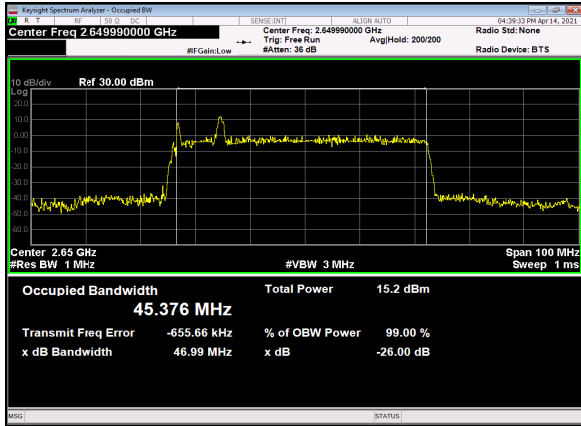
B2_N41(50M)_DFT-s-OFDM_256_QAM_Outer_Full_Mid_CH



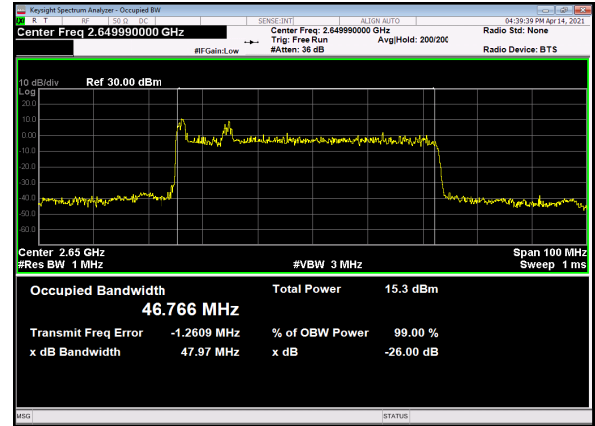
B2_N41(50M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



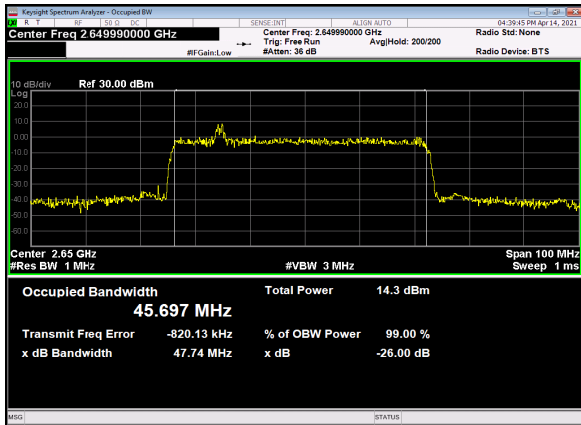
B2_N41(50M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



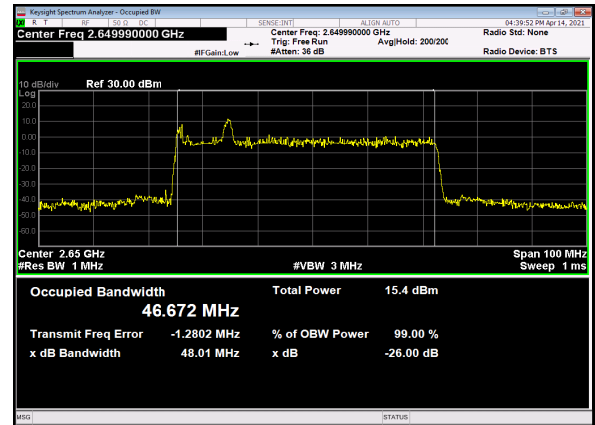
B2_N41(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



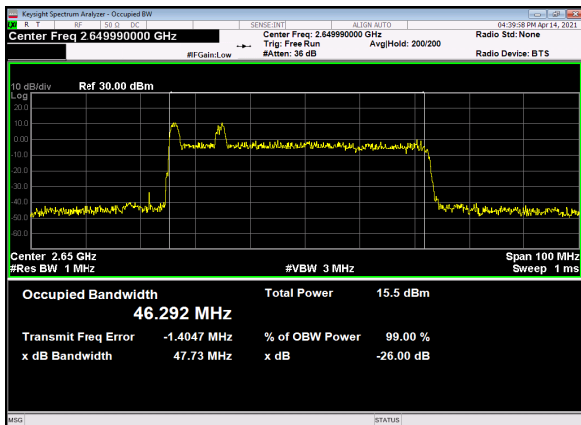
B2_N41(50M)_DFT-s-OFDM_16_QAM_Outer_Full_High_CH



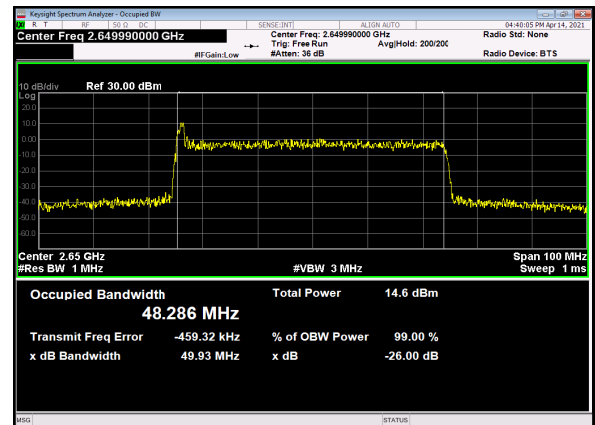
B2_N41(50M)_DFT-s-OFDM_64_QAM_Outer_Full_High_CH



B2_N41(50M)_DFT-s-OFDM_256_QAM_Outer_Full_High_CH

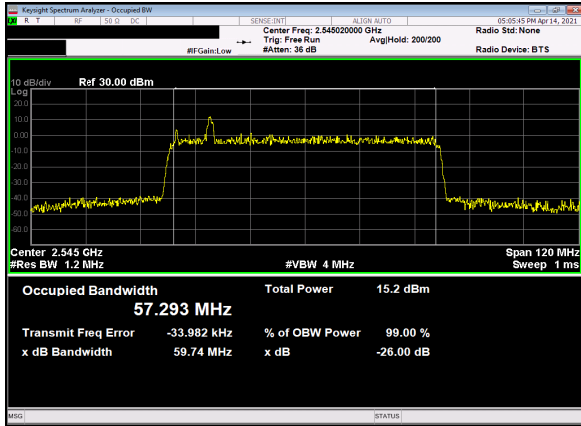


B2_N41(50M)_CP-OFDM_QPSK_Outer_Full_High_CH

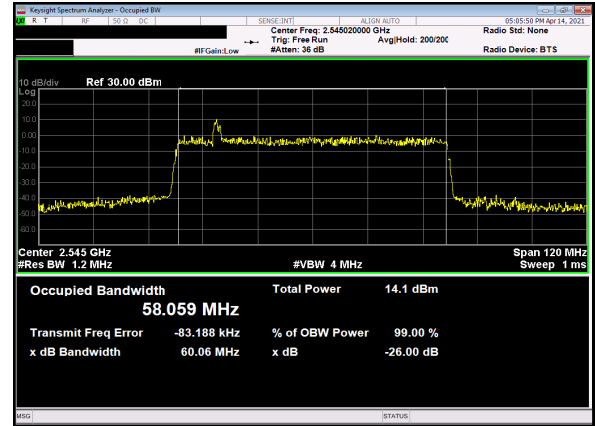




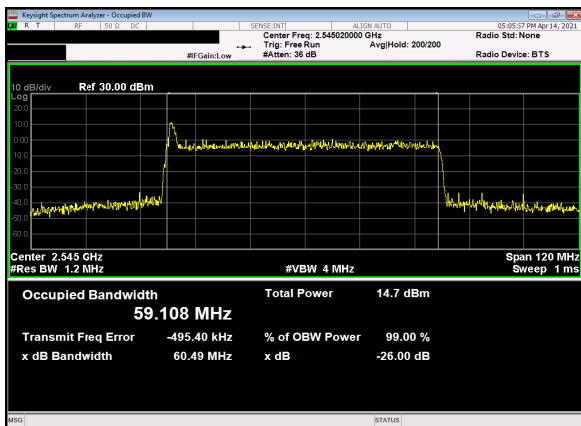
B2_N41(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



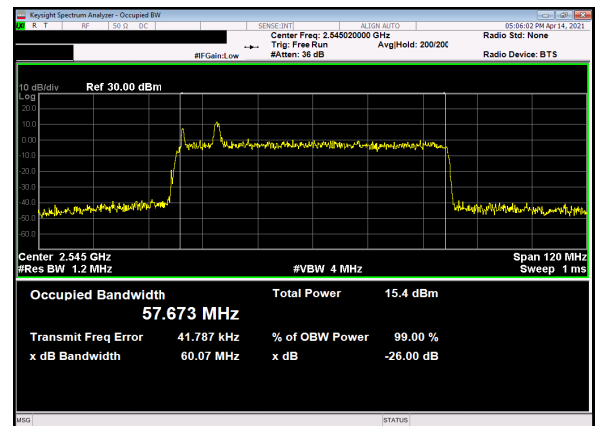
B2_N41(60M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



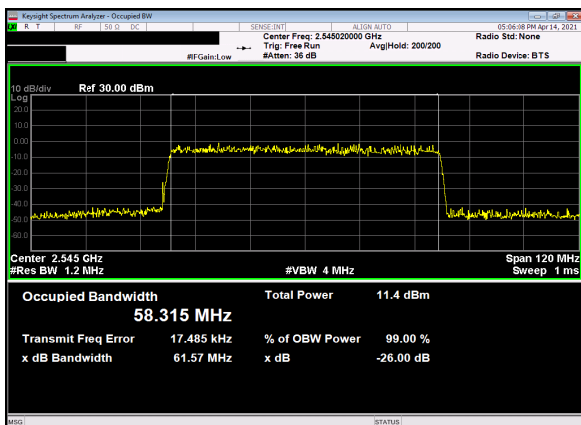
B2_N41(60M)_DFT-s-OFDM_16_QAM_Outer_Full_Low_CH



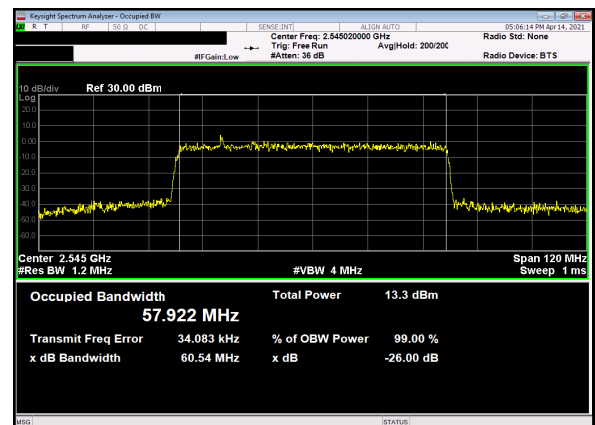
B2_N41(60M)_DFT-s-OFDM_64_QAM_Outer_Full_Low_CH



