MEASUREMENT REPORT

FCC ID	:	**2BH7FBE220**
Applicant	:	**TP-Link Systems Inc.**
Application Type	:	**Certification**
Product	:	**BE3600 Dual-Band Wi-Fi 7 Router** **BE3200 Dual-Band Wi-Fi 7 Router**
Model No.	:	**Archer BE220**
Series Model No.	:	**Archer BE3600, Archer BE3200**
Brand Name	:	**tp-link**
FCC Classification	:	**Unlicensed National Information Infrastructure (NII)**
FCC Rule Part(s)	:	**Part15 Subpart E (Section 15.407)**
Received Date	:	**December 26, 2024**
Test Date	:	**January 12, 2025 ~ February 3, 2025**

Test By : Owen Tsai
(Owen Tsai)

Reviewed By : Paddy Chen
(Paddy Chen)

Approved By : Chenz Ker
(Chenz Ker)

Testing Laboratory
3261

The test results relate only to the samples tested.

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 KDB 789033 D02v02r01. Test results reported herein relate only to the item(s) tested.

Revision History

Report No.	Version	Description	Issue Date	Note
2412TW0120-U3	1.0	Original Report	2025-02-18	

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General Information

Applicant	TP-Link Systems Inc.
Applicant Address	10 Mauchly, Irvine, CA 92618
Manufacturer	TP-Link Systems Inc.
Manufacturer Address	10 Mauchly, Irvine, CA 92618
Test Site	MRT Technology (Taiwan) Co., Ltd
Test Site Address	No. 38, Fuxing Second Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C)
MRT FCC Registration No.	291082
FCC Rule Part(s)	Part 15.407

Test Facility / Accreditations

1. MRT facility is a FCC registered (Reg. No. 291082) test facility with the site description report on file and is designated by the FCC as an Accredited Test Firm.
2. MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
3. MRT Lab is accredited to ISO 17025 by the Taiwan Accreditation Foundation (TAF Cert. No. 3261) in EMC, Telecommunications and Radio testing for FCC (Designation Number: TW3261), Industry Canada, EU and TELEC Rules.

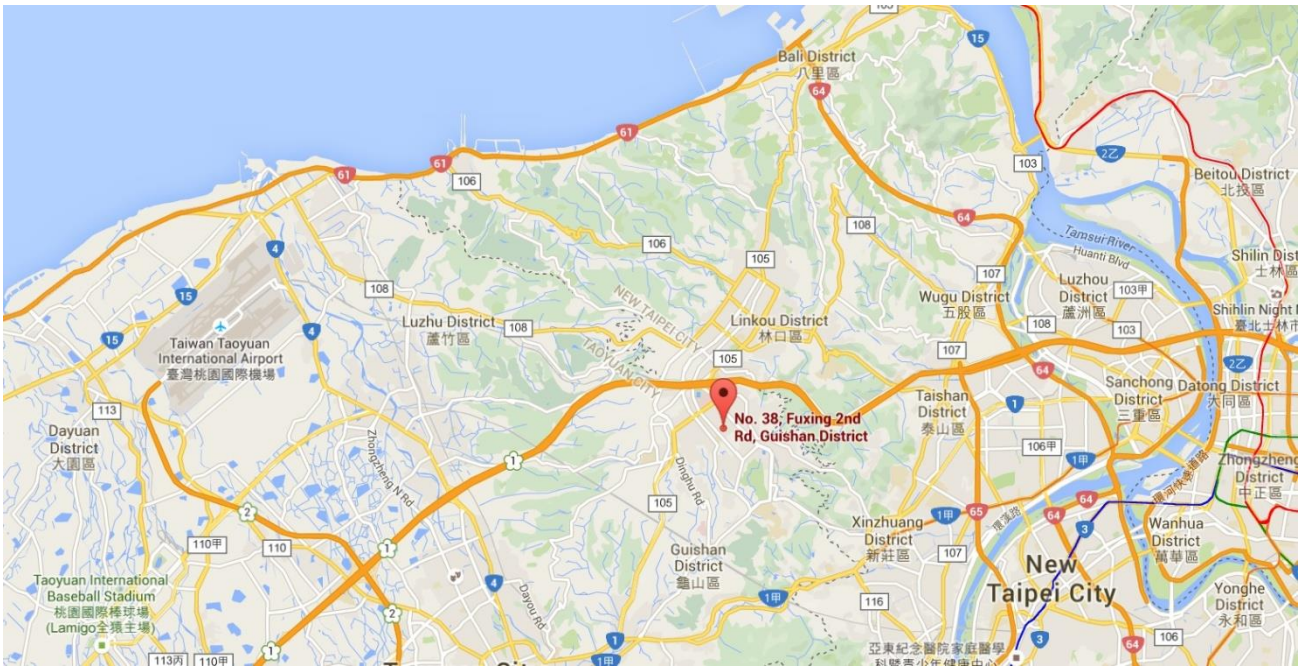
1. INTRODUCTION

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 and Certification and Engineering Bureau.

1.2. MRT Test Location

The map below shows the location of the MRT LABORATORY, its proximity to the Taoyuan City. These measurement tests were conducted at the MRT Technology (Taiwan) Co., Ltd. Facility located at No.38, Fuxing 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan (R.O.C).



2. PRODUCT INFORMATION

2.1. Equipment Description

Product Name	BE3600 Dual-Band Wi-Fi 7 Router BE3200 Dual-Band Wi-Fi 7 Router
Model No.	Archer BE220
Series Model No.	Archer BE3600, Archer BE3200
Brand Name	tp-link
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
EUTIdentificationNo.	#1-1 (Conducted) #1-2 (Radiated)
Accessory	
Power Adapter	Brand: tp-link Model No: T120200-2B1 Input: AC 100-240V~50-60Hz 0.8A Output: 12V⎓2.0A DC Cable Out: Non-Shielded, 1.5m

Note:

Model Difference: Archer BE220 and Archer BE3600 only differ in model, and Archer BE220 supports 240MHz Bandwidth at 802.11be (Wi-Fi 5GHz), but Archer BE3200 (Product Name is BE3200 Dual-Band Wi-Fi 7 Router) does not support, and it's closed by the software based on the Archer BE220. Others are exactly the same (declared by the manufacturer). So only Archer BE220 was accessed in this report.

2.2. Product Specification Subjective to this Report

Frequency Range	For 802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20: 5180~5240MHz, 5260~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40: 5190~5230MHz, 5270~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80/ax-HE80/be-EHT80: 5210MHz, 5290MHz, 5530MHz, 5610 MHz, 5690MHz, 5775MHz For 802.11ac-VHT160/ax-HE160/be-EHT160: 5250MHz, 5570MHz
Type of Modulation	802.11a/n/ac: OFDM 802.11ax/be: OFDMA
Data Rate	802.11a: 6/9/12/18/24/36/48/54Mbps 802.11n: up to 300Mbps 802.11ac: up to 1733.4Mbps 802.11ax: up to 2402Mbps 802.11be: up to 2882Mbps

Note: For other features of this EUT, test report will be issued separately.

2.3. Working Frequencies for this report

802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz
128	5640 MHz	132	5660 MHz	136	5680 MHz
140	5700 MHz	144	5720 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz	--	--	--	--

802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz
62	5310 MHz	102	5510 MHz	110	5550MHz
118	5590 MHz	126	5630 MHz	134	5670 MHz
142	5710 MHz	151	5755 MHz	159	5795 MHz

802.11ac-VHT80/ax-HE80/be-EHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz
122	5610 MHz	138	5690 MHz	155	5775 MHz

802.11ac-VHT160/ax-HE160/be-EHT160

Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250MHz	114	5570 MHz	--	--

2.4. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	T_X Paths	Number of spatial streams	Max Antenna Gain (dBi)	Beamforming Directional Gain(dBi)	CDD Directional Gain (dBi)	
						For Power	For PSD
Wi-Fi Antenna							
Dipole	2412 ~ 2462	2	1	4.29	7.30	4.29	7.30
	5150 ~ 5250	2	1	4.03	7.04	4.03	7.04
	5250 ~ 5350	2	1	4.14	7.15	4.14	7.15
	5470 ~ 5725	2	1	5.01	8.02	5.01	8.02
	5725 ~ 5895	2	1	5.03	8.04	5.03	8.04

Remark:

1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.

   If all antennas have the same gain, G_{ANT}, Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows.

   - For power spectral density (PSD) measurements on all devices,

   Array Gain = 10 log (N_{ANT}/ N_{SS}) dB;

   - For power measurements on IEEE 802.11 devices,

   Array Gain = 0 dB for $N_{ANT} \leq 4$;

2. The EUT also supports Beam Forming mode, and the Beam Forming support 802.11ac/ax/be, not include 802.11a/b/g/n. BF Directional gain = G_{ANT} + 10 log (N_{ANT}).

3. All messages of antenna were declared by manufacturer.

Test Mode	T_X Paths	CDD Mode	Beamforming Mode
802.11b/g/n (DTS)	2	√	X
802.11ax/be (DTS)	2	√	√
802.11a/n (NII)	2	√	X
802.11ac/ax/be (NII)	2	√	√

