

MEASUREMENT REPORT

FCC ID : HD5-CT70L0
Applicant : Honeywell International Inc
Application Type : Certification
Product : Mobile Computer
Model No. : CT70-L0
Brand Name : Honeywell
FCC Classification : Unlicensed National Information Infrastructure (NII)
FCC Rule Part(s) : Part15 Subpart E (Section 15.407)
Received Date : May 12, 2025
Test Date : July 2, 2025~August 1, 2025

Tested By : Owen Tsai
(Owen Tsai)
Reviewed By : Paddy Chen
(Paddy Chen)
Approved By : Chenz Ker
(Chenz Ker)



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 and KDB 291074. Test results reported herein relate only to the item(s) tested.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Taiwan) Co., Ltd.

Revision History

Report No.	Version	Description	Issue Date	Note
2505TW0108-U7	1.0	Original Report	2025-08-04	

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General Information

Applicant	Honeywell International Inc
Applicant Address	9680 Old Bailes Rd. Fort Mill, SC 29707 United States
Manufacturer	Honeywell International Inc
Manufacturer Address	9680 Old Bailes Rd. Fort Mill, SC 29707 United States
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.

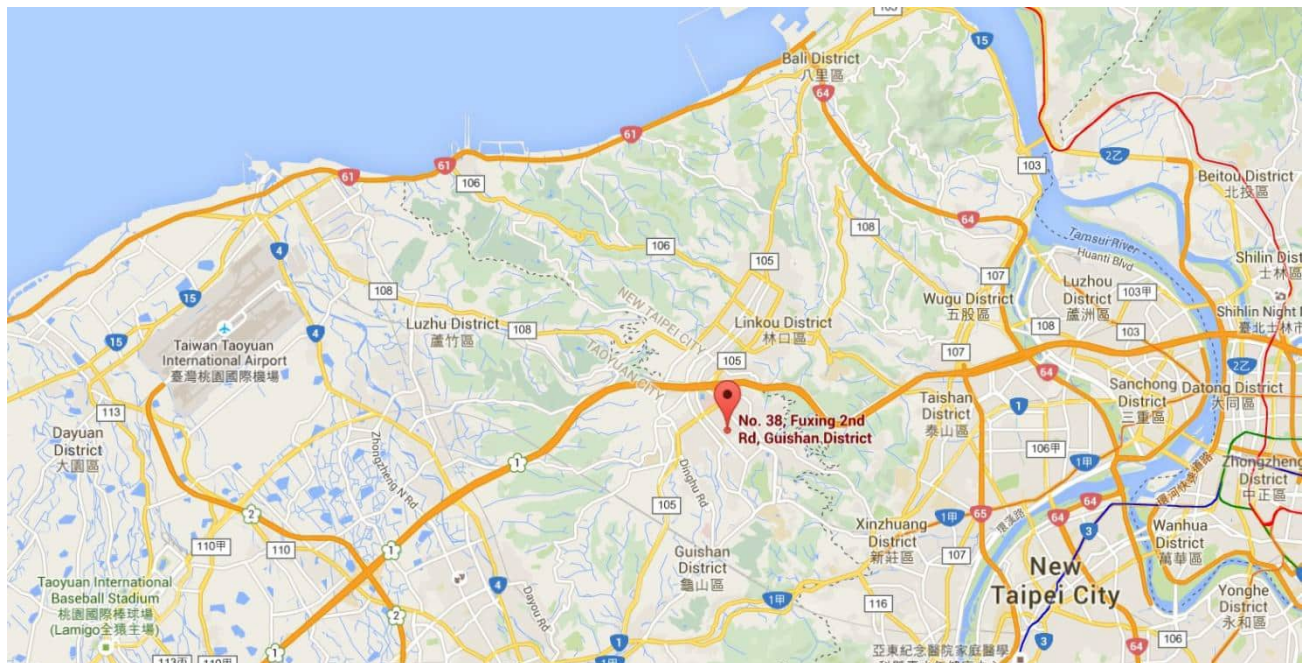
1. INTRODUCTION

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	Mobile Computer
Model No.	CT70-L0
Brand Name	Honeywell
Wi-Fi Specification	802.11a/b/g/n/ac/ax/be
Bluetooth Specification	Main BT/BLE : V6.0 dual mode + 2 nd BLE: V5.3 Single mode
NFC Specification	13.56MHz
EUT Identification No.	#Sample 1 (Conducted) #25163E004B (Radiated)
Accessory	
Standard Battery	Brand: Honeywell MODEL: CT70-BTSC Rating: 3.87Vdc, 4720mAh, 18.27Wh
Extend Battery	Brand: Honeywell MODEL: CT70-BTEC Rating: 3.87Vdc, 7570mAh, 29.3Wh
WPC Battery	Brand: Honeywell MODEL: CT70-BTWC Rating: 3.87Vdc, 4720mAh, 18.27Wh

Note:

1. For other features of this EUT, test report will be issued separately.
2. This product has 2 scanners, can refer as below:

Scanner	S0703	S0803FR	--	--	--
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3. This report used S0703 scanner as the main test.

2.2. Product Specification Subjective to this Report

Frequency Range	For 802.11a/n-HT20/ac-VHT20/ax-HE20/be-EHT20: 5845MHz, 5865MHz, 5885MHz For 802.11n-HT40/ac-VHT40/ax-HE40/be-EHT40: 5835MHz, 5875MHz For 802.11ac-VHT80/ax-HE80/be-EHT80: 5855MHz For 802.11ac-VHT160/ax-HE160/be-EHT160: 5815MHz
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 1733.3Mbps 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
169	5845 MHz	173	5865 MHz	177	5885 MHz

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

Channel	Frequency	Channel	Frequency	Channel	Frequency
167	5835 MHz	175	5875 MHz	--	--

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

Channel	Frequency	Channel	Frequency	Channel	Frequency
171	5855 MHz	--	--	--	--

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

Channel	Frequency	Channel	Frequency	Channel	Frequency
163	5815 MHz	--	--	--	--

2.4. Description of Available Antennas

Antenna Type	Frequency Band (MHz)	T _x Paths	Number of spatial streams	Wi-Fi 0 (TX1) Gain (dBi)	Wi-Fi 1 (TX2) Gain (dBi)	Beamforming Directional Gain(dBi)	CDD Directional Gain (dBi)	
							For Power	For PSD
Wi-Fi Antenna (Brand: Amphenol, M/N: US542A-16-002-C WLAN_S803, US542A-16-012-C WLAN_S703)								
PIFA	2400~2483.5	2	1	0.4	1.3	--	1.30	3.87
	5150~5250	2	1	1.1	0.3	--	1.10	3.72
	5250~5350	2	1	0.8	0.5	--	0.80	3.66
	5470~5725	2	1	2.5	1.1	--	2.50	4.84
	5725~5850	2	1	2.3	1.1	--	2.30	4.73
	5850~5895	2	1	2.1	0.9	--	2.10	4.53
	5925~6425	2	1	1.9	0.7	--	1.90	4.33
	6425~6525	2	1	0.7	0.7	--	0.70	3.71
	6525~6875	2	1	1.6	2.1	--	2.10	4.86
	6875~7125	2	1	1.3	2.6	--	2.60	4.98
Remark:								
1. The EUT supports Cyclic Delay Diversity (CDD) mode, and CDD signals are correlated.								
If antenna gains are not equal, the user may use either of the following methods to calculate directional gain, provided that each transmit antenna is driven by only one spatial stream follows.								
• For power spectral density (PSD) measurements on all devices,								
$dBS(dBW/m^2) = 10 \log_{10} \left(\frac{\sum_{i=1}^N S_{i,j} ^2}{N} \right)$								
• For power measurements on IEEE 802.11 devices,								
Array Gain = 0 dB for N _{ANT} ≤ 4;								
2. 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	√	X
802.11a/n (NII)	2	√	X
802.11ac/ax/be (NII)	2	√	X
802.11ax/be (6XD)	2	√	X

2.5. Test Mode

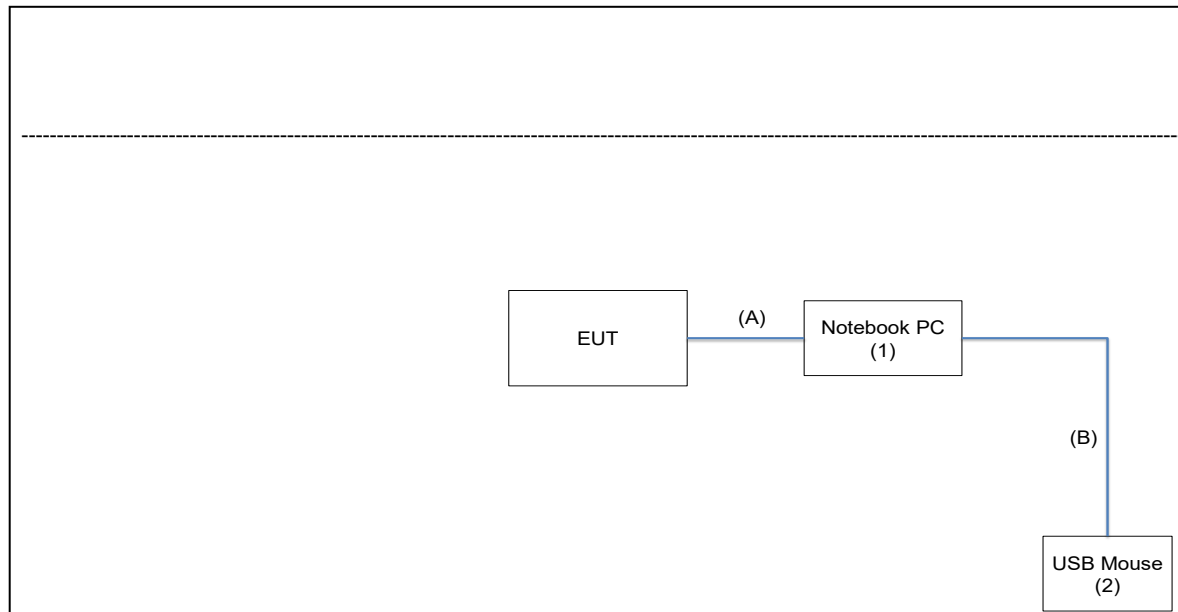
CDD Mode
Mode 1: Transmit by 802.11a_ (6Mbps) (CDD mode)
Mode 2: Transmit by 802.11ac-VHT20_ (MCS0) (CDD mode)
Mode 3: Transmit by 802.11ac-VHT40_ (MCS0) (CDD mode)
Mode 4: Transmit by 802.11ac-VHT80_ (MCS0) (CDD mode)
Mode 5: Transmit by 802.11ac-VHT160_ (MCS0) (CDD mode)
Mode 6: Transmit by 802.11be-EHT20_ (MCS0) (CDD mode)
Mode 7: Transmit by 802.11be-EHT40_ (MCS0) (CDD mode)
Mode 8: Transmit by 802.11be-EHT80_ (MCS0) (CDD mode)
Mode 9: Transmit by 802.11be-EHT160_ (MCS0) (CDD mode)
Mode 10: Transmit by 802.11ax-HE20_26Tone (CDD mode)
Mode 11: Transmit by 802.11ax-HE20_52Tone (CDD mode)
Mode 12: Transmit by 802.11ax-HE20_106Tone (CDD mode)
Mode 13: Transmit by 802.11ax-HE20_242Tone (CDD mode)
Mode 14: Transmit by 802.11ax-HE40_26Tone (CDD mode)
Mode 15: Transmit by 802.11ax-HE40_52Tone (CDD mode)
Mode 16: Transmit by 802.11ax-HE40_106Tone (CDD mode)
Mode 17: Transmit by 802.11ax-HE40_242Tone (CDD mode)
Mode 18: Transmit by 802.11ax-HE40_484Tone (CDD mode)
Mode 19: Transmit by 802.11ax-HE80_26Tone (CDD mode)
Mode 20: Transmit by 802.11ax-HE80_52Tone (CDD mode)
Mode 21: Transmit by 802.11ax-HE80_106Tone (CDD mode)
Mode 22: Transmit by 802.11ax-HE80_242Tone (CDD mode)
Mode 23: Transmit by 802.11ax-HE80_484Tone (CDD mode)
Mode 24: Transmit by 802.11ax-HE80_996Tone (CDD mode)
Mode 25: Transmit by 802.11ax-HE160_26Tone (CDD mode)
Mode 26: Transmit by 802.11ax-HE160_52Tone (CDD mode)
Mode 27: Transmit by 802.11ax-HE160_106Tone (CDD mode)
Mode 28: Transmit by 802.11ax-HE160_242Tone (CDD mode)
Mode 29: Transmit by 802.11ax-HE160_484Tone (CDD mode)
Mode 30: Transmit by 802.11ax-HE160_996Tone (CDD mode)
Mode 31: Transmit by 802.11ax-HE160_1992Tone (CDD mode)
Mode 32: Transmit by 802.11be-EHT20_26Tone (CDD mode)
Mode 33: Transmit by 802.11be-EHT20_52Tone (CDD mode)
Mode 34: Transmit by 802.11be-EHT20_106Tone (CDD mode)
Mode 35: Transmit by 802.11be-EHT20_242Tone (CDD mode)