B2_N41(60M)_DFT-s-OFDM_256_QAM_Outer_Full_Low_CH

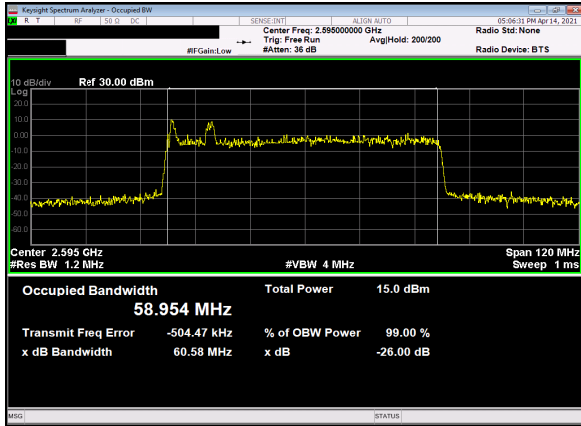


B2_N41(60M)_CP-OFDM_QPSK_Outer_Full_Low_CH

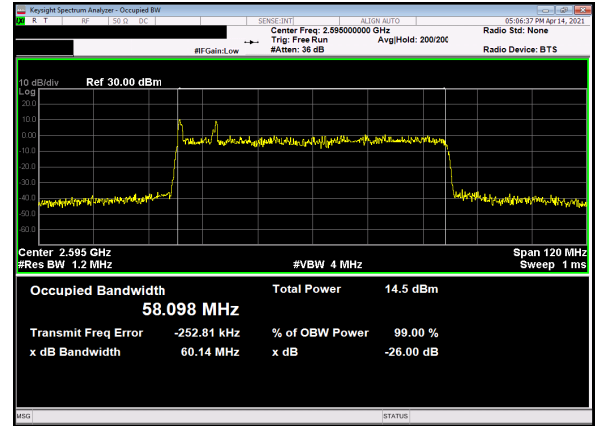




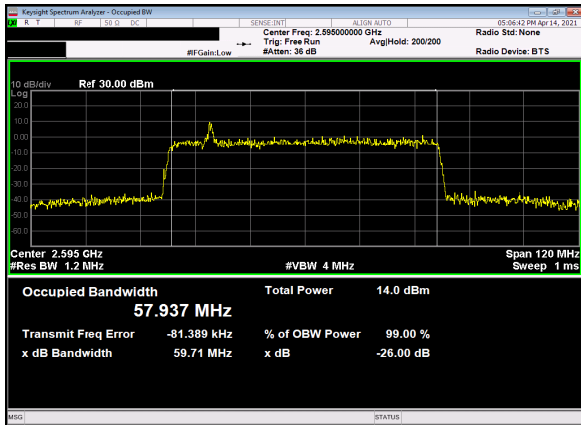
B2_N41(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



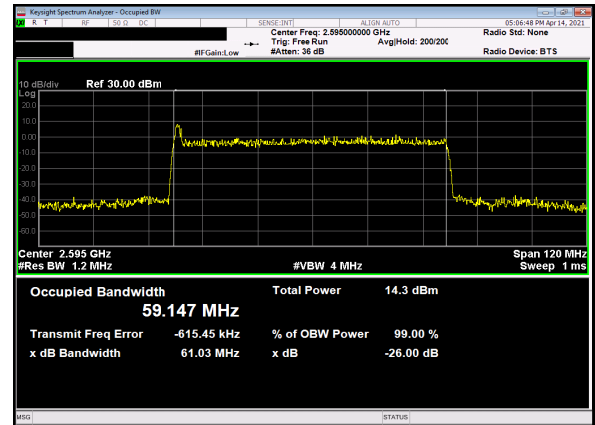
B2_N41(60M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



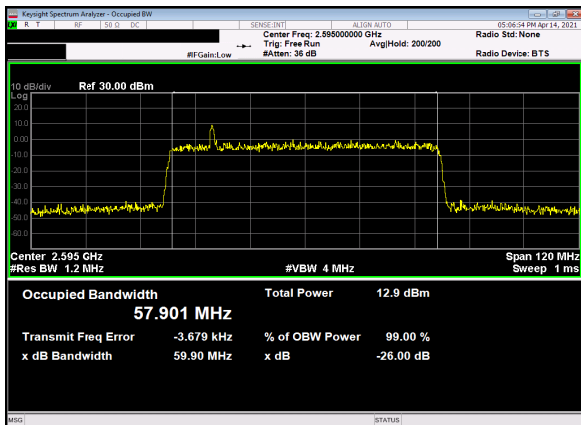
B2_N41(60M)_DFT-s-OFDM_16_QAM_Outer_Full_Mid_CH



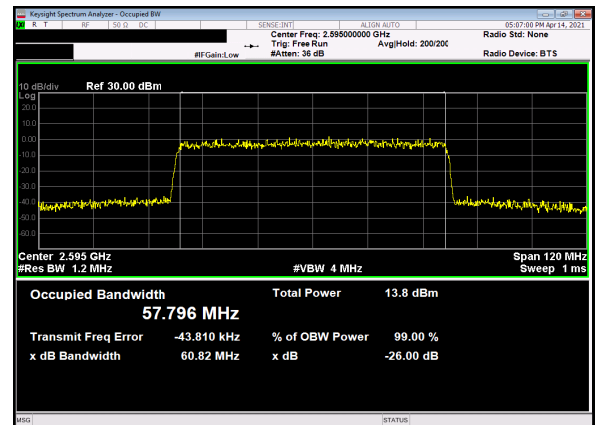
B2_N41(60M)_DFT-s-OFDM_64_QAM_Outer_Full_Mid_CH



B2_N41(60M)_DFT-s-OFDM_256_QAM_Outer_Full_Mid_CH

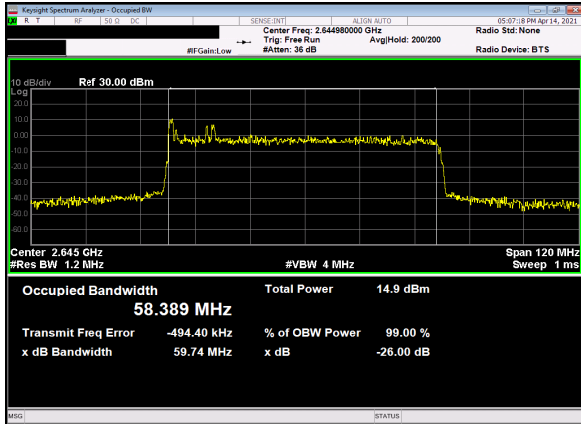


B2_N41(60M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

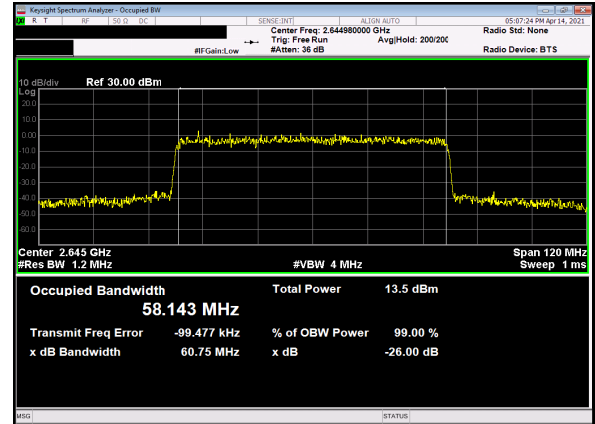




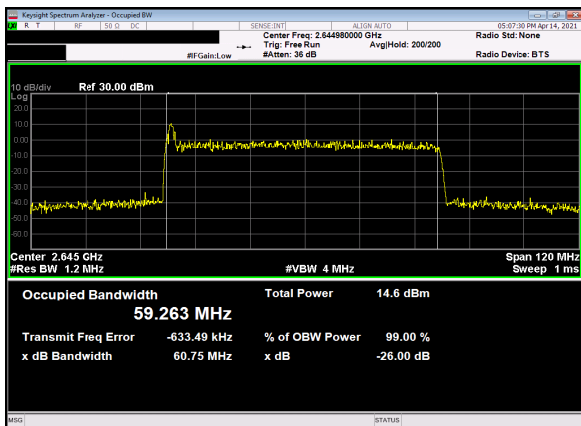
B2_N41(60M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



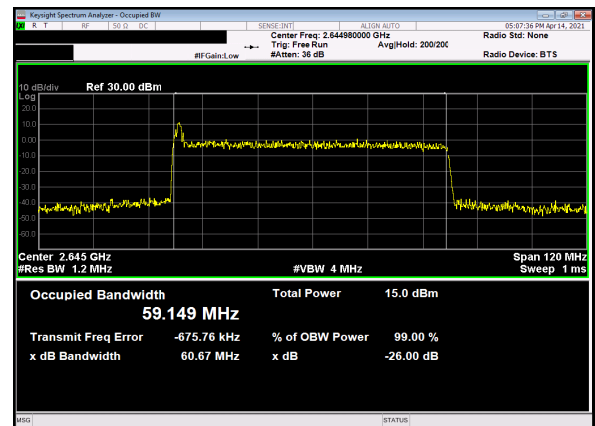
B2_N41(60M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



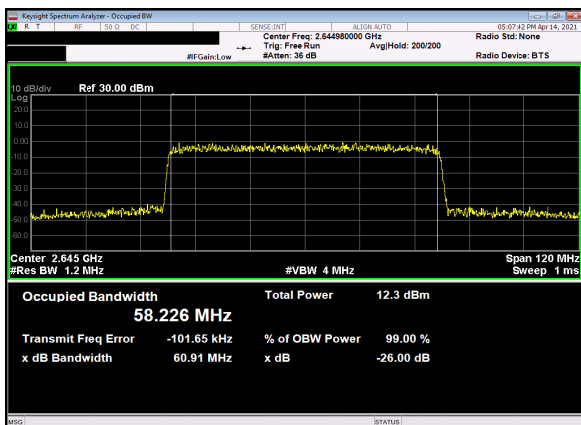
B2_N41(60M)_DFT-s-OFDM_16_QAM_Outer_Full_High_CH