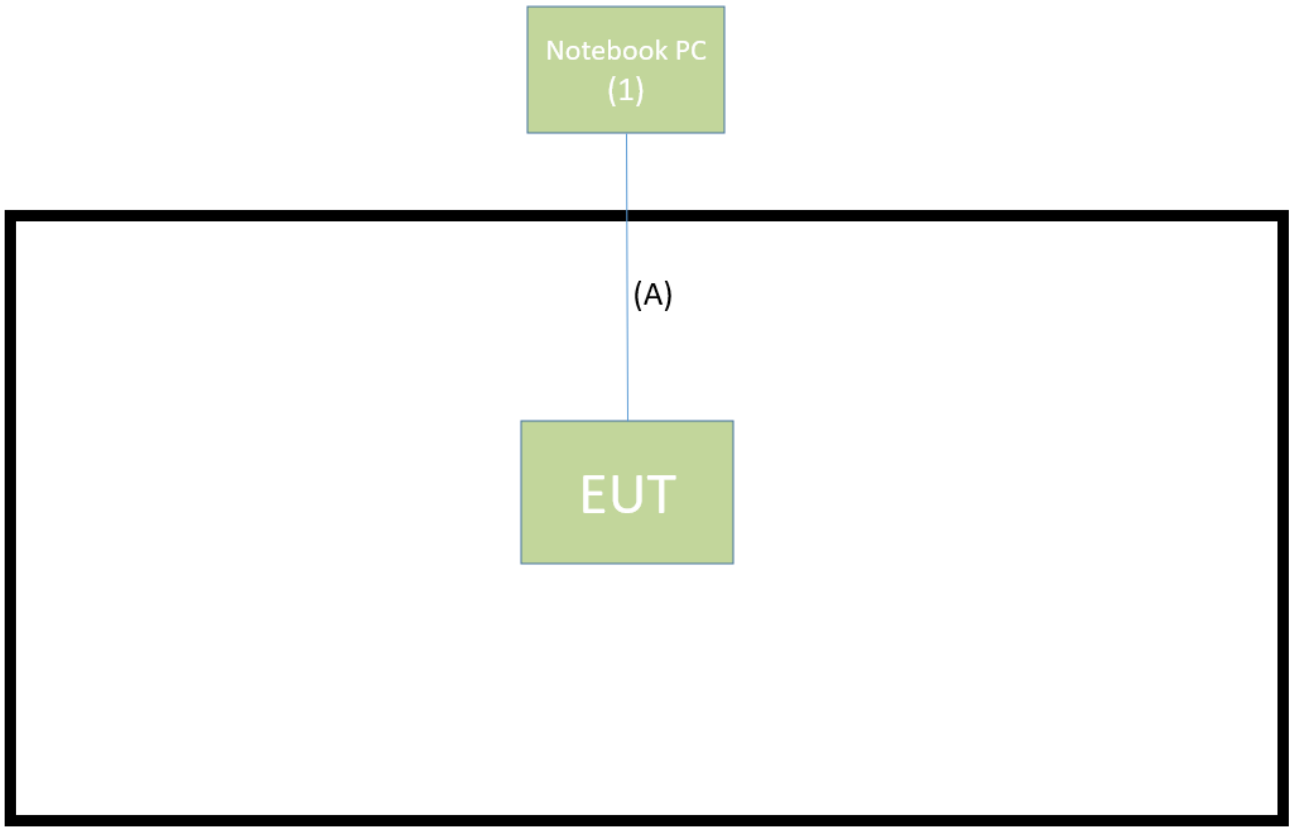
2.5. Test Mode

CDD Mode
Mode 1: Transmit by 802.11a_Nss=1 (6Mbps)
Mode 2: Transmit by 802.11ac-VHT20_Nss=1 (MCS0)
Mode 3: Transmit by 802.11ac-VHT40_Nss=1 (MCS0)
Mode 4: Transmit by 802.11ac-VHT80_Nss=1 (MCS0)
Mode 5: Transmit by 802.11ac-VHT160_Nss=1 (MCS0)
Mode 6: Transmit by 802.11ax-HE20_Nss=1 (MCS0)
Mode 7: Transmit by 802.11ax-HE40_Nss=1 (MCS0)
Mode 8: Transmit by 802.11ax-HE80_Nss=1 (MCS0)
Mode 9: Transmit by 802.11ax-HE160_Nss=1 (MCS0)
Mode 10: Transmit by 802.11be-EHT20_N_{SS}=1 (MCS0)
Mode 11: Transmit by 802.11be-EHT40_N_{SS}=1 (MCS0)
Mode 12: Transmit by 802.11be-EHT80_N_{SS}=1 (MCS0)
Mode 13: Transmit by 802.11be-EHT160_N_{SS}=1 (MCS0)
Remark: 1. For Radiated emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power. 2. This device supports 2 N_{SS} and power level of 2 N_{SS} is less than or equal to the power of 1 N_{SS}. The worst case is N_{SS}=1. 3. 802.11n and 802.11ac have same modulation type and same power value, so we only show 802.11ac test data in report. 4. For Beamforming operation, manufacturer automatically backs power down based on a 10log(N_{ANT}) factor based on CDD power. Therefore, only the CDD mode was evaluated in this report. 5. EUT supports one configuration only in 802.11ax/be full RU mode. 6. As Designated by manufacturer, the lowest data rate was the worst condition, so all the tests were done with lowest data rate.

2.6. Configuration of Test System

The device was tested per the guidance ANSI C63.10: 2013 was used to reference the appropriate EUT setup for radiated emissions testing and AC line conducted testing.

Connection Diagram



Signal Cable Type		Signal Cable Description
A	LAN Cable	Non- Shielded, 3m

2.7. Test System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	Lenovo	20Y7-006KTW	N/A	Non-shielded, 0.8m

2.8. Description of Test Software

The test utility software used during testing was “accessMTool”, the version is ver REL_3_3_0_1.

Note: Final power setting please refer to operational description.

2.9. Applied Standards

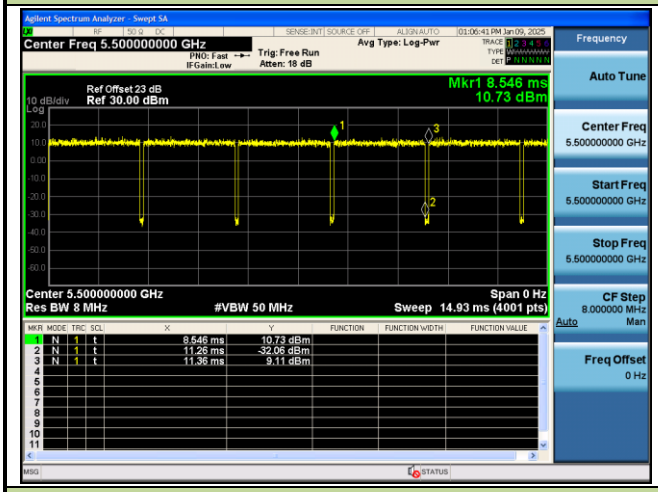
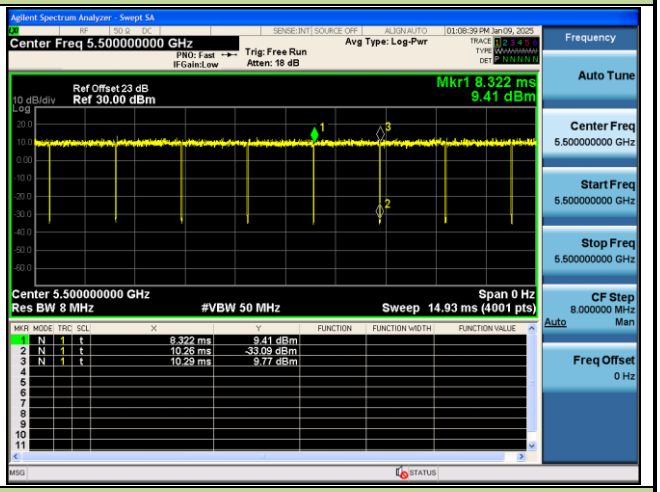
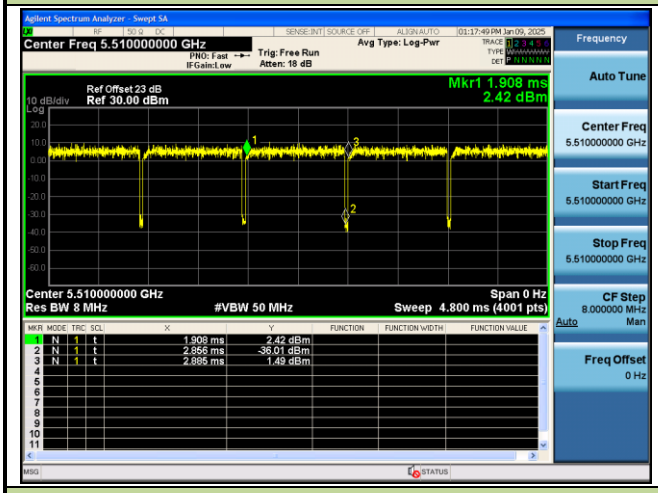
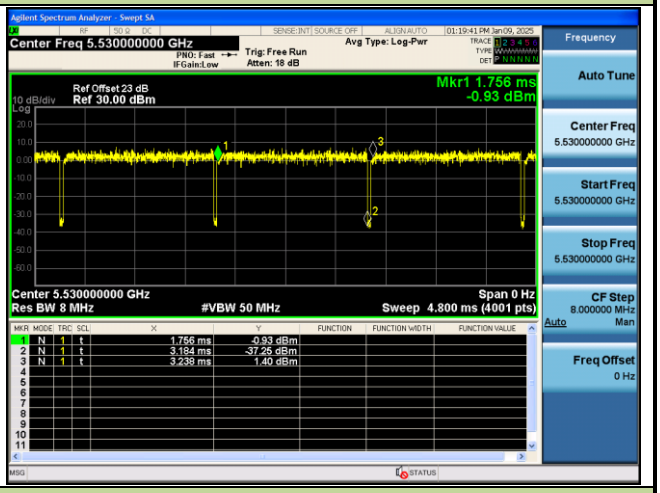
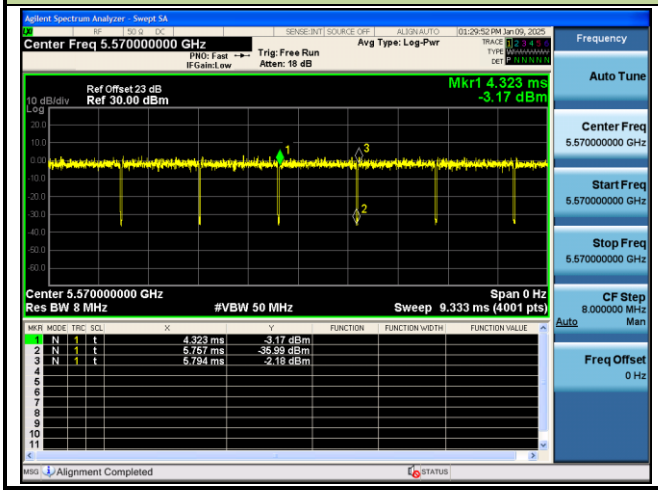
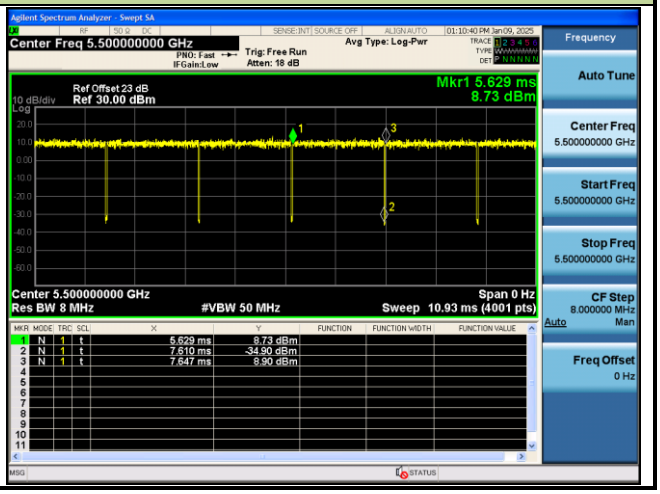
According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

