

MEASUREMENT REPORT

FCC PART 15.407 / ISED RSS-248 UNII 802.11a/ax OFDM WIFI 6E

Applicant Name:

Apple Inc.
 One Apple Park Way
 Cupertino, CA 95014
 United States

Date of Testing:

1/8/2024 - 04/05/2024

Test Report Issue Date:

03/26/2024

Test Site/Location:

Element Material Technology, Morgan Hill, CA, USA

Test Report Serial No.:

1C2311270067-13-R1.BCG

FCC ID:	BCGA2836
IC:	579C-A2836
APPLICANT:	Apple Inc.

Application Type:

Certification

Model/HVIN:

A2836

EUT Type:

Tablet Device

Frequency Range:

5955 – 7115MHz

Modulation Type:

OFDM

FCC Classification:

15E 6GHz Low Power Dual Client (6CD)

FCC Rule Part(s):

Part 15 Subpart E (15.407)

ISED Specification:

RSS-248 Issue 2

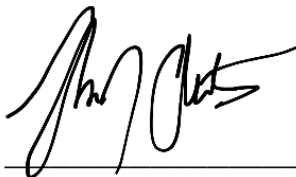
Test Procedure(s):

ANSI C63.10-2013, KDB 789033 D02 v02r01
 KDB 662911 D01 v02r01, KDB 987594 D02 v02r01
 KDB 987594 D04 v02

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10-2013 and KDB 789033 D02 v02r01. Test results reported herein relate only to the item(s) tested.

This revised Test Report (S/N: 1C2311270067-13-R1) supersedes and replaces the previously issued test report on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose accordingly.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.



RJ Ortanez
 Executive Vice President

Prepared by: WKR0000010592

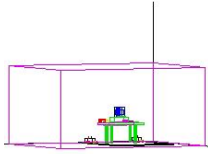
Reviewed by: WKR0000005805



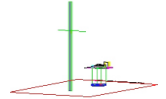
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 1 of 567

1.0	INTRODUCTION	5
1.1	Scope	5
1.2	Element Materials Technology Test Location	5
1.3	Test Facility / Accreditations	5
2.0	PRODUCT INFORMATION	6
2.1	Equipment Description	6
2.2	Device Capabilities	6
2.3	Antenna Description.....	10
2.4	Test Support Equipment.....	10
2.5	Test Configuration.....	11
2.6	Software and Firmware	11
2.7	EMI Suppression Device(s)/Modifications.....	11
3.0	DESCRIPTION OF TESTS	12
3.1	Evaluation Procedure.....	12
3.2	AC Line Conducted Emissions	12
3.3	Radiated Emissions	13
3.4	Environmental Conditions	13
4.0	ANTENNA REQUIREMENTS	14
5.0	MEASUREMENT UNCERTAINTY	15
6.0	TEST EQUIPMENT CALIBRATION DATA.....	16
7.0	TEST RESULTS.....	17
7.1	Summary	17
7.2	26dB & 99% Bandwidth Measurement – 802.11a/ax(SU)	19
7.3	Conducted Output Power and Max EIRP Measurement – 802.11a/ax(SU)	65
7.4	Maximum Power Spectral Density – 802.11a/ax(SU).....	108
7.5	In-Band Emissions – 802.11a/ax(SU).....	246
7.6	Contention Based Protocol – 802.11a/ax(SU)	344
7.7	Radiated Spurious Emissions – Above 1GHz.....	367
7.8	Radiated Spurious Emissions – Below 1GHz	556
7.9	AC Line-Conducted Emissions Measurement.....	561
8.0	CONCLUSION.....	567

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 2 of 567



MEASUREMENT REPORT



UNII Band	Channel Bandwidth (MHz)	Mode	Tx Frequency (MHz)	SISO						CDD/SDM Primary		CDD/SDM Diversity	
				Antenna WF5B		Antenna WF8		Antenna WF7		Summed		Summed	
				Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)
5	20	802.11a/ax	5955 - 6415	6.577	8.18	6.384	8.05	7.190	8.57	6.839	8.35	7.235	8.59
6		802.11a/ax	6435 - 6515	5.064	7.05	4.929	6.93	6.742	8.29	5.876	7.69	6.928	8.41
7		802.11a/ax	6535 - 6875	5.683	7.55	4.096	6.12	6.564	8.17	6.062	7.83	6.600	8.20
8		802.11a/ax	6895 - 7115	6.912	8.40	4.030	6.05	5.006	7.00	6.808	8.33	5.766	7.61
5	40	802.11ax	5965 - 6405	12.912	11.11	13.011	11.14	14.279	11.55	13.772	11.39	14.436	11.59
6		802.11ax	6445 - 6525	10.042	10.02	9.506	9.78	13.589	11.33	12.026	10.80	13.509	11.31
7		802.11ax	6565 - 6845	11.212	10.50	7.982	9.02	12.856	11.09	12.235	10.88	13.200	11.21
8		802.11ax	6885 - 7085	13.530	11.31	7.958	9.01	9.815	9.92	13.742	11.38	11.425	10.58
5	80	802.11ax	5985 - 6385	25.107	14.00	25.621	14.09	28.840	14.60	27.542	14.40	28.738	14.58
6		802.11ax	6465	20.142	13.04	18.998	12.79	26.206	14.18	23.395	13.69	27.140	14.34
7		802.11ax	6545 - 6865	22.172	13.46	15.882	12.01	26.194	14.18	24.189	13.84	26.337	14.21
8		802.11ax	6945 - 7025	27.102	14.33	15.893	12.01	19.597	12.92	26.981	14.31	22.381	13.50
5	160	802.11ax	6025 - 6345	45.154	16.55	46.057	16.63	50.269	17.01	47.863	16.80	51.459	17.11
6		802.11ax	6505	28.504	14.55	27.816	14.44	37.705	15.76	34.365	15.36	41.554	16.19
7		802.11ax	6665 - 6825	38.753	15.88	29.094	14.64	45.082	16.54	42.817	16.32	46.943	16.72
8		802.11ax	6985	47.163	16.74	27.791	14.44	35.457	15.50	47.759	16.79	40.167	16.04

EUT Overview (Low Rate)

UNII Band	Channel Bandwidth (MHz)	Mode	Tx Frequency (MHz)	SISO						CDD/SDM Primary		CDD/SDM Diversity	
				Antenna WF5B		Antenna WF8		Antenna WF7		Summed		Summed	
				Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)
5	20	802.11a/ax	5955 - 6415	6.521	8.14	6.567	8.17	7.099	8.51	6.855	8.36	7.169	8.55
6		802.11a/ax	6435 - 6515	5.187	7.15	4.899	6.90	6.702	8.26	5.904	7.71	6.833	8.35
7		802.11a/ax	6535 - 6875	5.642	7.51	4.048	6.07	6.631	8.22	5.843	7.67	6.708	8.27
8		802.11a/ax	6895 - 7115	6.844	8.35	4.072	6.10	5.118	7.09	6.856	8.36	5.687	7.55
5	40	802.11ax	5965 - 6405	12.903	11.11	12.720	11.05	13.801	11.40	13.677	11.36	14.470	11.60
6		802.11ax	6445 - 6525	10.238	10.10	9.840	9.93	13.568	11.33	11.834	10.73	13.760	11.39
7		802.11ax	6565 - 6845	11.200	10.49	8.219	9.15	12.880	11.10	12.012	10.80	13.200	11.21
8		802.11ax	6885 - 7085	13.378	11.26	7.930	8.99	9.676	9.86	13.647	11.35	11.399	10.57
5	80	802.11ax	5985 - 6385	24.860	13.96	25.686	14.10	27.593	14.41	27.416	14.38	28.738	14.58
6		802.11ax	6465	20.119	13.04	19.196	12.83	26.236	14.19	23.021	13.62	27.773	14.44
7		802.11ax	6545 - 6865	22.264	13.48	16.237	12.11	26.309	14.20	24.245	13.85	26.337	14.21
8		802.11ax	6945 - 7025	27.240	14.35	16.207	12.10	20.258	13.07	26.795	14.28	22.432	13.51
5	160	802.11ax	6025 - 6345	44.937	16.53	45.846	16.61	48.933	16.90	49.204	16.92	50.987	17.07
6		802.11ax	6505	29.013	14.63	27.302	14.36	36.392	15.61	35.004	15.44	40.515	16.08
7		802.11ax	6665 - 6825	39.518	15.97	28.366	14.53	45.888	16.62	42.327	16.27	47.160	16.74
8		802.11ax	6985	47.566	16.77	27.893	14.46	34.285	15.35	47.759	16.79	39.707	15.99

EUT Overview (Mid Rate)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 3 of 567

UNII Band	Channel Bandwidth (MHz)	Mode	Tx Frequency (MHz)	SISO						CDD/SDM Primary		CDD/SDM Diversity	
				Antenna WF5B		Antenna WF8		Antenna WF7		Summed		Summed	
				Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)	Max. e.i.r.p (mW)	Max. e.i.r.p (dBm)
5	20	802.11a/ax	5955 - 6415	6.417	8.07	6.574	8.18	6.934	8.41	6.887	8.38	7.302	8.63
6		802.11a/ax	6435 - 6515	5.120	7.09	4.920	6.92	6.733	8.28	5.972	7.76	6.944	8.42
7		802.11a/ax	6535 - 6875	5.634	7.51	4.023	6.05	6.581	8.18	6.048	7.82	6.646	8.23
8		802.11a/ax	6895 - 7115	6.885	8.38	4.017	6.04	5.066	7.05	6.824	8.34	5.648	7.52
5	40	802.11ax	5965 - 6405	13.023	11.15	12.607	11.01	14.223	11.53	13.614	11.34	14.671	11.66
6		802.11ax	6445 - 6525	10.205	10.09	9.681	9.86	13.397	11.27	11.725	10.69	13.602	11.34
7		802.11ax	6565 - 6845	11.174	10.48	8.106	9.09	13.122	11.18	11.875	10.75	13.139	11.19
8		802.11ax	6885 - 7085	13.434	11.28	7.762	8.90	10.212	10.09	13.491	11.30	11.399	10.57
5	80	802.11ax	5985 - 6385	25.609	14.08	25.177	14.01	27.778	14.44	27.479	14.39	28.738	14.58
6		802.11ax	6465	19.829	12.97	19.409	12.88	26.140	14.17	23.449	13.70	26.768	14.28
7		802.11ax	6545 - 6865	22.156	13.46	16.181	12.09	25.787	14.11	24.078	13.82	26.398	14.22
8		802.11ax	6945 - 7025	26.872	14.29	15.889	12.01	19.829	12.97	27.482	14.39	22.536	13.53
5	160	802.11ax	6025 - 6345	45.405	16.57	46.763	16.70	49.102	16.91	48.195	16.83	50.870	17.06
6		802.11ax	6505	28.721	14.58	27.403	14.38	37.291	15.72	35.004	15.44	40.702	16.10
7		802.11ax	6665 - 6825	39.509	15.97	28.119	14.49	45.761	16.61	42.425	16.28	46.086	16.64
8		802.11ax	6985	48.161	16.83	27.549	14.40	34.978	15.44	47.212	16.74	40.260	16.05

EUT Overview (High Rate)

UNII Band	Channel Bandwidth (MHz)	Mode	Tx Frequency (MHz)	SISO						CDD/SDM Primary		CDD/SDM Diversity	
				Antenna WF5B		Antenna WF8		Antenna WF7		Summed		Summed	
				Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)
5	20	802.11a/ax	5955 - 6415	87.458	19.42	84.372	19.26	98.924	19.95	168.655	22.27	193.197	22.86
7		802.11a/ax	6535 - 6875	112.047	20.49	84.996	19.29	134.524	21.29	224.388	23.51	262.422	24.19
5	40	802.11ax	5965 - 6405	85.173	19.30	83.541	19.22	100.508	20.02	167.880	22.25	174.181	22.41
7		802.11ax	6565 - 6845	114.104	20.57	71.945	18.57	139.862	21.46	216.272	23.35	253.513	24.04
5	80	802.11ax	5985 - 6385	86.357	19.36	82.167	19.15	83.464	19.22	177.011	22.48	176.198	22.46
7		802.11ax	6545 - 6865	114.419	20.59	84.333	19.26	138.963	21.43	224.905	23.52	257.632	24.11
5	160	802.11ax	6025 - 6345	83.792	19.23	83.311	19.21	99.977	20.00	164.059	22.15	190.546	22.80
7		802.11ax	6665 - 6825	118.741	20.75	79.708	19.02	123.396	20.91	198.153	22.97	263.027	24.20

EUT Overview Standard Power (Low Rate)

UNII Band	Channel Bandwidth (MHz)	Mode	Tx Frequency (MHz)	SISO						CDD/SDM Primary		CDD/SDM Diversity	
				Antenna WF5B		Antenna WF8		Antenna WF7		Summed		Summed	
				Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)
5	20	802.11a/ax	5955 - 6415	86.238	19.36	86.596	19.38	102.070	20.09	174.985	22.43	187.068	22.72
7		802.11a/ax	6535 - 6875	117.139	20.69	84.781	19.28	136.678	21.36	219.280	23.41	261.818	24.18
5	40	802.11ax	5965 - 6405	87.418	19.42	84.159	19.25	88.186	19.45	173.380	22.39	179.061	22.53
7		802.11ax	6565 - 6845	115.824	20.64	74.748	18.74	137.721	21.39	222.331	23.47	256.448	24.09
5	80	802.11ax	5985 - 6385	88.085	19.45	84.178	19.25	85.921	19.34	171.002	22.33	177.419	22.49
7		802.11ax	6545 - 6865	111.353	20.47	83.368	19.21	121.675	20.85	225.424	23.53	252.930	24.03
5	160	802.11ax	6025 - 6345	85.684	19.33	81.395	19.11	101.438	20.06	170.608	22.32	194.536	22.89
7		802.11ax	6665 - 6825	96.294	19.84	84.918	19.29	125.893	21.00	214.289	23.31	263.027	24.20

EUT Overview Standard Power (Mid Rate)

UNII Band	Channel Bandwidth (MHz)	Mode	Tx Frequency (MHz)	SISO						CDD/SDM Primary		CDD/SDM Diversity	
				Antenna WF5B		Antenna WF8		Antenna WF7		Summed		Summed	
				Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)	Max. Power (mW)	Max. Power (dBm)
5	20	802.11a/ax	5955 - 6415	86.477	19.37	82.813	19.18	99.862	19.99	162.930	22.12	188.799	22.76
7		802.11a/ax	6535 - 6875	119.895	20.79	84.762	19.28	135.270	21.31	216.272	23.35	265.461	24.24
5	40	802.11ax	5965 - 6405	83.138	19.20	79.891	19.03	101.906	20.08	160.694	22.06	187.932	22.74
7		802.11ax	6565 - 6845	118.878	20.75	70.372	18.47	139.894	21.46	213.796	23.30	254.683	24.06
5	80	802.11ax	5985 - 6385	83.100	19.20	80.408	19.05	101.111	20.05	163.682	22.14	189.671	22.78
7		802.11ax	6545 - 6865	108.568	20.36	81.452	19.11	136.490	21.35	214.289	23.31	251.768	24.01
5	160	802.11ax	6025 - 6345	82.149	19.15	90.386	19.56	99.977	20.00	167.109	22.23	187.068	22.72
7		802.11ax	6665 - 6825	118.577	20.74	78.668	18.96	118.550	20.74	222.331	23.47	252.930	24.03

EUT Overview Standard Power (High Rate)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)		Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device		Page 4 of 567

1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EMC) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Innovation, Science and Economic Development Canada.

1.2 Element Materials Technology Test Location

These measurement tests were conducted at the Element Materials Technology facility located at 18855 Adams Court, Morgan Hill, CA 95037. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014 and KDB 414788 D01 v01r01.

1.3 Test Facility / Accreditations

Measurements were performed at Element Materials Technology.

- Element Materials Technology is an ISO 17025-2017 accredited test facility under the American Association for Laboratory Accreditation (A2LA) with Certificate number 2041.02 for Specific Absorption Rate (SAR), Hearing Aid Compatibility (HAC) testing, where applicable, and Electromagnetic Compatibility (EMC) testing for FCC and Innovation, Science, and Economic Development Canada rules.
- Element Washington DC LLC TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC 17065-2012 by A2LA (Certificate number 2041.03) in all scopes of FCC Rules and ISED Standards (RSS).
- Element Materials Technology facility is a registered (22831) test laboratory with the site description on file with ISED.
- Element Washington DC LLC is a Recognized U.S. Certification Assessment Body (CAB # US0110) for ISED Canada as designated by NIST under the U.S. and Canada Mutual Recognition Agreements (MRAs).

FCC ID: BCGA2836 IC: 579C-A2836	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device Page 5 of 567

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **Apple Tablet Device FCC ID: BCGA2836** and **IC: 579C-A2836**. The test data contained in this report pertains only to the emissions due to the EUT's UNII transmitter while operating in the 6GHz band.

Test Device Serial No.: C424JG6V2Q, C4CV3H0HPL, N573DXQ0W, XGFQ3WXW2P DLXH1600004000065V

2.2 Device Capabilities

This device contains the following capabilities:

802.11b/g/n/ax WLAN, 802.11a/n/ac/ax UNII, Bluetooth (1x, EDR, LE1M, LE2M, HDR4, HDR8), 802.11a/ax WIFI 6E, NB UNII (1x, HDR4, HDR8), WPT, 802.15.4

This device supports BT Beamforming

Standard Power (SP) mode is supported for U-NII Bands 5 and 7. Lower Power Indoor (LPI) mode is supported for U-NII Bands 5, 6, 7, 8. Throughout the report, data of Standard Power mode is denoted as SP while data of Lower Power Indoor mode is denoted as LPI.