Mode 36: Transmit by 802.11be-EHT40_26Tone (CDD mode)
Mode 37: Transmit by 802.11be-EHT40_52Tone (CDD mode)
Mode 38: Transmit by 802.11be-EHT40_106Tone (CDD mode)
Mode 39: Transmit by 802.11be-EHT40_242Tone (CDD mode)
Mode 40: Transmit by 802.11be-EHT40_484Tone (CDD mode)
Mode 41: Transmit by 802.11be-EHT80_26Tone (CDD mode)
Mode 42: Transmit by 802.11be-EHT80_52Tone (CDD mode)
Mode 43: Transmit by 802.11be-EHT80_106Tone (CDD mode)
Mode 44: Transmit by 802.11be-EHT80_242Tone (CDD mode)
Mode 45: Transmit by 802.11be-EHT80_484Tone (CDD mode)
Mode 46: Transmit by 802.11be-EHT80_996Tone (CDD mode)
Mode 47: Transmit by 802.11be-EHT160_26Tone (CDD mode)
Mode 48: Transmit by 802.11be-EHT160_52Tone (CDD mode)
Mode 49: Transmit by 802.11be-EHT160_106Tone (CDD mode)
Mode 50: Transmit by 802.11be-EHT160_242Tone (CDD mode)
Mode 51: Transmit by 802.11be-EHT160_484Tone (CDD mode)
Mode 52: Transmit by 802.11be-EHT160_996Tone (CDD mode)
Mode 53: Transmit by 802.11be-EHT160_1992Tone (CDD mode)
Mode 54: Transmit by 802.11be-EHT20_52+26Tone (CDD mode)
Mode 55: Transmit by 802.11be-EHT20_102+26Tone (CDD mode)
Mode 56: Transmit by 802.11be-EHT20_484+242Tone (CDD mode)
Mode 57: Transmit by 802.11be-EHT20_996+484Tone (CDD mode)
Mode 58: Transmit by 802.11be-EHT80_484+242Tone (CDD mode)
Mode 59: Transmit by 802.11be-EHT80_996+484Tone (CDD mode)
Mode 60: Transmit by 802.11be-EHT80_996+484+242Tone (CDD mode)
Remark: 1. For Radiated emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power. 2. 802.11n, 802.11ac, 802.11ax and 802.11be have same modulation type and same power parameter, so we only show 802.11ac, 802.11be test data in report.

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	USB Type C Cable	Shielded, 1.0m
B	USB Mouse Cable	Shielded, 1.8m

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	V14 G3 ABA	N/A	Non-shielded, 0.8m
2	USB Mouse	Logitech	M90	N/A	N/A

2.8. Description of Test Software

The test utility software used during testing was “QRCT”, the version is ver4.0-00209.

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 291074 D02v01
- KDB 662911 D01v02r01
- ANSI C63.10-2013

2.10. Duty Cycle

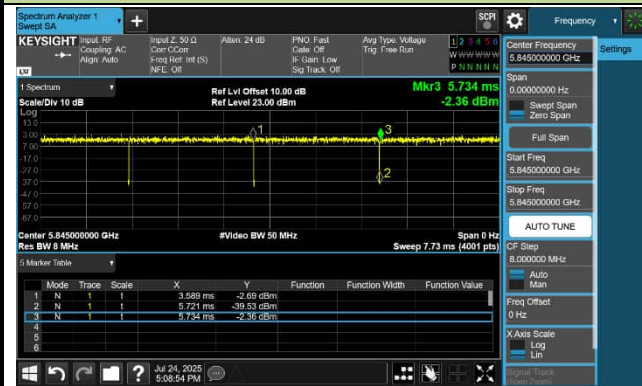
5GHz (NII) operation is possible in 20MHz, 40MHz, 80MHz and 160MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz. The RBW and VBW were both greater than 50/T, where 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	99.39%
802.11ac-VHT20	99.82%
802.11ac-VHT40	99.27%
802.11ac-VHT80	99.63%
802.11ac-VHT160	99.82%
802.11be-EHT20	99.64%
802.11be-EHT40	98.92%
802.11be-EHT80	98.56%
802.11be-EHT160	99.64%
802.11ax-HE20_26 Tone	98.82%
802.11ax-HE20_52 Tone	99.36%
802.11ax-HE20_106 Tone	99.36%
802.11ax-HE20_242 Tone	98.91%
802.11ax-HE40_484 Tone	97.81%
802.11ax-HE80_996 Tone	98.72%
802.11ax-HE160_1992 Tone	99.38%
802.11be-EHT20_26 Tone	98.64%
802.11be-EHT20_52 Tone	99.06%
802.11be-EHT20_106 Tone	99.09%
802.11be-EHT20_242 Tone	98.64%
802.11be-EHT40_484 Tone	96.82%
802.11be-EHT80_996 Tone	95.76%
802.11be-EHT160_1992 Tone	94.10%

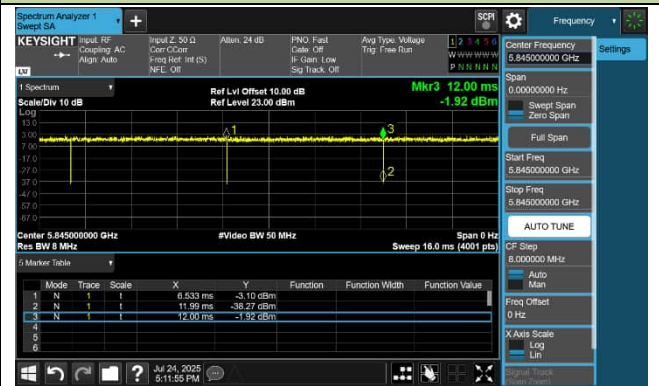
Test Mode	Duty Cycle
802.11be-EHT20_52+26 Tone	99.34%
802.11be-EHT20_102+26 Tone	99.31%
802.11be-EHT80_484+242 Tone	95.81%
802.11be-EHT160_996+484 Tone	97.67%
802.11be-EHT80_484+242Tone	97.98%
802.11be-EHT160_996+484Tone	99.45%
802.11be-EHT160_996+484+242Tone	99.27%