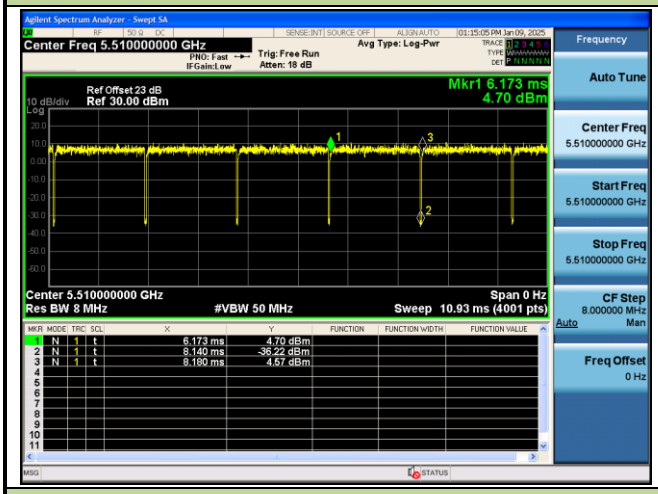
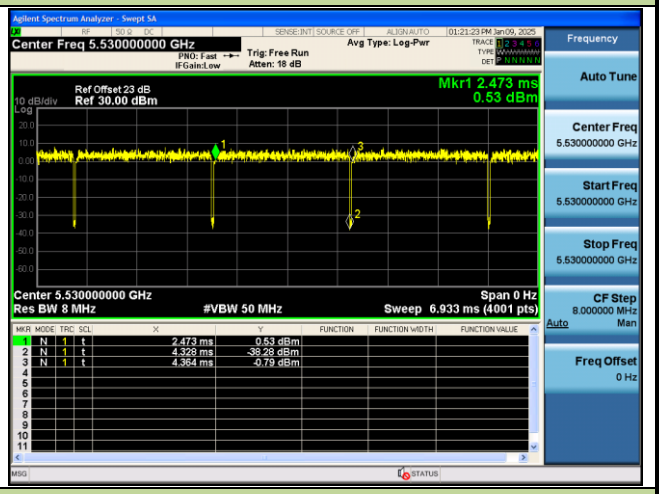
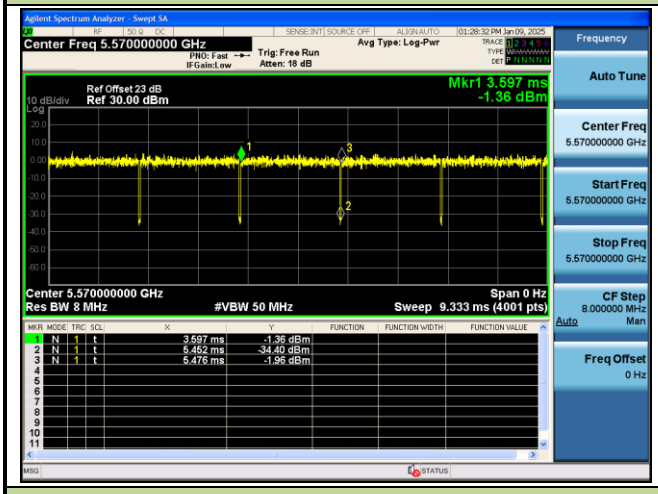
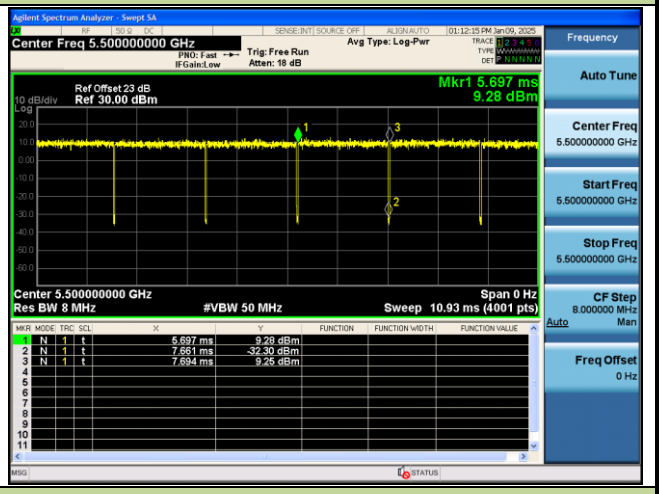
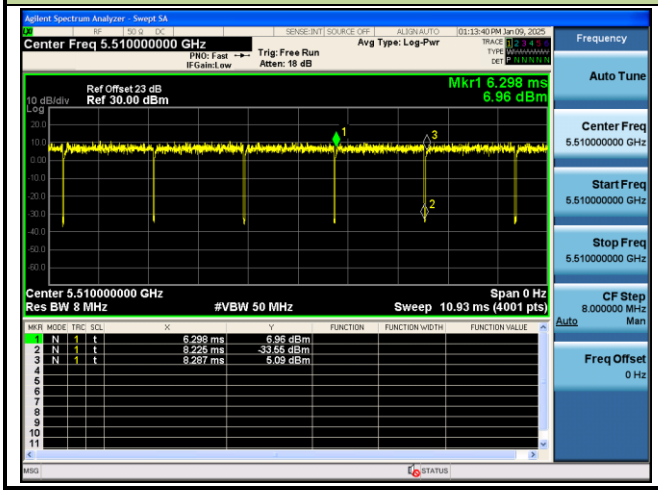
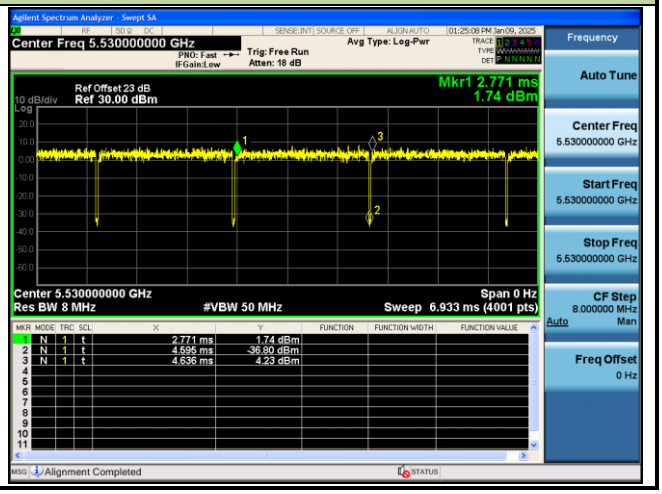
- FCC Part 15.407
- KDB 789033 D02v02r01,
- KDB 662911 D01v02r01
- ANSI C63.10-2013

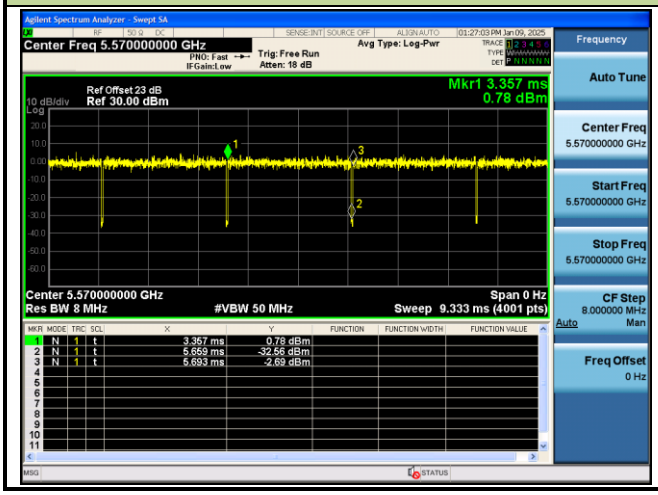
2.10. Duty Cycle

5GHz (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. 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:

Test Mode	Duty Cycle
802.11a	96.45%
802.11ac-VHT20	98.48%
802.11ac-VHT40	97.03%
802.11ac-VHT80	96.36%
802.11ac-VHT160	97.48%
802.11ax-HE20	98.17%
802.11ax-HE40	98.01%
802.11ax-HE80	98.10%
802.11ax-HE160	98.72%
802.11be-EHT20	98.35%
802.11be-EHT 40	96.88%
802.11be-EHT 80	97.80%
802.11be-EHT 160	98.54%

Duty Cycle (T = Transmission Duration)	
802.11a	802.11ac-VHT20
	
802.11ac-VHT40	802.11ac-VHT80
	
802.11ac-VHT160	802.11ax-HE20
	

802.11ax-HE40	802.11ax-HE80
	
802.11ax-HE160	**802.11be-EHT20**
	
802.11be-EHT40	**802.11be-EHT80**
	

802.11be-EHT160	
	

2.11. Test Configuration

The devicewas tested per the guidance of KDB 789033 D02v02r01.ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testingand AC line conducted testing.

2.12. EMI Suppression Device(s)/Modifications

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

2.13. Labeling Requirements

Per 2.1074 & 15.19; Docket 95-19

The label shall be permanently affixed at a conspicuous location on the device; instruction manual or pamphletsupplied to the user and be readily visible to the purchaser at the time of purchase. However, when the deviceis so small wherein placement of the label with specified statement is not practical, only the FCC ID must be displayed on the device per Section 15.19(a)(5). Please see attachment for FCC ID label andlabel location.

3. DESCRIPTION OF TEST

3.1. Evaluation Procedure

The measurement procedures described in the American National Standard ofProcedures for Compliance Testing of Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 789033 D02v02r01 were used in themeasurement.

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an8'x4'x4' shielded enclosure. A 1m x 2m 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/50uH 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. 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. 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 receiver and exploratory measurements were made to determine the frequencies producing the maximum emission from the EUT. The receiver was scanned from 150kHz to 30MHz. The detector function was set to peak mode for exploratory measurements while the bandwidth of the analyzer was set to 9kHz. The EUT, support equipment, and interconnecting cables were arranged and manipulated to maximize each emission. Each emission was also maximized by varying: power lines, the mode of operation or data exchange speed, or support equipment whichever determined the worst-case emission. Once the worst case emissions have been identified, the one EUT cable configuration/arrangement and mode of operation that produced these emissions are 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.
An extension cord was used to connect to a single LISN which powered by EUT. The extension cord was calibrated with LISN, the impedance and insertion loss are compliance with the requirements as stated in ANSI C63.10-2013.