Band 5		Band 6		Band 7		Band 8	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
1	5955	97	6435	117	6535	189	6895
:	:	:	:	:	:	:	:
45	6175	105	6475	149	6695	209	6995
:	:	:	:	:	:	:	:
93	6415	113	6515	185	6875	233	7115

Table 2-1. 802.11a / 802.11ax (20MHz) Frequency / Channel Operations

Band 5		Band 6		Band 7		Band 8	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
3	5965	99	6445	123	6565	187	6885
:	:	:	:	:	:	:	:
43	6165	107	6485	155	6725	211	7005
:	:	:	:	:	:	:	:
91	6405	115	6525	179	6845	227	7085

Table 2-2. 802.11ax (40MHz BW) Frequency / Channel Operations

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 6 of 567

Band 5		Band 6		Band 7		Band 8	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
7	5985	103	6465	119	6545	199	6945
:	:			:	:	:	:
39	6145			151	6705	215	7025
:	:			:	:		
87	6385			183	6865		

Table 2-3. 802.11ax (80MHz BW) Frequency / Channel Operations

Band 5		Band 6		Band 7		Band 8	
Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)	Ch.	Frequency (MHz)
15	6025	111	6505	143	6665	207	6985
:	:			:	:		
47	6185			175	6825		
:	:						
79	6345						

Table 2-4. 802.11ax (160MHz BW) Frequency / Channel Operations

Notes:

- 6GHz NII operation is possible in 20MHz, 40MHz, 80MHz and 160MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = peak per the guidance of Section B)2)b) KDB 789033 D02 v02r01 and ANSI C63.10-2013. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Measured Duty Cycles						
802.11 Mode/Band		Duty Cycle [%]				
		Antenna 5B	Antenna WF8	Antenna WF7	CDD/SDM (Primary)	CDD/SDM (Diversity)
6GHz	a (Low Rate)	97.10	97.72	97.72	-	-
	a (Mid Rate)	95.17	95.72	95.72	-	-
	a (High Rate)	94.25	91.41	91.83	-	-
	ax(SU) (HE20 Low Rate)	97.23	95.94	95.94	96.16	95.94
	ax(SU) (HE20 Mid Rate)	95.57	93.33	93.11	93.33	92.90
	ix(SU) (HE20 High Rate)	92.96	87.50	86.90	87.30	86.30
	ax(SU) (HE40 Low Rate)	97.86	95.72	95.50	95.94	95.50
	ax(SU) (HE40 Mid Rate)	95.39	93.11	92.90	92.68	92.90
	ix(SU) (HE40 High Rate)	93.41	86.30	86.70	86.30	86.30
	ax(SU) (HE80 Low Rate)	97.03	95.50	95.50	95.28	95.94
	ax(SU) (HE80 Mid Rate)	95.43	92.47	92.90	92.68	92.68
	ix(SU) (HE80 High Rate)	91.52	85.90	86.30	86.10	85.90
	ix(SU) (HE160 Low Rate)	96.63	93.76	93.97	93.97	94.19
	x(SU) (HE160 Mid Rate)	93.76	90.78	90.78	90.57	89.74
	x(SU) (HE160 High Rate)	87.96	82.99	83.75	82.79	83.37

Table 2-5. Measured Duty Cycles

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 7 of 567

2. The device employs MIMO technology. Below are the possible configurations.

WiFi Configuration		SISO			Primary						Diversity					
					SDM		CDD		STBC		SDM		CDD		STBC	
		Antenna 5B	Antenna WF8	Antenna WF7	Antenna 5B	Antenna WF8	Antenna 5B	Antenna WF8	Antenna 5B	Antenna WF8	Antenna WF8	Antenna WF7	Antenna WF8	Antenna WF7	Antenna WF8	Antenna WF7
6GHz	11a	✓	✓	✓	*	*	*	*	*	*	*	*	*	*	*	
	11ax(SU) (20MHz)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	11ax(SU) (40MHz)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	11ax(SU) (80MHz)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	11ax(SU) (160MHz)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Table 2-6. WiFi Configurations

✓ = Support ; * = NOT Support

SISO = Single Input Single Output

SDM = Spatial Diversity Multiplexing – MIMO function

CDD = Cyclic Delay Diversity - 2Tx Function

STBC = Space-Time Block Coding – 2Tx Function

Data Rate(s) Tested: 6, 9, 12, 18, 24, 36, 48, 54Mbps (802.11a)

8/8.6, 16/17.2, 24/25.8, 33/34.4, 49/51.6, 65/68.8, 73/77.4, 81/86.0, 98/103.2, 108/114.7, 122/129.0, 135/143.4Mbps (ax – 20MHz)
 16/17.2, 33/34.4, 49/51.6, 65/68.8, 98/103.2, 130/137.6, 146/154.9, 163/172.1, 195/206.5, 217/229.4, 244/258.1, 271/286.8Mbps (ax – 40MHz BW)
 34/36.0, 68/72.1, 102/108.1, 136/144.1, 204/216.2, 272/288.2, 306/324.4, 340/360.3, 408/432.4, 453/480.4, 510/540.4, 567/600.5Mbps (ax – 80MHz BW)
 68.1/72.1, 136.1/144.1, 204BC.2/216.2, 272.2/288.2, 408.3/432.4, 544.4/576.5, 612.5/648.5, 680.6/720.6, 816.7/864.7, 907.4/960.8, 1020.8/1080.9, 1134.3/1201Mbps (ax – 160Mhz BW)
 16.3/17.2, 32.5/34.4, 48.8/51.6, 65/68.8, 97.5/103.2, 130/137.6, 146.3/154.9, 162.5/172.1, 195/206.5, 216.7/229.4, 243.8/258.1, 270.8/286.8Mbps (MIMO ax – 20MHz)
 32.5/34.4, 65/68.8, 97.5/103.2, 130/137.6, 195/206.5, 260/275.3, 292.5/309.7, 325/344.1, 390/412.9, 433.3/458.8, 487.5/516.2, 541.7/573.5Mbps (MIMO ax – 40MHz BW)
 68.1/72.1, 136.1/144.1, 204.2/216.2, 272.2/288.2, 408.3/432.4, 544.4/576.5, 612.5/648.5, 680.6/720.6, 816.7/864.7, 907.4/960.8, 1020.8/1080.9, 1134.3/1201Mbps (MIMO ax – 80MHz BW)
 136.1/144.1, 272.2/288.2, 408.3/432.4, 544.4/576.5, 816.7/864.7, 1088.9/1152.9, 1225/1297.1, 1361.1/1441.2, 1633.3/1729.4, 1814.8/1921.6, 2041.7/2161.8, 2268.5/2402Mbps (MIMO ax – 160MHz BW)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICAION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 8 of 567

3. This device support simultaneous transmission operations, which allows for multiple transmitters to transmit simultaneously on the same antenna The table below shows all configurations possible.

Antenna	Simultaneous Tx Config	Wifi 2GHz	Bluetooth	Thread	Wifi 5GHz	Wifi 6GHz	NB UNII
		802.11 b/g/n/ax	BDR, EDR, HDR4/8, LE1/2M	802.15.4	802.11 a/n/ac/ax	802.11 a/ax	BDR, HDR4/8
WF8	Config 1	✓	✗	✗	✗	✗	✓
WF8	Config 2	✗	✓	✗	✓	✗	✗
WF8	Config 3	✗	✓	✗	✗	✓	✗
WF8	Config 4	✗	✗	✓	✓	✗	✗
WF8	Config 5	✗	✗	✓	✗	✓	✗
WF7	Config 6	✓	✗	✗	✗	✗	✓
WF7	Config 7	✗	✓	✗	✓	✗	✗
WF7	Config 8	✗	✓	✗	✗	✓	✗
WF7	Config 9	✗	✗	✓	✓	✗	✗
WF7	Config 10	✗	✗	✓	✗	✓	✗

Table 2-7. Simultaneous Transmission Configurations

✓ = Support; ✗ = Not Support

4. All the above simultaneous transmission configurations have been tested and the worst-case configuration was found to be Config 8 and reported in RF Bluetooth and RF Part 96 test reports.
5. Specific 2.4GHz Wi-Fi antenna that can only transmit simultaneously with 2.4GHz Bluetooth antenna is listed in the SAR test report. For BT (2.4GHz) in connected mode and Wi-Fi (2.4GHz) - Wi-Fi max power will not exceed minimum of (13.5dBm, SAR max cap, Reg max cap) power. For BT (2.4GHz) in disconnected mode and Wi-Fi (2.4GHz) - BT will be using iPA only and Wi-Fi max power will not exceed minimum of (SAR max cap, Reg max cap) power. Bluetooth can simultaneously transmit with IEEE 802.11a/n/ac/ax 5/6 GHz on separate antenna.

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 9 of 567

2.3 Antenna Description

Following antenna gains were provided by the manufacturer.

UNII Band	Tx Frequency (MHz)	Highest Antenna Gain			Lowest Antenna Gain		
		Antenna WF5B	Antenna WF8	Antenna WF7	Antenna WF5B	Antenna WF8	Antenna WF7
5	5955-6415	1.7	1.7	2.1	0.6	0.9	1.1
6	6435-6515	1.4	1.2	2.6	1.4	1.2	2.6
7	6535-6875	2.8	1.4	3.5	2.2	1.2	0.1
8	6895-7115	2.9	0.6	1.6	2.5	-1.3	0.9

Table 2-8. Antenna Gain

2.4 Test Support Equipment

1	Apple MacBook Pro w/AC/DC Adapter	Model: A2141 Model: A2166	S/N: C02H604EQ05D S/N: C4H042705ZNP M0WA6
2	Apple USB-C Cable	Model: Spartan	S/N: GXK1336018XKTR024
3	USB-C Cable w/ AC Adapter	Model: A246C Model: A2305	S/N: DWH80115BK826GV19 S/N: C4H95160004PF4F4V
4	Apple Pencil	Model: A2538	S/N: KJ26TCFXJW
5	DC Power Supply	Model: KPS3010D	S/N: N/A
6	Netgear AP	Model: RAXE500	S/N: 6JX215GA10A5
7	Broadcom AP	Model: N/A	S/N: N/A

Table 2-9. Test Support Equipment List

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 10 of 567

2.5 Test Configuration

The EUT was tested per the guidance of ANSI C63.10-2013, KDB 789033 D02 v02r01 and KDB 987594 D02 v02r01. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and AC line conducted testing. See Sections 3.2 for AC line conducted emissions test setups, 3.3 for radiated emissions test setups, and 7.2, 7.3, 7.4 and 7.5 for antenna port conducted emissions test setups.

There are two vendors of the WiFi/Bluetooth radio modules, variant 1 and variant 2. Both radio modules have the same mechanical outline, same on-board antenna matching circuit, identical antenna structure, and are built and tested to conform to the same specifications and to operate within the same tolerances. The worst case configuration was found between the two variants. The EUT was also investigated with and without charger.

For emissions from 1GHz – 18GHz, low, mid, and high channels were tested with highest power and worst case configuration. The emissions below 1GHz and above 18GHz were tested with the highest transmitting power and the worst case channel.

The EUT was manipulated through three orthogonal planes of X-orientation (flatbed), Y-orientation (landscape), and Z-orientation (portrait) during the testing. Only the worst case emissions were reported in this test report.

For AC line conducted and radiated test below 1GHz, following configuration were investigated and EUT powered by AC/DC was the worst case.

- EUT powered by AC/DC adaptor via USB-C cable with wire charger
- EUT powered by host PC via USB-C cable with wire charger

802.11ax HE20/40/80 2TX SDM mode test data provided in this report covers 802.11ax HE20/40/80 2TX STBC mode.

For 802.11ax-RU test results, see separate UNII 6E OFDMA report, 1C2311270067-14.BCG.

The data rates have been classified into three different groups; low data rate, middle data rate, and high data rate. All three groups of data rate have been investigated and only the worst case data rate per group is reported. The worst case data rate for each group per mode are as follows:

- o 802.11a:
 - Low Data Rate: 12Mbps
 - Mid Data Rate: 24Mbps
 - High Data Rate: 54Mbps
- o 802.11ax(SU) HE20/HE40/HE80/HE160
 - Low Data Rate: MCS2
 - Mid Data Rate: MCS4
 - High Data Rate: MCS11

2.6 Software and Firmware

The test was conducted with firmware 21E8197 installed on the EUT

2.7 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and/or no modifications were made during testing.

FCC ID: BCGA2836 IC: 579C-A2836	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device

3.0 DESCRIPTION OF TESTS

3.1 Evaluation Procedure

The measurement procedures described in the American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices (ANSI C63.10-2013) and the guidance provided in KDB 789033 D02 v02r01 were used in the measurement of the EUT.

Deviation from measurement procedure.....None

3.2 AC Line Conducted Emissions

The line-conducted facility is located inside a 7m x 3.66m x 2.7m shielded enclosure. The shielded enclosure is manufactured by AP Americas. The shielding effectiveness of the shielded room is in accordance with MIL-Std-285 or NSA 65-6. A 1m x 1.5m wooden table 80cm high is placed 40cm away from the vertical wall and 80cm away from the sidewall of the shielded room. Two 10kHz-30MHz, 50Ω/50μH Line-Impedance Stabilization Networks (LISNs) are bonded to the shielded room floor. Power to the LISNs is filtered by external high-current high-insertion loss power line filters. The external power line filter is EPCOS 2X60A Power Line Filter (100dB Attenuation, 14kHz-18GHz) and the two EPCOs 2X48A filters (100dB Minimum Insertion Loss, 14kHz - 10GHz). These filters attenuate ambient signal noise from entering the measurement lines. These filters are also bonded to the shielded enclosure.

The EUT is powered from one LISN and the support equipment is powered from the second LISN. If the EUT is a DC-powered device, power will be derived from the source power supply it normally will be powered from and this supply line(s) will be connected to the second LISN. All interconnecting cables more than 1 meter were shortened to a 1 meter length by non-inductive bundling (serpentine fashion) and draped over the back edge of the test table. All cables were at least 40cm above the horizontal reference ground plane. Power cables for support equipment were routed down to the second LISN while ensuring that that cables were not draped over the second LISN.

Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The RF output of the LISN was connected to the spectrum analyzer and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The spectrum was scanned from 150kHz to 30MHz with a spectrum analyzer. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 10kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions is used for final measurements on the same test site. The analyzer is set to CISPR quasi-peak and average detectors with a 9kHz resolution bandwidth for final measurements.

Line conducted emissions test results are shown in Section 7.9. Automated test software was used to perform the AC line conducted emissions testing. Automated measurement software utilized is Rohde & Schwarz EMC32, Version 10.50.40.

FCC ID: BCGA2836 IC: 579C-A2836	 MEASUREMENT REPORT (CERTIFICAION)		Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 12 of 567

3.3 Radiated Emissions

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. An 80cm tall test table made of Styrodur is placed on top of the turn table. For measurements above 1GHz, an additional Styrodur pedestal is placed on top of the test table to bring the total table height to 1.5m.

Per KDB 414788, radiated emission test sites other than open-field test sites (e.g., shielded anechoic chambers), may be employed for emission measurements below 30MHz if characterized so that the measurements correspond to those obtained at an open-field test site. To determine test site equivalency, a reference sample transmitting at 149kHz was measured on an open field test site (asphalt with no ground plane) and then measured in the 3m semi-anechoic chamber. A calibrated 60cm loop antenna was used while the reference device was rotated through the X, Y and Z axis in order to capture the worst case level. A maximum deviation of 2.77dB at 149kHz was measured when comparing the 3 meter semi-anechoic chamber to the open field site.

For all measurements, the spectrum was scanned through all EUT azimuths and from 1 to 4 meter receive antenna height using a broadband antenna from 30MHz up to the upper frequency shown in 15.33 depending on the highest frequency generated or used in the device or on which the device operates or tunes. For frequencies above 1GHz, linearly polarized double ridge horn antennas were used. For frequencies below 30MHz, a calibrated loop antenna was used. When exploratory measurements were necessary, they were performed at 1 meter test distance inside the semi-anechoic chamber using broadband antennas, broadband amplifiers, and spectrum analyzers to determine the frequencies and modes producing the maximum emissions. Sufficient time for the EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. The test set-up was placed on top of the 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, mode of operation, turntable azimuth, and receive antenna height was noted for each frequency found.

Final measurements were made in the semi-anechoic chamber using calibrated, linearly polarized broadband and horn antennas. The test setup was configured to the setup that produced the worst case emissions. The spectrum analyzer was set to investigate all frequencies required for testing to compare the highest radiated disturbances with respect to the specified limits. The turntable containing the EUT was rotated through 360 degrees and the height of the receive antenna was varied 1 to 4 meters and stopped at the azimuth and height producing the maximum emission. Each emission was maximized by changing the orientation of the EUT through three orthogonal planes and changing the polarity of the receive antenna, whichever produced the worst-case emissions.

3.4 Environmental Conditions

The temperature is controlled within range of 15°C to 35°C. The relative humidity is controlled within range of 10% to 75%. The atmospheric pressure is monitored within the range 86-106kPa (860-1060mbar).

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 13 of 567

4.0 ANTENNA REQUIREMENTS

Excerpt from §15.203 of the FCC Rules/Regulations:

“An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.”

- The antennas of the EUT are **permanently attached**.
- There are no provisions for connection to an external antenna.

Conclusion:

The EUT complies with the requirement of §15.203.

FCC ID: BCGA2836 IC: 579C-A2836	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device
		Page 14 of 567

V 10.5 12/15/2021

5.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.23-2012. All measurement uncertainty values are shown with a coverage factor of $k = 2$ to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Contribution	Expanded Uncertainty (\pm dB)
Conducted Bench Top Measurements	2.07
Line Conducted Disturbance	1.91
Radiated Disturbance (<30MHz)	4.12
Radiated Disturbance (30MHz - 1GHz)	4.85
Radiated Disturbance (1 - 18GHz)	5.08
Radiated Disturbance (>18GHz)	4.59

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 15 of 567

V 10.5 12/15/2021

6.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2017.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent Technologies	N9030A	3Hz-44GHz PXA Signal Analyzer	6/21/2023	Annual	6/21/2024	MY49430244
Anritsu	ML2496A	Power Meter	4/4/2023	Annual	4/4/2024	1840005
Anritsu	MA2411B	Pulse Power Sensor	8/22/2023	Annual	8/22/2024	1726262
Anritsu	MA2411B	Pulse Power Sensor	4/5/2023	Annual	4/5/2024	1726261
ETS-Lindgren	3117	Double Ridged Guide Antenna (1-18 GHz)	3/30/2023	Annual	3/30/2024	00218555
Keysight Technology	N9040B	UXA Signal Analyzer	3/10/2023	Annual	3/10/2024	MY57212015
Rohde & Schwarz	TS-PR18	Pre-Amplifier (1GHz - 18GHz)	8/31/2023	Annual	8/31/2024	100052
Rohde & Schwarz	FSV40	Signal Analyzer (10Hz-40GHz)	5/11/2023	Annual	5/11/2024	101619
Rohde & Schwarz	ESW44	EMI Test Receiver	6/6/2023	Annual	6/6/2024	101668
Rohde & Schwarz	TS-PR8	Pre-Amplifier (30MHz - 8GHz)	6/22/2023	Annual	6/22/2024	102356
Rohde & Schwarz	TS-PR1840	Pre-Amplifier (18GHz - 40GHz)	6/2/2023	Annual	6/2/2024	100050
Rohde & Schwarz	HFH2-Z2	Loop Antenna	5/1/2023	Annual	5/1/2024	100519
Rohde & Schwarz	ENV216	Two-Line V-Network	6/8/2023	Annual	6/8/2024	192052
Schwarzbeck	VULB 9162	Bilog Antenna (30MHz - 6GHz)	4/17/2023	Annual	4/17/2024	00304

Table 6-1. Test Equipment List

Note:

For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 16 of 567

7.0 TEST RESULTS

7.1 Summary

Company Name: Apple Inc.
 FCC ID: BCGA2836
 IC: 579C-A2836
 FCC Classification: 15E 6GHz Low Power Dual Client (6CD)