Duty Cycle

802.11a



802.11ac-VHT20



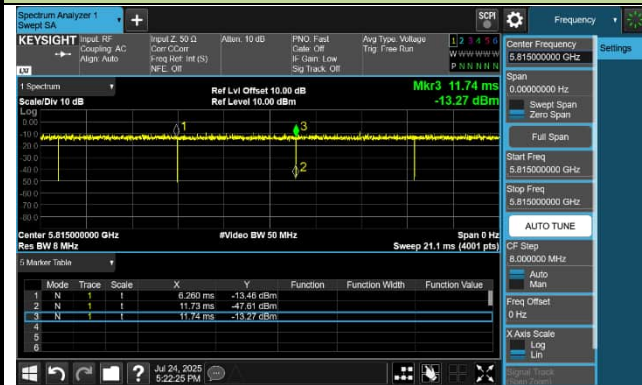
802.11ac-VHT40



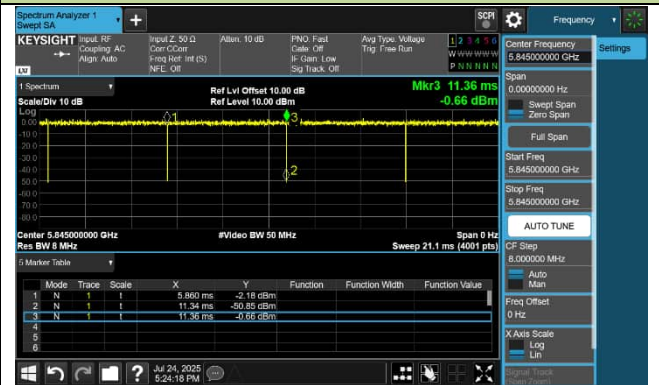
802.11ac-VHT80



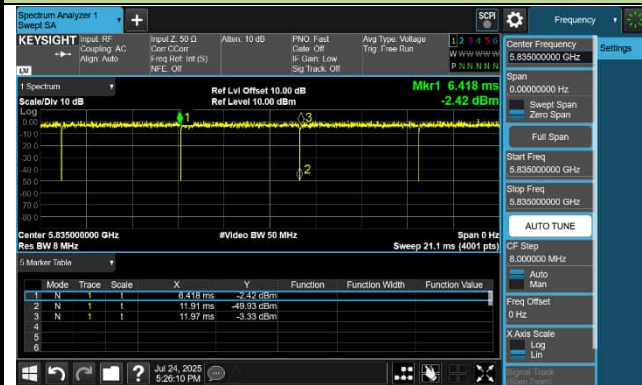
802.11ac-VHT160



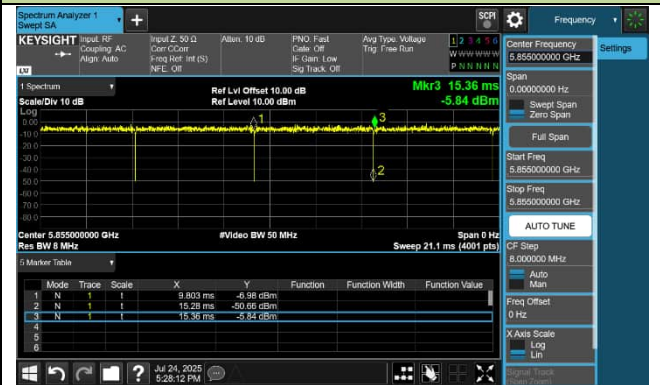
802.11be-EHT20



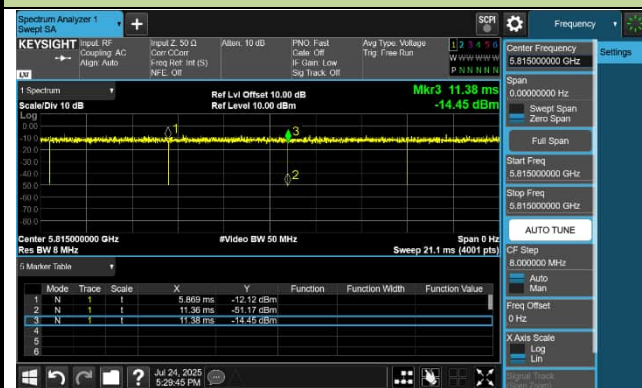
802.11be-EHT40



802.11be-EHT80

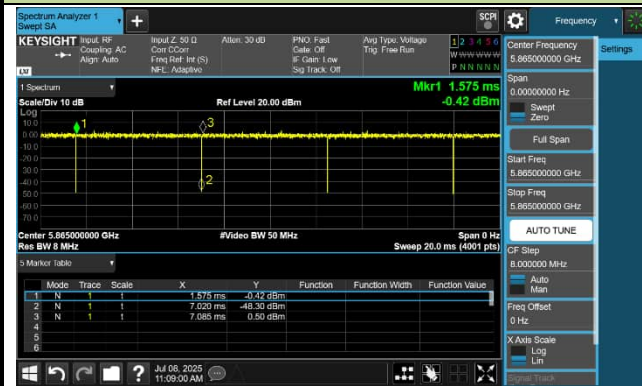


802.11be-EHT160



Duty Cycle

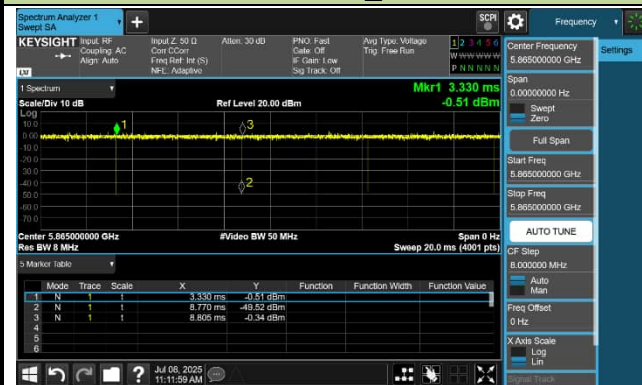
802.11ax-HE20_26 Tone



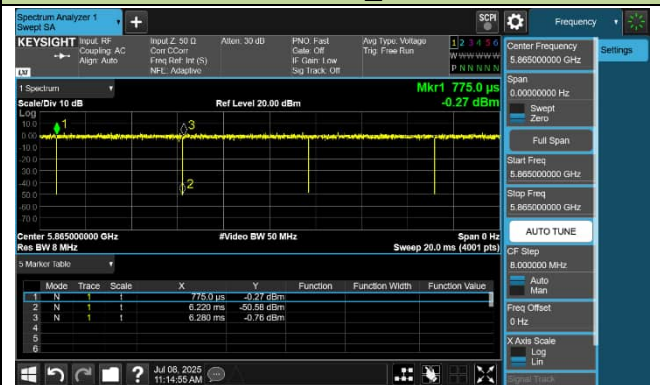
802.11ax-HE20_52 Tone



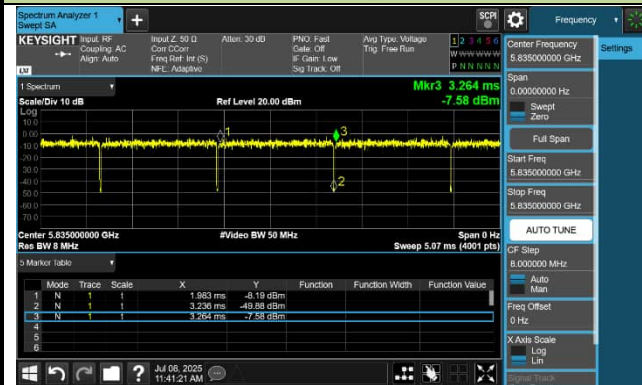
802.11ax-HE20_106 Tone



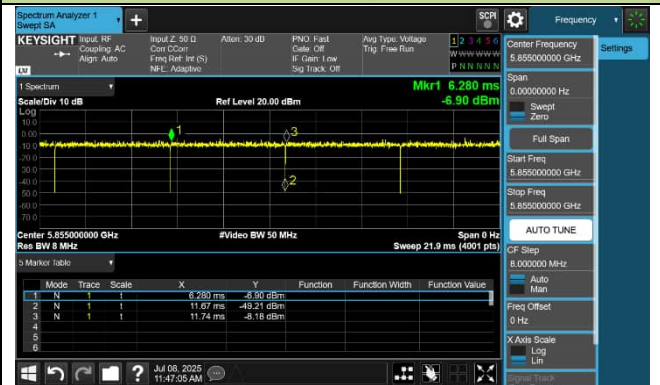
802.11ax-HE20_242 Tone



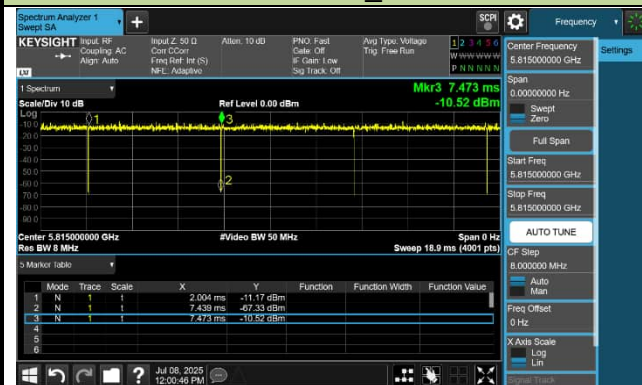
802.11ax-HE40_484 Tone



802.11ax-HE80_996 Tone

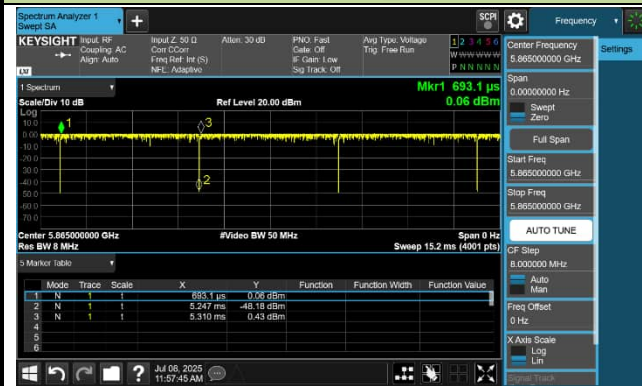


802.11ax-HE160_1992 Tone

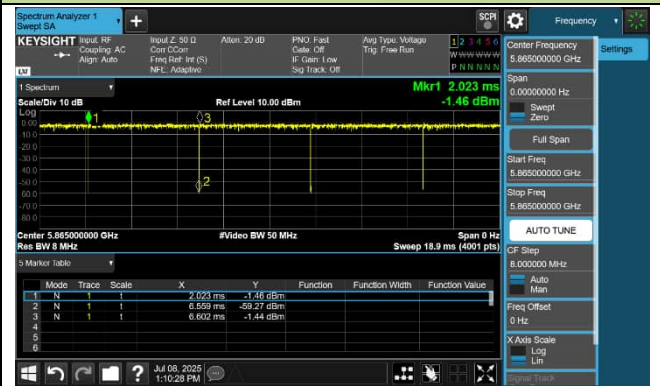


Duty Cycle

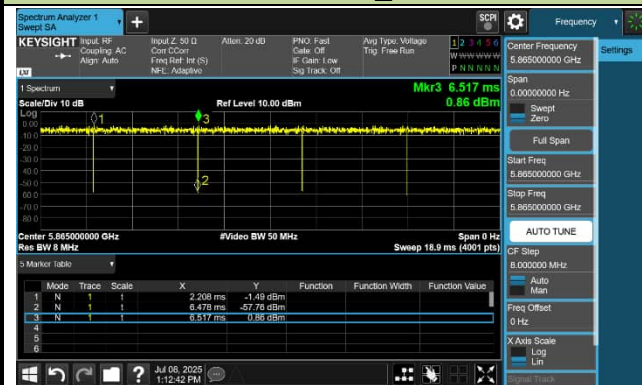
802.11be-EHT20_26 Tone



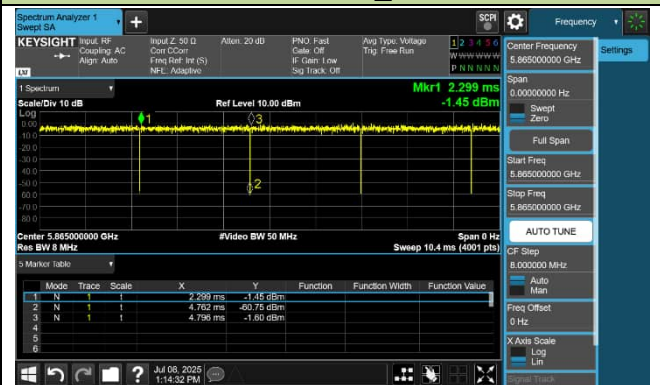
802.11be-EHT20_52 Tone



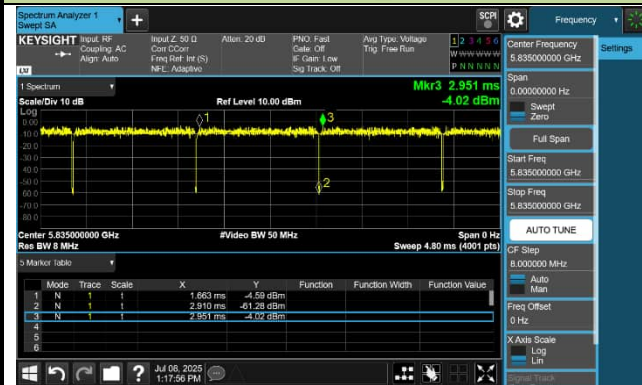
802.11be-EHT20_106 Tone



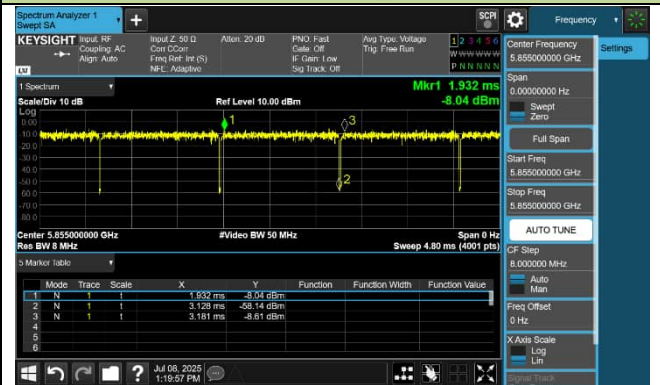
802.11be-EHT20_242 Tone



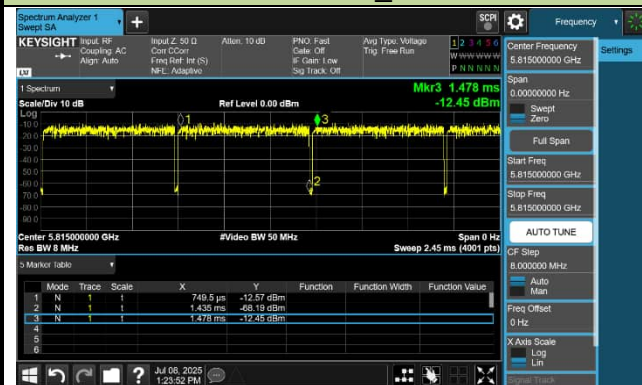
802.11be-EHT40_484 Tone



802.11be-EHT80_996 Tone

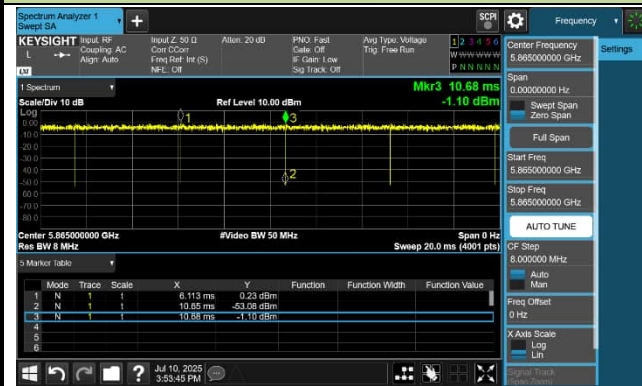


802.11be-EHT160_1992 Tone

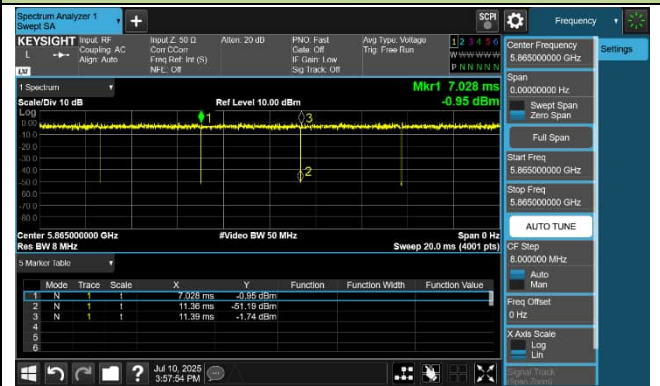


Duty Cycle

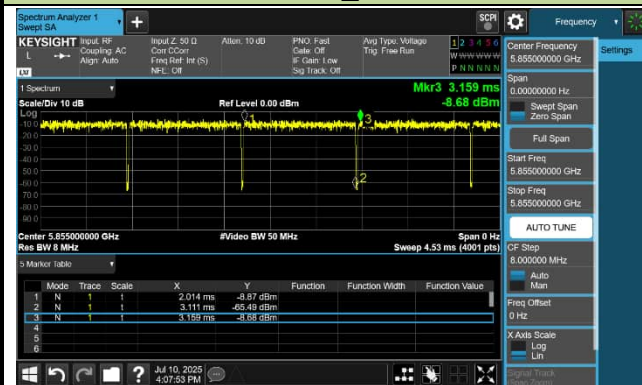
802.11be-EHT20_52+26 Tone



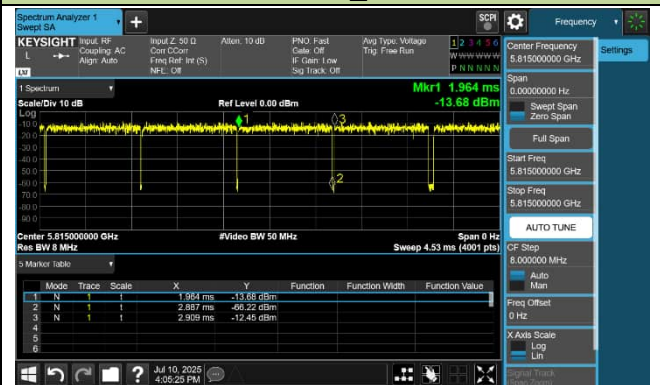
802.11be-EHT20_102+26 Tone



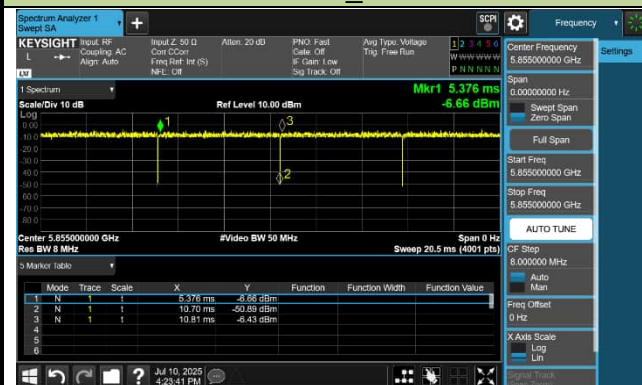
802.11be-EHT80_484+242 Tone



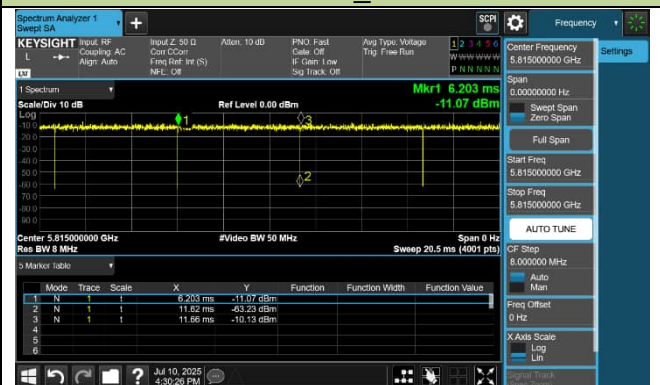
802.11be-EHT160_996+484 Tone



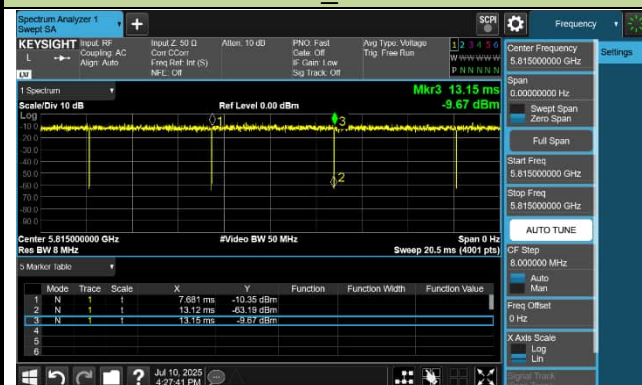
802.11be-EHT80_484+242Tone



802.11be-EHT160_996+484Tone



802.11be-EHT160_996+484+242Tone



2.11. Test Configuration

The device was tested per the guidance of KDB 789033 D02v02r01. ANSI C63.10-2013 was used to reference the appropriate EUT setup for radiated spurious emissions testing and 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 pamphlets supplied to the user and be readily visible to the purchaser at the time of purchase.

However, when the device is 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 and label location.

3. DESCRIPTION OF TEST

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 D02v02r01 were used in the measurement.

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 8'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, 50 Ω /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. An 80cm 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 to maximize 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

KDB 291074 DR01: An Indoor Access point in the U-NII-4 band (5.850-5.895 GHz) and U-NII -3 & -4 span channels must use an integrated antenna