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. For measurements above 1GHz 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 below 1GHz, the absorbers are removed. A MF Model 210SS turntable is used for radiated measurement. It is a continuously rotatable, remotecontrolled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. An80cm high PVC support structure is placed on top of the turntable.
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(b)(1) 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 for frequencies below 1GHz was placed on top of the 0.8 meter high, 1 x 1.5 meter table; and test set-up for frequencies 1-40GHz was placed on top of the 1.5 meter high, 1 x 1.5 meter table. The EUT, support equipment, and interconnecting cables were arranged and manipulated tomaximize each emission. Appropriate precaution was taken to ensure that all emissions from the EUT were maximized and investigated. The system configuration, clock speed, mode of operation or video resolution, if applicable, 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. According to 3dB Beam-Width of horn antenna, the horn antenna should be always directed to the EUT when rising height.

4. 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 theresponsible party can be used with the device. The use of a permanently attached antenna or of an antennathat uses a unique coupling to the intentional radiator shall be considered sufficient to comply with theprovisions of this section.”

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

Conclusion:

The unit complies with the requirement of §15.203.

5. TEST EQUIPMENT CALIBRATION DATE

Conducted Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Two-Line V-Network	R&S	ENV216	MRTTWA00019	1 year	2025/3/5
Two-Line V-Network	R&S	ENV216	MRTTWA00020	1 year	2025/4/21
EMI Test Receiver	R&S	ESR3	MRTTWA00045	1 year	2025/5/14
DIVA PLUS Funk-Wetterstation	TFA	35.1083	MRTTWA00050	1 year	2025/6/2

Radiated Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2025/5/7
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00086	1 year	2025/11/5
Broadband Hornantenna	SCHWARZBECK	BBHA 9120D	MRTTWA00003	1 year	2025/2/28
Broadband Preamplifier	SCHWARZBECK	BBV 9718	MRTTWA00005	1 year	2025/2/28
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2025/3/26
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2025/3/21
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2025/3/5
Signal Analyzer	R&S	FSV40	MRTTWA00007	1 year	2025/3/14
Antenna Cable	HUBERSUHNER	SF106	MRTTWE00010	1 year	2025/6/14
Cable	Rosnol	K1K50-UP0264 -K1K50-4M	MRTTWE00012	1 year	2025/6/14
Temperature/Humidity Meter	TFA	35.1083	MRTTWA00050	1 year	2025/6/2

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
X-Series USB Peak and Average Power Sensor	KEYSIGHT	U2021XA	MRTTWA00014	1 year	2025/4/16
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2025/9/24
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2025/8/12
Attenuator	WTI	218FS-20	MRTTWE00026	1 year	2025/10/31
Attenuator	WTI	218FS-10	MRTTWE00027	1 year	2025/6/13
Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	1 year	2025/6/6
DIVA PLUS Funk-Wetterstation	TFA	35.1083	MRTTWA00050	1 year	2025/6/2

Software	Version	Function
e3	9.160520a	EMI Test Software

6. MEASUREMENT UNCERTAINTY

Where relevant, the following test uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k = 2.

AC Conducted Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 150kHz~30MHz: ± 2.53dB
Radiated Emission Measurement
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): 9kHz ~ 1GHz: ± 4.25dB 1GHz ~ 40GHz: ± 4.45dB
Conducted Power (Carrier Power / Power Density)
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ± 0.84dB
Conducted Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)):± 2.65 dB
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ± 3.3%
Temp. / Humidity
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ±0.82°C/ ±3%
Frequency Error
Measuring Uncertainty for a Level of Confidence of 95% (U=2Uc(y)): ±78.4Hz

7. TEST RESULT

7.1. Summary

FCC Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)	26dB Bandwidth	N/A	Conducted	Pass	Section7.2
15.407(e)	6dB Bandwidth	≥ 500kHz		Pass	Section 7.3
15.407(a)(1)(ii), (2), (3)	Maximum Conducted Output Power	Refer to section 7.4		Pass	Section 7.4
15.407(h)(1)	Transmit Power Control	≤ 24 dBm		Pass	Section 7.5
15.407(a)(1)(ii), (2), (3), (12)	Peak Power Spectral Density	Refer to section 7.6		Pass	Section 7.6
15.407(g)	Frequency Stability	N/A		Pass	Section 7.7
15.407(b)(1), (2), (3), (4)(i)	Undesirable Emissions	Refer to Section 7.8	Radiated	Pass	Section 7.8 & 7.9
15.205, 15.209 15.407(b)(8), (9), (10)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restricted bands must meet the radiated limits detailed in15.209		Pass	
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.10

Notes:

1) Determining compliance is based on the test results met the regulation limits or requirements declared by clients, and the test results don't take into account the value of measurement uncertainty.
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) For radiated emission test, every axis (X, Y, Z) was also verified. The test results shown in the following sections represent the worst-case emissions.

7.2. 26dB Bandwidth Measurement

7.2.1.Test Limit

N/A

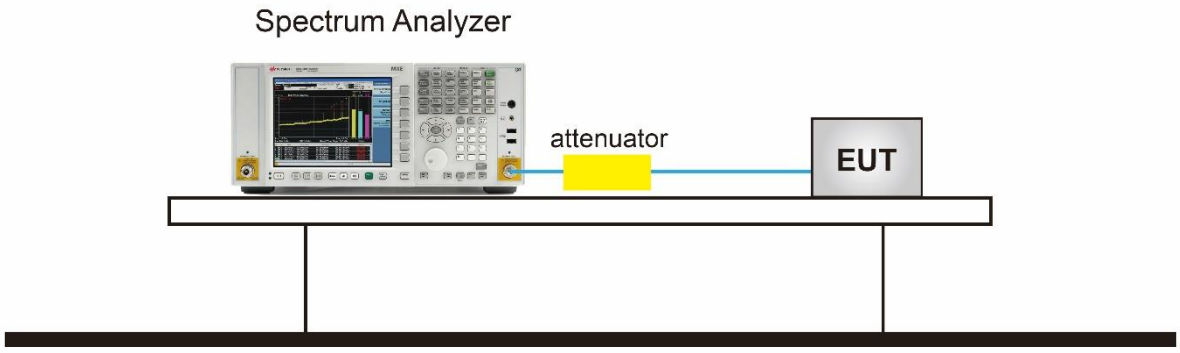
7.2.2.Test Procedure used

K DB 789033 D02v02r01- Section II)C.1) (26dB Bandwidth)
KDB 789033 D02v02r01- Section II)D) (99% Bandwidth)

7.2.3.Test Setting

1. The 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 intermediated power nulls in the fundamental emission.
2. RBW = approximately 1% of the emission bandwidth.
3. VBW ≥ 3×RBW.
4. Detector = Peak.
5. Trace mode = max hold.

7.2.4.Test Setup



7.2.5.Test Result

Product	BE3600 Dual-Band Wi-Fi 7 Router	Test Engineer	Wen
Test Site	SR6	Test Date	2025/1/23~2025/2/3

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 1					
802.11a	6Mbps	36	5180	23.920	16.796
802.11a	6Mbps	40	5200	28.050	16.775
802.11a	6Mbps	48	5240	22.950	16.712
802.11a	6Mbps	52	5260	21.040	16.595
802.11a	6Mbps	60	5300	21.220	16.631
802.11a	6Mbps	64	5320	23.880	16.797
802.11a	6Mbps	100	5500	23.140	16.683
802.11a	6Mbps	116	5580	20.710	16.581
802.11a	6Mbps	140	5700	20.920	16.611
802.11a	6Mbps	144	5720	21.130	16.638
802.11a	6Mbps	149	5745	22.570	16.758
802.11a	6Mbps	157	5785	37.430	18.203
802.11a	6Mbps	165	5825	22.840	16.706
802.11ac-VHT20	MCS0	36	5180	22.060	17.886
802.11ac-VHT20	MCS0	40	5200	28.600	18.049
802.11ac-VHT20	MCS0	48	5240	25.800	17.949
802.11ac-VHT20	MCS0	52	5260	21.020	17.841
802.11ac-VHT20	MCS0	60	5300	20.940	17.828
802.11ac-VHT20	MCS0	64	5320	21.670	17.893
802.11ac-VHT20	MCS0	100	5500	21.820	17.995
802.11ac-VHT20	MCS0	116	5580	21.510	17.743
802.11ac-VHT20	MCS0	140	5700	21.380	17.896
802.11ac-VHT20	MCS0	144	5720	21.390	17.825
802.11ac-VHT20	MCS0	149	5745	22.040	18.032
802.11ac-VHT20	MCS0	157	5785	32.960	18.908
802.11ac-VHT20	MCS0	165	5825	33.130	18.062

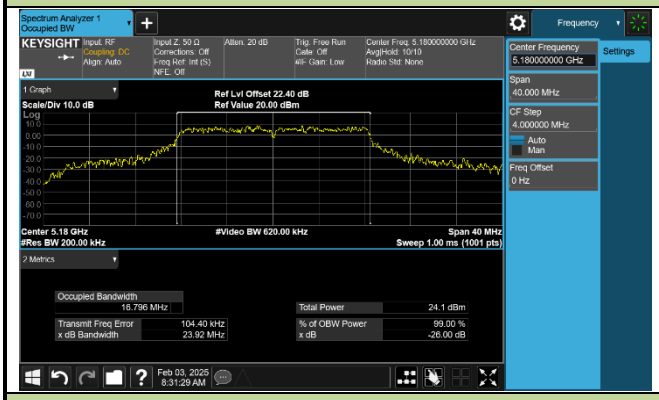
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 1					
802.11ac-VHT40	MCS0	38	5190	42.300	36.329
802.11ac-VHT40	MCS0	46	5230	39.830	36.280
802.11ac-VHT40	MCS0	54	5270	39.260	36.228
802.11ac-VHT40	MCS0	62	5310	40.720	36.407
802.11ac-VHT40	MCS0	102	5510	42.360	36.383
802.11ac-VHT40	MCS0	110	5550	39.190	36.313
802.11ac-VHT40	MCS0	134	5670	38.720	36.205
802.11ac-VHT40	MCS0	142	5710	38.950	36.274
802.11ac-VHT40	MCS0	151	5755	65.310	36.857
802.11ac-VHT40	MCS0	159	5795	61.270	36.402
802.11ac-VHT80	MCS0	42	5210	88.870	75.909
802.11ac-VHT80	MCS0	58	5290	82.200	75.969
802.11ac-VHT80	MCS0	106	5530	81.250	75.848
802.11ac-VHT80	MCS0	122	5610	79.960	75.598
802.11ac-VHT80	MCS0	138	5690	80.780	75.761
802.11ac-VHT80	MCS0	155	5775	82.010	75.749
802.11ac-VHT160	MCS0	50	5250	161.600	154.390
802.11ac-VHT160	MCS0	114	5570	162.400	154.370
802.11ax-HE20	MCS0	36	5180	22.060	17.886
802.11ax-HE20	MCS0	40	5200	25.390	18.978
802.11ax-HE20	MCS0	48	5240	21.340	19.091
802.11ax-HE20	MCS0	52	5260	21.140	19.043
802.11ax-HE20	MCS0	60	5300	20.760	18.957
802.11ax-HE20	MCS0	64	5320	24.450	19.003
802.11ax-HE20	MCS0	100	5500	23.100	19.110
802.11ax-HE20	MCS0	116	5580	21.340	18.941
802.11ax-HE20	MCS0	140	5700	21.000	19.002
802.11ax-HE20	MCS0	144	5720	20.970	19.025
802.11ax-HE20	MCS0	149	5745	29.090	19.169
802.11ax-HE20	MCS0	157	5785	35.990	19.394
802.11ax-HE20	MCS0	165	5825	39.160	19.786