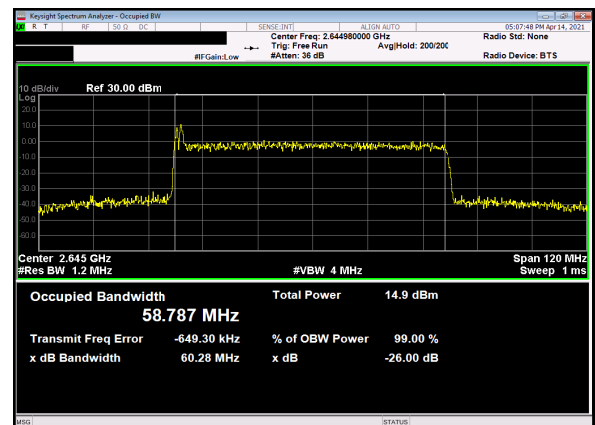
B2_N41(60M)_DFT-s-OFDM_64_QAM_Outer_Full_High_CH



B2_N41(60M)_DFT-s-OFDM_256_QAM_Outer_Full_High_CH

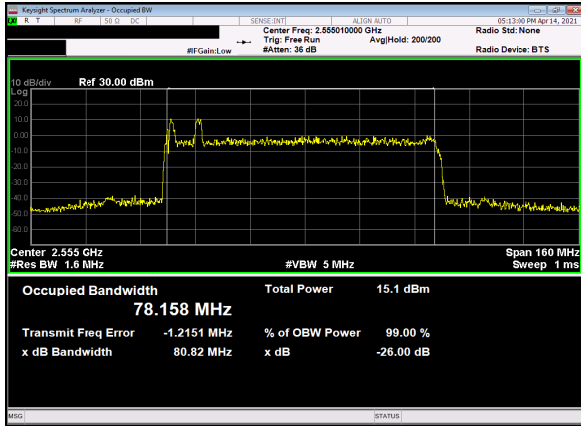


B2_N41(60M)_CP-OFDM_QPSK_Outer_Full_High_CH

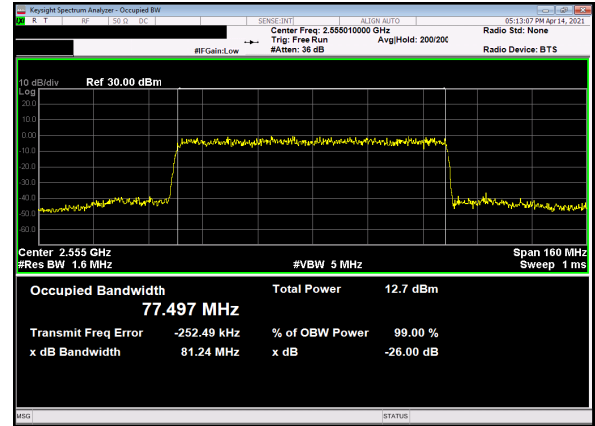




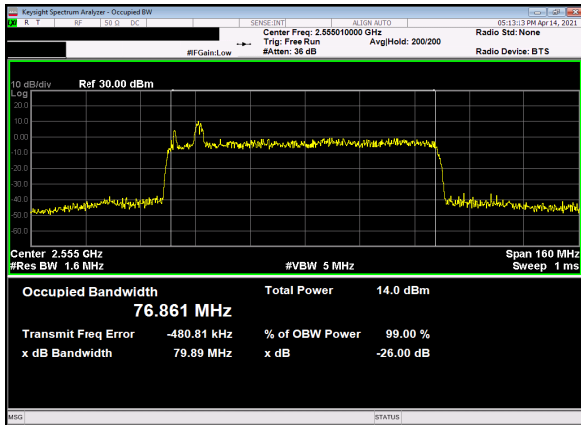
B2_N41(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



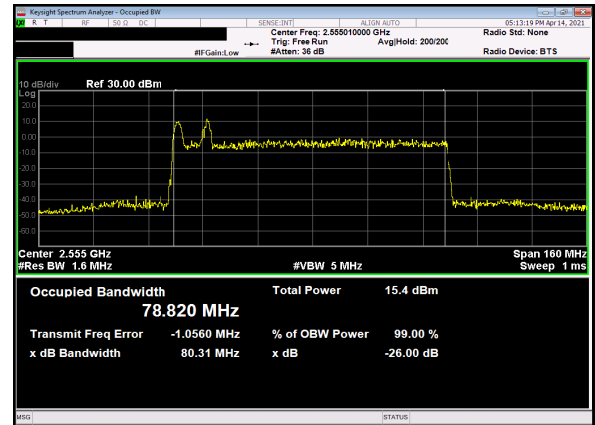
B2_N41(80M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



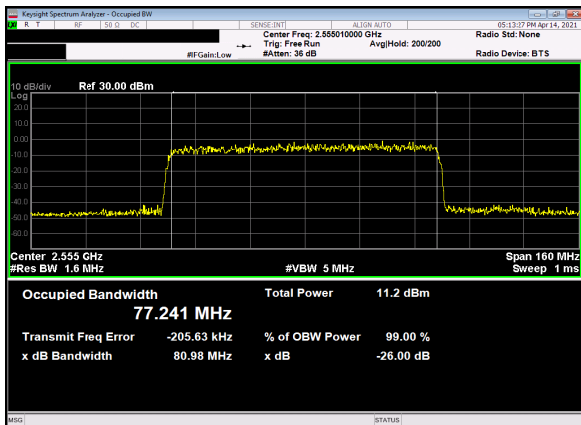
B2_N41(80M)_DFT-s-OFDM_16_QAM_Outer_Full_Low_CH



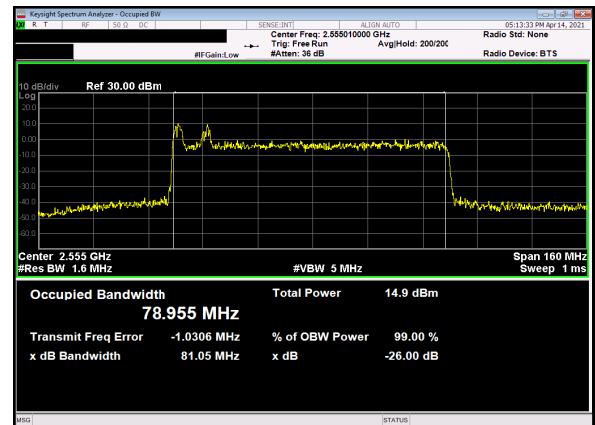
B2_N41(80M)_DFT-s-OFDM_64_QAM_Outer_Full_Low_CH



B2_N41(80M)_DFT-s-OFDM_256_QAM_Outer_Full_Low_CH

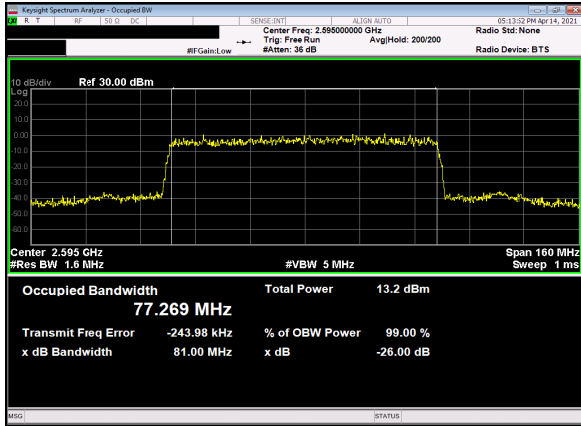


B2_N41(80M)_CP-OFDM_QPSK_Outer_Full_Low_CH

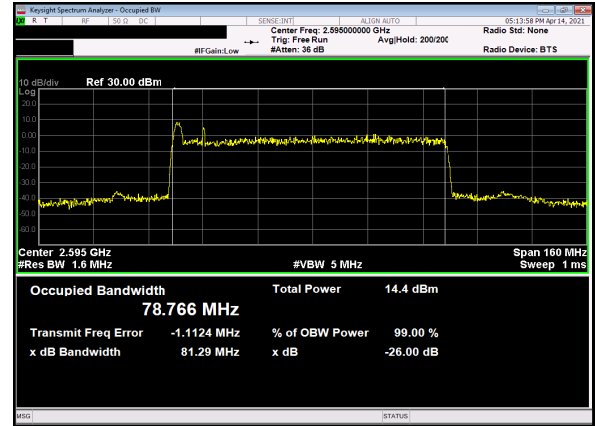




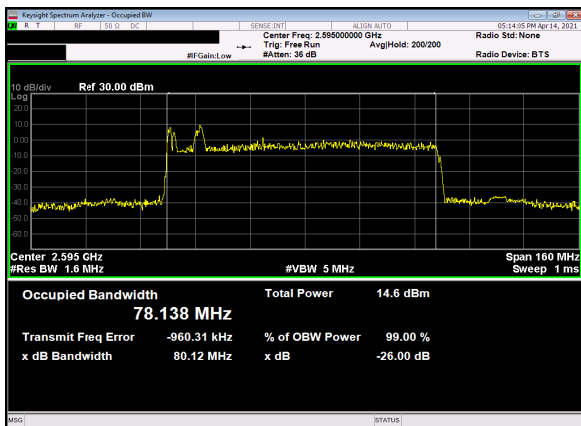
B2_N41(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



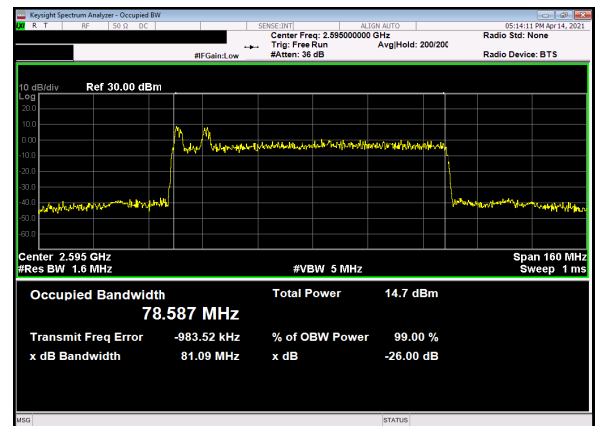
B2_N41(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



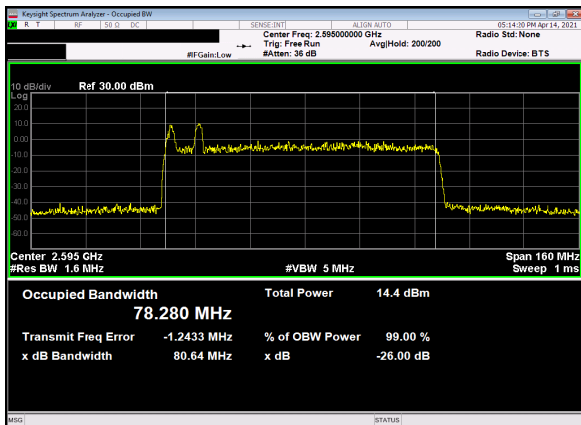
B2_N41(80M)_DFT-s-OFDM_16_QAM_Outer_Full_Mid_CH