- The antenna of the device is built in and locked inside the enclosure.

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	MRTTWA00020	1 year	2026/4/14
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2026/3/4
Cable	Rosnol	N1C50-RG400-B 1C50-500CM	MRTTWE00013	1 year	2026/6/13

Radiated Emissions

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2026/4/16
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00086	1 year	2025/11/5
Broadband Hornantenna	RFSPIN	DRH18-E	MRTTWA00087	1 year	2026/5/14
Broadband Preamplifier	EMC Instruments corporation	EMC118A45SE	MRTTWA00088	1 year	2026/5/12
Breitband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2026/3/27
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2026/3/20
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2026/3/4
Signal Analyzer	R&S	FSVA3044	MRTTWA00092	1 year	2025/9/20
Antenna Cable	HUBERSUHNER	SF106	MRTTWE00034	1 year	2026/6/24
Cable	HUBERSUHNER	EMC105-NM-NM -3000	MRTTWE00035	1 year	2026/6/24
Temperature/Humidity Meter	TFA	35.1083	MRTTWA00032	1 year	2026/6/5

Conducted Test Equipment

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2025/9/24
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2026/7/14
USB Wideband Power Sensor	KEYSIGHT	U2021XA	MRTTWA00015	1 year	2026/3/11
Temperature & Humidity Chamber	TEN BILLION	TTH-B3UP	MRTTWA00036	1 year	2026/7/3

Test Software

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

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	Section 7.2
15.407(e)	6dB Bandwidth	$\geq 500\text{kHz}$		Pass	Section 7.3
15.407(a)(3)(ii)	Maximum Conducted Output Power	Refer to section 7.4		Pass (22.63dBm @EIRP)	Section 7.4
15.407(a)(3)(ii) (12)	Peak Power Spectral Density	Refer to section 7.5		Pass	Section 7.5
15.407(g)	Frequency Stability	N/A		Pass	Section 7.6
15.407(b)(5)	Undesirable Emissions	Refer to Section 7.7	Radiated	Pass (41.68dBuV/m@avg)	Section 7.7
15.205, 15.209 15.407(b)(5)(i), (8), (9)	General Field Strength Limits (Restricted Bands and Radiated Emission Limits)	Emissions in restrictedbands must meet theradiated limits detailed in15.209		Pass (65.98dBuV/m@Peak)	Section 7.8
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.9

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) Output power test was verified over all data rates of each mode (data refers to operational description), and then choose the maximum power output (low data rate) for final test of each channel.
- 4) 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

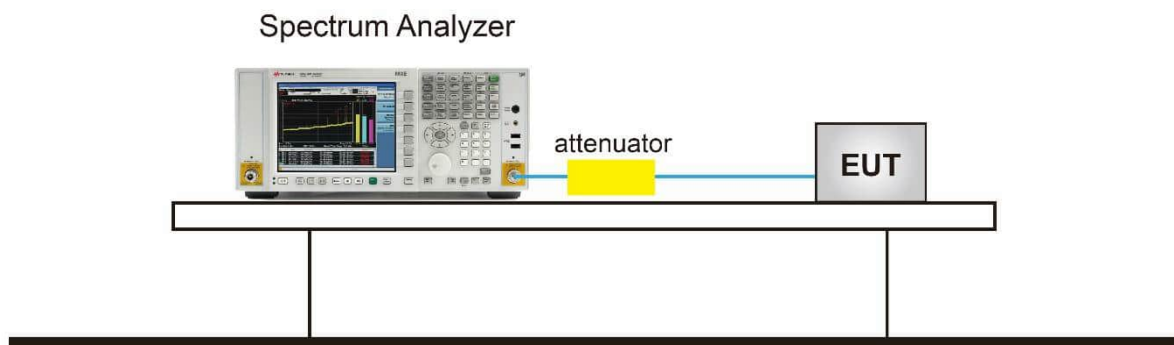
K DB 789033 D02v02r01- Section II)C.1) (26dB Bandwidth)

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. $VBW \geq 3 \times RBW$.
4. Detector = Peak.
5. Trace mode = max hold.