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 1					
802.11ax-HE40	MCS0	38	5190	41.960	37.731
802.11ax-HE40	MCS0	46	5230	41.290	37.820
802.11ax-HE40	MCS0	54	5270	39.400	37.646
802.11ax-HE40	MCS0	62	5310	46.380	37.840
802.11ax-HE40	MCS0	102	5510	40.920	37.855
802.11ax-HE40	MCS0	110	5550	39.670	37.730
802.11ax-HE40	MCS0	134	5670	39.980	37.645
802.11ax-HE40	MCS0	142	5710	39.540	37.803
802.11ax-HE40	MCS0	151	5755	51.120	37.814
802.11ax-HE40	MCS0	159	5795	58.130	37.958
802.11ax-HE80	MCS0	42	5210	80.940	77.341
802.11ax-HE80	MCS0	58	5290	82.160	77.018
802.11ax-HE80	MCS0	106	5530	81.520	77.085
802.11ax-HE80	MCS0	122	5610	80.350	76.965
802.11ax-HE80	MCS0	138	5690	80.550	77.113
802.11ax-HE80	MCS0	155	5775	80.860	77.097
802.11ax-HE160	MCS0	50	5250	163.000	155.800
802.11ax-HE160	MCS0	114	5570	161.600	156.010
802.11be-EHT20	MCS0	36	5180	25.130	19.116
802.11be-EHT20	MCS0	40	5200	27.630	19.116
802.11be-EHT20	MCS0	48	5240	26.800	19.064
802.11be-EHT20	MCS0	52	5260	20.800	19.032
802.11be-EHT20	MCS0	60	5300	20.880	19.043
802.11be-EHT20	MCS0	64	5320	21.740	19.154
802.11be-EHT20	MCS0	100	5500	21.550	19.109
802.11be-EHT20	MCS0	116	5580	21.160	18.982
802.11be-EHT20	MCS0	140	5700	21.580	19.013
802.11be-EHT20	MCS0	144	5720	20.910	19.020
802.11be-EHT20	MCS0	149	5745	29.330	19.042
802.11be-EHT20	MCS0	157	5785	21.410	19.026
802.11be-EHT20	MCS0	165	5825	34.650	19.316

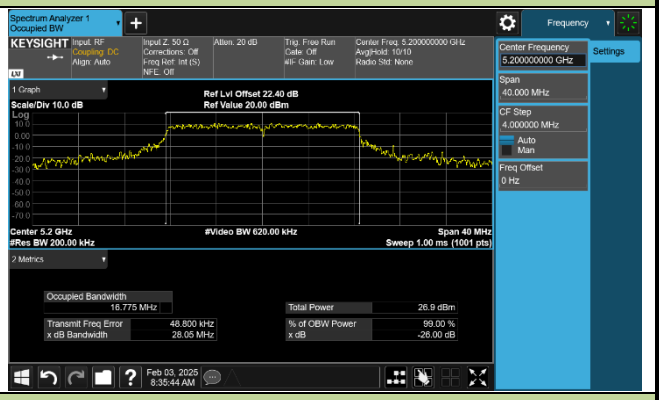
Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 1					
802.11be-EHT40	MCS0	38	5190	41.530	37.827
802.11be-EHT40	MCS0	46	5230	69.590	38.167
802.11be-EHT40	MCS0	54	5270	39.820	37.670
802.11be-EHT40	MCS0	62	5310	42.240	37.875
802.11be-EHT40	MCS0	102	5510	41.810	37.739
802.11be-EHT40	MCS0	110	5550	39.820	37.723
802.11be-EHT40	MCS0	134	5670	39.360	37.682
802.11be-EHT40	MCS0	142	5710	40.030	37.738
802.11be-EHT40	MCS0	151	5755	51.630	37.919
802.11be-EHT40	MCS0	159	5795	42.020	37.861
802.11be-EHT80	MCS0	42	5210	81.150	77.519
802.11be-EHT80	MCS0	58	5290	81.450	77.265
802.11be-EHT80	MCS0	106	5530	82.220	77.117
802.11be-EHT80	MCS0	122	5610	80.350	77.219
802.11be-EHT80	MCS0	138	5690	80.790	77.117
802.11be-EHT80	MCS0	155	5775	81.430	77.169
802.11be-EHT160	MCS0	50	5250	162.600	155.680
802.11be-EHT160	MCS0	114	5570	162.300	156.020

802.11a 26dB Bandwidth & 99% Bandwidth

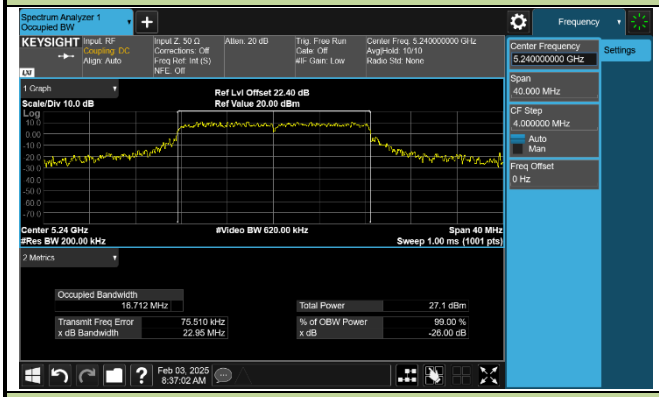
Channel 36 (5180MHz)



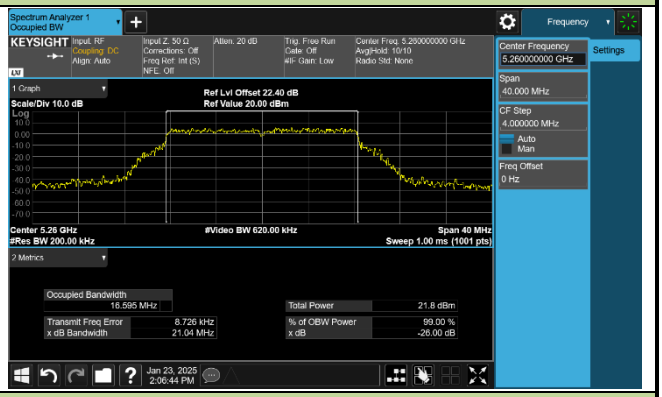
Channel 40 (5200MHz)



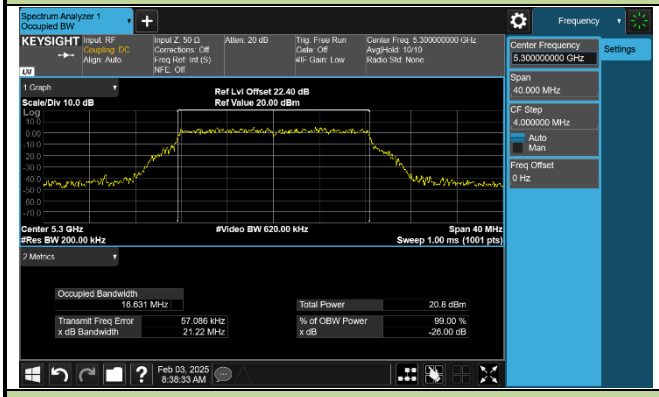
Channel 48 (5240MHz)



Channel 52 (5260MHz)

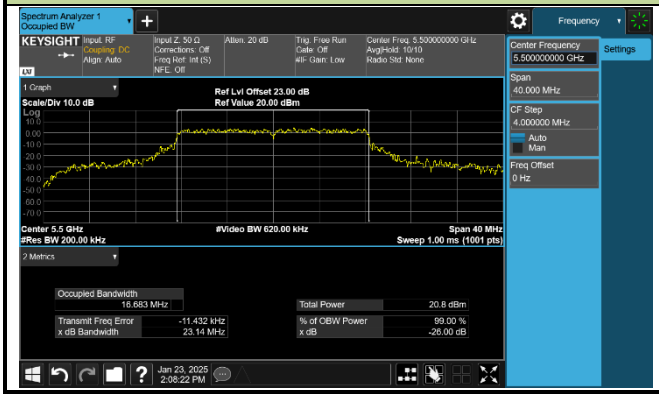


Channel 60 (5300MHz)