FCC Part Section(s) / KDB Reference	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
2.1049, 15.407(a)(11)	RSS Gen [6.7], RSS-248 [4.4]	Occupied Bandwidth/ 26dB Bandwidth	99% of the occupied bandwidth of any channel must be contained within each of its respective U-NII sub bands < 320MHz (5.925 - 7.125GHz)	CONDUCTED	PASS	Section 7.2
15.407(a)(8)	RSS-248 [4.5.3]	Maximum Power Spectral Density	< -1dBm/MHz e.i.r.p. for Low Power indoor		PASS	Section 7.4
15.407(a)(7)	RSS-248 [4.5.5]		< 17dBm/MHz e.i.r.p. for Standard Power		PASS	Section 7.4
15.407(a)(8)	RSS-248 [4.5.3]	Maximum Radiated Output Power	< 24dBm over the frequency band of operation for Low Power Indoor		PASS	Section 7.2.3
15.407(a)(7)	RSS-248 [4.5.5]		< 30dBm over the frequency band of operation for Standard Power		PASS	Section 7.2.3
15.407(b)(7)	RSS-248 [4.6.2]	In-Band Emissions	EUT must meet the limits detailed in 15.407(b)(7) and RSS-248 [4.7.2]b)		PASS	Section 7.5
15.407(d)(6)	RSS-248 [4.7]	Contention Based Protocol	EUT must detect AWGN signal with 90% (or better) certainty		PASS	Section 7.6
15.407(a)(7)	RSS-248 [4.5.5]	Proper Power Adjustment, Client Devices Connected to a Standard Power Access Point	EUT maintains its power level at least 6 dB lower than that of the standard-power access point		PASS	See UNII 6E OFDMA Test Report(1C23 11270067-14.BCG)
987594 D02 v02r01	N/A	Dual Client Test, Demonstration of Proper Power Adjustment based on Associated AP	EUT maximum power level shall not exceed 30dBm EIRP when connected to Standard Power AP, and 24dBm EIRP when connected to Low Power Indoor AP		PASS	
15.407(b)(6)	RSS-248 [4.6.2]	Undesirable Emissions	< -27dBm/MHz e.i.r.p. outside of the 5.925 – 7.125GHz band	RADIATED	PASS	Section 7.7
15.205, 15.209	RSS-248 [8.9]	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in 15.209		PASS	Section 7.7, 7.8
15.207(b)(8)	RSS-Gen [8.8]	AC Conducted Emissions (150kHz – 30MHz)	< FCC 15.207 limits, RSS-Gen [8.8] limits	LINE CONDUCTED	PASS	Section 7.9

Table 7-1. Summary of Test Results

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 17 of 567

Notes:

- 1) All channels, modes, and modulations/data rates were investigated among all UNII bands. The test results shown in the following sections represent the worst-case emissions.
- 2) The analyzer plots shown in this section were all taken with a correction table loaded into the analyzer. The correction table was used to account for the losses of the cables and attenuators used as part of the system to connect the EUT to the analyzer at all frequencies of interest.
- 3) All antenna ports conducted emissions testing was performed on a test bench with the antenna port of the EUT connected to the spectrum analyzer through calibrated cables and attenuators.
- 4) For conducted spurious emissions, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element EMC Software Tool v1.2.
- 5) For radiated band edge, automated test software was used to measure emissions and capture the corresponding plots necessary to show compliance. The measurement software utilized is Element "Chamber Automation," Version 3.0.0
- 6) All radiated measurements were tested at the highest supported power setting per band.

FCC ID: BCGA2836 IC: 579C-A2836	 MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG		Test Dates: 1/8/2024 - 04/05/2024

7.2 26dB & 99% Bandwidth Measurement – 802.11a/ax(SU)
§2.1049; §15.407; RSS-Gen [6.7]

Test Overview and Limit

The bandwidth at 26dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating at its maximum duty cycle, at its maximum power control level, as defined in ANSI C63.10-2013 and KDB 789033 D02 v02r01, and at the appropriate frequencies. The spectrum analyzer's bandwidth measurement function is configured to measure the 26dB bandwidth.

Test Procedure Used

ANSI C63.10-2013 – Section 12.4
 KDB 789033 D02 v02r01 – Section C

Test Settings

1. The signal analyzers' automatic bandwidth measurement capability was used to perform the 26dB bandwidth measurement. The "X" dB bandwidth parameter was set to X = 26. The automatic bandwidth measurement function also has the capability of simultaneously measuring the 99% occupied bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth
3. VBW \geq 3 x RBW
4. Detector = Peak
5. Trace mode = max hold

Test Setup


The EUT and measurement equipment were set up as shown in the diagram below.



Figure 7-1. Test Instrument & Measurement Setup

Test Notes

1. All antenna configurations and data rates were investigated and only the worst case are reported.
2. The data rates have been classified into three different groups; Low Data Rate, Middle rate, and High Data Rate. All three data rate groups of data rate have been investigated and only the worst case data rate per group is reported.
3. Low, mid, and high channels were tested and tabular data has been reported. Only mid channel bandwidth plots have been reported.

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICAION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 19 of 567

7.2.1 Antenna WF5B 26dB & 99% Bandwidth Measurements

	Frequency [MHz]	Channel	802.11 MODE	Data Rate [Mbps]	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]	Maximum Bandwidth Limit [MHz]	Pass / Fail
Band 5	5955	1	a	12	16.71	20.48	320	Pass
	6175	45	a	12	16.68	20.75	320	Pass
	6415	93	a	12	16.66	20.64	320	Pass
	5955	1	ax (20MHz)	24/25.8 (MCS2)	19.00	21.09	320	Pass
	6175	45	ax (20MHz)	24/25.8 (MCS2)	19.00	21.09	320	Pass
	6415	93	ax (20MHz)	24/25.8 (MCS2)	18.97	20.91	320	Pass
	5965	3	ax (40MHz)	24/25.8 (MCS2)	37.91	41.08	320	Pass
	6165	43	ax (40MHz)	24/25.8 (MCS2)	37.94	41.27	320	Pass
	6405	91	ax (40MHz)	24/25.8 (MCS2)	37.86	41.09	320	Pass
	5985	7	ax (80MHz)	24/25.8 (MCS2)	77.16	81.64	320	Pass
	6145	39	ax (80MHz)	24/25.8 (MCS2)	77.16	81.23	320	Pass
	6385	87	ax (80MHz)	24/25.8 (MCS2)	77.17	81.65	320	Pass
	6025	15	ax (160MHz)	24/25.8 (MCS2)	156.33	165.05	320	Pass
6185	47	ax (160MHz)	24/25.8 (MCS2)	156.42	164.34	320	Pass	
6345	79	ax (160MHz)	24/25.8 (MCS2)	156.23	164.28	320	Pass	
Band 6	6435	97	a	12	16.69	20.53	320	Pass
	6475	105	a	12	16.64	20.70	320	Pass
	6515	113	a	12	16.66	20.72	320	Pass
	6345	97	ax (20MHz)	24/25.8 (MCS2)	18.98	21.07	320	Pass
	6475	105	ax (20MHz)	24/25.8 (MCS2)	18.98	21.00	320	Pass
	6515	113	ax (20MHz)	24/25.8 (MCS2)	19.04	20.92	320	Pass
	6445	99	ax (40MHz)	24/25.8 (MCS2)	37.90	41.18	320	Pass
	6485	107	ax (40MHz)	24/25.8 (MCS2)	37.94	41.25	320	Pass
	6525	115	ax (40MHz)	24/25.8 (MCS2)	37.93	41.15	320	Pass
	6465	103	ax (80MHz)	24/25.8 (MCS2)	77.19	81.50	320	Pass
6505	111	ax (160MHz)	24/25.8 (MCS2)	156.34	163.89	320	Pass	
Band 7	6535	117	a	12	16.71	20.68	320	Pass
	6695	149	a	12	16.68	20.76	320	Pass
	6875	185	a	12	16.64	20.57	320	Pass
	6535	117	ax (20MHz)	24/25.8 (MCS2)	19.00	21.08	320	Pass
	6695	149	ax (20MHz)	24/25.8 (MCS2)	19.03	21.08	320	Pass
	6875	185	ax (20MHz)	24/25.8 (MCS2)	18.98	21.07	320	Pass
	6565	123	ax (40MHz)	24/25.8 (MCS2)	37.88	41.23	320	Pass
	6725	155	ax (40MHz)	24/25.8 (MCS2)	37.93	41.33	320	Pass
	6885	179	ax (40MHz)	24/25.8 (MCS2)	37.89	41.45	320	Pass
	6545	119	ax (80MHz)	24/25.8 (MCS2)	77.11	81.31	320	Pass
	6705	151	ax (80MHz)	24/25.8 (MCS2)	77.28	81.20	320	Pass
	6865	183	ax (80MHz)	24/25.8 (MCS2)	77.19	81.27	320	Pass
	6665	143	ax (160MHz)	24/25.8 (MCS2)	156.26	165.25	320	Pass
	6825	175	ax (160MHz)	24/25.8 (MCS2)	156.41	164.73	320	Pass
Band 8	6895	189	a	12	16.66	20.79	320	Pass
	6995	209	a	12	16.66	20.70	320	Pass
	7115	233	a	12	16.63	20.75	320	Pass
	6895	189	ax (20MHz)	24/25.8 (MCS2)	19.00	21.15	320	Pass
	6995	209	ax (20MHz)	24/25.8 (MCS2)	18.99	21.11	320	Pass
	7115	233	ax (20MHz)	24/25.8 (MCS2)	19.00	20.93	320	Pass
	6925	187	ax (40MHz)	24/25.8 (MCS2)	37.90	41.25	320	Pass
	7005	211	ax (40MHz)	24/25.8 (MCS2)	37.92	41.38	320	Pass
	7085	227	ax (40MHz)	24/25.8 (MCS2)	37.94	41.06	320	Pass
	6945	199	ax (80MHz)	24/25.8 (MCS2)	77.15	81.62	320	Pass
	7025	215	ax (80MHz)	24/25.8 (MCS2)	77.07	81.64	320	Pass
6985	207	ax (160MHz)	24/25.8 (MCS2)	156.24	164.61	320	Pass	

Table 7-2. Conducted Bandwidth Measurements Antenna WF5B (Low Data Rate)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 20 of 567

	Frequency [MHz]	Channel	802.11 MODE	Data Rate [MHz]	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]	Maximum Bandwidth Limit [MHz]	Pass / Fail
Band 5	5955	1	a	24	16.66	20.70	320	Pass
	6175	45	a	24	16.62	20.73	320	Pass
	6415	93	a	24	16.65	20.71	320	Pass
	5955	1	ax (20MHz)	49/51.6 (MCS4)	18.99	20.93	320	Pass
	6175	45	ax (20MHz)	49/51.6 (MCS4)	18.98	21.03	320	Pass
	6415	93	ax (20MHz)	49/51.6 (MCS4)	19.00	21.13	320	Pass
	5965	3	ax (40MHz)	49/51.6 (MCS4)	37.88	41.22	320	Pass
	6165	43	ax (40MHz)	49/51.6 (MCS4)	37.95	41.12	320	Pass
	6405	91	ax (40MHz)	49/51.6 (MCS4)	37.95	41.49	320	Pass
	5985	7	ax (80MHz)	49/51.6 (MCS4)	77.11	81.22	320	Pass
	6145	39	ax (80MHz)	49/51.6 (MCS4)	77.23	81.49	320	Pass
	6385	87	ax (80MHz)	49/51.6 (MCS4)	77.15	81.63	320	Pass
	6025	15	ax (160MHz)	49/51.6 (MCS4)	156.11	164.94	320	Pass
	6185	47	ax (160MHz)	49/51.6 (MCS4)	156.15	163.86	320	Pass
6345	79	ax (160MHz)	49/51.6 (MCS4)	156.17	164.13	320	Pass	
Band 6	6435	97	a	24	16.59	20.62	320	Pass
	6475	105	a	24	16.66	20.76	320	Pass
	6515	113	a	24	16.65	20.77	320	Pass
	6345	97	ax (20MHz)	49/51.6 (MCS4)	19.00	21.37	320	Pass
	6475	105	ax (20MHz)	49/51.6 (MCS4)	18.99	21.03	320	Pass
	6515	113	ax (20MHz)	49/51.6 (MCS4)	18.97	20.81	320	Pass
	6445	99	ax (40MHz)	49/51.6 (MCS4)	37.82	41.33	320	Pass
	6485	107	ax (40MHz)	49/51.6 (MCS4)	37.91	41.21	320	Pass
	6525	115	ax (40MHz)	49/51.6 (MCS4)	37.96	41.45	320	Pass
	6465	103	ax (80MHz)	49/51.6 (MCS4)	77.21	81.28	320	Pass
6505	111	ax (160MHz)	49/51.6 (MCS4)	156.29	164.03	320	Pass	
Band 7	6535	117	a	24	16.64	20.67	320	Pass
	6695	149	a	24	16.61	20.76	320	Pass
	6875	185	a	24	16.67	20.79	320	Pass
	6535	117	ax (20MHz)	49/51.6 (MCS4)	19.01	20.82	320	Pass
	6695	149	ax (20MHz)	49/51.6 (MCS4)	19.01	20.98	320	Pass
	6875	185	ax (20MHz)	49/51.6 (MCS4)	19.01	21.03	320	Pass
	6565	123	ax (40MHz)	49/51.6 (MCS4)	37.92	41.05	320	Pass
	6725	155	ax (40MHz)	49/51.6 (MCS4)	37.92	40.97	320	Pass
	6885	179	ax (40MHz)	49/51.6 (MCS4)	37.89	41.29	320	Pass
	6545	119	ax (80MHz)	49/51.6 (MCS4)	77.09	81.43	320	Pass
	6705	151	ax (80MHz)	49/51.6 (MCS4)	77.19	81.61	320	Pass
	6865	183	ax (80MHz)	49/51.6 (MCS4)	77.21	81.28	320	Pass
	6665	143	ax (160MHz)	49/51.6 (MCS4)	156.32	164.59	320	Pass
	6825	175	ax (160MHz)	49/51.6 (MCS4)	156.39	163.91	320	Pass
Band 8	6895	189	a	24	16.63	20.67	320	Pass
	6995	209	a	24	16.67	20.62	320	Pass
	7115	233	a	24	16.66	20.63	320	Pass
	6895	189	ax (20MHz)	49/51.6 (MCS4)	18.99	21.10	320	Pass
	6995	209	ax (20MHz)	49/51.6 (MCS4)	19.00	20.87	320	Pass
	7115	233	ax (20MHz)	49/51.6 (MCS4)	19.01	20.97	320	Pass
	6925	187	ax (40MHz)	49/51.6 (MCS4)	37.97	40.84	320	Pass
	7005	211	ax (40MHz)	49/51.6 (MCS4)	37.95	41.20	320	Pass
	7085	227	ax (40MHz)	49/51.6 (MCS4)	37.94	41.09	320	Pass
	6945	199	ax (80MHz)	49/51.6 (MCS4)	77.24	81.36	320	Pass
	7025	215	ax (80MHz)	49/51.6 (MCS4)	77.26	81.86	320	Pass
	6985	207	ax (160MHz)	49/51.6 (MCS4)	156.55	163.97	320	Pass

Table 7-3. Conducted Bandwidth Measurements Antenna WF5B (Mid Data Rate)

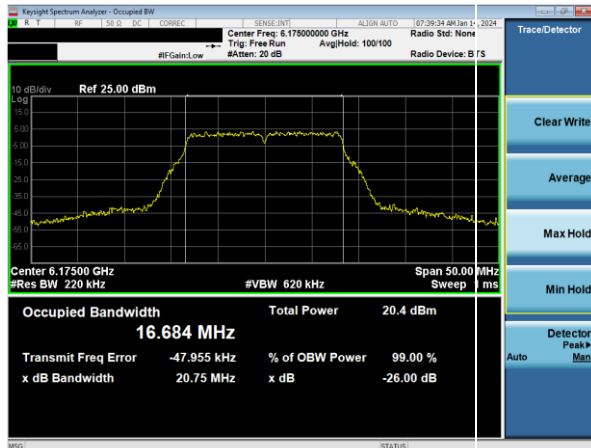
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 21 of 567

	Frequency [MHz]	Channel	802.11 MODE	Data Rate [MHz]	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]	Maximum Bandwidth Limit [MHz]	Pass / Fail	
Band 5	5955	1	a	54	16.61	20.41	320	Pass	
	6175	45	a	54	16.58	20.46	320	Pass	
	6415	93	a	54	16.62	20.63	320	Pass	
	5955	1	ax (20MHz)	135/143.4 (MCS11)	19.00	20.79	320	Pass	
	6175	45	ax (20MHz)	135/143.4 (MCS11)	19.01	20.92	320	Pass	
	6415	93	ax (20MHz)	135/143.4 (MCS11)	19.01	21.08	320	Pass	
	5965	3	ax (40MHz)	135/143.4 (MCS11)	37.91	41.13	320	Pass	
	6165	43	ax (40MHz)	135/143.4 (MCS11)	37.89	40.76	320	Pass	
	6405	91	ax (40MHz)	135/143.4 (MCS11)	37.93	41.06	320	Pass	
	5985	7	ax (80MHz)	135/143.4 (MCS11)	77.10	81.40	320	Pass	
	6145	39	ax (80MHz)	135/143.4 (MCS11)	77.20	81.36	320	Pass	
	6385	87	ax (80MHz)	135/143.4 (MCS11)	77.09	81.14	320	Pass	
	6025	15	ax (160MHz)	135/143.4 (MCS11)	156.10	166.02	320	Pass	
	6185	47	ax (160MHz)	135/143.4 (MCS11)	156.03	165.29	320	Pass	
6345	79	ax (160MHz)	135/143.4 (MCS11)	155.95	164.96	320	Pass		
Band 6	6435	97	a	54	16.61	20.53	320	Pass	
	6475	105	a	54	16.60	20.63	320	Pass	
	6515	113	a	54	16.61	20.65	320	Pass	
	6345	97	ax (20MHz)	135/143.4 (MCS11)	19.00	21.09	320	Pass	
	6475	105	ax (20MHz)	135/143.4 (MCS11)	19.03	21.04	320	Pass	
	6515	113	ax (20MHz)	135/143.4 (MCS11)	18.97	21.11	320	Pass	
	6445	99	ax (40MHz)	135/143.4 (MCS11)	37.88	40.97	320	Pass	
	6485	107	ax (40MHz)	135/143.4 (MCS11)	37.83	41.08	320	Pass	
	6525	115	ax (40MHz)	135/143.4 (MCS11)	37.80	41.17	320	Pass	
	6465	103	ax (80MHz)	135/143.4 (MCS11)	77.25	81.53	320	Pass	
	6505	111	ax (160MHz)	135/143.4 (MCS11)	156.07	164.87	320	Pass	
	Band 7	6535	117	a	54	16.58	20.58	320	Pass
		6695	149	a	54	16.59	20.64	320	Pass
		6875	185	a	54	16.61	20.52	320	Pass
6535		117	ax (20MHz)	135/143.4 (MCS11)	18.95	20.69	320	Pass	
6695		149	ax (20MHz)	135/143.4 (MCS11)	19.03	21.27	320	Pass	
6875		185	ax (20MHz)	135/143.4 (MCS11)	18.98	20.91	320	Pass	
6565		123	ax (40MHz)	135/143.4 (MCS11)	37.89	41.10	320	Pass	
6725		155	ax (40MHz)	135/143.4 (MCS11)	37.89	41.19	320	Pass	
6885		179	ax (40MHz)	135/143.4 (MCS11)	37.89	41.24	320	Pass	
6545		119	ax (80MHz)	135/143.4 (MCS11)	77.24	81.18	320	Pass	
6705		151	ax (80MHz)	135/143.4 (MCS11)	77.10	81.15	320	Pass	
6865		183	ax (80MHz)	135/143.4 (MCS11)	77.23	81.31	320	Pass	
6665		143	ax (160MHz)	135/143.4 (MCS11)	156.35	164.50	320	Pass	
6825		175	ax (160MHz)	135/143.4 (MCS11)	156.33	164.02	320	Pass	
Band 8	6895	189	a	54	16.62	20.75	320	Pass	
	6995	209	a	54	16.58	20.76	320	Pass	
	7115	233	a	54	16.60	20.55	320	Pass	
	6895	189	ax (20MHz)	135/143.4 (MCS11)	19.03	21.04	320	Pass	
	6995	209	ax (20MHz)	135/143.4 (MCS11)	19.01	21.14	320	Pass	
	7115	233	ax (20MHz)	135/143.4 (MCS11)	18.98	21.16	320	Pass	
	6925	187	ax (40MHz)	135/143.4 (MCS11)	37.94	41.07	320	Pass	
	7005	211	ax (40MHz)	135/143.4 (MCS11)	37.97	41.32	320	Pass	
	7085	227	ax (40MHz)	135/143.4 (MCS11)	37.89	41.09	320	Pass	
	6945	199	ax (80MHz)	135/143.4 (MCS11)	77.20	81.46	320	Pass	
	7025	215	ax (80MHz)	135/143.4 (MCS11)	77.12	81.24	320	Pass	
	6985	207	ax (160MHz)	135/143.4 (MCS11)	156.83	244.59	320	Pass	