7.2.4. Test Setup



7.2.5.Test Result

Product	Mobile Computer	Temperature	25°C
Test Engineer	Marvin	Relative Humidity	54%
Test Site	SR6	Test Date	2025/7/17~2025/7/23
Test Mode	U-NII-4		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 7					
802.11a	6Mbps	169	5845	20.67	16.495
802.11a	6Mbps	173	5865	21.08	16.510
802.11a	6Mbps	177	5885	20.59	16.512
802.11ac-VHT20	MCS0	169	5845	21.18	17.657
802.11ac-VHT20	MCS0	173	5865	20.99	17.668
802.11ac-VHT20	MCS0	177	5885	21.29	17.680
802.11ac-VHT40	MCS0	167	5835	40.42	36.244
802.11ac-VHT40	MCS0	175	5875	40.61	36.242
802.11ac-VHT80	MCS0	171	5855	81.41	75.610
802.11ac-VHT160	MCS0	163	5815	164.2	155.20
802.11be-EHT20	MCS0	169	5845	20.44	18.843
802.11be-EHT20	MCS0	173	5865	21.12	18.877
802.11be-EHT20	MCS0	177	5885	20.25	18.866
802.11be-EHT40	MCS0	167	5835	39.69	37.802
802.11be-EHT40	MCS0	175	5875	40.32	37.790
802.11be-EHT80	MCS0	171	5855	80.70	77.134
802.11be-EHT160	MCS0	163	5815	163.4	156.98

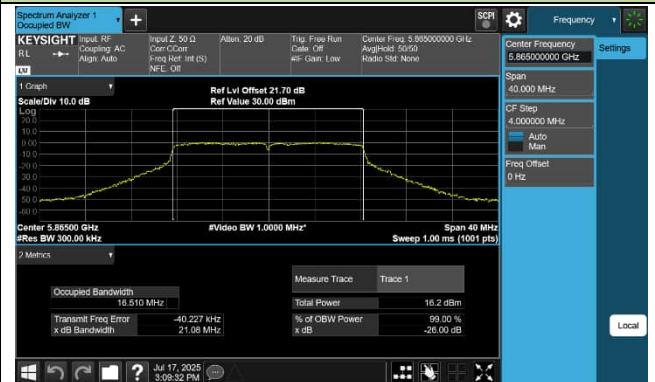
Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 7						
802.11be-EHT20	26 Tone	RU 0	169	5845	20.57	18.548
802.11be-EHT20		RU 8	177	5885	20.49	18.567
802.11be-EHT20	52 Tone	RU 74	169	5845	19.97	18.410
802.11be-EHT20		RU 77	177	5885	17.91	16.1710
802.11be-EHT20	106 Tone	RU 106	169	5845	19.21	16.919
802.11be-EHT20		RU 107	177	5885	19.76	17.658
802.11be-EHT20	242 Tone	RU 122	169	5845	22.83	19.102
802.11be-EHT20		RU 122	177	5885	22.76	19.109

802.11a 26dB Bandwidth & 99% Bandwidth

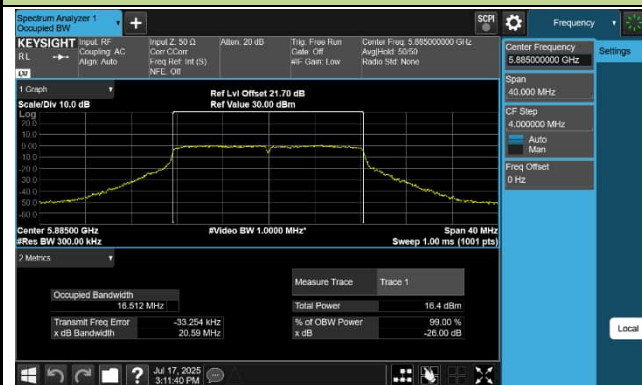
Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)

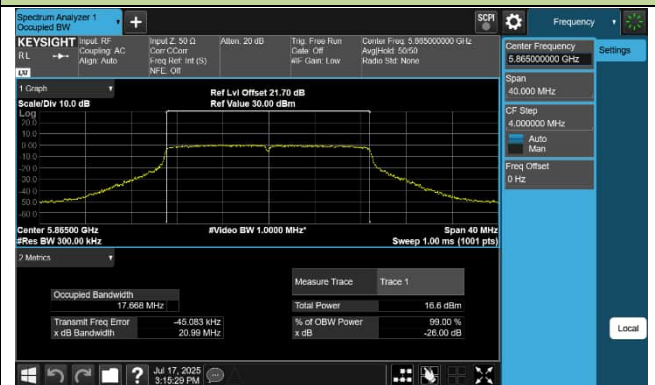


802.11ac-VHT20 26dB Bandwidth & 99% Bandwidth

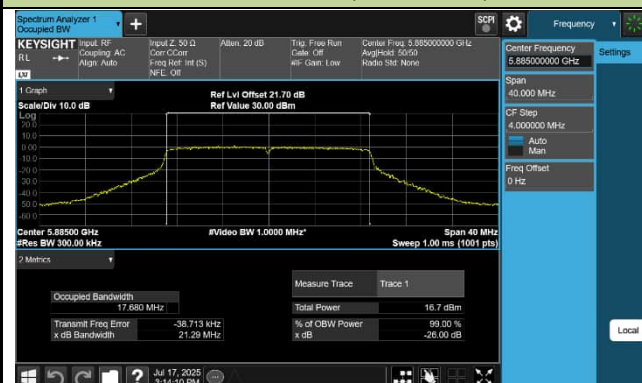
Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)



802.11ac-VHT40 26dB Bandwidth & 99% Bandwidth

Channel 167 (5835MHz)



Channel 175 (5875MHz)



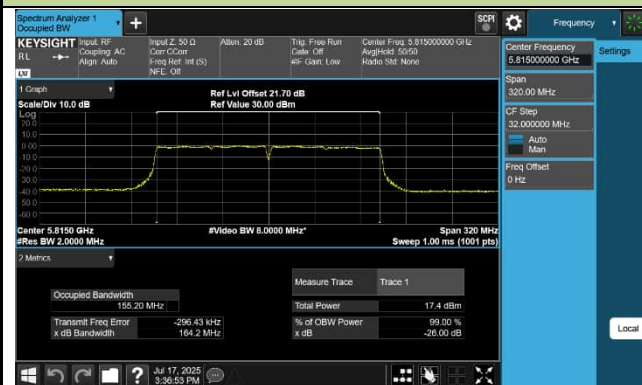
802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth

Channel 171 (5855MHz)



802.11ac-VHT160 26dB Bandwidth & 99% Bandwidth

Channel 163 (5815MHz)



802.11be-EHT20 26dB Bandwidth & 99% Bandwidth

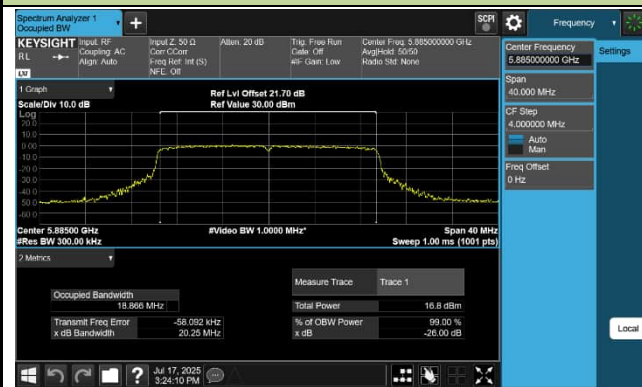
Channel 169 (5845MHz)



Channel 173 (5865MHz)

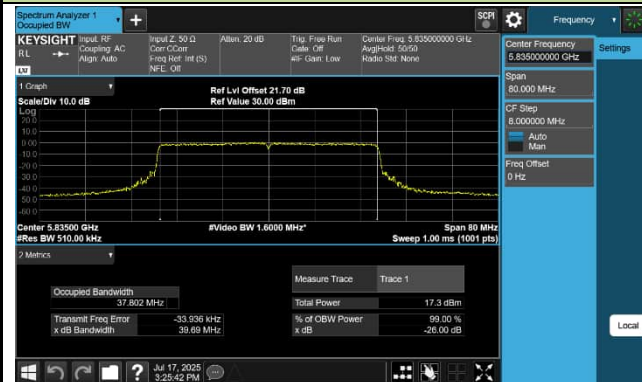


Channel 177 (5885MHz)

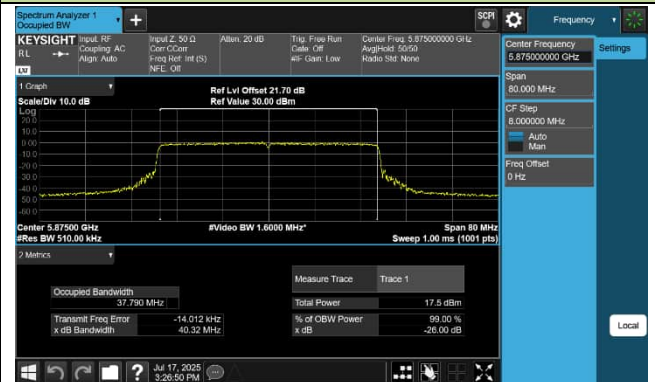


802.11 be-EHT40 26dB Bandwidth & 99% Bandwidth

Channel 167 (5835MHz)

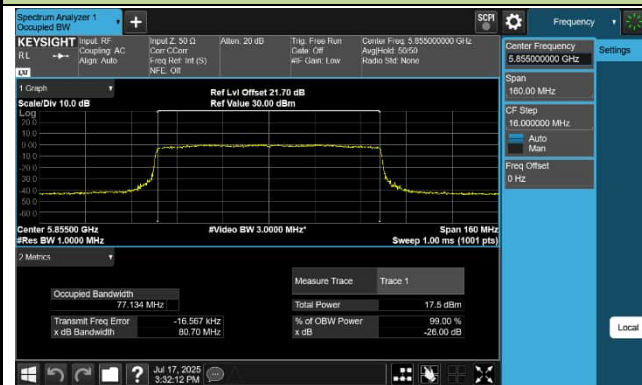


Channel 175 (5875MHz)