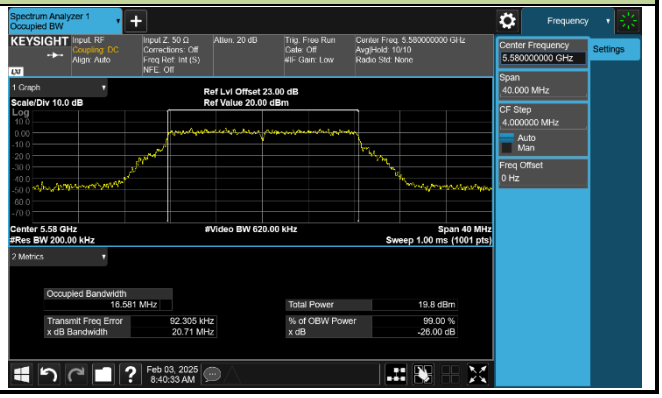


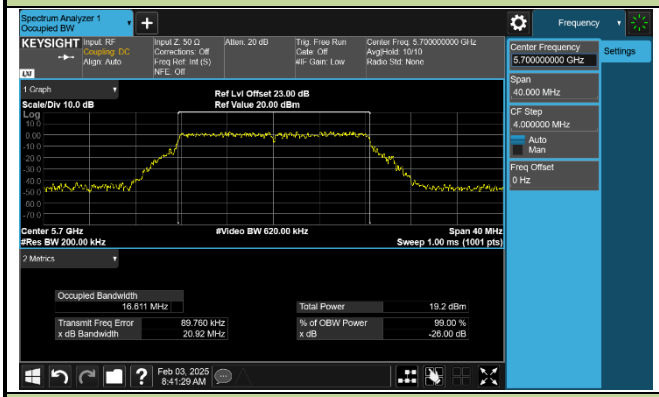
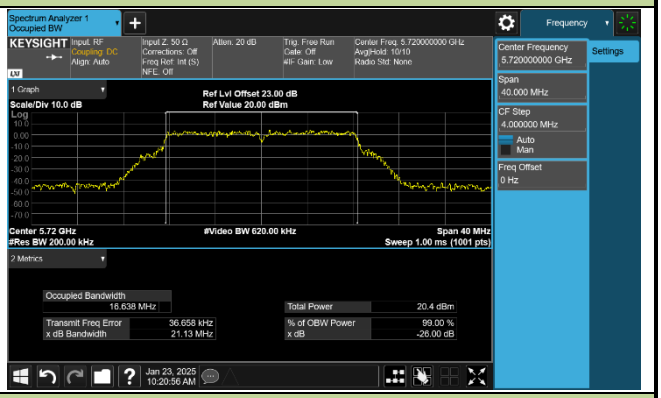
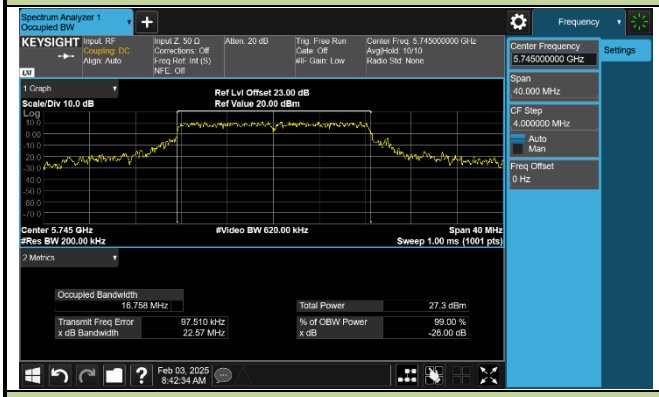
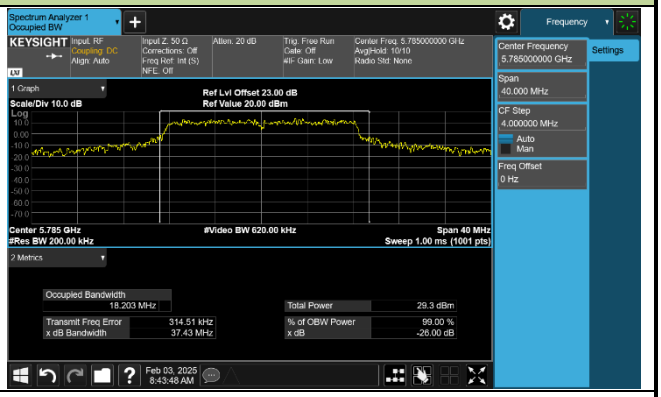
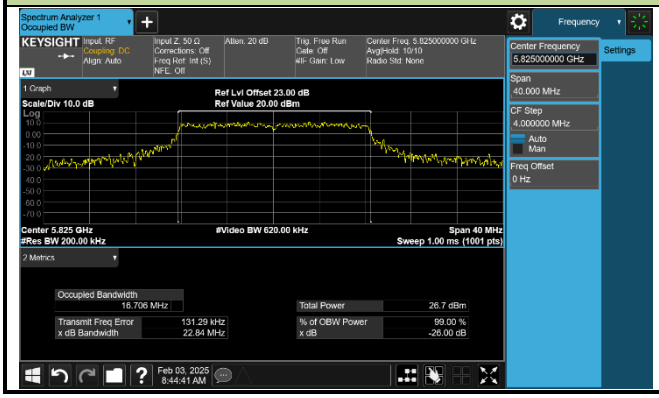
Channel 64 (5320MHz)

Channel 100 (5500MHz)



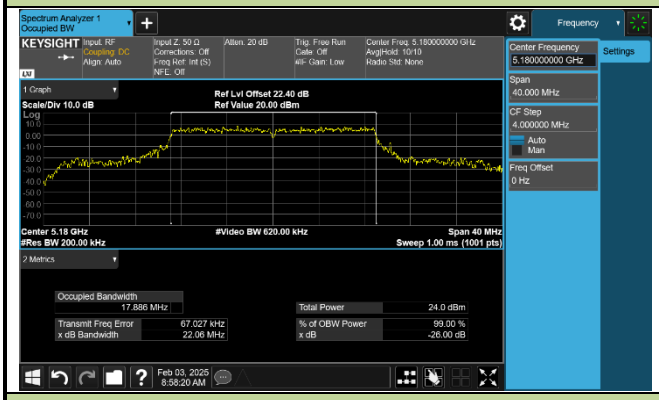
Channel 116 (5580MHz)



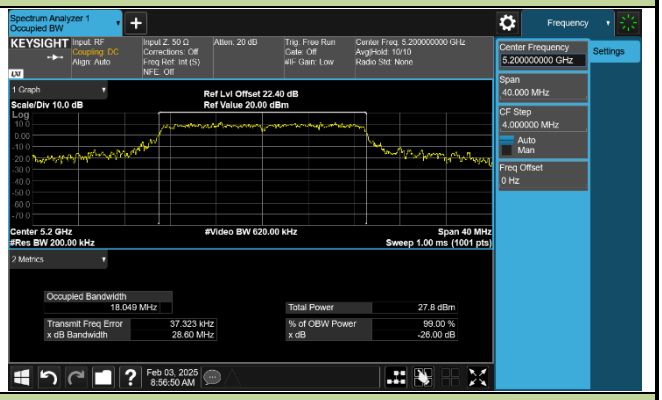
Channel 140 (5700MHz)	Channel 144 (5720MHz)
	
Channel 149 (5745MHz)	**Channel 157 (5785MHz)**
	
Channel 165 (5825MHz)	
	

802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth

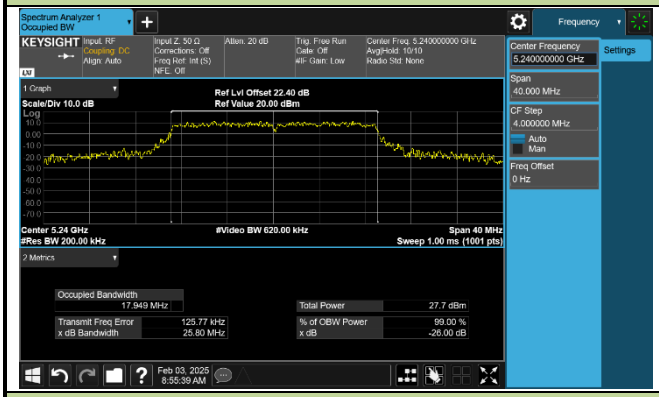
Channel 36 (5180MHz)



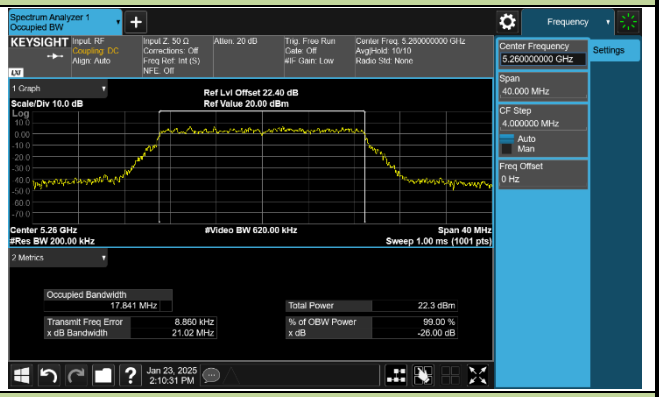
Channel 40 (5200MHz)



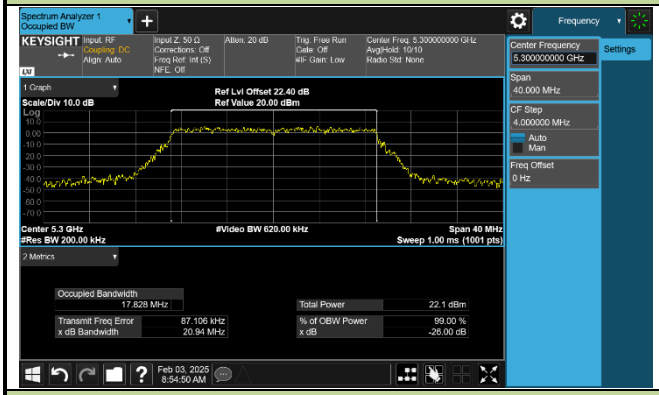
Channel 48 (5240MHz)



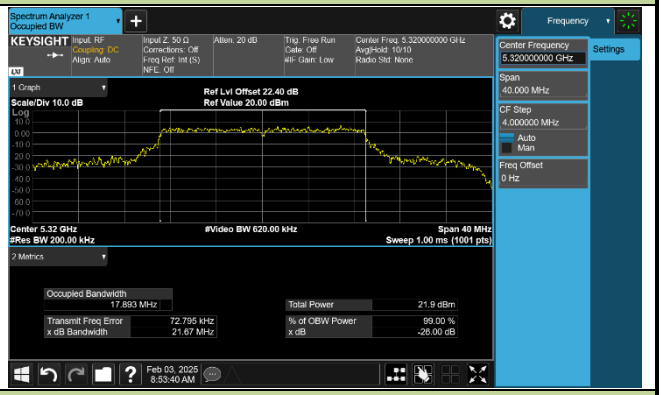
Channel 52 (5260MHz)



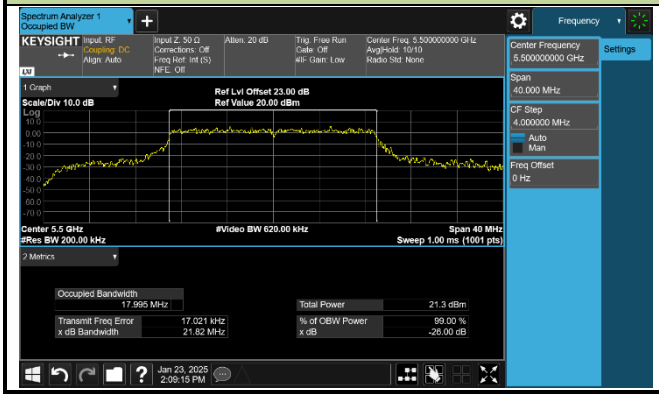
Channel 60 (5300MHz)