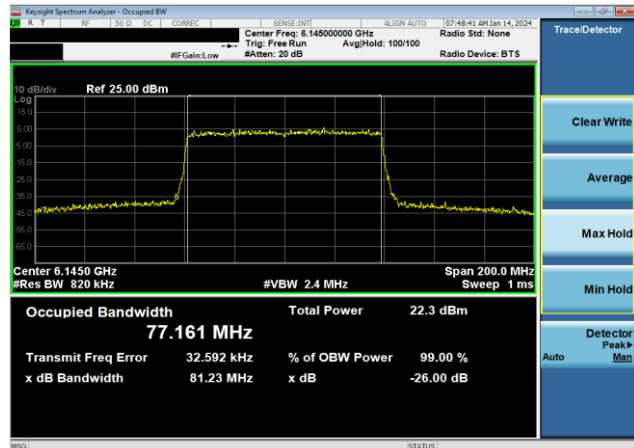
Table 7-4. Conducted Bandwidth Measurements Antenna WF5B (High Data Rate)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 22 of 567

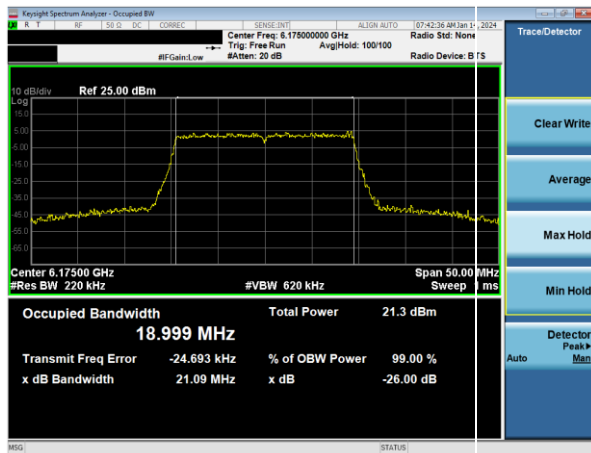
Low Data Rate



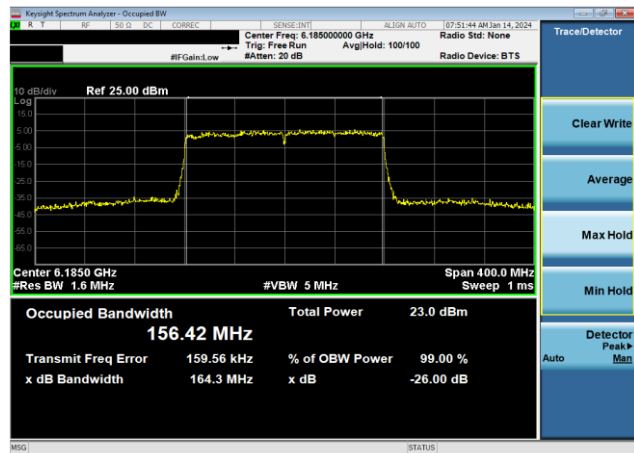
Plot 7-1. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 5) – Ch. 45, 12Mbps)



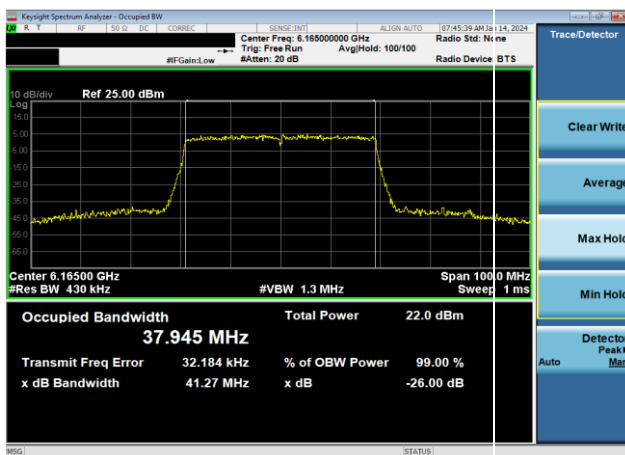
Plot 7-4. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS2)



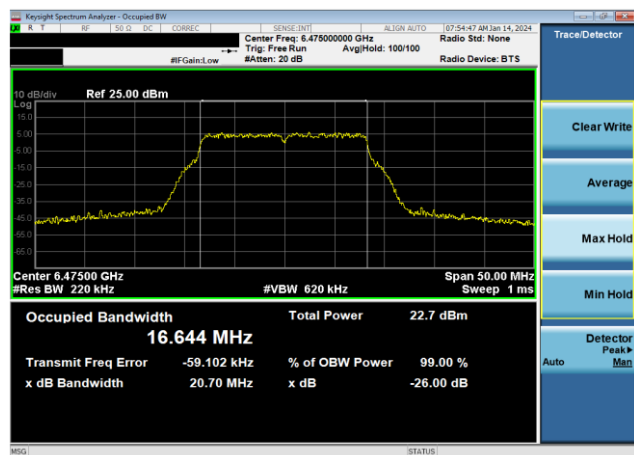
Plot 7-2. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS2)



Plot 7-5. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS2)

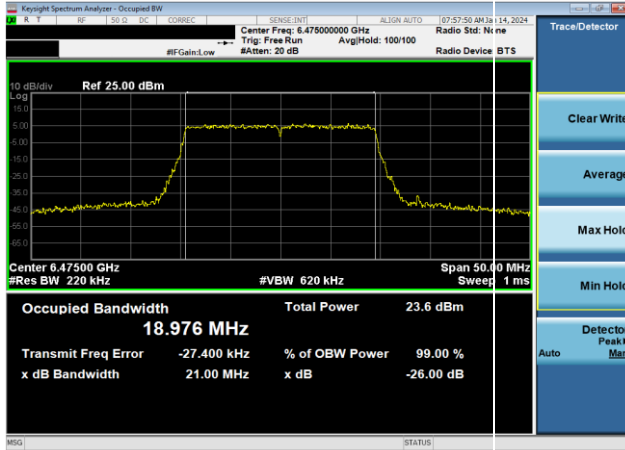


Plot 7-3. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS2)

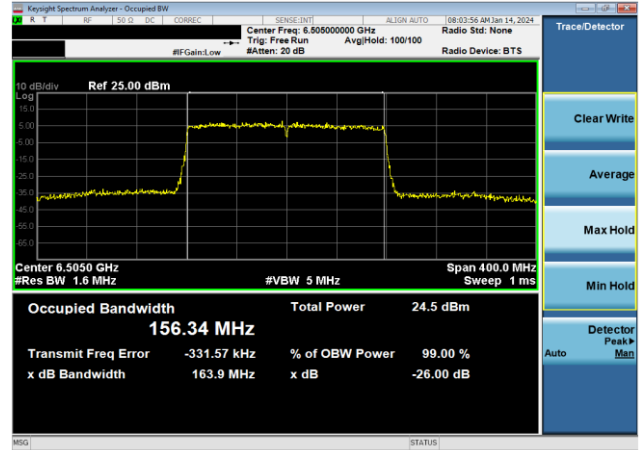


Plot 7-6. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 6) – Ch. 105, 12Mbps)

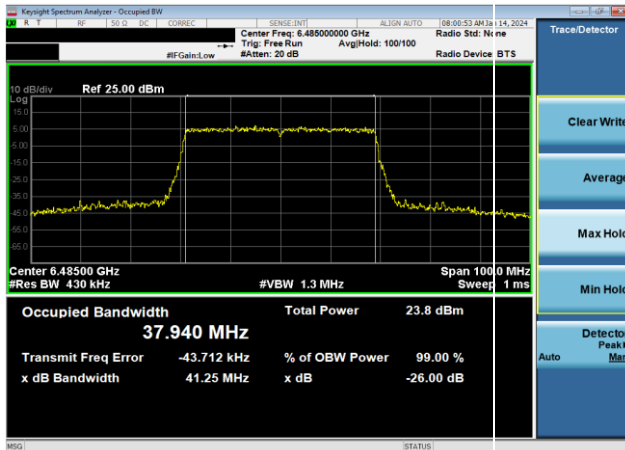
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 23 of 567



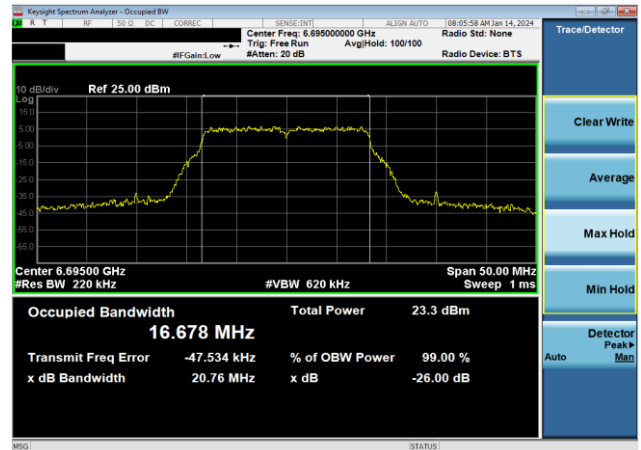
Plot 7-7. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS2)



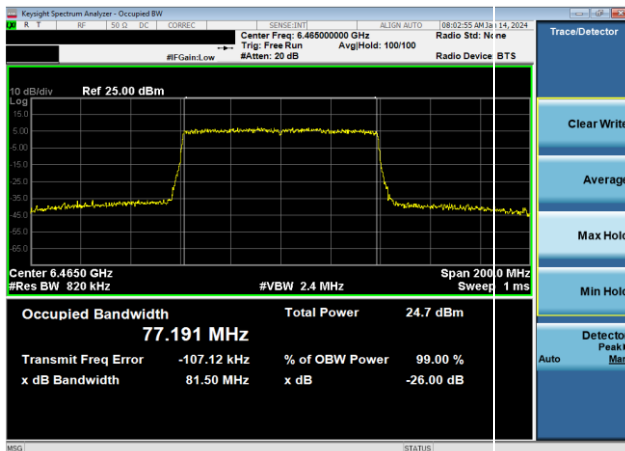
Plot 7-10. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 6) – Ch. 111, MCS2)



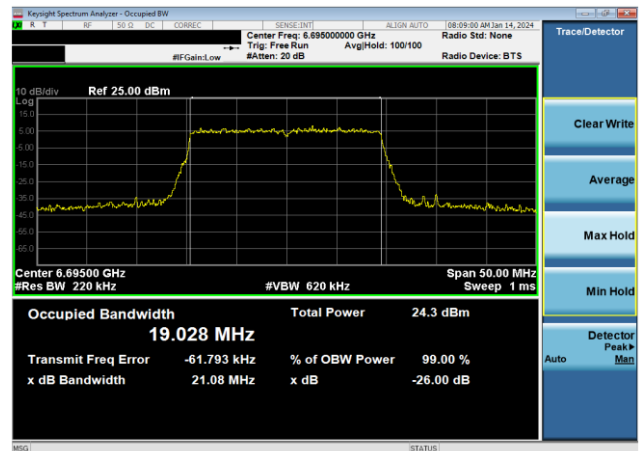
Plot 7-8. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS2)



Plot 7-11. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 7) – Ch. 149, 12Mbps)

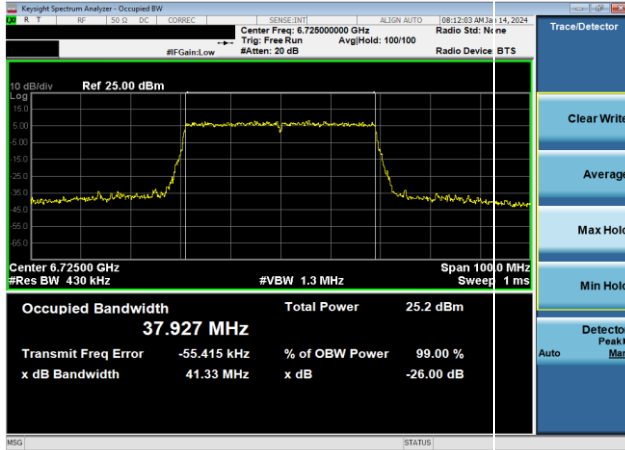


Plot 7-9. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS2)

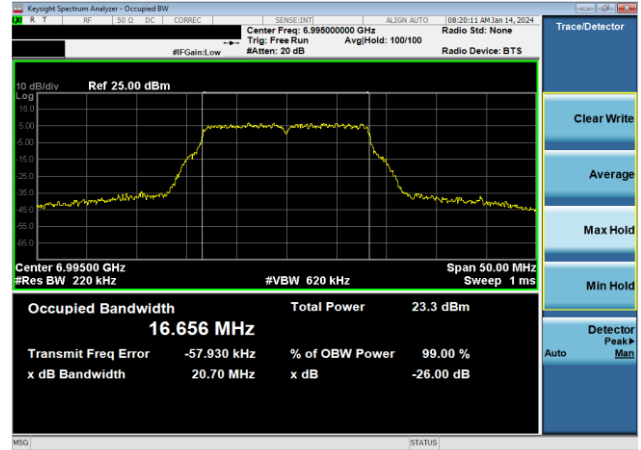


Plot 7-12. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS2)

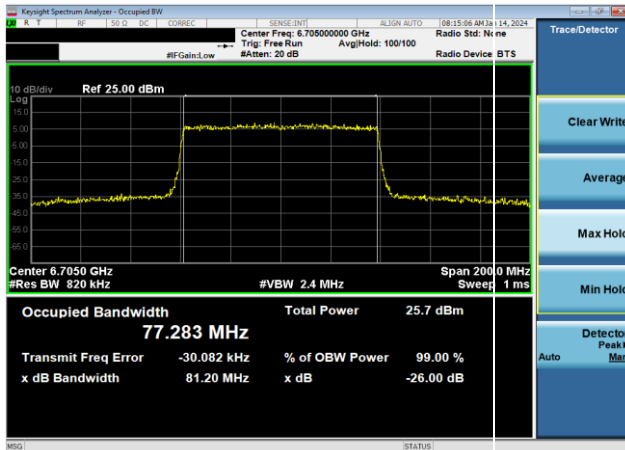
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 24 of 567



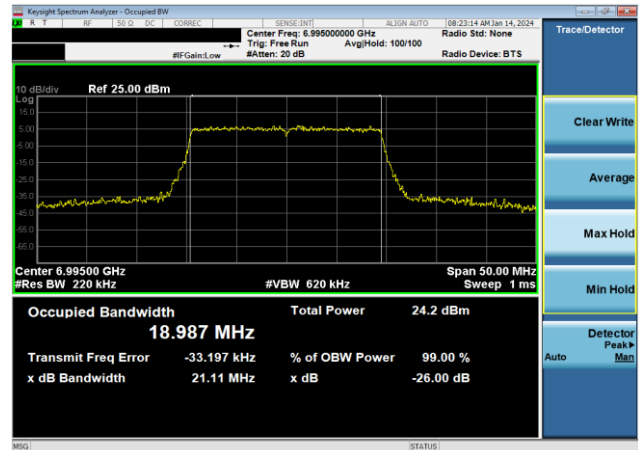
Plot 7-13. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS2)



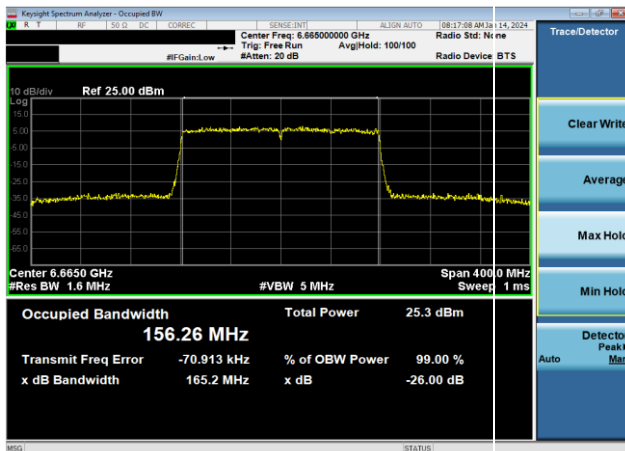
Plot 7-16. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 8) – Ch. 209, 12Mbps)



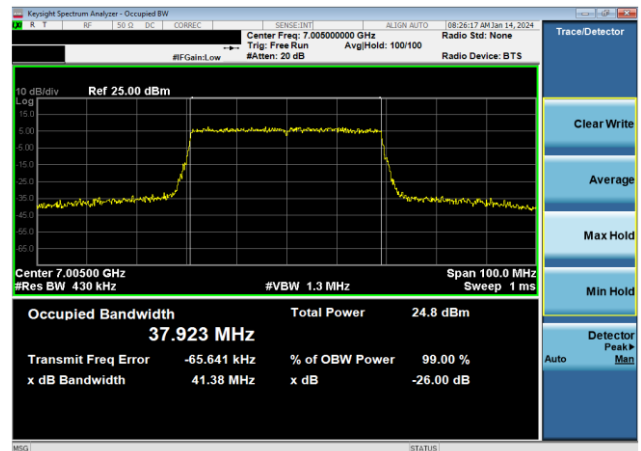
Plot 7-14. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS2)