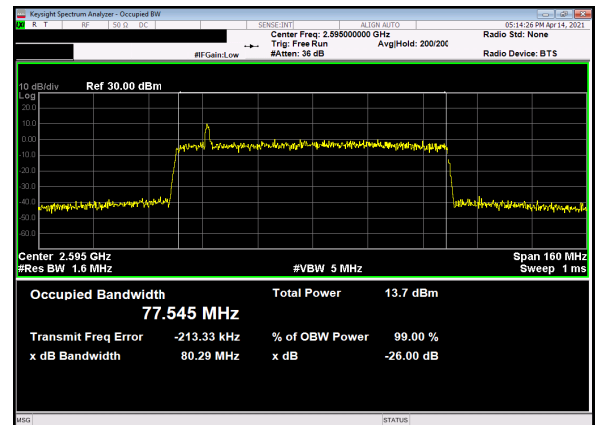
B2_N41(80M)_DFT-s-OFDM_64_QAM_Outer_Full_Mid_CH



B2_N41(80M)_DFT-s-OFDM_256_QAM_Outer_Full_Mid_CH

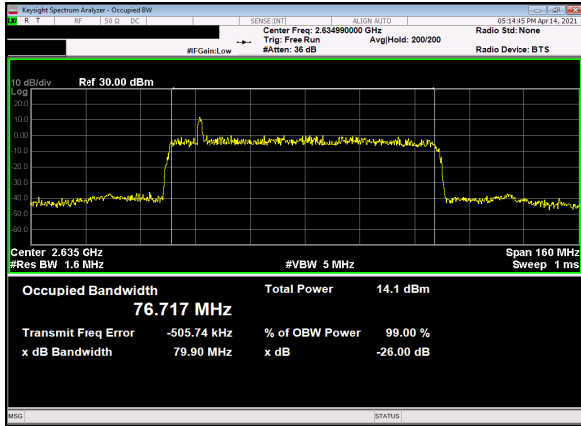


B2_N41(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

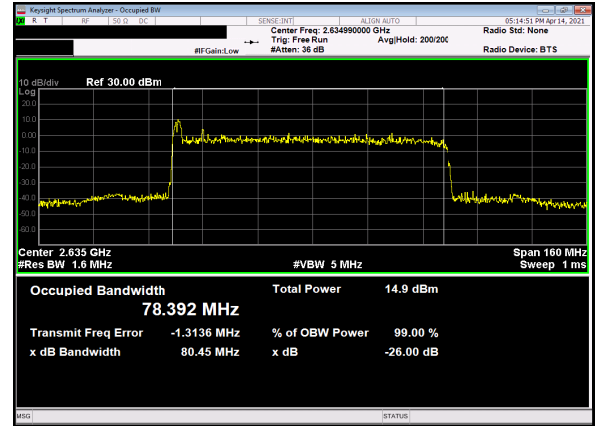




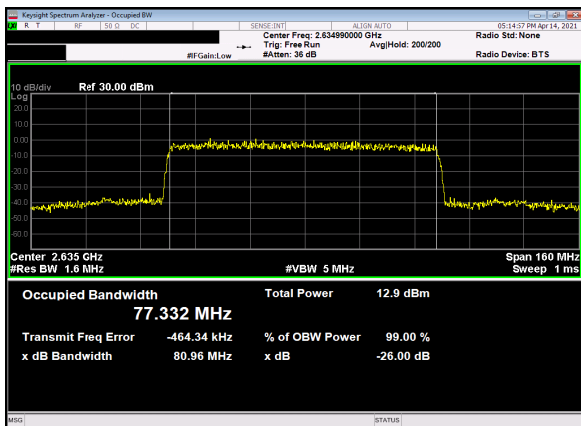
B2_N41(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



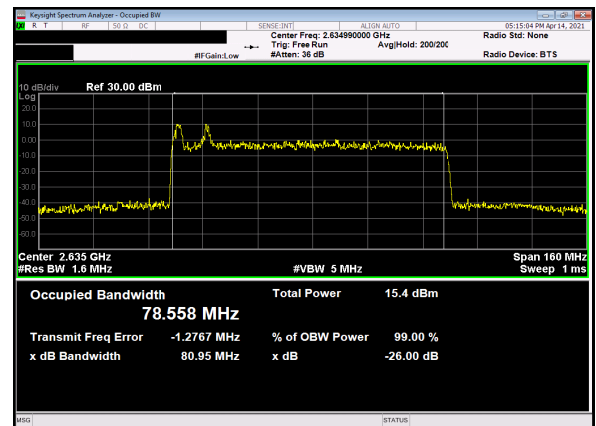
B2_N41(80M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



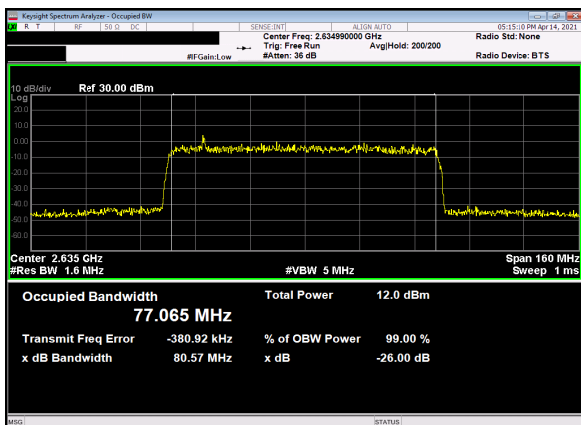
B2_N41(80M)_DFT-s-OFDM_16_QAM_Outer_Full_High_CH



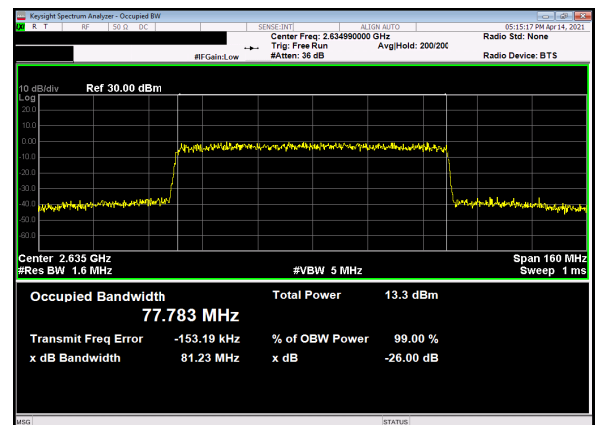
B2_N41(80M)_DFT-s-OFDM_64_QAM_Outer_Full_High_CH



B2_N41(80M)_DFT-s-OFDM_256_QAM_Outer_Full_High_CH

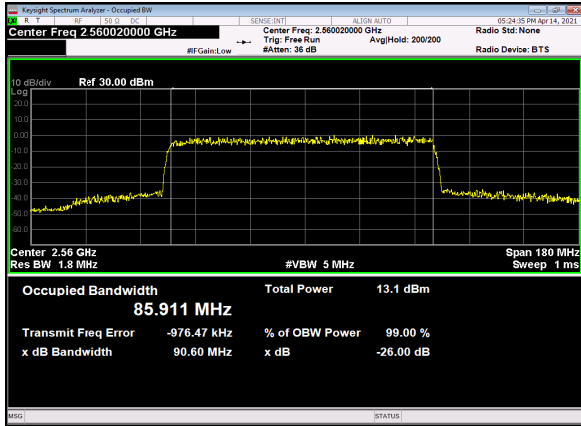


B2_N41(80M)_CP-OFDM_QPSK_Outer_Full_High_CH

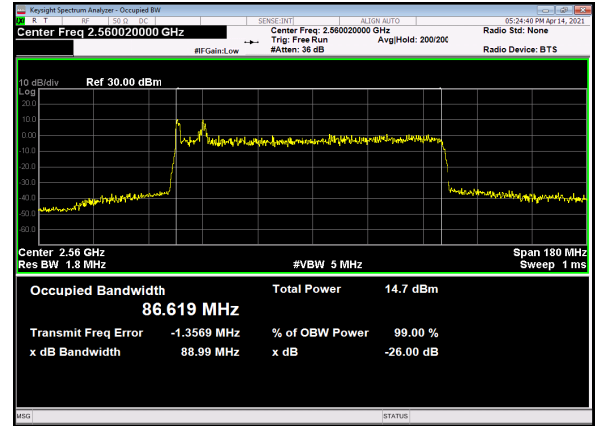




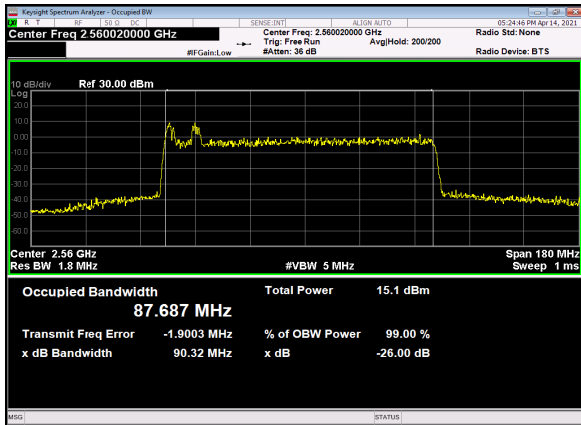
B2_N41(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Low_CH



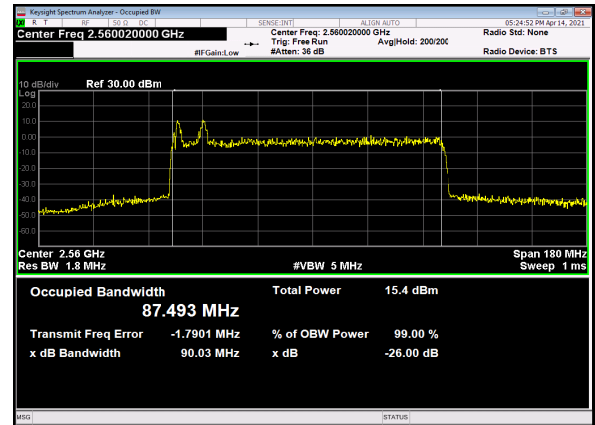
B2_N41(90M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



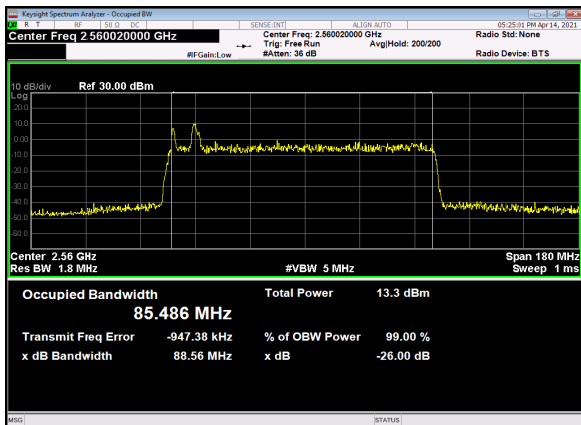
B2_N41(90M)_DFT-s-OFDM_16_QAM_Outer_Full_Low_CH