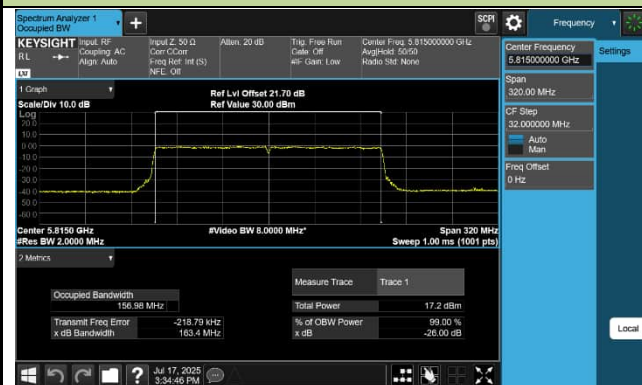
802.11 be-EHT80 26dB Bandwidth & 99% Bandwidth

Channel 171 (5855MHz)



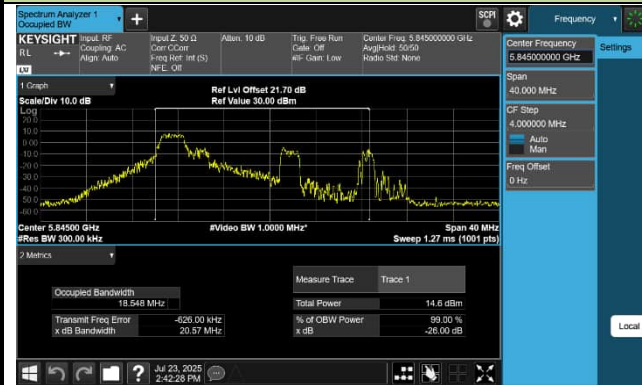
802.11 be-EHT160 26dB Bandwidth & 99% Bandwidth

Channel 163 (5815MHz)



802.11be-EHT20 26dB Bandwidth & 99% Bandwidth

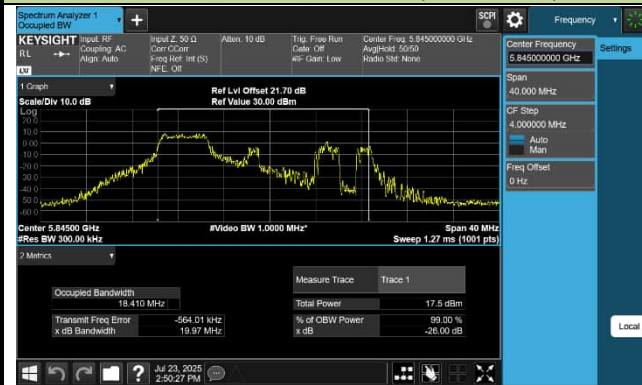
26 Tone_RU0_CH169 (5845MHz)



26 Tone_RU8_CH177 (5885MHz)



52 Tone_RU74_CH169 (5845MHz)



52 Tone_RU77_CH177 (5885MHz)



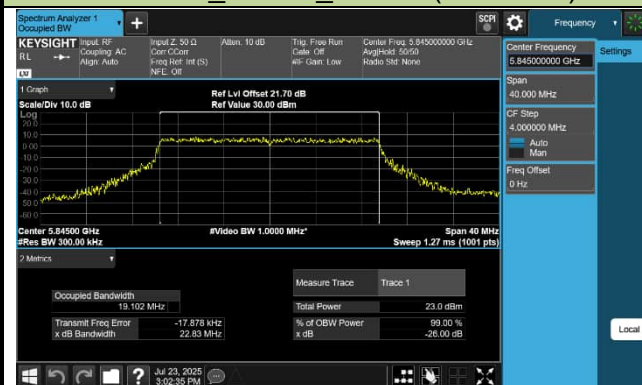
106 Tone_RU106_CH169 (5845MHz)



106 Tone_RU107_CH177 (5885MHz)



242 Tone_RU122_CH169 (5845MHz)



242 Tone_RU122_CH177 (5885MHz)



7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

The minimum 6dB bandwidth shall be at least 500 kHz.

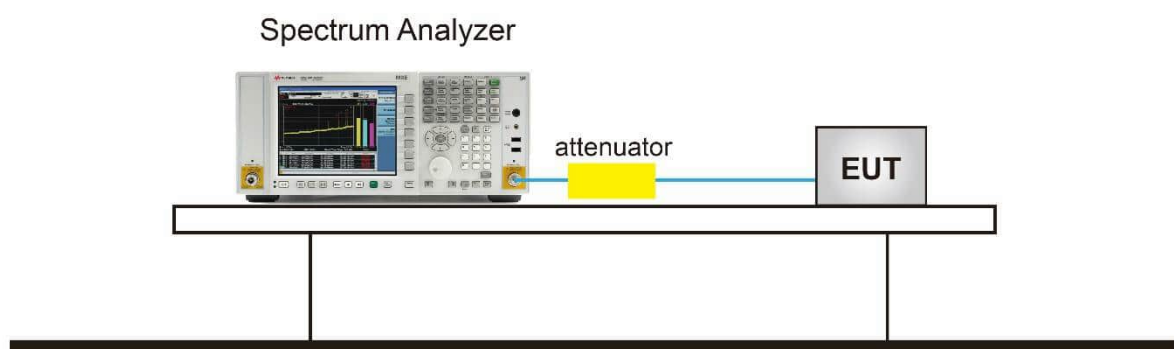
7.3.2. Test Procedure used

KDB 789033 D02v02r01- Section C.2

7.3.3. Test Setting

1. Set center frequency to the nominal EUT channel center frequency.
2. RBW = 100 kHz.
3. VBW $3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

7.3.4. Test Setup



7.3.5. Test Result

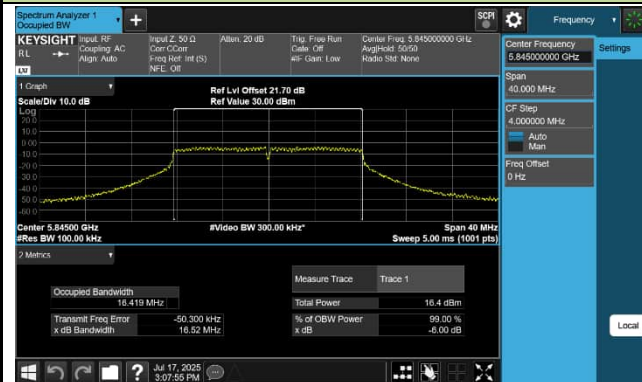
Product	Mobile Computer	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/7/17~2025/7/23
Test Mode	U-NII-4		

Test Mode	Data Rate/ MCS	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 7						
802.11a	6Mbps	169	5845	16.52	≥ 0.5	Pass
802.11a	6Mbps	173	5865	16.50	≥ 0.5	Pass
802.11a	6Mbps	177	5885	16.53	≥ 0.5	Pass
802.11ac-VHT20	MCS0	169	5845	17.74	≥ 0.5	Pass
802.11ac-VHT20	MCS0	173	5865	17.73	≥ 0.5	Pass
802.11ac-VHT20	MCS0	177	5885	17.75	≥ 0.5	Pass
802.11ac-VHT40	MCS0	167	5835	36.53	≥ 0.5	Pass
802.11ac-VHT40	MCS0	175	5875	36.52	≥ 0.5	Pass
802.11ac-VHT80	MCS0	171	5855	76.51	≥ 0.5	Pass
802.11ac-VHT160	MCS0	163	5815	156.4	≥ 0.5	Pass
802.11be-EHT20	MCS0	169	5845	19.11	≥ 0.5	Pass
802.11be-EHT20	MCS0	173	5865	19.09	≥ 0.5	Pass
802.11be-EHT20	MCS0	177	5885	19.13	≥ 0.5	Pass
802.11be-EHT40	MCS0	167	5835	38.24	≥ 0.5	Pass
802.11be-EHT40	MCS0	175	5875	38.24	≥ 0.5	Pass
802.11be-EHT80	MCS0	171	5855	78.21	≥ 0.5	Pass
802.11be-EHT160	MCS0	163	5815	157.9	≥ 0.5	Pass

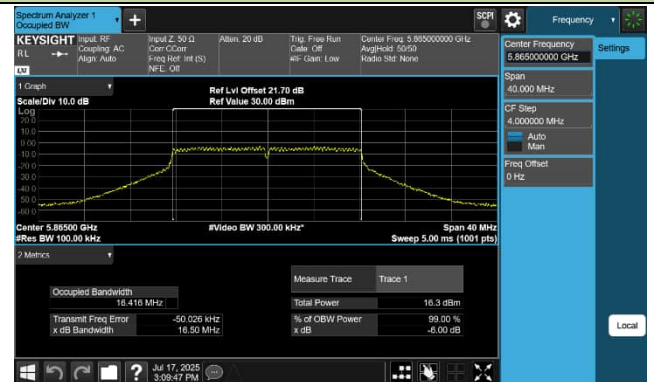
Test Mode	RU Size	RU Index	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 7							
802.11be-EHT20	26 Tone	RU 0	169	5845	2.075	≥ 0.5	Pass
802.11be-EHT20		RU 8	177	5885	2.040	≥ 0.5	Pass
802.11be-EHT20	52 Tone	RU 74	169	5845	4.030	≥ 0.5	Pass
802.11be-EHT20		RU 77	177	5885	4.07	≥ 0.5	Pass
802.11be-EHT20	106 Tone	RU 106	169	5845	17.09	≥ 0.5	Pass
802.11be-EHT20		RU 107	177	5885	17.18	≥ 0.5	Pass
802.11be-EHT20	242 Tone	RU 122	169	5845	19.03	≥ 0.5	Pass
802.11be-EHT20		RU 122	177	5885	19.12	≥ 0.5	Pass

802.11a 6dB Bandwidth

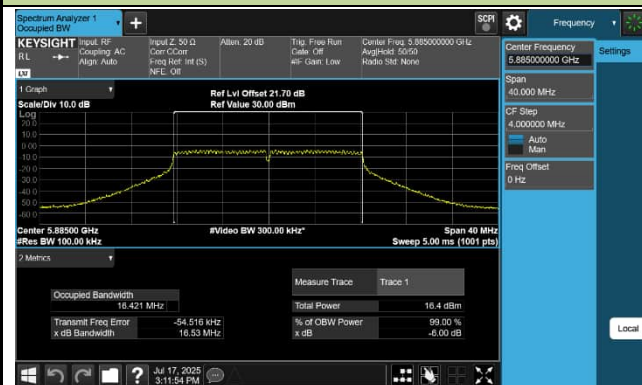
Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)

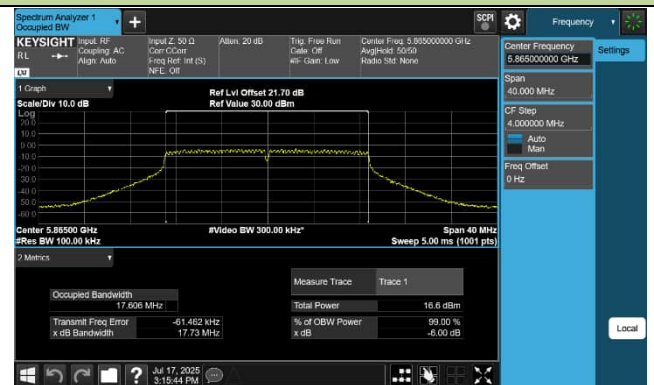


802.11ac-VHT20 6dB Bandwidth

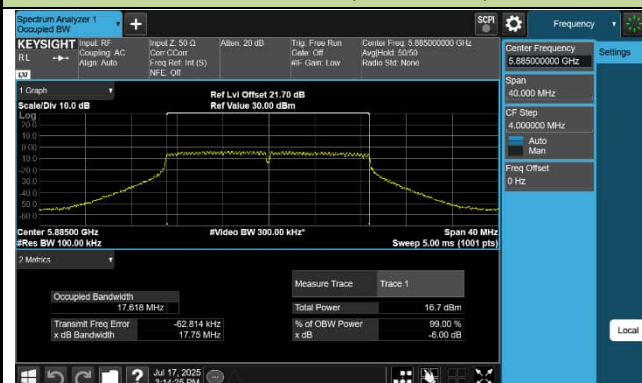
Channel 169 (5845MHz)