Plot 7-17. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 8) – Ch. 209, MCS2)

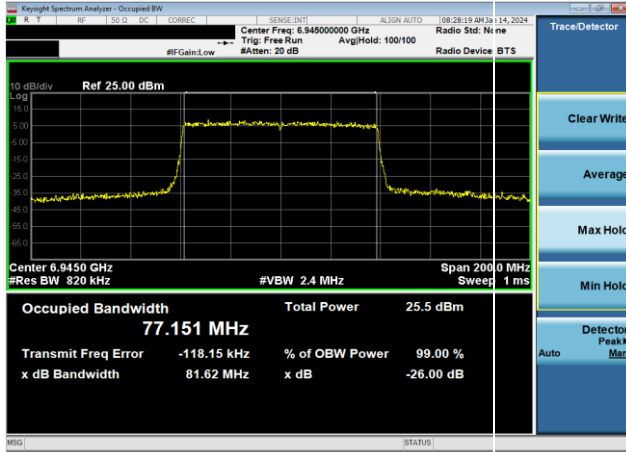


Plot 7-15. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS2)

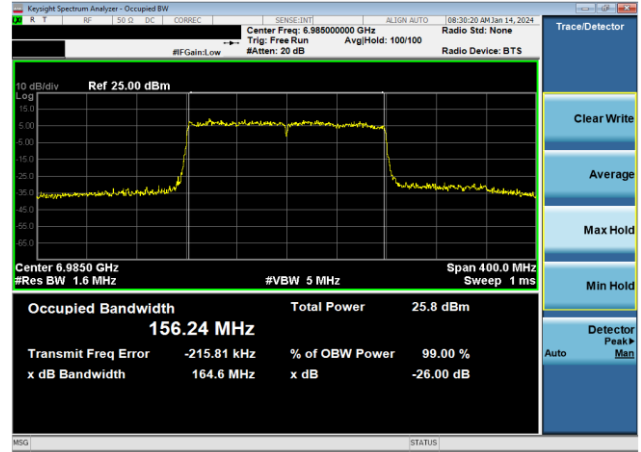


Plot 7-18. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 8) – Ch. 211, MCS2)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 25 of 567



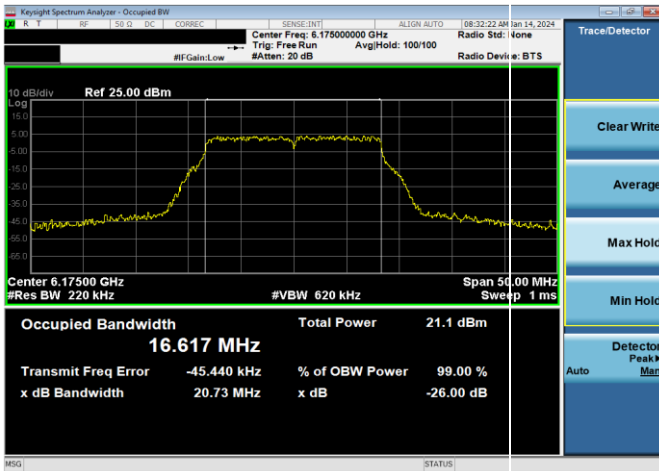
Plot 7-19. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 8) – Ch. 199, MCS2)



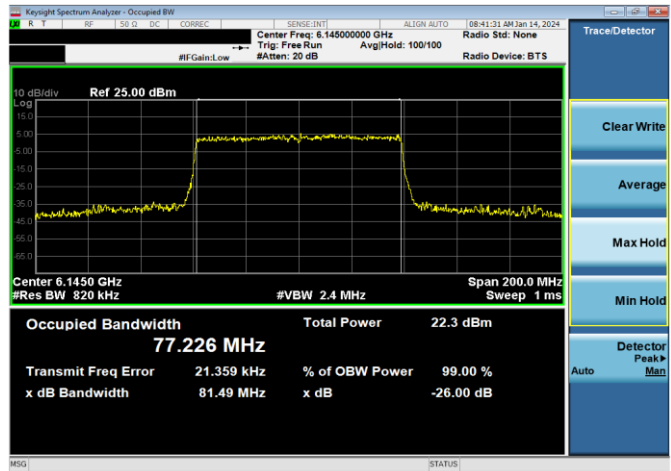
Plot 7-20. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 8) – Ch. 207, MCS2)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICAION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 26 of 567

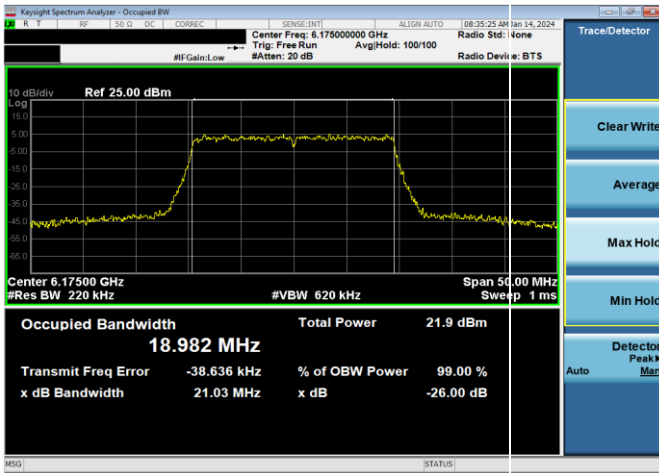
Mid Data Rate



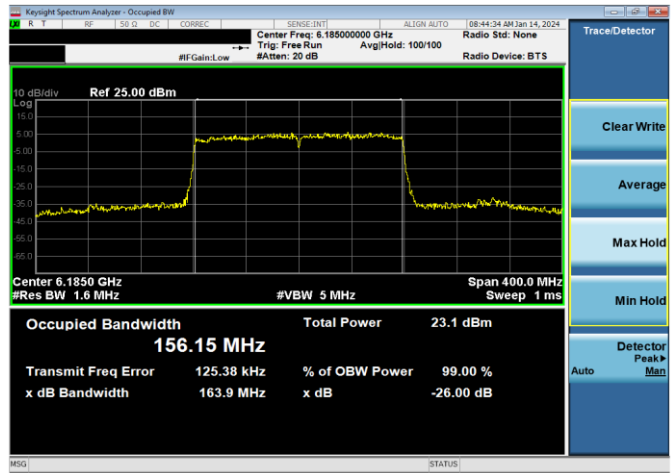
Plot 7-21. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 5) – Ch. 45, 24Mbps)



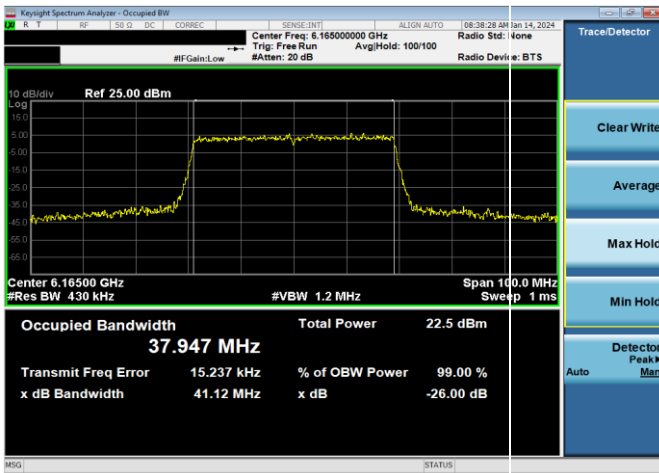
Plot 7-24. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS4)



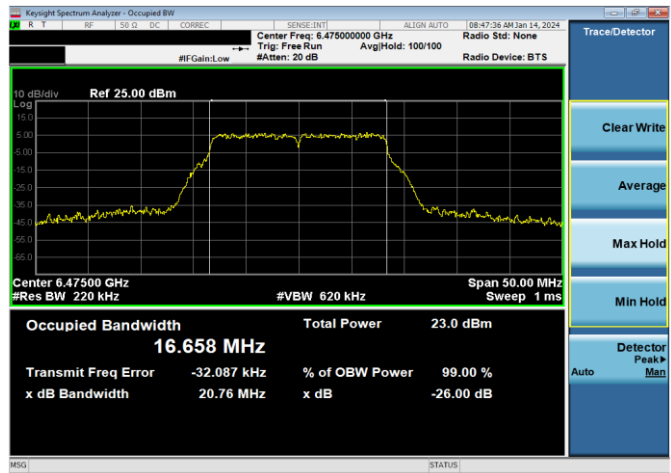
Plot 7-22. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS4)



Plot 7-25. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS4)

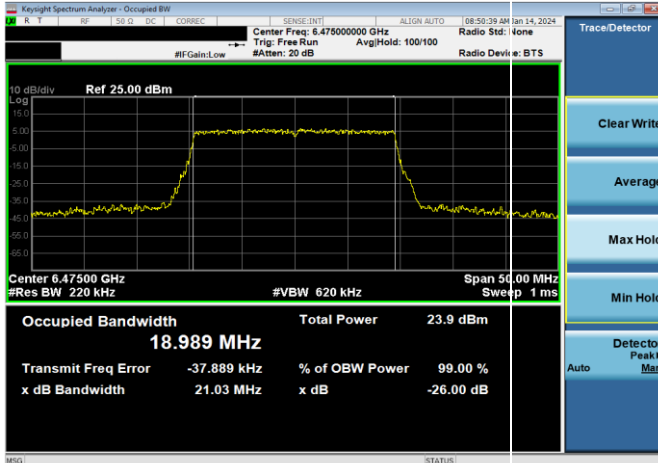


Plot 7-23. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS4)

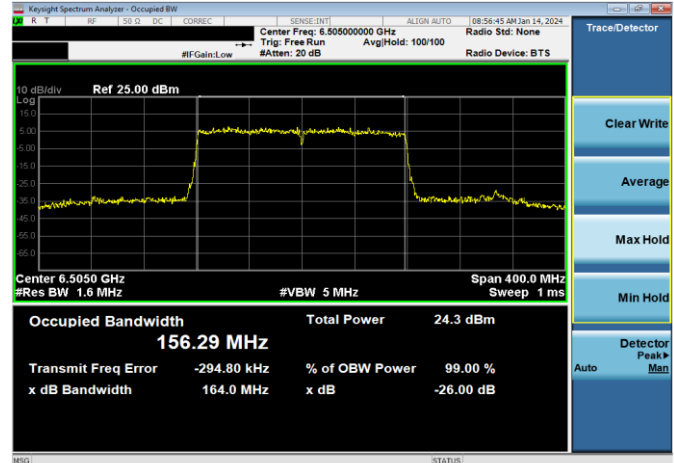


Plot 7-26. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 6) – Ch. 105, 24Mbps)

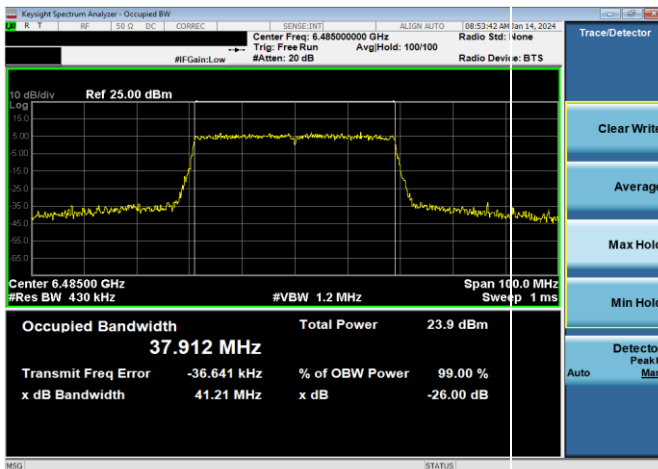
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 27 of 567



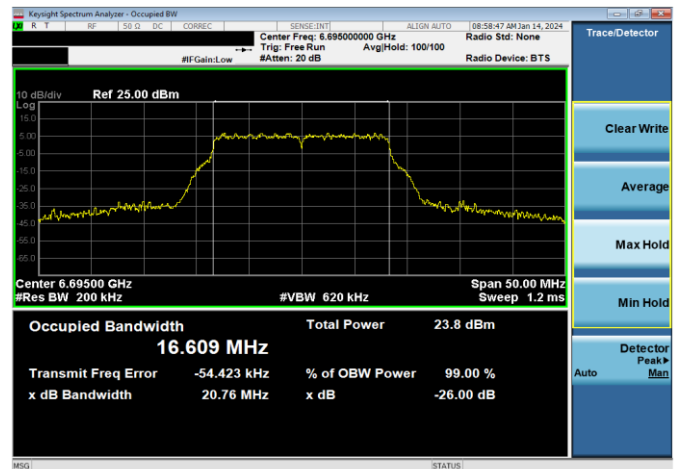
Plot 7-27. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS4)



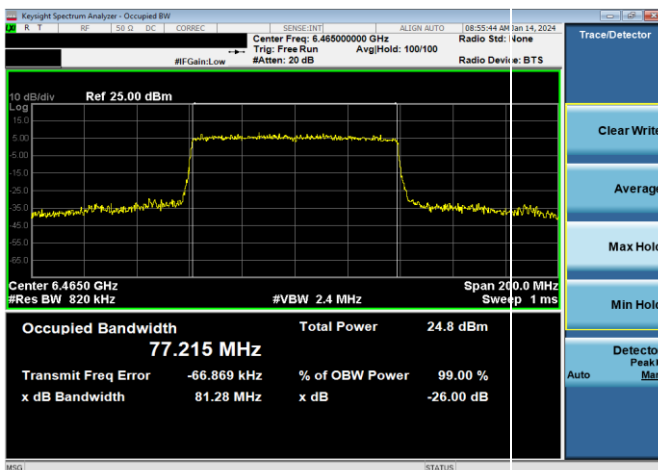
Plot 7-30. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 6) – Ch. 111, MCS4)



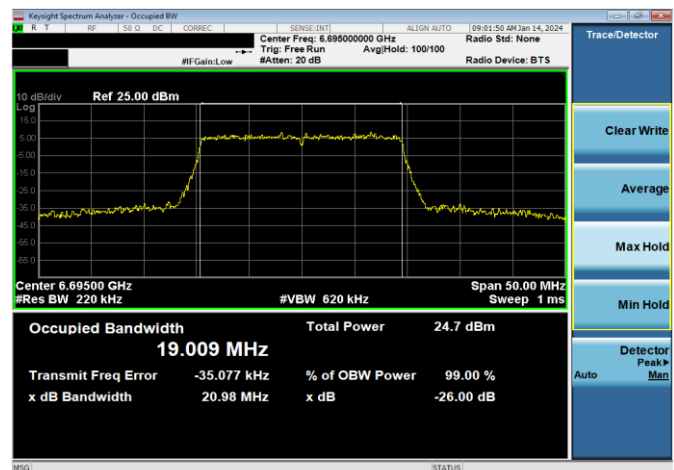
Plot 7-28. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS4)



Plot 7-31. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 7) – Ch. 149, 24Mbps)

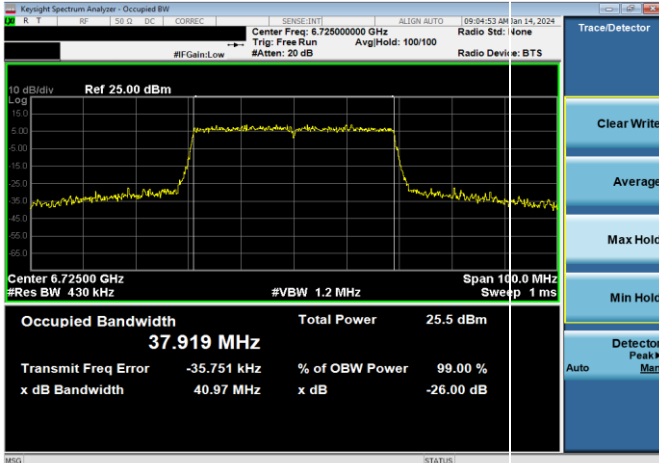


Plot 7-29. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS4)

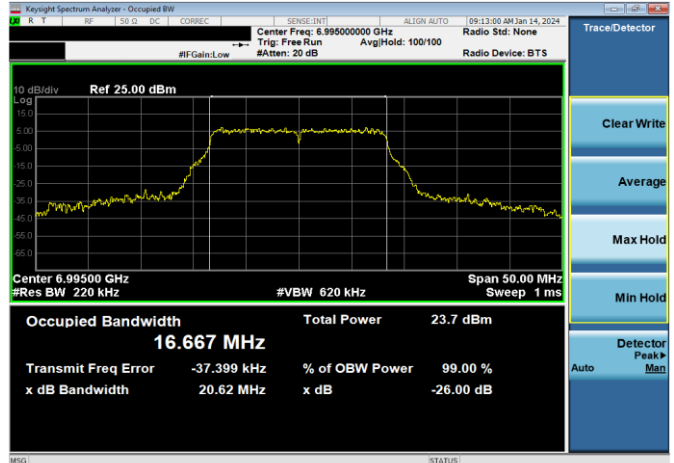


Plot 7-32. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS4)

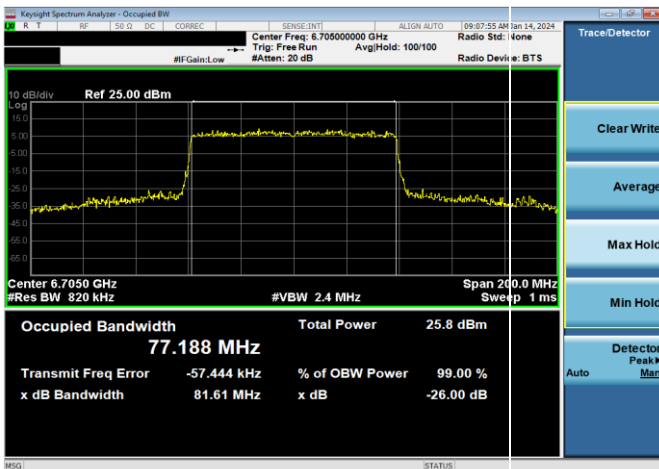
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 28 of 567



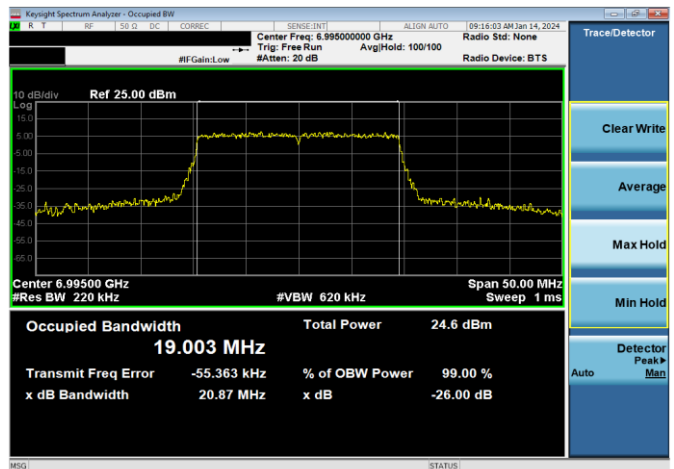
Plot 7-33. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS4)