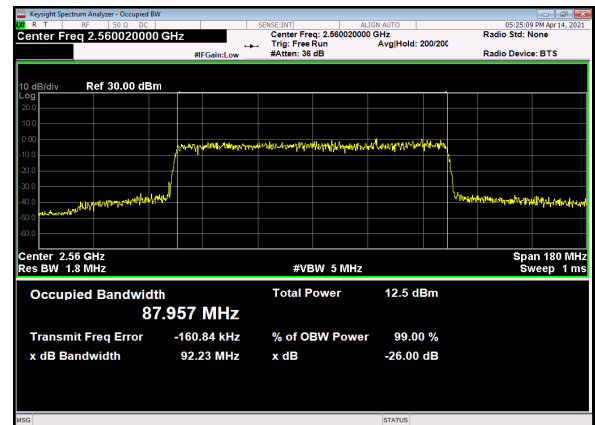
B2_N41(90M)_DFT-s-OFDM_64_QAM_Outer_Full_Low_CH



B2_N41(90M)_DFT-s-OFDM_256_QAM_Outer_Full_Low_CH

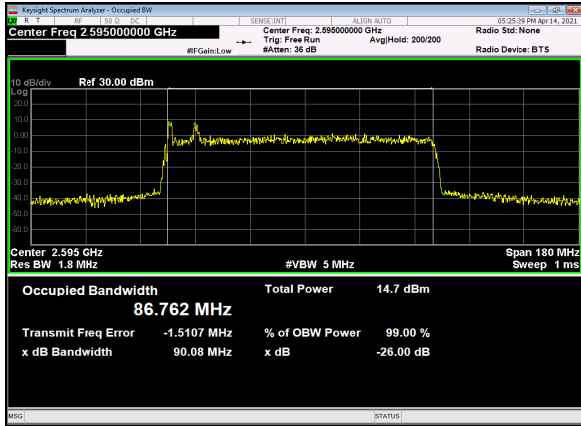


B2_N41(90M)_CP-OFDM_QPSK_Outer_Full_Low_CH

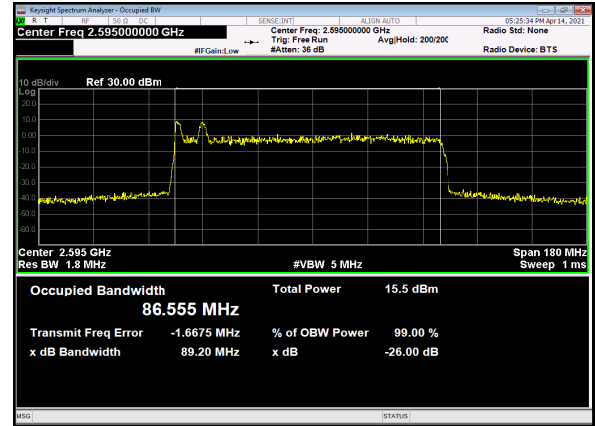




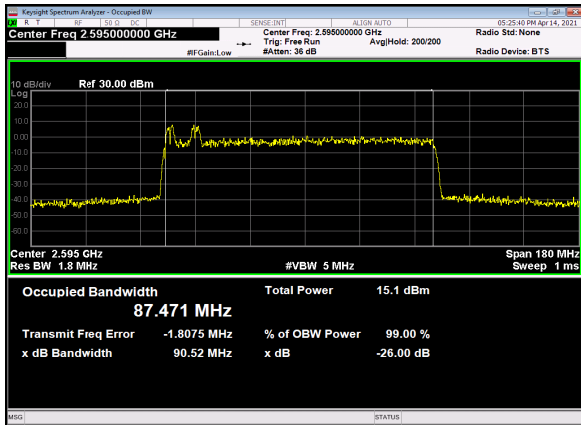
B2_N41(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



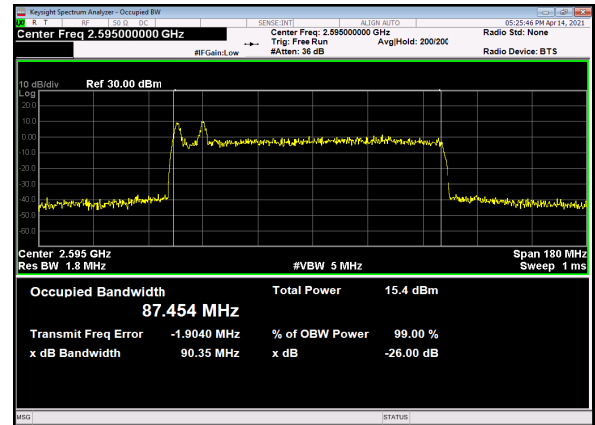
B2_N41(90M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



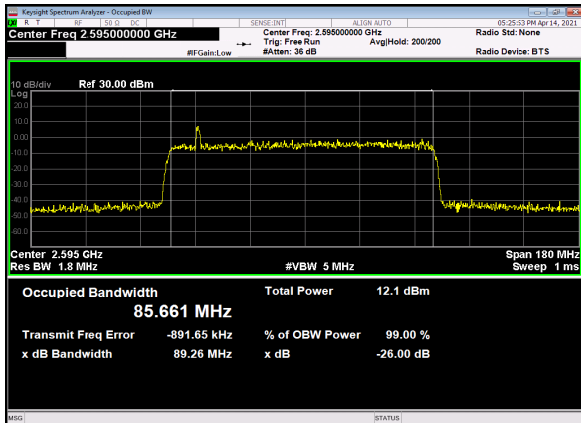
B2_N41(90M)_DFT-s-OFDM_16_QAM_Outer_Full_Mid_CH



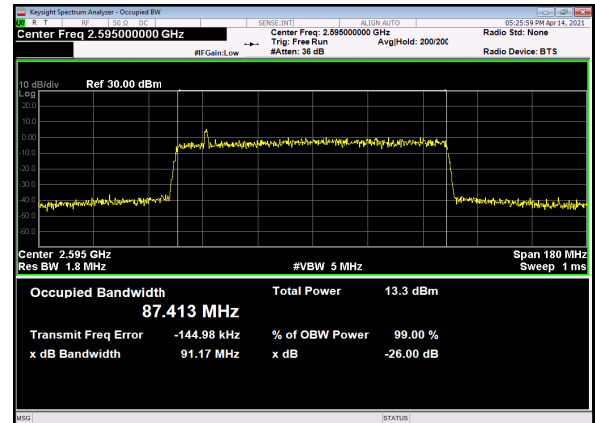
B2_N41(90M)_DFT-s-OFDM_64_QAM_Outer_Full_Mid_CH



B2_N41(90M)_DFT-s-OFDM_256_QAM_Outer_Full_Mid_CH

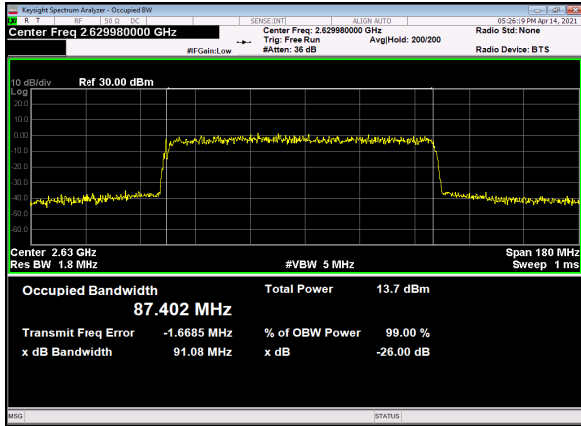


B2_N41(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH

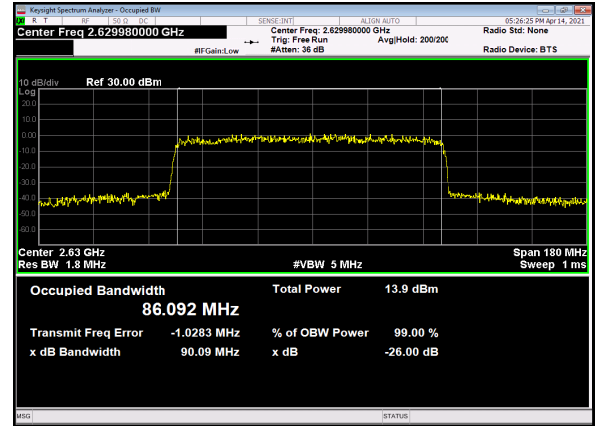




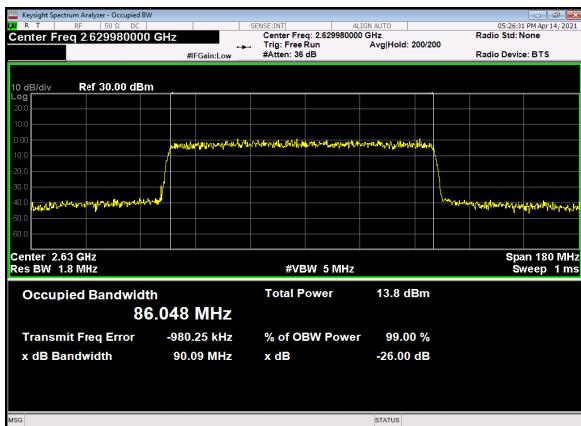
B2_N41(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_High_CH



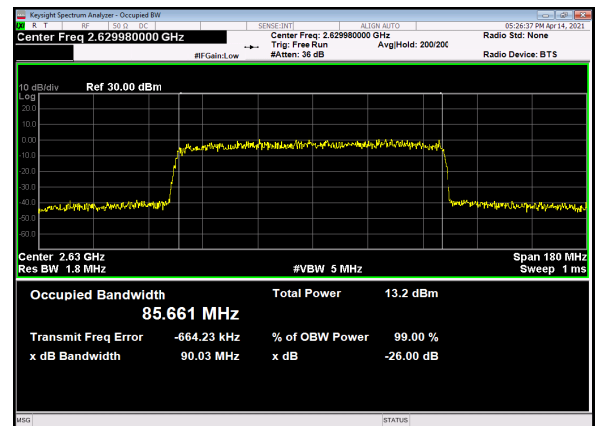
B2_N41(90M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