Channel 173 (5865MHz)

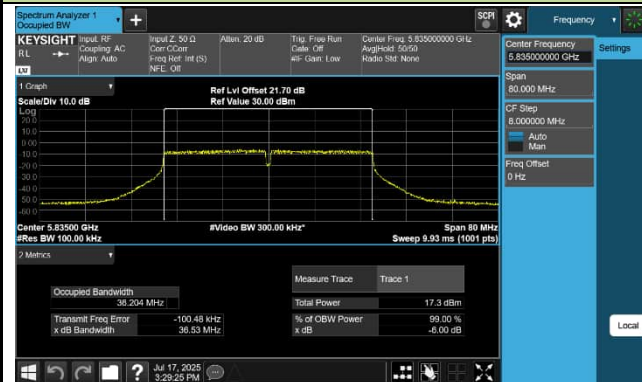


Channel 177 (5885MHz)

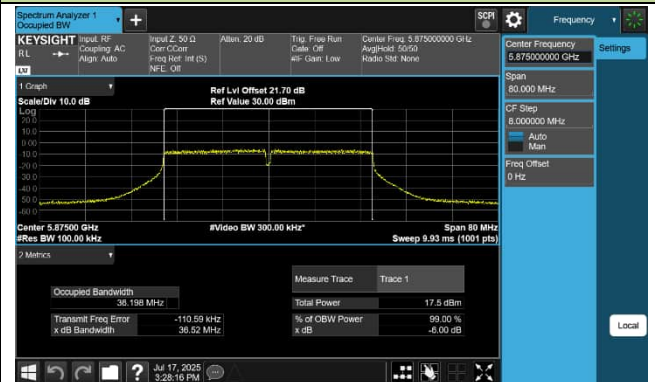


802.11ac-VHT40 6dB Bandwidth

Channel 167 (5835MHz)

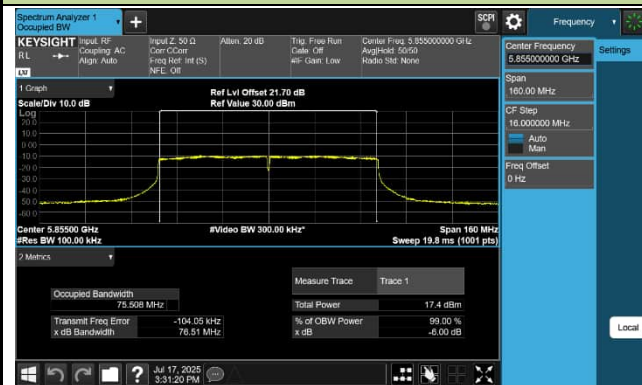


Channel 175 (5875MHz)



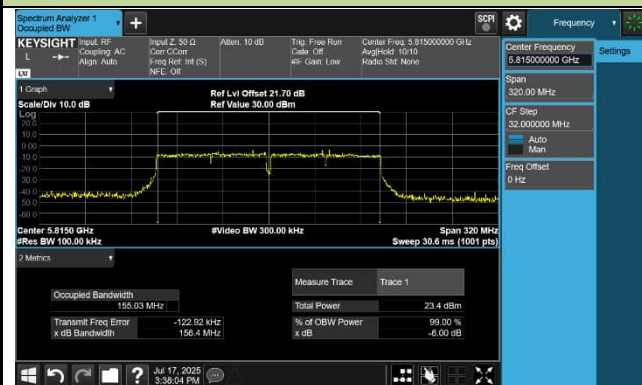
802.11ac-VHT80 6dB Bandwidth

Channel 171 (5855MHz)



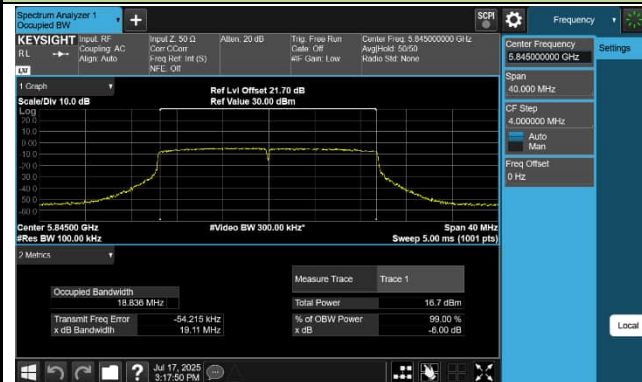
802.11ac-VHT160 6dB Bandwidth

Channel 163 (5815MHz)



802.11be-EHT20 6dB Bandwidth

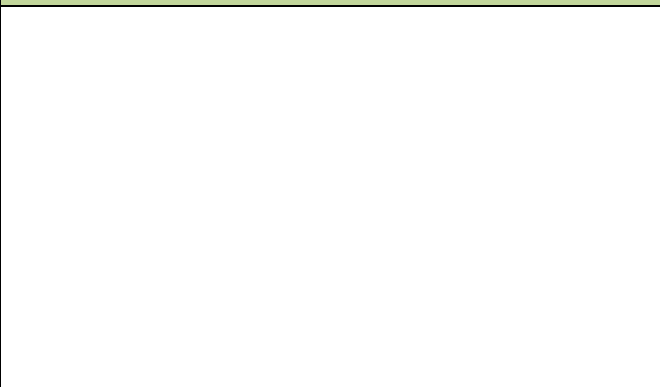
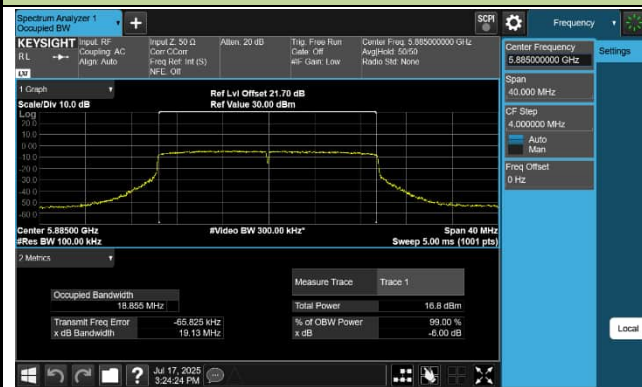
Channel 169 (5845MHz)



Channel 173 (5865MHz)

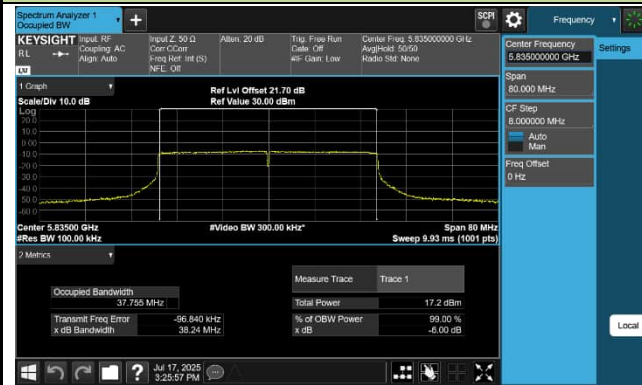


Channel 177 (5885MHz)



802.11be-EHT40 6dB Bandwidth

Channel 167 (5835MHz)

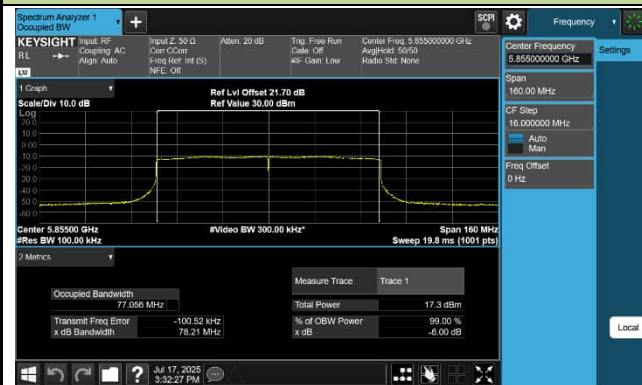


Channel 175 (5875MHz)



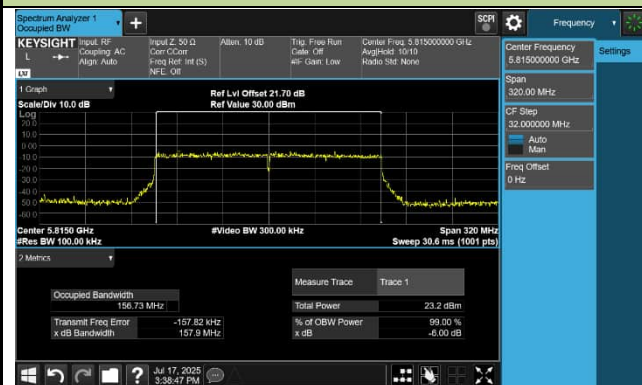
802.11be-EHT80 6dB Bandwidth

Channel 171 (5855MHz)



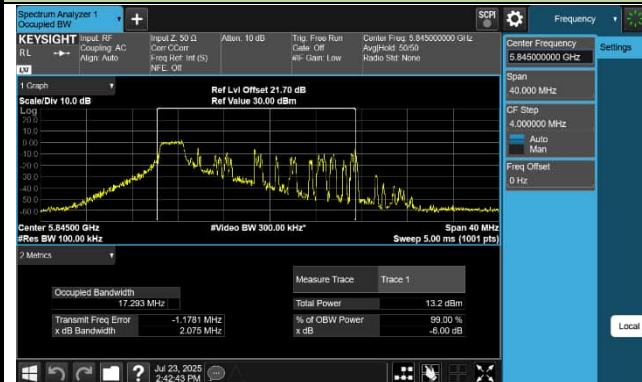
802.11be-EHT160 6dB Bandwidth

Channel 163 (5815MHz)