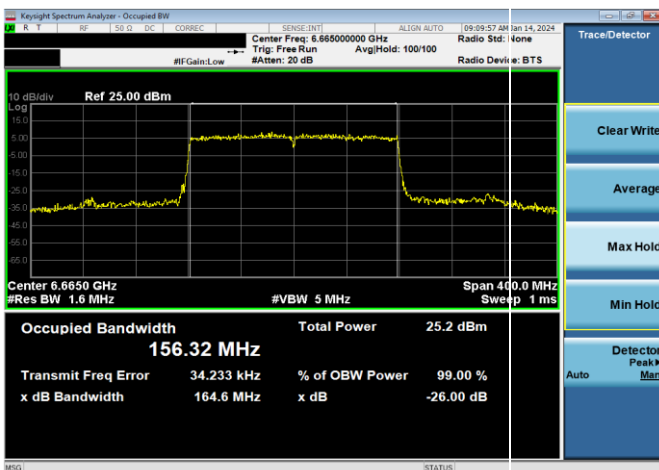
Plot 7-36. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 8) – Ch. 209, 24Mbps)



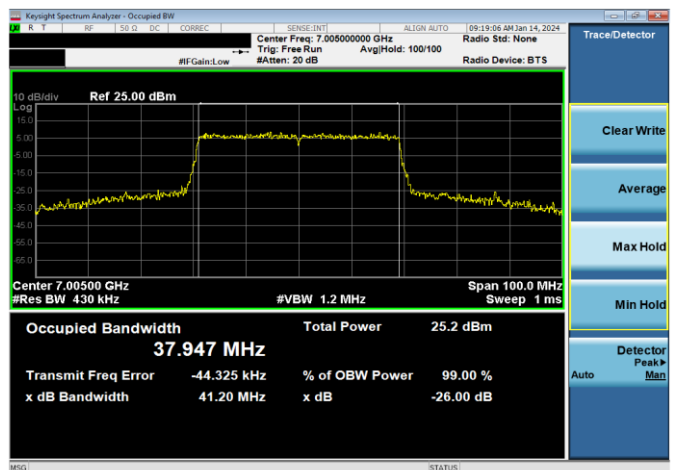
Plot 7-34. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS4)



Plot 7-37. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 8) – Ch. 209, MCS4)

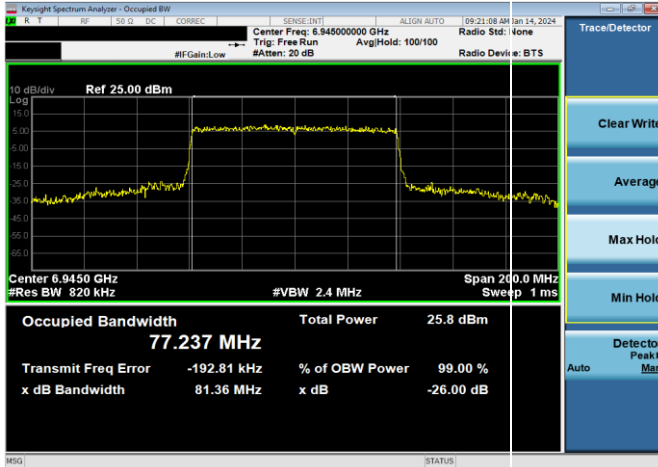


Plot 7-35. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS4)

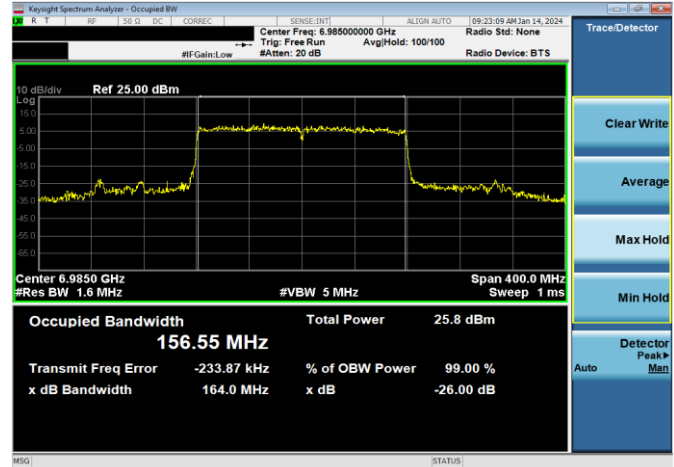


Plot 7-38. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 8) – Ch. 211, MCS4)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 29 of 567



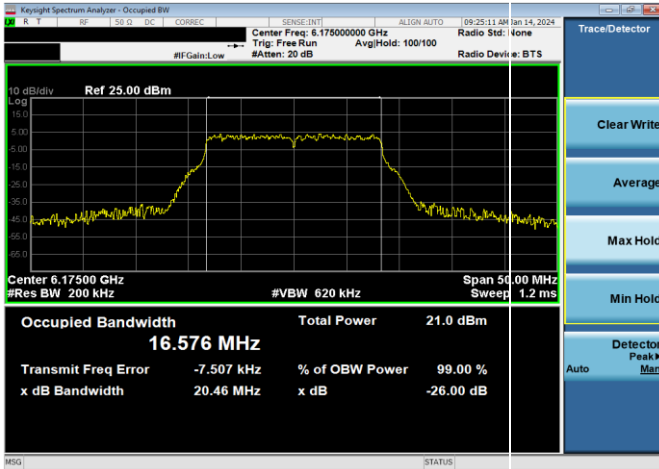
Plot 7-39. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz)
 802.11ax (UNII Band 8) – Ch. 199, MCS4)



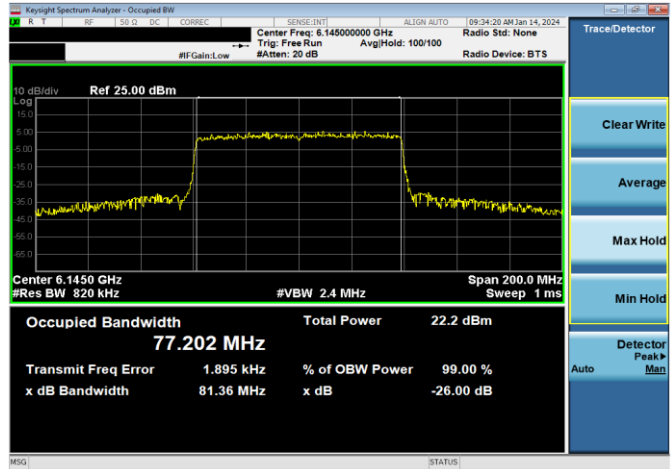
Plot 7-40. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz)
 802.11ax (UNII Band 8) – Ch. 207, MCS4)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 30 of 567

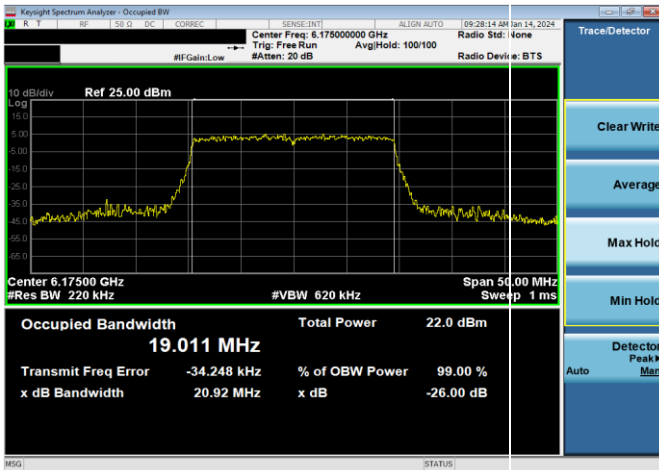
High Data Rate



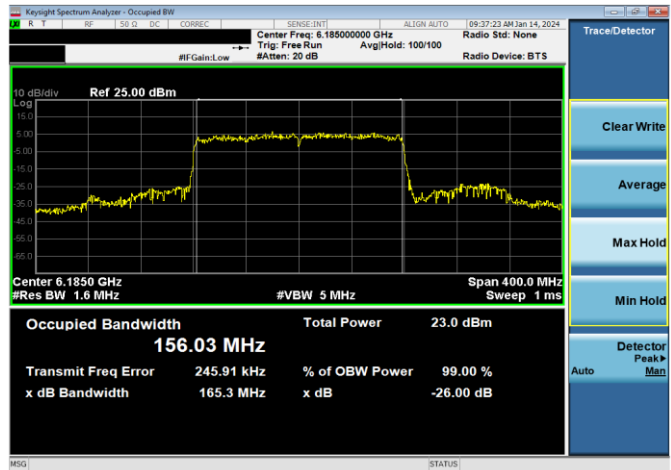
Plot 7-41. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 5) – Ch. 45, 54Mbps)



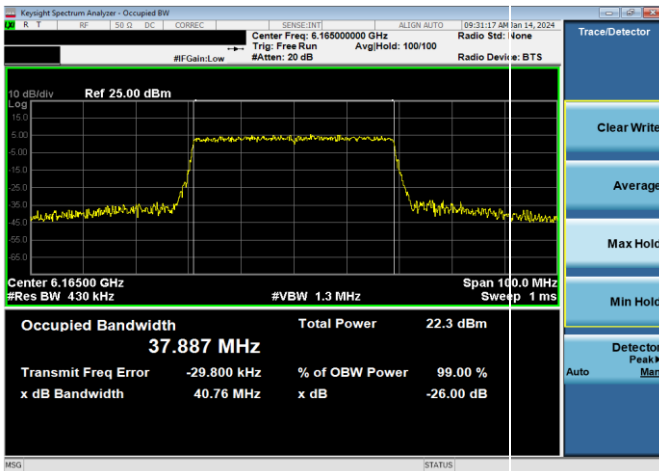
Plot 7-44. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS11)



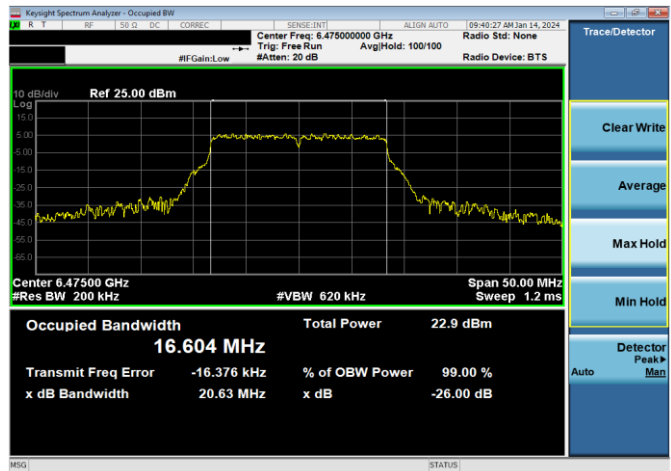
Plot 7-42. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS11)



Plot 7-45. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS11)

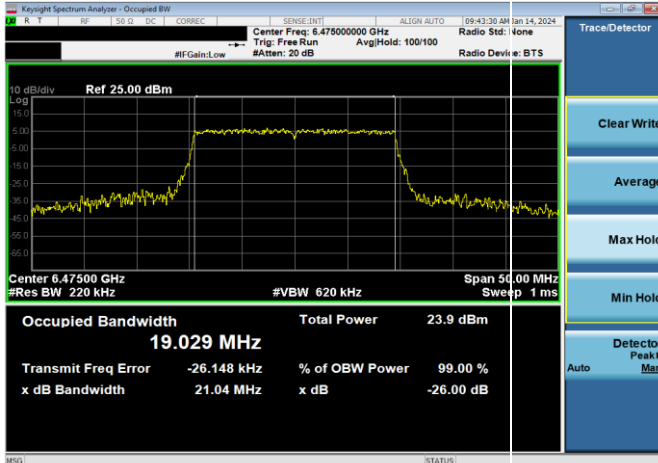


Plot 7-43. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS11)

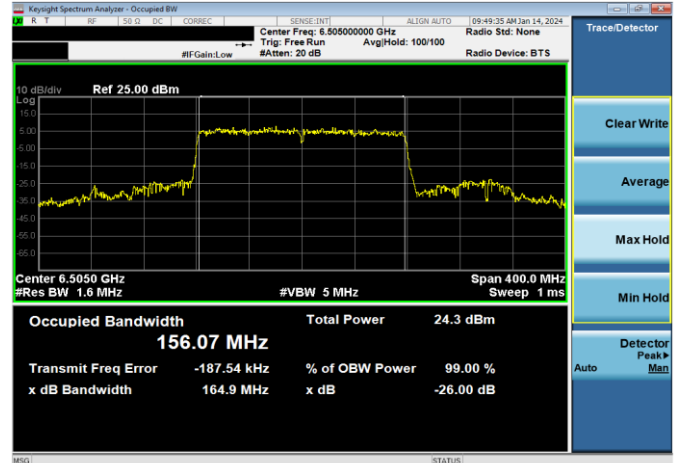


Plot 7-46. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 6) – Ch. 105, 54Mbps)

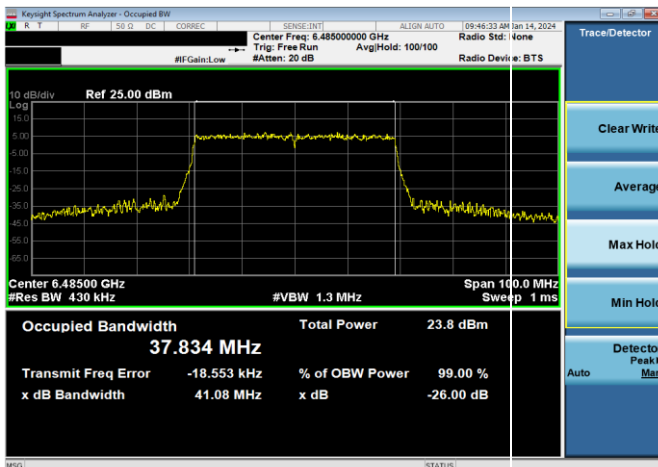
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 31 of 567



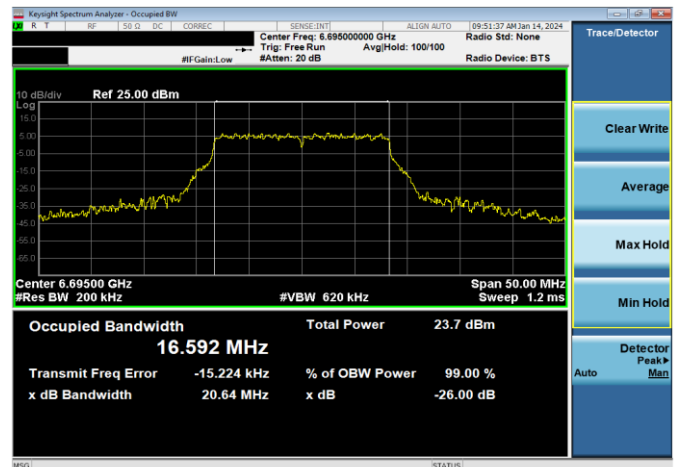
Plot 7-47. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS11)



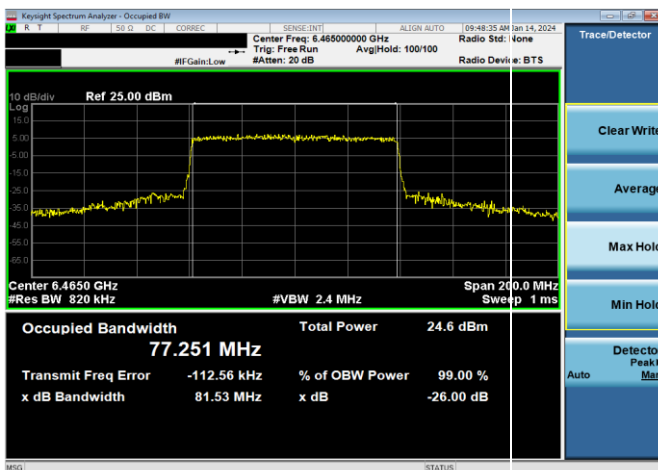
Plot 7-50. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 6) – Ch. 111, MCS11)



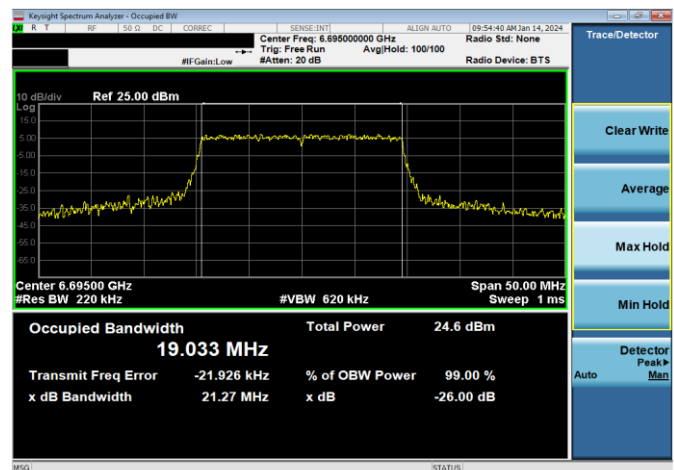
Plot 7-48. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS11)



Plot 7-51. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 7) – Ch. 149, 54Mbps)

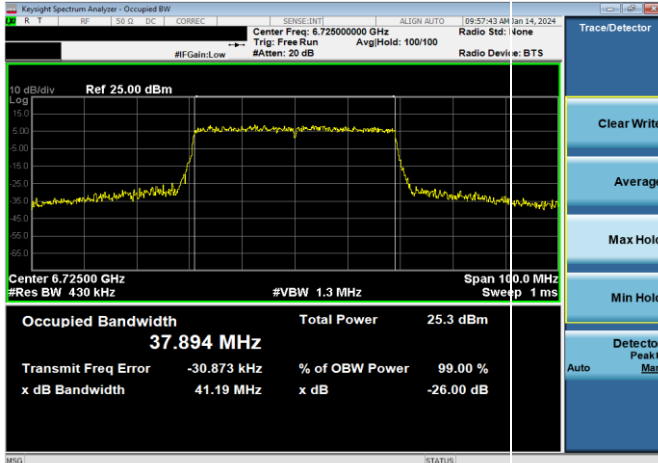


Plot 7-49. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS11)