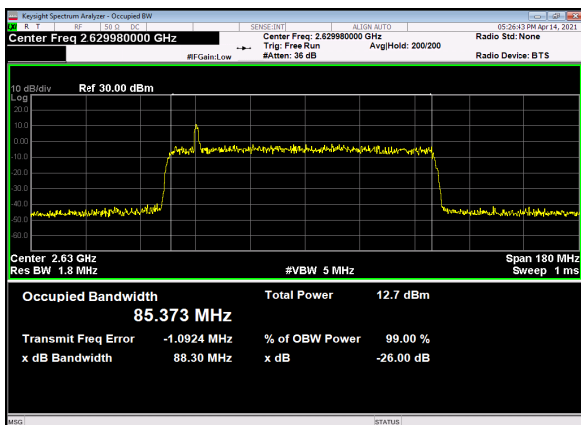
B2_N41(90M)_DFT-s-OFDM_16_QAM_Outer_Full_High_CH



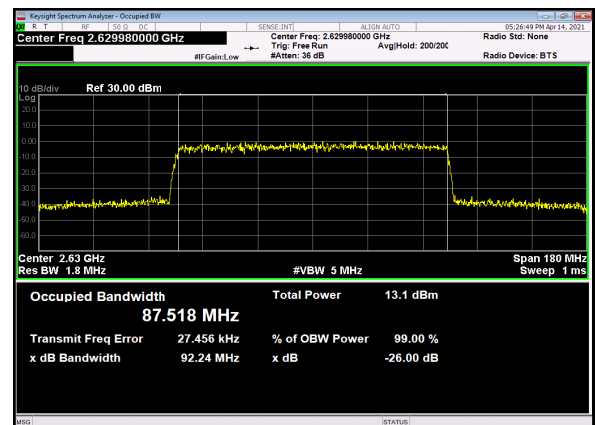
B2_N41(90M)_DFT-s-OFDM_64_QAM_Outer_Full_High_CH



B2_N41(90M)_DFT-s-OFDM_256_QAM_Outer_Full_High_CH

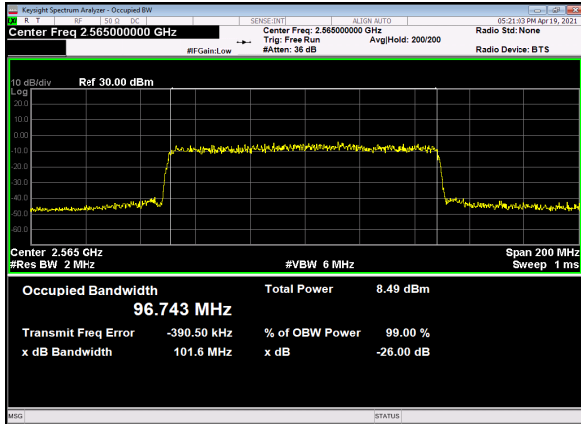


B2_N41(90M)_CP-OFDM_QPSK_Outer_Full_High_CH

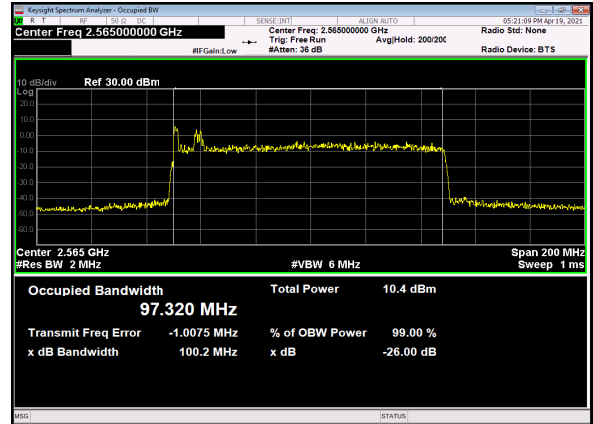




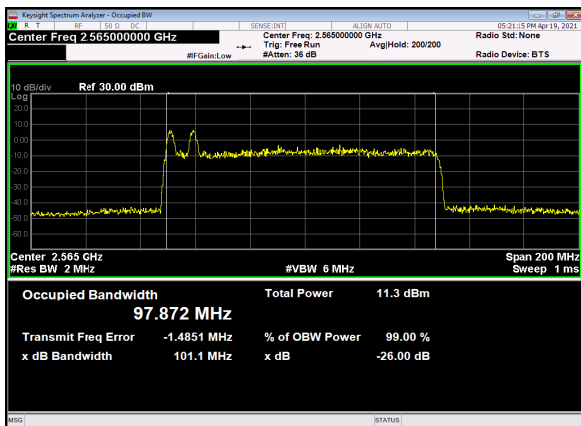
B2_N41(100M)_DFT-s-OFDM_PI_2-BPSK_Outer
_Full_Low_CH



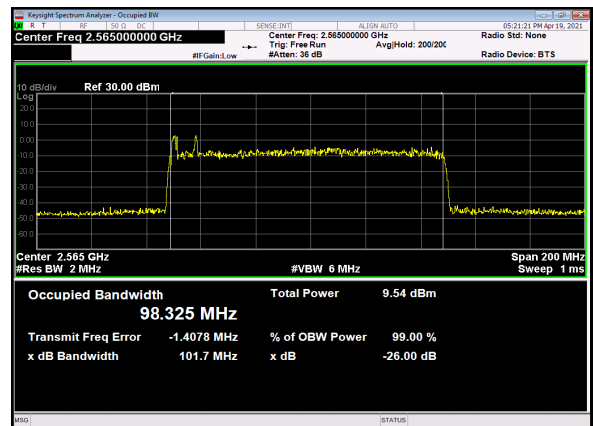
B2_N41(100M)_DFT-s-OFDM_QPSK_Outer
Full_Low_CH



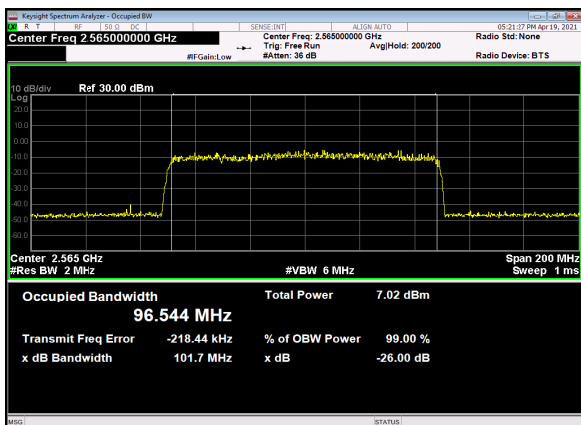
B2_N41(100M)_DFT-s-OFDM_16
QAM_Outer_Full_Low_CH



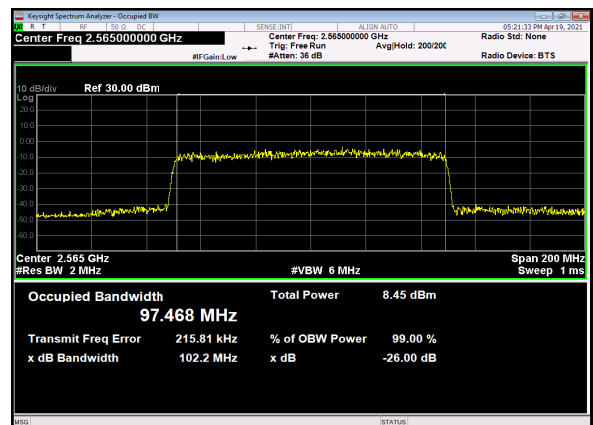
B2_N41(100M)_DFT-s-OFDM_64
QAM_Outer_Full_Low_CH



B2_N41(100M)_DFT-s-OFDM_256
QAM_Outer_Full_Low_CH

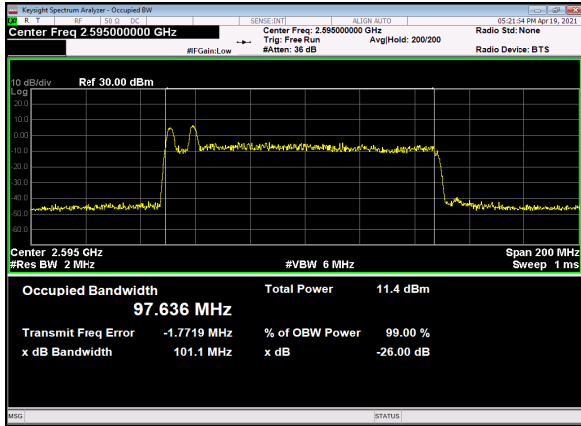


B2_N41(100M)_CP-OFDM_QPSK_Outer_Ful
l_Low_CH

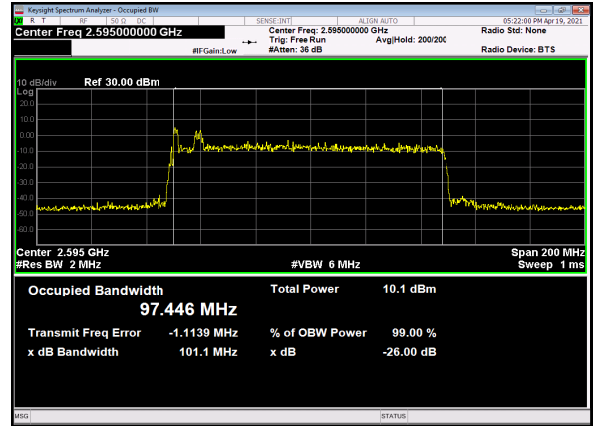




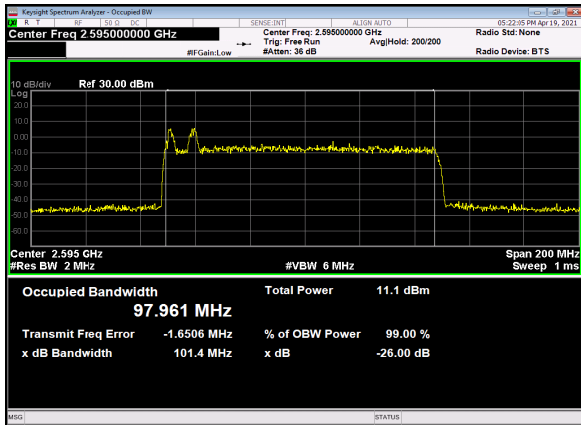
B2_N41(100M)_DFT-s-OFDM_PI_2-BPSK_Outer
_Full_Mid_CH