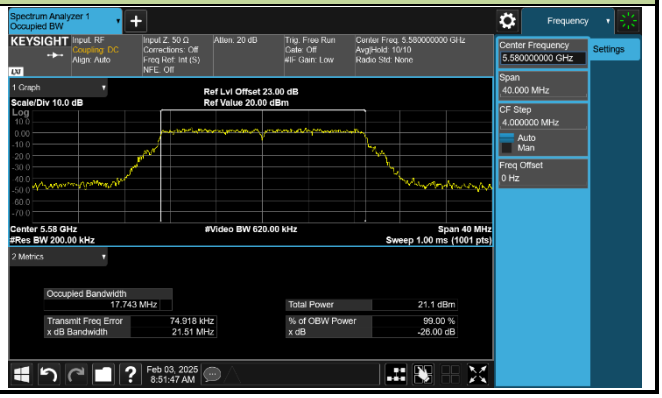
Channel 64 (5320MHz)

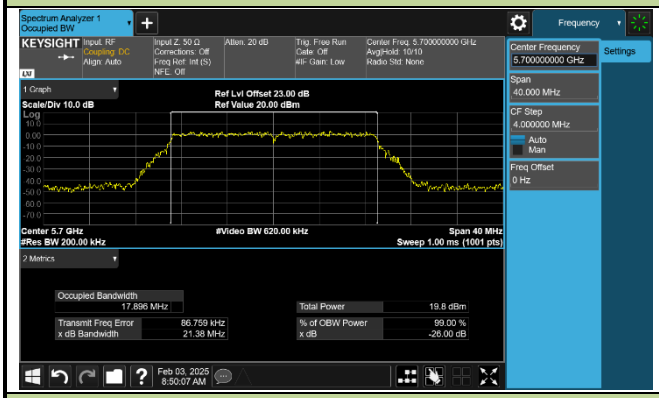
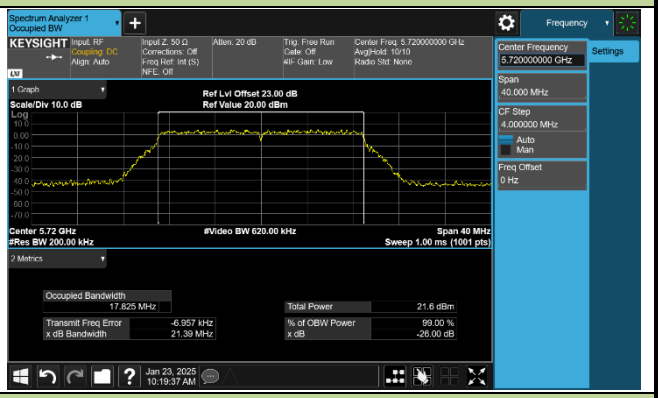
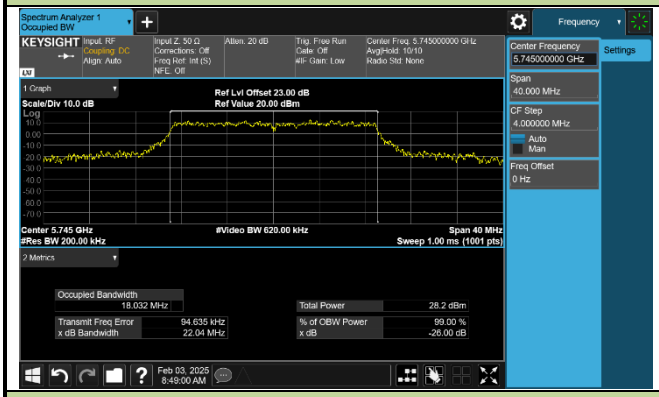
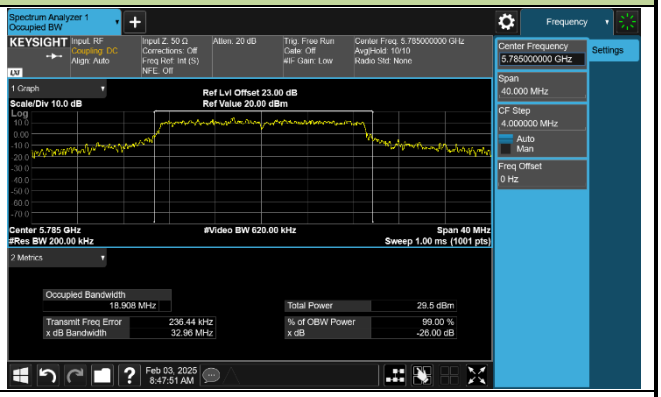
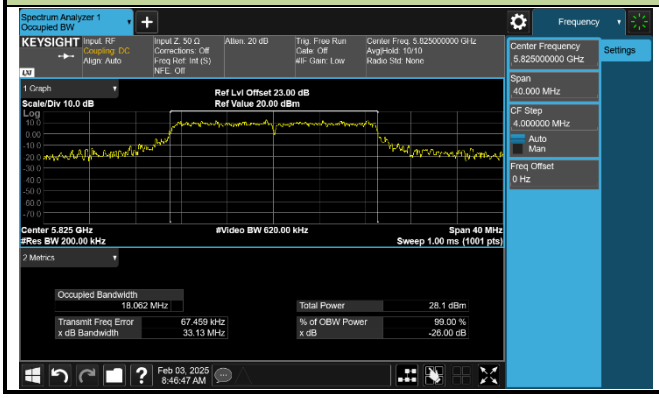


Channel 100 (5500MHz)



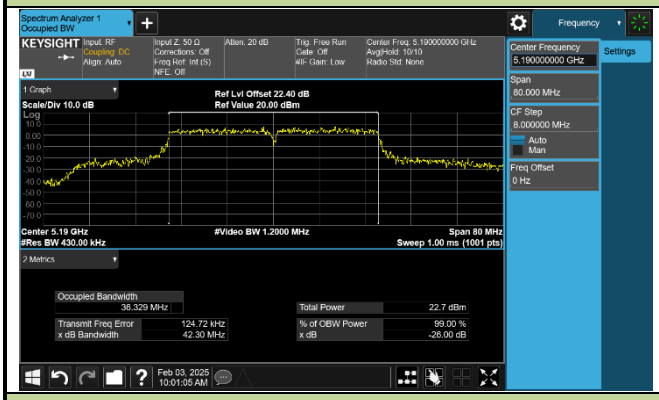
Channel 116 (5580MHz)



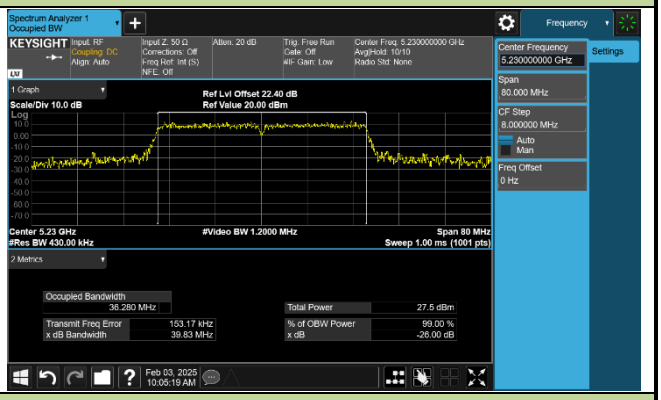
Channel 140 (5700MHz)	Channel 144 (5720MHz)
	
Channel 149 (5745MHz)	**Channel 157 (5785MHz)**
	
Channel 165 (5825MHz)	
	

802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth

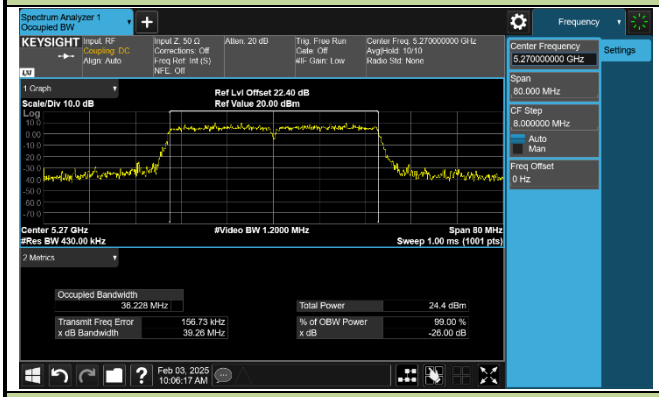
Channel 38 (5190MHz)



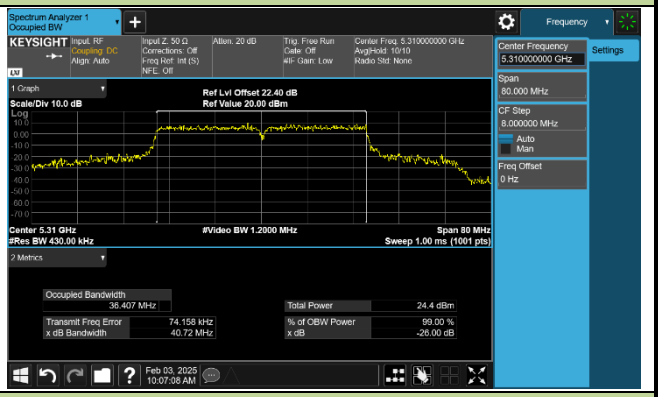
Channel 46 (5230MHz)



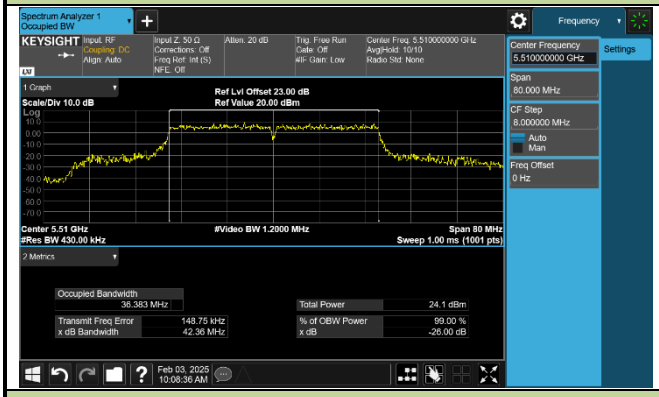
Channel 54 (5270MHz)



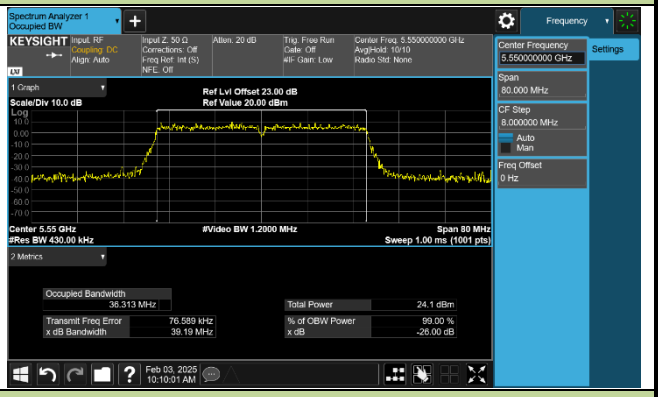
Channel 62 (5310MHz)