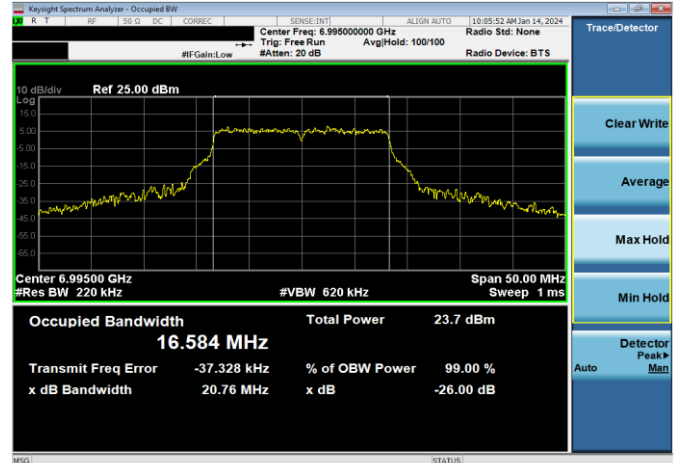


Plot 7-52. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS11)

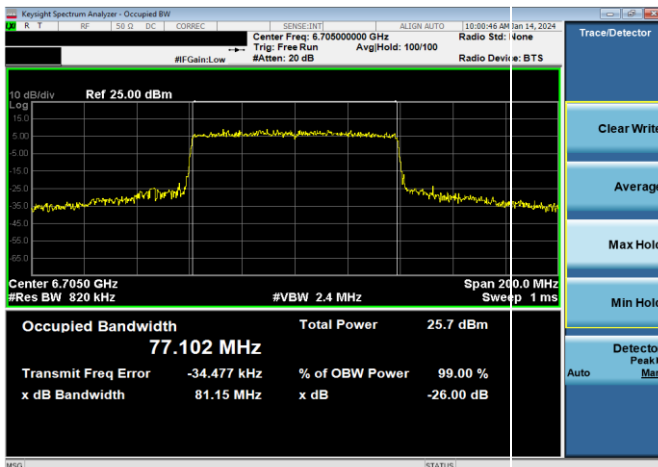
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 32 of 567



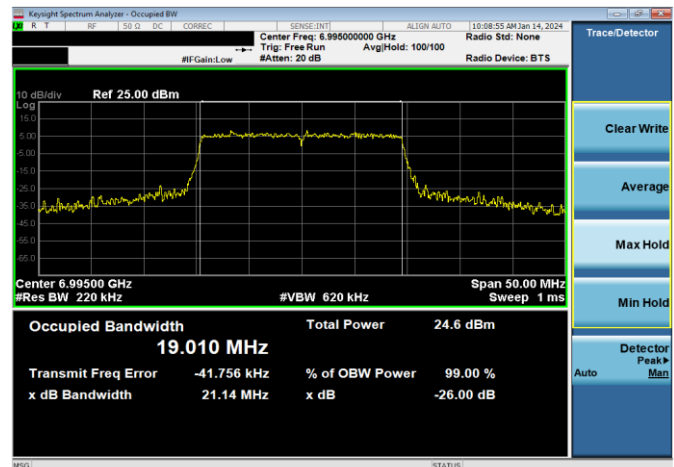
Plot 7-53. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 7) – Ch. 155, MCS11)



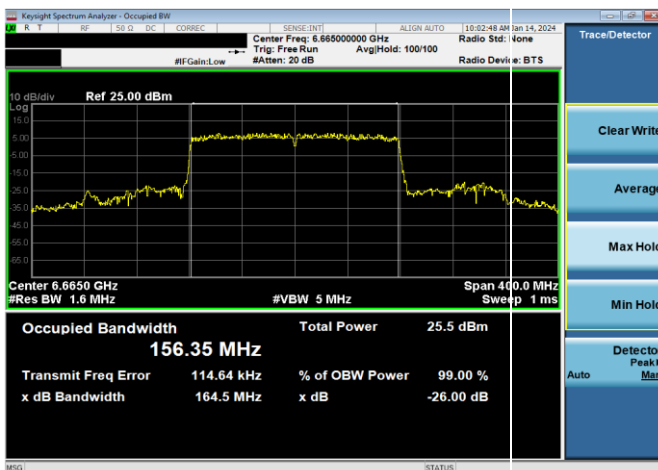
Plot 7-56. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11a (UNII Band 8) – Ch. 209, 54Mbps)



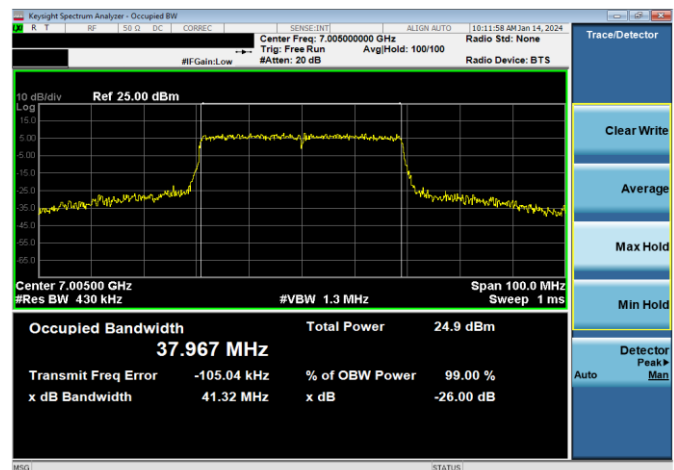
Plot 7-54. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz 802.11ax (UNII Band 7) – Ch. 151, MCS11)



Plot 7-57. 26dB & 99% Bandwidth Plot Antenna WF5B (20MHz 802.11ax (UNII Band 8) – Ch. 209, MCS11)

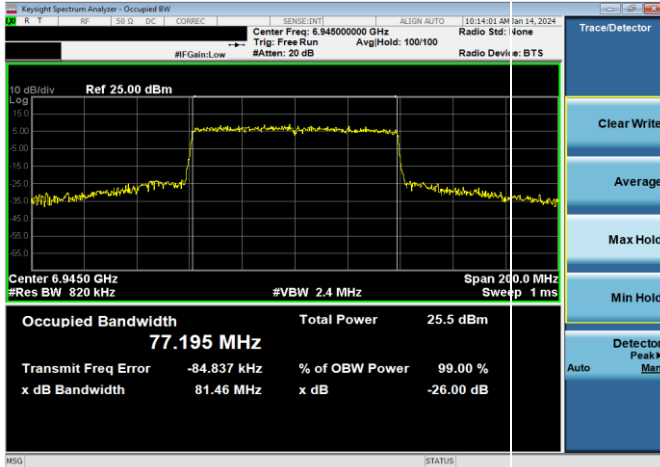


Plot 7-55. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz 802.11ax (UNII Band 7) – Ch. 143, MCS11)

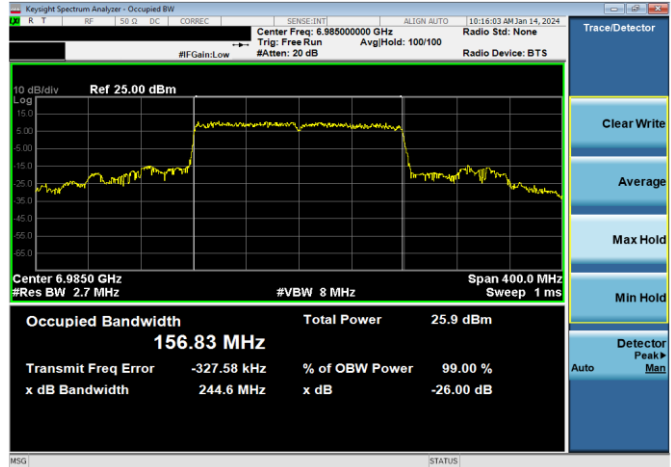


Plot 7-58. 26dB & 99% Bandwidth Plot Antenna WF5B (40MHz 802.11ax (UNII Band 8) – Ch. 211, MCS11)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 33 of 567



Plot 7-59. 26dB & 99% Bandwidth Plot Antenna WF5B (80MHz)
 802.11ax (UNII Band 8) – Ch. 199, MCS11)



Plot 7-60. 26dB & 99% Bandwidth Plot Antenna WF5B (160MHz)
 802.11ax (UNII Band 8) – Ch. 207, MCS11)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 34 of 567

7.2.2 Antenna WF8 26dB & 99% Bandwidth Measurements

	Frequency [MHz]	Channel	802.11 MODE	Data Rate [Mbps]	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]	Maximum Bandwidth Limit [MHz]	Pass / Fail
Band 5	5955	1	a	12	16.69	20.74	320	Pass
	6175	45	a	12	16.66	20.81	320	Pass
	6415	93	a	12	16.65	20.74	320	Pass
	5955	1	ax (20MHz)	24/25.8 (MCS2)	18.99	20.84	320	Pass
	6175	45	ax (20MHz)	24/25.8 (MCS2)	18.96	20.95	320	Pass
	6415	93	ax (20MHz)	24/25.8 (MCS2)	18.98	21.08	320	Pass
	5965	3	ax (40MHz)	24/25.8 (MCS2)	37.94	41.25	320	Pass
	6165	43	ax (40MHz)	24/25.8 (MCS2)	37.87	41.42	320	Pass
	6405	91	ax (40MHz)	24/25.8 (MCS2)	37.89	41.31	320	Pass
	5985	7	ax (80MHz)	24/25.8 (MCS2)	77.11	81.93	320	Pass
	6145	39	ax (80MHz)	24/25.8 (MCS2)	77.22	81.48	320	Pass
	6385	87	ax (80MHz)	24/25.8 (MCS2)	77.17	81.69	320	Pass
	6025	15	ax (160MHz)	24/25.8 (MCS2)	156.36	164.43	320	Pass
	6185	47	ax (160MHz)	24/25.8 (MCS2)	156.22	164.83	320	Pass
6345	79	ax (160MHz)	24/25.8 (MCS2)	156.25	165.53	320	Pass	
Band 6	6435	97	a	12	16.62	20.73	320	Pass
	6475	105	a	12	16.66	20.80	320	Pass
	6515	113	a	12	16.63	20.58	320	Pass
	6345	97	ax (20MHz)	24/25.8 (MCS2)	18.99	21.23	320	Pass
	6475	105	ax (20MHz)	24/25.8 (MCS2)	18.99	20.87	320	Pass
	6515	113	ax (20MHz)	24/25.8 (MCS2)	18.99	21.13	320	Pass
	6445	99	ax (40MHz)	24/25.8 (MCS2)	37.85	41.05	320	Pass
	6485	107	ax (40MHz)	24/25.8 (MCS2)	37.92	41.25	320	Pass
	6525	115	ax (40MHz)	24/25.8 (MCS2)	37.89	41.26	320	Pass
	6465	103	ax (80MHz)	24/25.8 (MCS2)	77.14	81.32	320	Pass
Band 7	6505	111	ax (160MHz)	24/25.8 (MCS2)	156.41	164.18	320	Pass
	6535	117	a	12	16.67	20.53	320	Pass
	6695	149	a	12	16.71	20.75	320	Pass
	6875	185	a	12	16.66	20.67	320	Pass
	6535	117	ax (20MHz)	24/25.8 (MCS2)	18.98	21.21	320	Pass
	6695	149	ax (20MHz)	24/25.8 (MCS2)	18.98	21.10	320	Pass
	6875	185	ax (20MHz)	24/25.8 (MCS2)	18.95	21.15	320	Pass
	6565	123	ax (40MHz)	24/25.8 (MCS2)	37.88	41.35	320	Pass
	6725	155	ax (40MHz)	24/25.8 (MCS2)	37.88	41.34	320	Pass
	6885	179	ax (40MHz)	24/25.8 (MCS2)	37.92	41.36	320	Pass
	6545	119	ax (80MHz)	24/25.8 (MCS2)	77.23	81.24	320	Pass
	6705	151	ax (80MHz)	24/25.8 (MCS2)	77.07	81.47	320	Pass
	6865	183	ax (80MHz)	24/25.8 (MCS2)	77.17	81.64	320	Pass
	6665	143	ax (160MHz)	24/25.8 (MCS2)	156.40	164.78	320	Pass
6825	175	ax (160MHz)	24/25.8 (MCS2)	156.21	164.33	320	Pass	
Band 8	6895	189	a	12	16.65	20.71	320	Pass
	6995	209	a	12	16.66	20.61	320	Pass
	7115	233	a	12	16.65	20.75	320	Pass
	6895	189	ax (20MHz)	24/25.8 (MCS2)	19.01	20.98	320	Pass
	6995	209	ax (20MHz)	24/25.8 (MCS2)	19.00	20.94	320	Pass
	7115	233	ax (20MHz)	24/25.8 (MCS2)	19.01	21.11	320	Pass
	6925	187	ax (40MHz)	24/25.8 (MCS2)	37.87	41.25	320	Pass
	7005	211	ax (40MHz)	24/25.8 (MCS2)	37.87	41.35	320	Pass
	7085	227	ax (40MHz)	24/25.8 (MCS2)	37.88	41.30	320	Pass
	6945	199	ax (80MHz)	24/25.8 (MCS2)	77.21	81.01	320	Pass
	7025	215	ax (80MHz)	24/25.8 (MCS2)	77.22	81.44	320	Pass
	6985	207	ax (160MHz)	24/25.8 (MCS2)	156.05	164.89	320	Pass

Table 7-5. Conducted Bandwidth Measurements Antenna WF8 (Low Data Rate)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 35 of 567

	Frequency [MHz]	Channel	802.11 MODE	Data Rate [MHz]	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]	Maximum Bandwidth Limit [MHz]	Pass / Fail
Band 5	5955	1	a	24	16.65	20.83	320	Pass
	6175	45	a	24	16.61	20.66	320	Pass
	6415	93	a	24	16.60	20.69	320	Pass
	5955	1	ax (20MHz)	49/51.6 (MCS4)	19.01	21.29	320	Pass
	6175	45	ax (20MHz)	49/51.6 (MCS4)	19.02	21.17	320	Pass
	6415	93	ax (20MHz)	49/51.6 (MCS4)	18.98	21.12	320	Pass
	5965	3	ax (40MHz)	49/51.6 (MCS4)	37.92	41.30	320	Pass
	6165	43	ax (40MHz)	49/51.6 (MCS4)	37.91	41.29	320	Pass
	6405	91	ax (40MHz)	49/51.6 (MCS4)	37.92	41.37	320	Pass
	5985	7	ax (80MHz)	49/51.6 (MCS4)	77.24	81.66	320	Pass
	6145	39	ax (80MHz)	49/51.6 (MCS4)	77.20	81.10	320	Pass
	6385	87	ax (80MHz)	49/51.6 (MCS4)	77.17	81.43	320	Pass
	6025	15	ax (160MHz)	49/51.6 (MCS4)	155.98	164.83	320	Pass
6185	47	ax (160MHz)	49/51.6 (MCS4)	155.97	163.90	320	Pass	
6345	79	ax (160MHz)	49/51.6 (MCS4)	156.14	164.55	320	Pass	
Band 6	6435	97	a	24	16.65	20.88	320	Pass
	6475	105	a	24	16.65	20.61	320	Pass
	6515	113	a	24	16.66	20.68	320	Pass
	6345	97	ax (20MHz)	49/51.6 (MCS4)	18.99	21.13	320	Pass
	6475	105	ax (20MHz)	49/51.6 (MCS4)	19.03	20.87	320	Pass
	6515	113	ax (20MHz)	49/51.6 (MCS4)	19.00	21.17	320	Pass
	6445	99	ax (40MHz)	49/51.6 (MCS4)	37.94	40.97	320	Pass
	6485	107	ax (40MHz)	49/51.6 (MCS4)	37.91	41.13	320	Pass
	6525	115	ax (40MHz)	49/51.6 (MCS4)	37.96	41.43	320	Pass
	6465	103	ax (80MHz)	49/51.6 (MCS4)	77.18	81.57	320	Pass
6505	111	ax (160MHz)	49/51.6 (MCS4)	156.21	164.45	320	Pass	
Band 7	6535	117	a	24	16.65	20.71	320	Pass
	6695	149	a	24	16.66	20.54	320	Pass
	6875	185	a	24	16.66	20.76	320	Pass
	6535	117	ax (20MHz)	49/51.6 (MCS4)	19.00	20.99	320	Pass
	6695	149	ax (20MHz)	49/51.6 (MCS4)	19.01	20.90	320	Pass
	6875	185	ax (20MHz)	49/51.6 (MCS4)	18.97	20.84	320	Pass
	6565	123	ax (40MHz)	49/51.6 (MCS4)	37.96	41.32	320	Pass
	6725	155	ax (40MHz)	49/51.6 (MCS4)	37.91	41.36	320	Pass
	6885	179	ax (40MHz)	49/51.6 (MCS4)	37.93	41.30	320	Pass
	6545	119	ax (80MHz)	49/51.6 (MCS4)	77.05	80.98	320	Pass
	6705	151	ax (80MHz)	49/51.6 (MCS4)	77.05	81.39	320	Pass
	6865	183	ax (80MHz)	49/51.6 (MCS4)	77.17	81.02	320	Pass
	6665	143	ax (160MHz)	49/51.6 (MCS4)	156.15	164.39	320	Pass
6825	175	ax (160MHz)	49/51.6 (MCS4)	156.17	164.48	320	Pass	
Band 8	6895	189	a	24	16.58	20.58	320	Pass
	6995	209	a	24	16.63	20.77	320	Pass
	7115	233	a	24	16.66	20.63	320	Pass
	6895	189	ax (20MHz)	49/51.6 (MCS4)	19.02	21.26	320	Pass
	6995	209	ax (20MHz)	49/51.6 (MCS4)	19.01	21.13	320	Pass
	7115	233	ax (20MHz)	49/51.6 (MCS4)	18.99	20.98	320	Pass
	6925	187	ax (40MHz)	49/51.6 (MCS4)	37.90	41.19	320	Pass
	7005	211	ax (40MHz)	49/51.6 (MCS4)	37.89	41.29	320	Pass
	7085	227	ax (40MHz)	49/51.6 (MCS4)	37.93	40.95	320	Pass
	6945	199	ax (80MHz)	49/51.6 (MCS4)	77.26	81.68	320	Pass
	7025	215	ax (80MHz)	49/51.6 (MCS4)	77.11	81.44	320	Pass
6985	207	ax (160MHz)	49/51.6 (MCS4)	156.06	164.00	320	Pass	

Table 7-6. Conducted Bandwidth Measurements Antenna WF8 (Mid Data Rate)

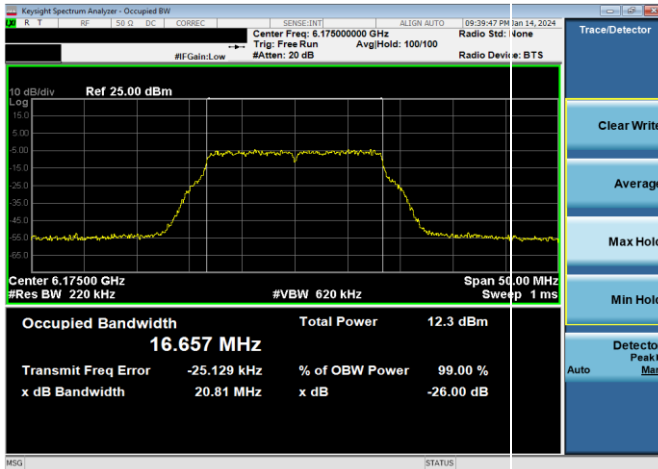
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 36 of 567