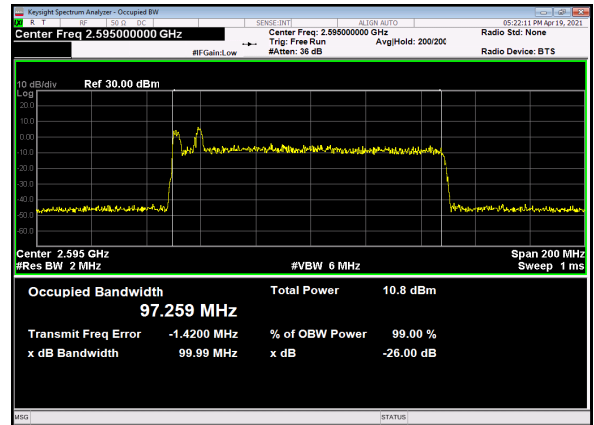
B2_N41(100M)_DFT-s-OFDM_QPSK_Outer
Full_Mid_CH



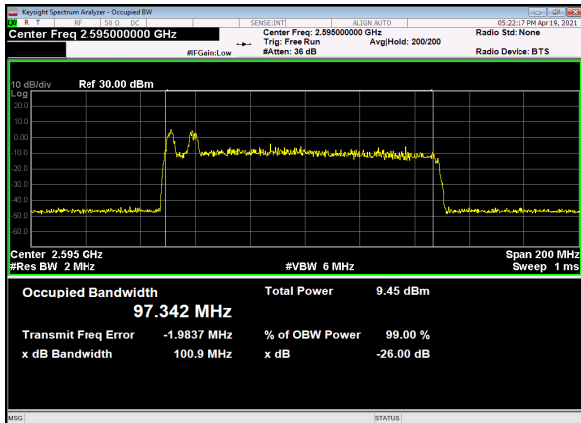
B2_N41(100M)_DFT-s-OFDM_16
QAM_Outer_Full_Mid_CH



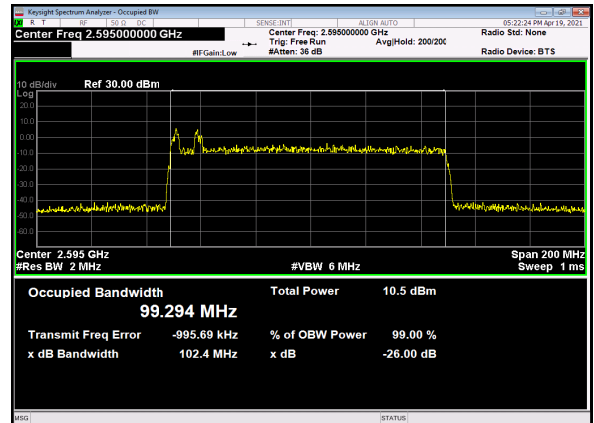
B2_N41(100M)_DFT-s-OFDM_64
QAM_Outer_Full_Mid_CH



B2_N41(100M)_DFT-s-OFDM_256
QAM_Outer_Full_Mid_CH

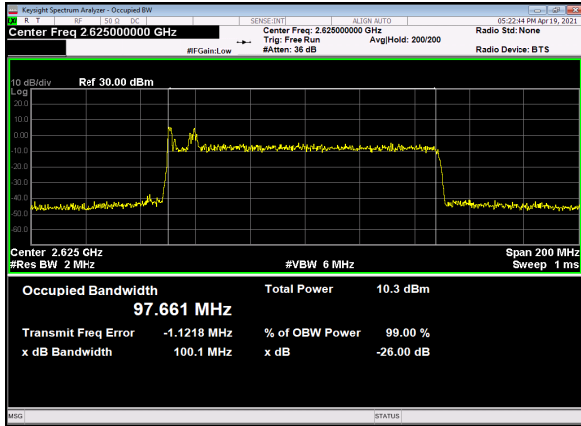


B2_N41(100M)_CP-OFDM_QPSK_Outer_Ful
l_Mid_CH

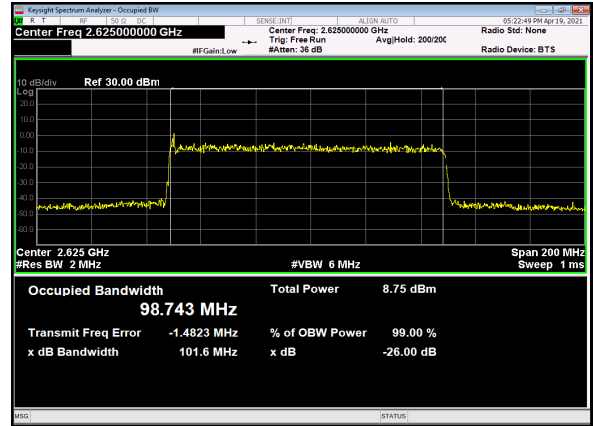




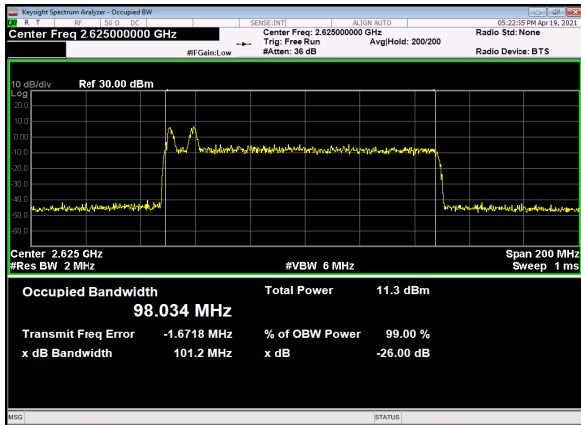
B2_N41(100M)_DFT-s-OFDM_PI_2-BPSK_Outer
_Full_High_CH



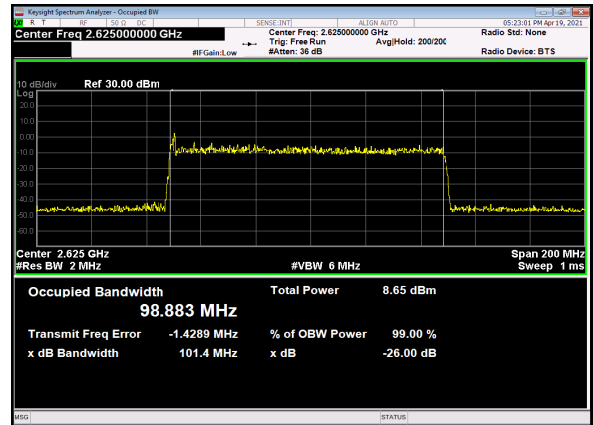
B2_N41(100M)_DFT-s-OFDM_QPSK_Outer
Full_High_CH



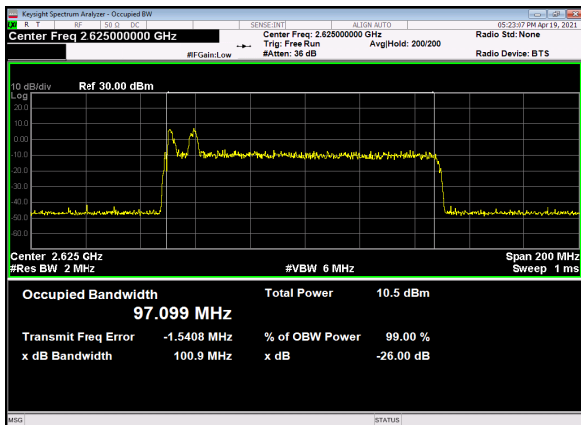
B2_N41(100M)_DFT-s-OFDM_16
QAM_Outer_Full_High_CH



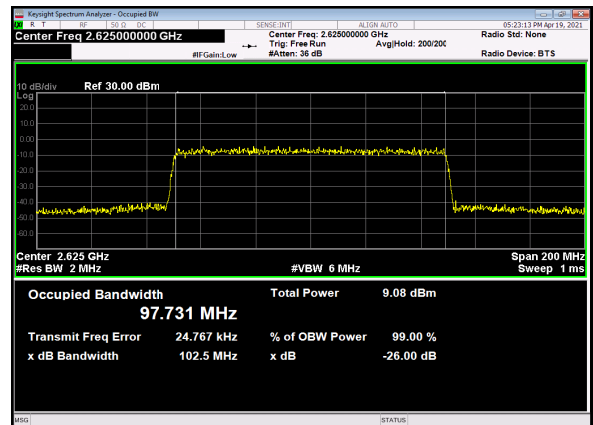
B2_N41(100M)_DFT-s-OFDM_64
QAM_Outer_Full_High_CH



B2_N41(100M)_DFT-s-OFDM_256
QAM_Outer_Full_High_CH



B2_N41(100M)_CP-OFDM_QPSK_Outer_Ful
l_High_CH



2.3. Frequency Stability

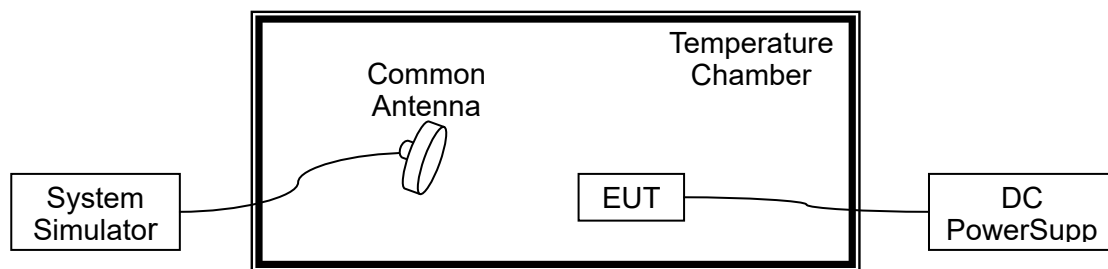
2.3.1. Requirement

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 $+50^{\circ}\text{C}$ 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 25959MHz					
Limit =±1ppm					
Voltage (%)	Power (VDC)	Temp (°C)	Fre. Dev. (Hz)	Deviation (ppm)	Result
100	3.87	+20 (Ref)	22	0.008	PASS
100		0	-41	-0.016	
100		+10	34	0.013	
100		+20	-43	-0.017	
100		+30	26	0.010	
100		+40	-23	-0.009	
100		+45	34	0.013	
115	4.45	+20	-31	-0.012	
85	3.00	+20	43	0.017	

2.4. Conducted Spurious Emissions

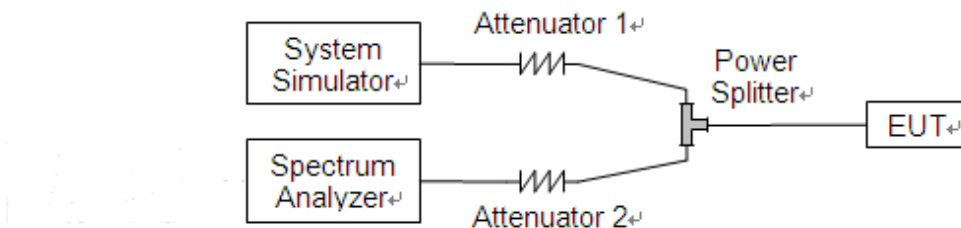
2.4.1. Requirement

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 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.