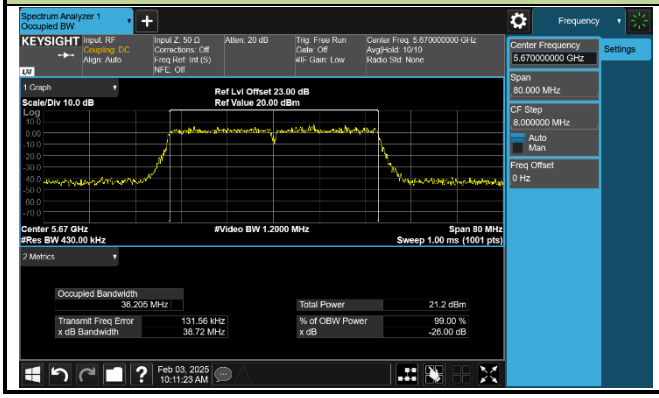
Channel 102 (5510MHz)



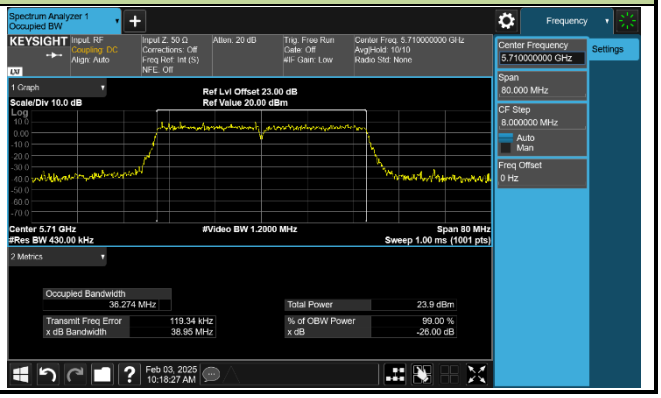
Channel 110 (5550MHz)

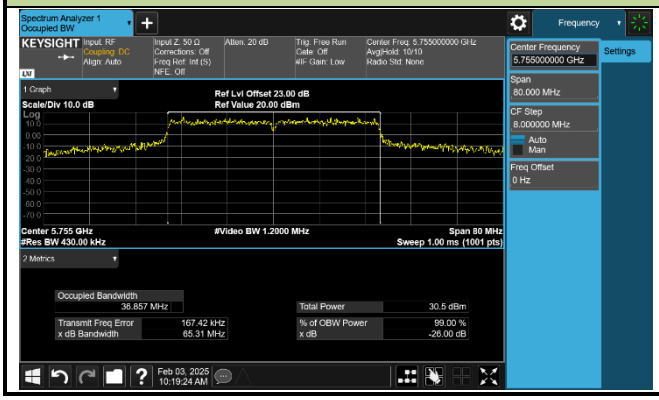
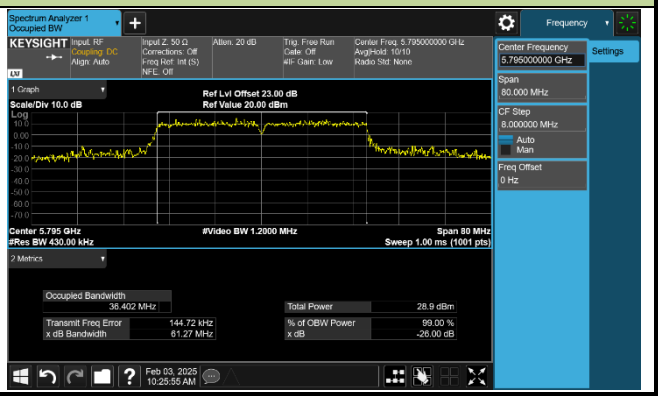


Channel 134 (5670MHz)



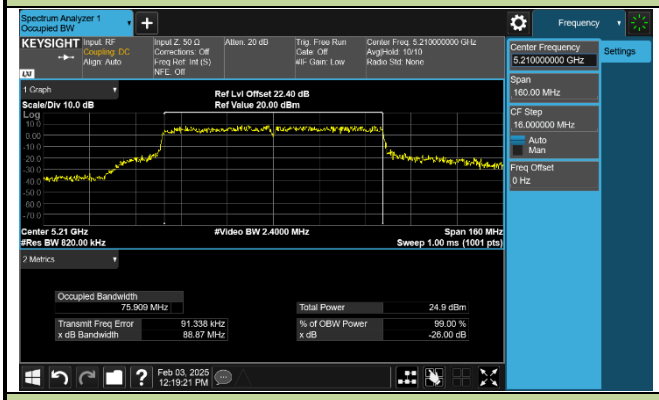
Channel 142 (5710MHz)



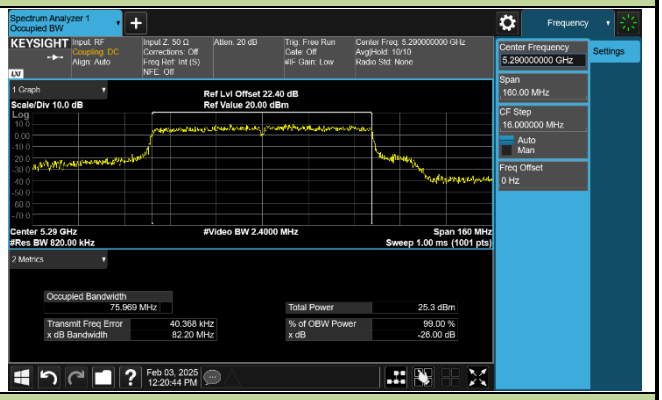
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	

802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth

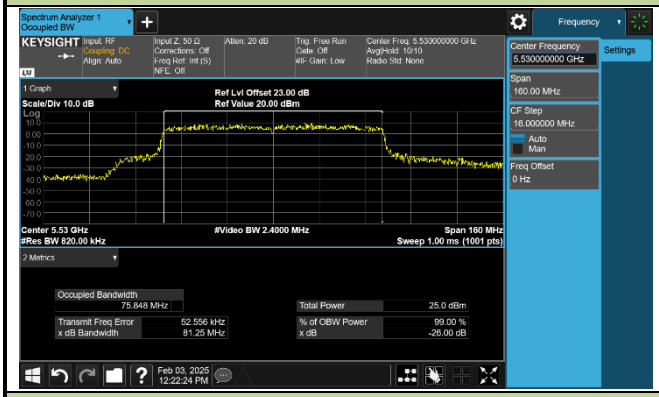
Channel 42 (5210MHz)



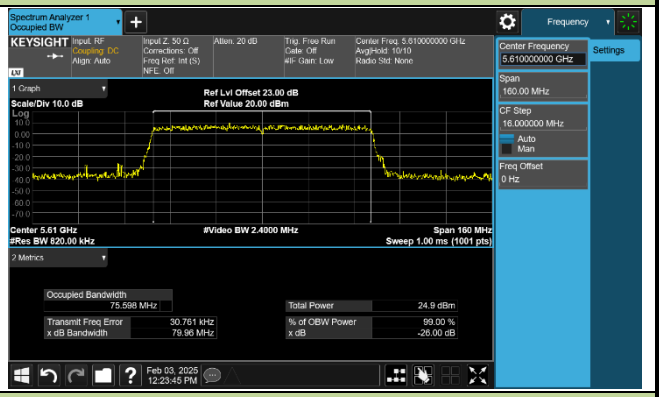
Channel 58 (5290MHz)



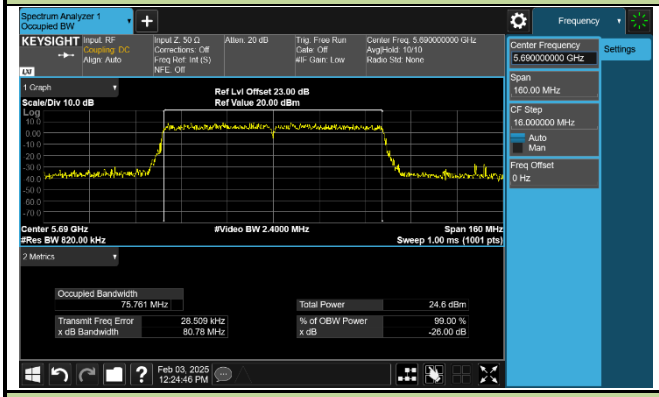
Channel 106 (5530MHz)



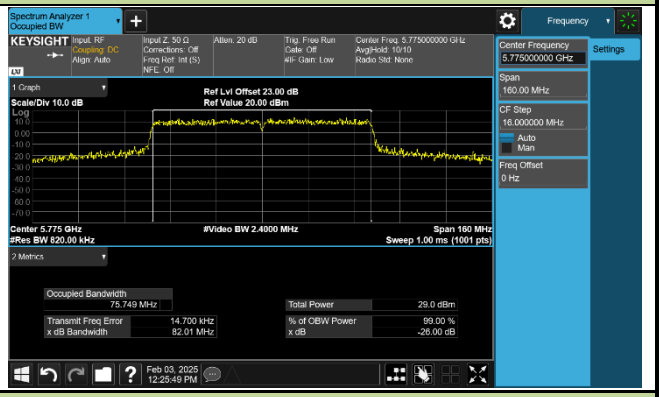
Channel 122 (5610MHz)



Channel 138 (5690MHz)

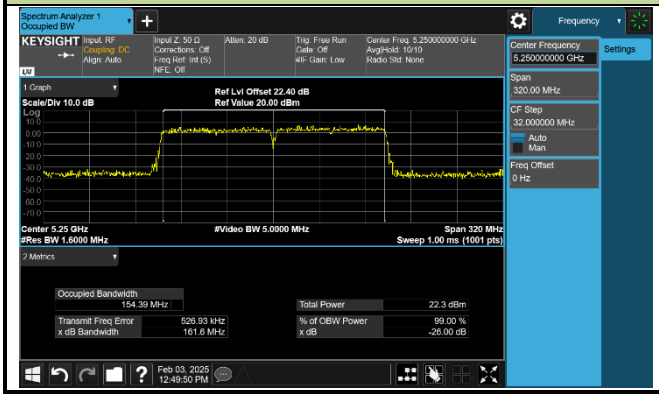


Channel 155 (5775MHz)



802.11ac-VHT160 26dB Bandwidth & 99% Bandwidth

Channel 50 (5250MHz)



Channel 114 (5570MHz)