	Frequency [MHz]	Channel	802.11 MODE	Data Rate [MHz]	Measured 99% Occupied Bandwidth [MHz]	Measured 26dB Bandwidth [MHz]	Maximum Bandwidth Limit [MHz]	Pass / Fail	
Band 5	5955	1	a	54	16.62	20.56	320	Pass	
	6175	45	a	54	16.61	20.53	320	Pass	
	6415	93	a	54	16.63	20.64	320	Pass	
	5955	1	ax (20MHz)	135/143.4 (MCS11)	18.97	20.76	320	Pass	
	6175	45	ax (20MHz)	135/143.4 (MCS11)	19.00	20.90	320	Pass	
	6415	93	ax (20MHz)	135/143.4 (MCS11)	19.00	20.92	320	Pass	
	5965	3	ax (40MHz)	135/143.4 (MCS11)	37.81	40.93	320	Pass	
	6165	43	ax (40MHz)	135/143.4 (MCS11)	37.84	41.17	320	Pass	
	6405	91	ax (40MHz)	135/143.4 (MCS11)	37.87	41.13	320	Pass	
	5985	7	ax (80MHz)	135/143.4 (MCS11)	77.06	80.97	320	Pass	
	6145	39	ax (80MHz)	135/143.4 (MCS11)	77.08	81.13	320	Pass	
	6385	87	ax (80MHz)	135/143.4 (MCS11)	76.98	80.96	320	Pass	
	6025	15	ax (160MHz)	135/143.4 (MCS11)	156.40	165.41	320	Pass	
6185	47	ax (160MHz)	135/143.4 (MCS11)	156.09	163.44	320	Pass		
6345	79	ax (160MHz)	135/143.4 (MCS11)	156.03	164.89	320	Pass		
Band 6	6435	97	a	54	16.57	20.47	320	Pass	
	6475	105	a	54	16.59	20.46	320	Pass	
	6515	113	a	54	16.60	20.52	320	Pass	
	6345	97	ax (20MHz)	135/143.4 (MCS11)	19.01	21.05	320	Pass	
	6475	105	ax (20MHz)	135/143.4 (MCS11)	19.04	20.95	320	Pass	
	6515	113	ax (20MHz)	135/143.4 (MCS11)	18.99	21.05	320	Pass	
	6445	99	ax (40MHz)	135/143.4 (MCS11)	37.90	41.12	320	Pass	
	6485	107	ax (40MHz)	135/143.4 (MCS11)	37.89	41.20	320	Pass	
	6525	115	ax (40MHz)	135/143.4 (MCS11)	37.90	41.25	320	Pass	
	6465	103	ax (80MHz)	135/143.4 (MCS11)	77.11	81.29	320	Pass	
	6505	111	ax (160MHz)	135/143.4 (MCS11)	156.26	164.88	320	Pass	
	Band 7	6535	117	a	54	16.59	20.39	320	Pass
		6695	149	a	54	16.56	20.50	320	Pass
6875		185	a	54	16.55	20.65	320	Pass	
6535		117	ax (20MHz)	135/143.4 (MCS11)	19.03	20.87	320	Pass	
6695		149	ax (20MHz)	135/143.4 (MCS11)	19.00	21.06	320	Pass	
6875		185	ax (20MHz)	135/143.4 (MCS11)	18.99	20.97	320	Pass	
6565		123	ax (40MHz)	135/143.4 (MCS11)	37.90	40.96	320	Pass	
6725		155	ax (40MHz)	135/143.4 (MCS11)	37.82	41.06	320	Pass	
6885		179	ax (40MHz)	135/143.4 (MCS11)	37.92	41.05	320	Pass	
6545		119	ax (80MHz)	135/143.4 (MCS11)	77.00	81.80	320	Pass	
6705		151	ax (80MHz)	135/143.4 (MCS11)	77.16	81.06	320	Pass	
6865		183	ax (80MHz)	135/143.4 (MCS11)	77.06	81.23	320	Pass	
6665		143	ax (160MHz)	135/143.4 (MCS11)	156.22	164.77	320	Pass	
6825	175	ax (160MHz)	135/143.4 (MCS11)	156.30	165.09	320	Pass		
Band 8	6895	189	a	54	16.58	20.64	320	Pass	
	6995	209	a	54	16.56	20.55	320	Pass	
	7115	233	a	54	16.61	20.54	320	Pass	
	6895	189	ax (20MHz)	135/143.4 (MCS11)	18.99	21.02	320	Pass	
	6995	209	ax (20MHz)	135/143.4 (MCS11)	18.99	20.99	320	Pass	
	7115	233	ax (20MHz)	135/143.4 (MCS11)	18.93	20.97	320	Pass	
	6925	187	ax (40MHz)	135/143.4 (MCS11)	37.94	40.97	320	Pass	
	7005	211	ax (40MHz)	135/143.4 (MCS11)	37.86	41.14	320	Pass	
	7085	227	ax (40MHz)	135/143.4 (MCS11)	37.91	40.98	320	Pass	
	6945	199	ax (80MHz)	135/143.4 (MCS11)	77.17	81.27	320	Pass	
	7025	215	ax (80MHz)	135/143.4 (MCS11)	77.23	81.02	320	Pass	
	6985	207	ax (160MHz)	135/143.4 (MCS11)	155.99	164.44	320	Pass	

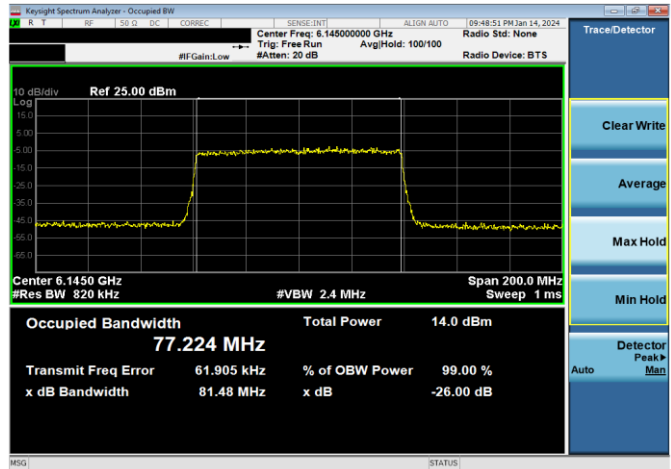
Table 7-7. Conducted Bandwidth Measurements Antenna WF8 (High Data Rate)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 37 of 567

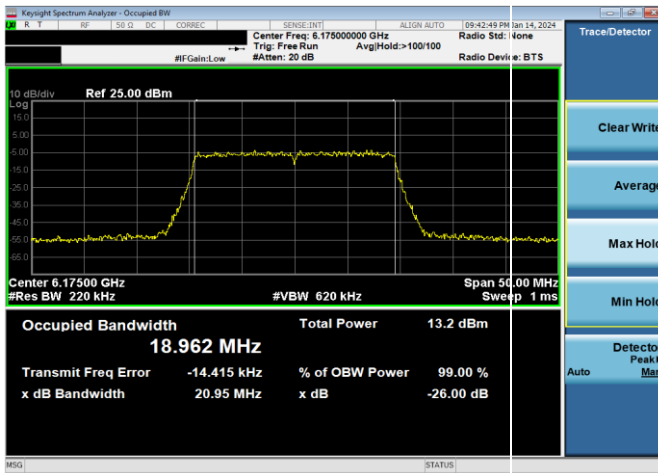
Low Data Rate



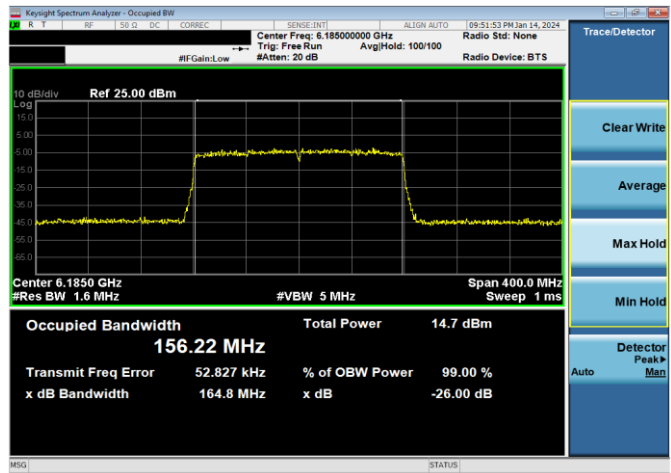
Plot 7-61. 26dB & 99% Bandwidth Plot Antenna WF8 (20MHz 802.11a (UNII Band 5) – Ch. 45, 12Mbps)



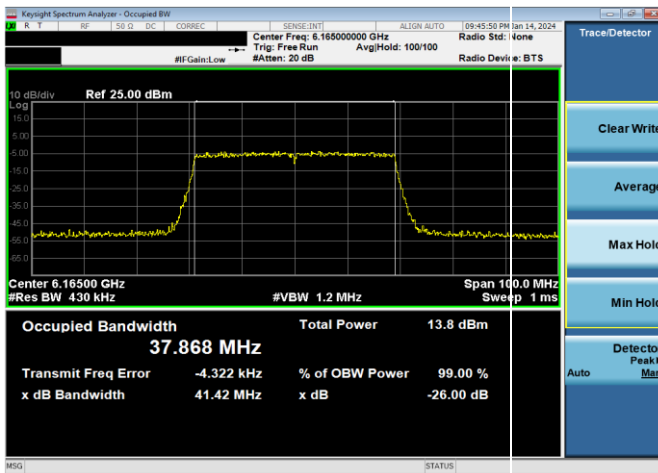
Plot 7-64. 26dB & 99% Bandwidth Plot Antenna WF8 (80MHz 802.11ax (UNII Band 5) – Ch. 39, MCS2)



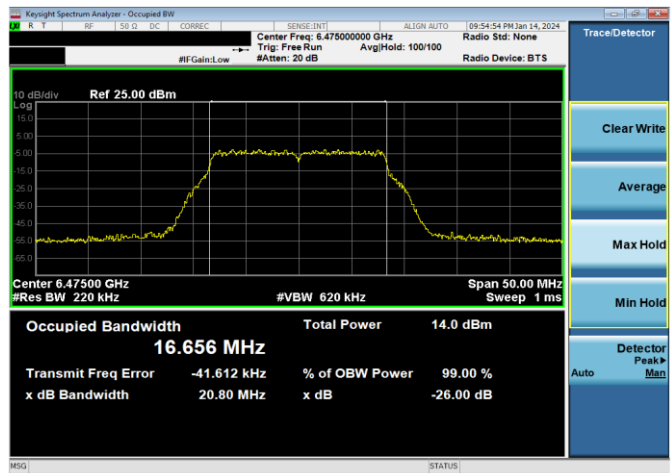
Plot 7-62. 26dB & 99% Bandwidth Plot Antenna WF8 (20MHz 802.11ax (UNII Band 5) – Ch. 45, MCS2)



Plot 7-65. 26dB & 99% Bandwidth Plot Antenna WF8 (160MHz 802.11ax (UNII Band 5) – Ch. 47, MCS2)

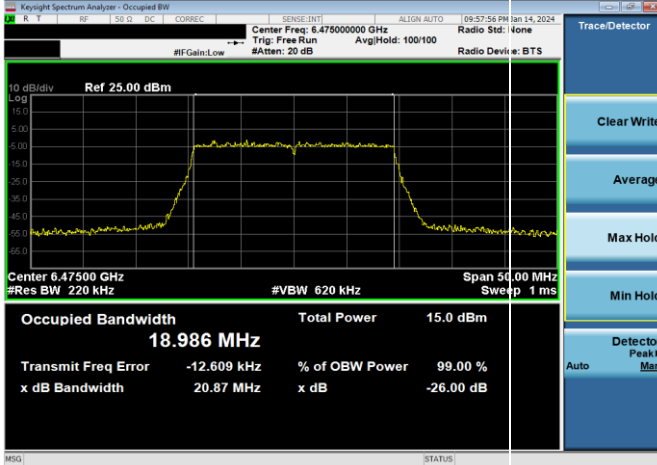


Plot 7-63. 26dB & 99% Bandwidth Plot Antenna WF8 (40MHz 802.11ax (UNII Band 5) – Ch. 43, MCS2)

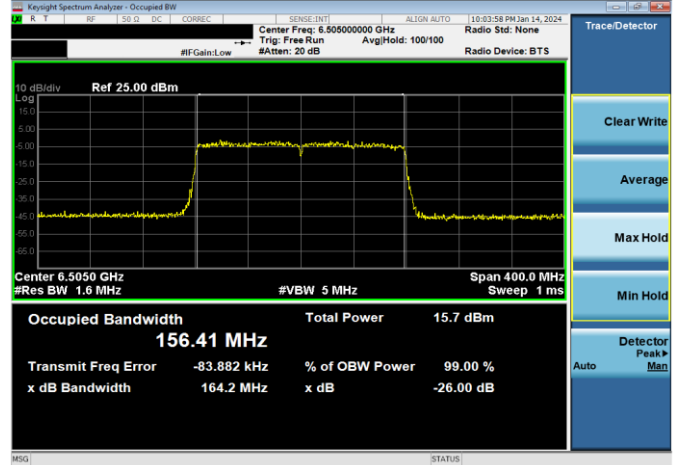


Plot 7-66. 26dB & 99% Bandwidth Plot Antenna WF8 (20MHz 802.11a (UNII Band 6) – Ch. 105, 12Mbps)

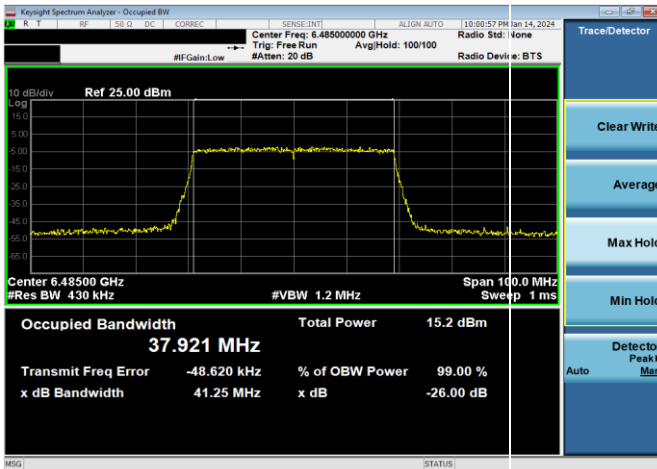
FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 38 of 567



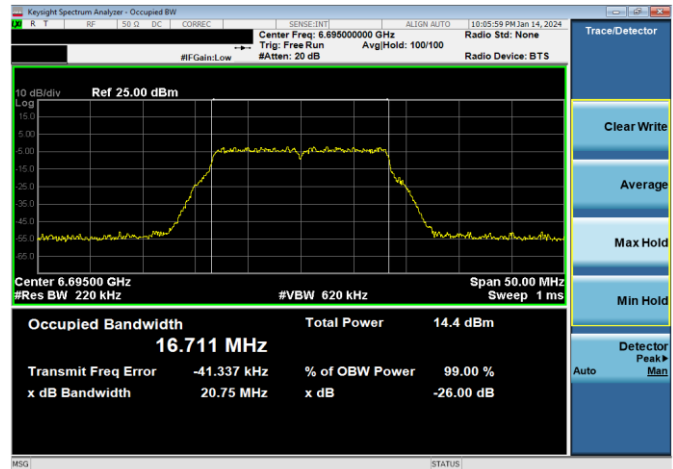
Plot 7-67. 26dB & 99% Bandwidth Plot Antenna WF8 (20MHz 802.11ax (UNII Band 6) – Ch. 105, MCS2)



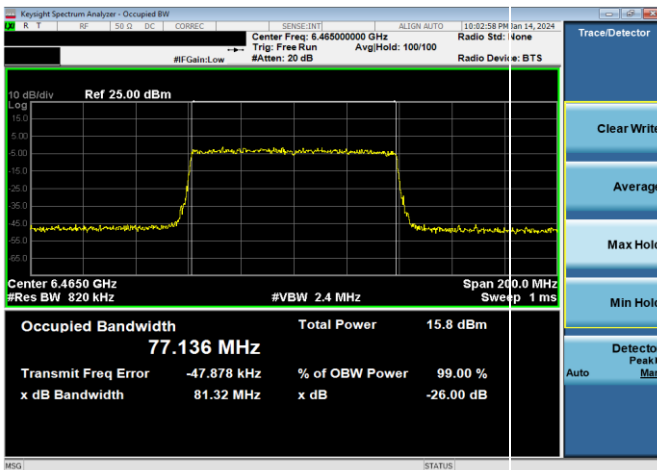
Plot 7-70. 26dB & 99% Bandwidth Plot Antenna WF8 (160MHz 802.11ax (UNII Band 6) – Ch. 111, MCS2)



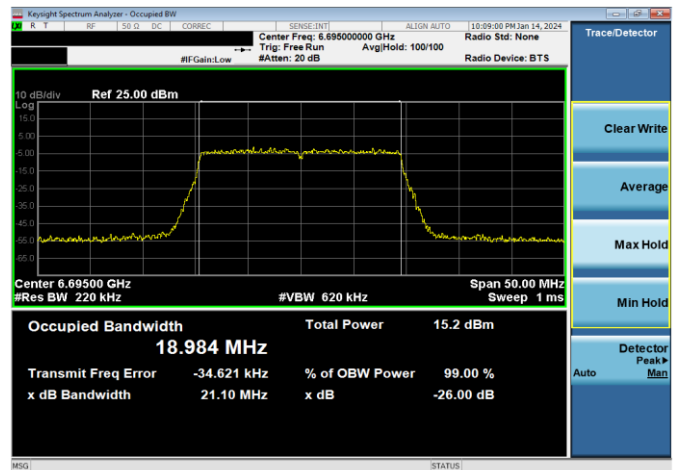
Plot 7-68. 26dB & 99% Bandwidth Plot Antenna WF8 (40MHz 802.11ax (UNII Band 6) – Ch. 107, MCS2)



Plot 7-71. 26dB & 99% Bandwidth Plot Antenna WF8 (20MHz 802.11a (UNII Band 7) – Ch. 149, 12Mbps)



Plot 7-69. 26dB & 99% Bandwidth Plot Antenna WF8 (80MHz 802.11ax (UNII Band 6) – Ch. 103, MCS2)



Plot 7-72. 26dB & 99% Bandwidth Plot Antenna WF8 (20MHz 802.11ax (UNII Band 7) – Ch. 149, MCS2)

FCC ID: BCGA2836 IC: 579C-A2836		MEASUREMENT REPORT (CERTIFICATION)	Approved by: Technical Manager
Test Report S/N: 1C2311270067-13-R1.BCG	Test Dates: 1/8/2024 - 04/05/2024	EUT Type: Tablet Device	Page 39 of 567