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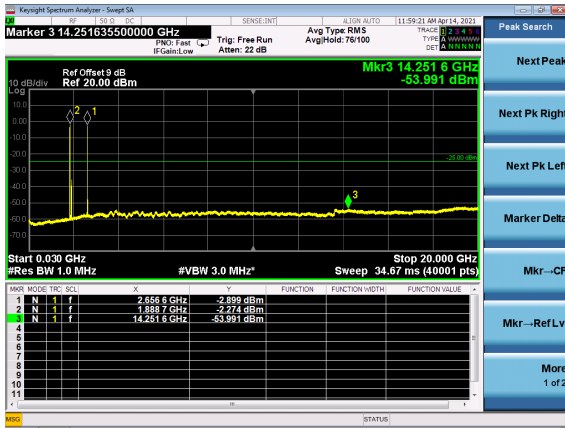
2.4.3. Test procedure

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

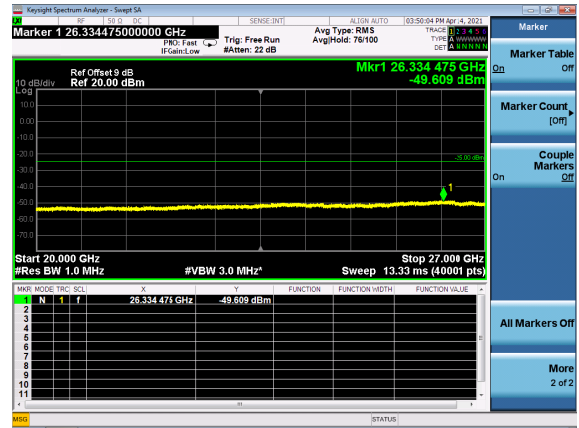
2.4.4. Test Result



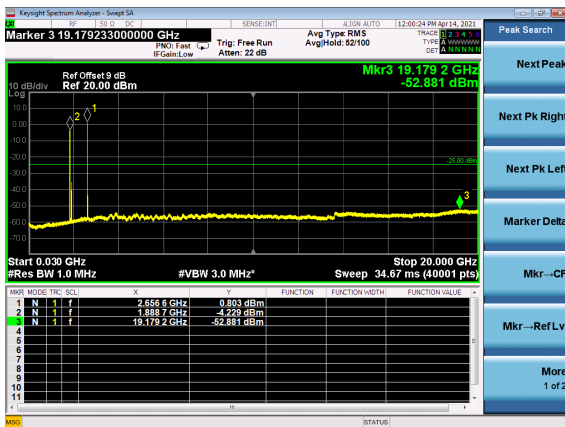
B2_N41(20M)_DFT-s-OFDM_BPSK_Edge_1
RB_Left_High_CH



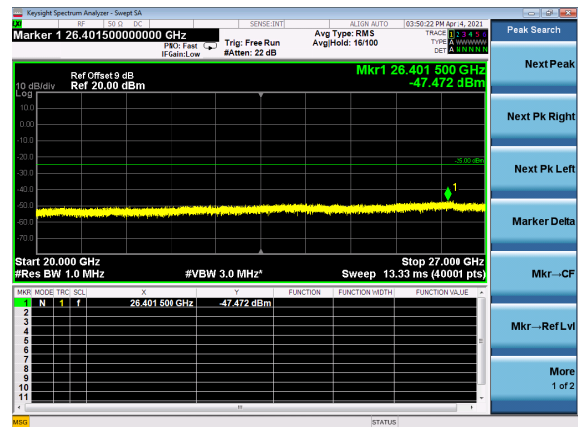
B2_N41(20M)_DFT-s-OFDM_BPSK_Ed
e_1RB_Left_High_CH



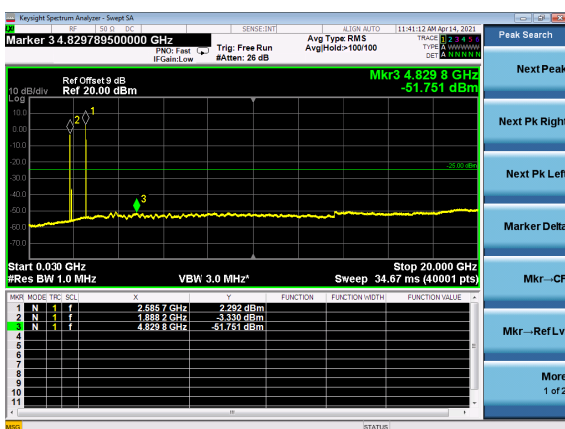
B2_N41(20M)_DFT-s-OFDM_QPSK_Edge_1
RB_Left_High_CH



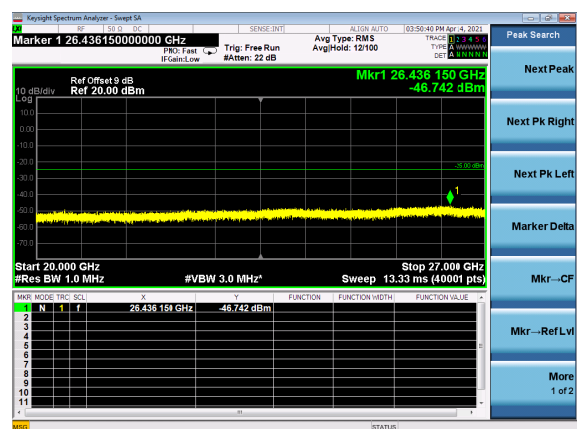
B2_N41(20M)_DFT-s-OFDM_QPSK_Edg
e_1RB_Left_High_CH



B2_N41(20M)_DFT-s-OFDM_BPSK_Edge_1
RB_Left_Mid_CH

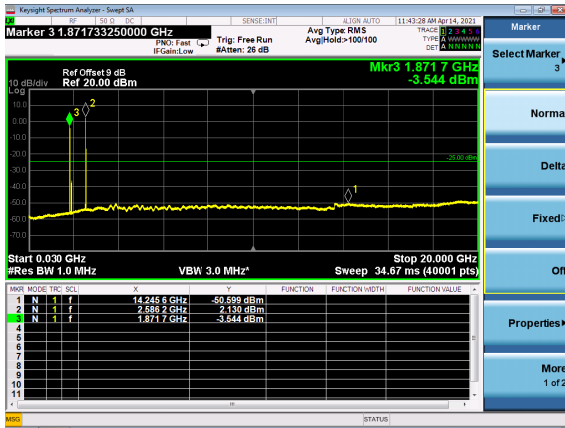


B2_N41(20M)_DFT-s-OFDM_BPSK_Edg
e_1RB_Left_Mid_CH

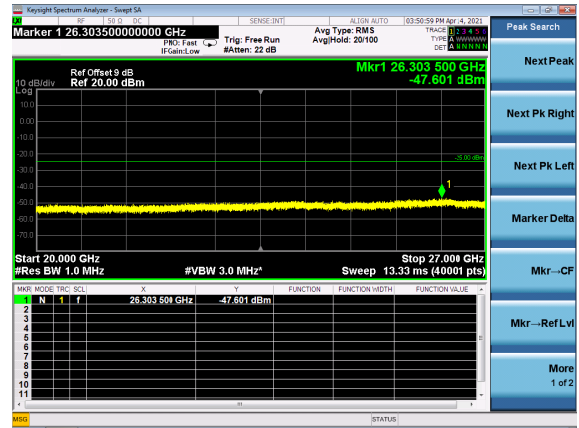




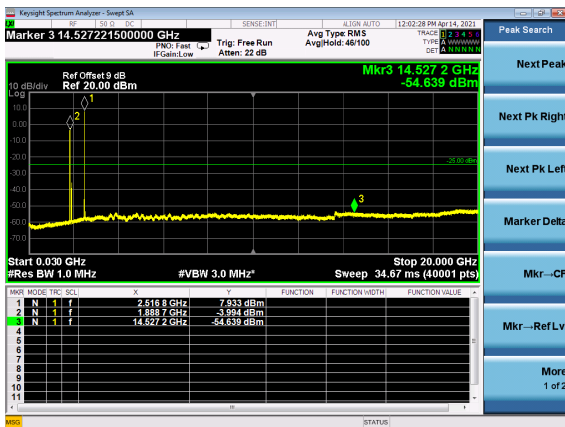
B2_N41(20M)_DFT-s-OFDM_QPSK_Edge_1
RB_Left_Mid_CH



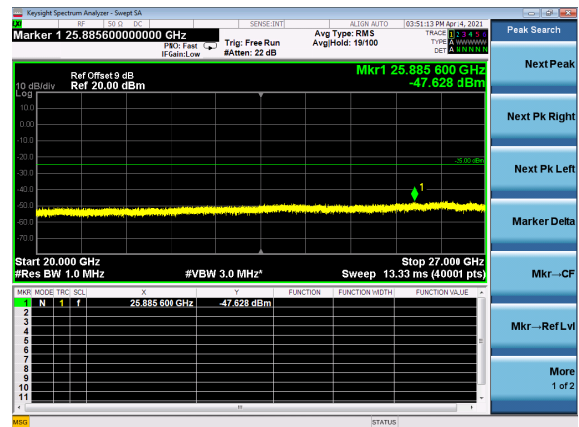
B2_N41(20M)_DFT-s-OFDM_QPSK_Edg
e_1RB_Left_Mid_CH



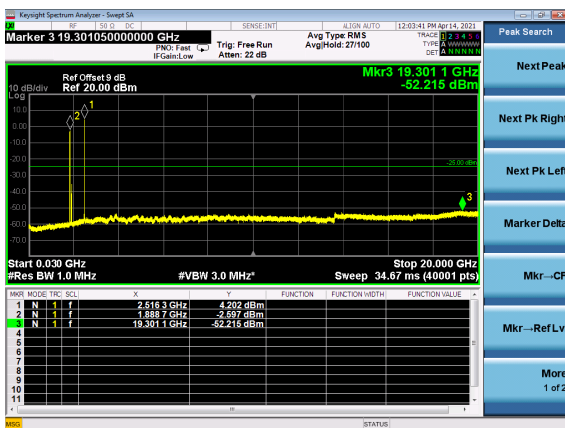
B2_N41(20M)_DFT-s-OFDM_BPSK_Edge_
1RB_Left_Low_CH



B2_N41(20M)_DFT-s-OFDM_BPSK_Edg
e_1RB_Left_Low_CH



B2_N41(20M)_DFT-s-OFDM_QPSK_Edge_1
RB_Left_Low_CH



B2_N41(20M)_DFT-s-OFDM_QPSK_Edg
e_1RB_Left_Low_CH