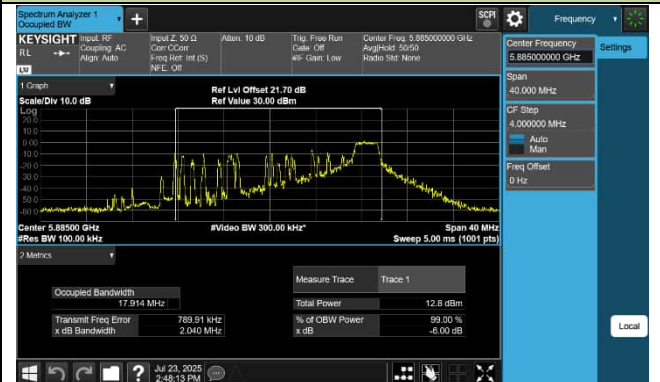


802.11be-EHT20 6dB Bandwidth

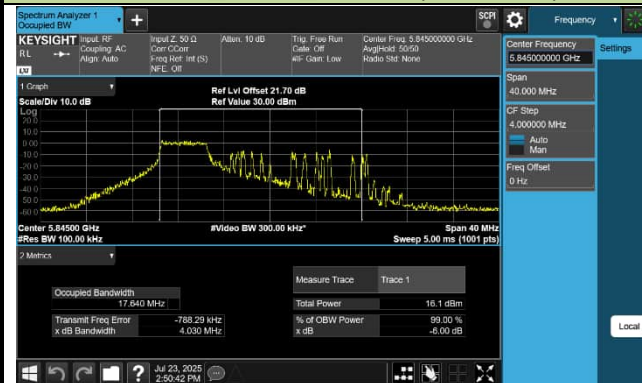
26 Tone_RU0_CH169 (5845MHz)



26 Tone_RU8_CH177 (5885MHz)



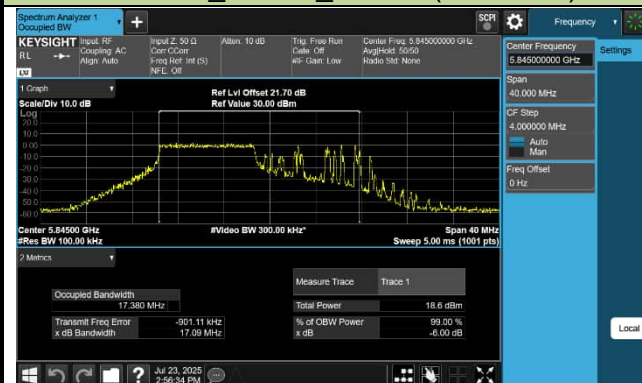
52 Tone_RU74_CH169 (5845MHz)



52 Tone_RU77_CH177 (5885MHz)



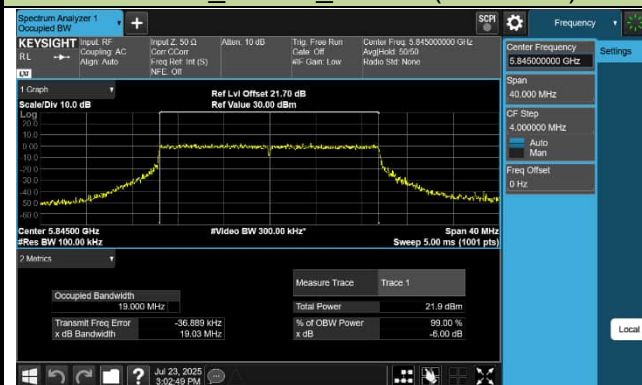
106 Tone_RU106_CH169 (5845MHz)



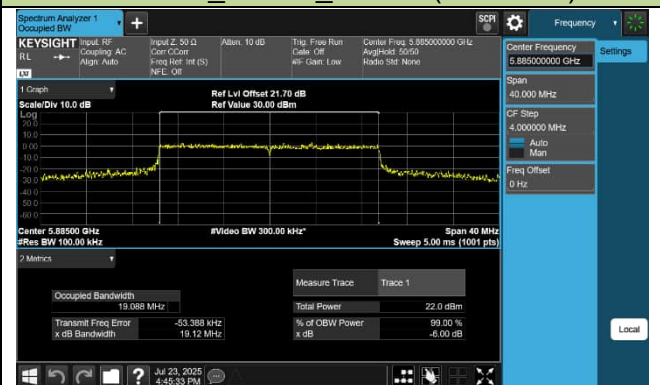
106 Tone_RU107_CH177 (5885MHz)



242 Tone_RU122_CH169 (5845MHz)



242 Tone_RU122_CH177 (5885MHz)



7.4. Output Power Measurement

7.4.1. Test Limit

For an indoor access point (Client) operating in the 5.850-5.895 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm. Indoor access points operating on a channel that spans the 5.725-5.850 GHz and 5.850-5.895 GHz bands must not exceed an e.i.r.p. of 30 dBm.

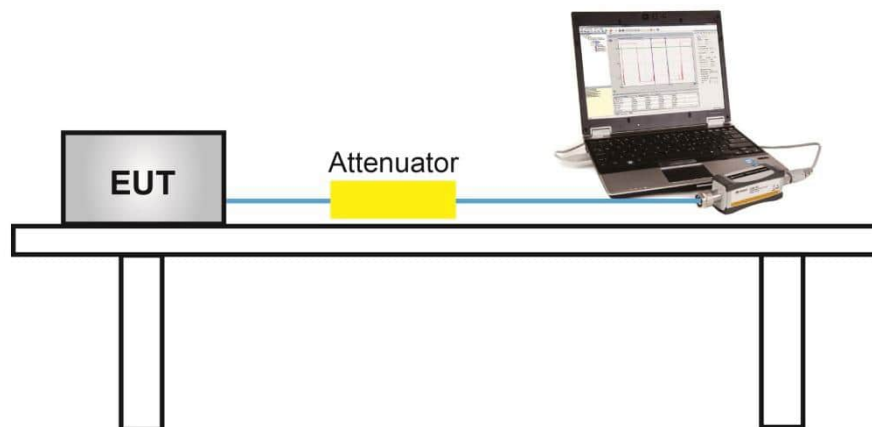
7.4.2. Test Procedure Used

KDB 789033D02v02r01- Section E)3)b) Method PM-G

7.4.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter.

7.4.4. Test Setup



7.4.5. Test Result

Product	Mobile Computer	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/7/16~2025/8/1
Test Mode	CDD Mode		

Test Mode	Data Rate	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 7 Average Power (dBm)	Ant Gain (dBi)	Total EIRP Power (dBm)	Average Power Limit (dBm)	Result
11a	6Mbps	169	5845	16.01	16.67	2.10	21.46	≤ 30.00	Pass
11a	6Mbps	173	5865	15.88	16.63	2.10	21.38	≤ 30.00	Pass
11a	6Mbps	177	5885	15.86	16.68	2.10	21.40	≤ 30.00	Pass
11ac-VHT20	MCS0	169	5845	16.43	17.16	2.10	21.92	≤ 30.00	Pass
11ac-VHT20	MCS0	173	5865	16.41	17.11	2.10	21.88	≤ 30.00	Pass
11ac-VHT20	MCS0	177	5885	16.30	17.20	2.10	21.88	≤ 30.00	Pass
11ac-VHT40	MCS0	167	5835	17.19	17.83	2.10	22.63	≤ 30.00	Pass
11ac-VHT40	MCS0	175	5875	17.23	17.72	2.10	22.59	≤ 30.00	Pass
11ac-VHT80	MCS0	171	5855	17.06	17.67	2.10	22.49	≤ 30.00	Pass
11ac-VHT160	MCS0	163	5815	17.00	17.68	2.10	22.46	≤ 30.00	Pass
11be-EHT20	MCS0	169	5845	16.56	17.24	2.10	22.02	≤ 30.00	Pass
11be-EHT20	MCS0	173	5865	16.50	17.19	2.10	21.97	≤ 30.00	Pass
11be-EHT20	MCS0	177	5885	16.42	17.28	2.10	21.98	≤ 30.00	Pass
11be-EHT40	MCS0	167	5835	17.18	17.80	2.10	22.61	≤ 30.00	Pass
11be-EHT40	MCS0	175	5875	17.22	17.73	2.10	22.59	≤ 30.00	Pass
11be-EHT80	MCS0	171	5855	17.06	17.65	2.10	22.48	≤ 30.00	Pass
11be-EHT160	MCS0	163	5815	17.06	17.93	2.10	22.63	≤ 30.00	Pass

Note 1: The Total Average Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 6 Average Power} / 10)} + 10^{(\text{Ant 7 Average Power} / 10)}\}$.

Note 2: For 5725 - 5850MHz Bands: Average Power Limit (dBm) = 30 dBm.

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 7 Average Power (dBm)	Ant Gain (dBi)	Total EIRP Power (dBm)	Average Power Limit (dBm)	Result
CDD Mode										
802.11 be-EHT20	26 Tone	RU 0	169	5845	7.10	8.10	2.10	12.74	≤ 30.00	Pass
		RU 8	177	5885	6.63	7.91	2.10	12.43	≤ 30.00	Pass
	52 Tone	RU 74	169	5845	10.60	11.14	2.10	15.99	≤ 30.00	Pass
		RU 77	177	5885	9.75	10.71	2.10	15.37	≤ 30.00	Pass
	106 Tone	RU 106	169	5845	12.77	13.64	2.10	18.34	≤ 30.00	Pass
		RU 107	177	5885	12.42	13.72	2.10	18.23	≤ 30.00	Pass
	242 Tone	RU 122	169	5845	16.16	17.19	2.10	21.82	≤ 30.00	Pass
		RU 122	177	5885	16.13	17.17	2.10	21.79	≤ 30.00	Pass
802.11 be-EHT40	26 Tone	RU 0	167	5835	6.21	8.64	2.10	12.70	≤ 30.00	Pass
		RU 17	175	5875	6.33	8.05	2.10	12.38	≤ 30.00	Pass
	52 Tone	RU 74	167	5835	9.60	11.51	2.10	15.77	≤ 30.00	Pass
		RU 81	175	5875	9.26	10.58	2.10	15.08	≤ 30.00	Pass
	106 Tone	RU 106	167	5835	12.20	13.45	2.10	17.98	≤ 30.00	Pass
		RU 109	175	5875	12.09	13.30	2.10	17.85	≤ 30.00	Pass
	242 Tone	RU 122	167	5835	16.05	17.18	2.10	21.76	≤ 30.00	Pass
		RU 123	175	5875	16.17	17.04	2.10	21.74	≤ 30.00	Pass
802.11 be-EHT80	26 Tone	RU 130	167	5835	17.24	17.63	2.10	22.55	≤ 30.00	Pass
		RU 130	175	5875	17.25	17.65	2.10	22.56	≤ 30.00	Pass
	52 Tone	RU 0	171	5855	6.00	8.43	2.10	12.49	≤ 30.00	Pass
		RU 36	171	5855	6.00	7.90	2.10	12.16	≤ 30.00	Pass
	106 Tone	RU 74	171	5855	9.77	11.23	2.10	15.67	≤ 30.00	Pass
		RU 89	171	5855	9.33	10.65	2.10	15.15	≤ 30.00	Pass
	242 Tone	RU 106	171	5855	12.12	13.40	2.10	17.92	≤ 30.00	Pass
		RU 113	171	5855	12.16	13.33	2.10	17.89	≤ 30.00	Pass
	484 Tone	RU 122	171	5855	15.90	17.10	2.10	21.65	≤ 30.00	Pass
		RU 125	171	5855	16.05	16.96	2.10	21.64	≤ 30.00	Pass
	996 Tone	RU 130	171	5855	17.09	17.73	2.10	22.53	≤ 30.00	Pass
		RU 131	171	5855	17.04	17.68	2.10	22.48	≤ 30.00	Pass
		RU 134	171	5855	17.05	17.60	2.10	22.44	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 7 Average Power (dBm)	Ant Gain (dBi)	Total EIRP Power (dBm)	Average Power Limit (dBm)	Result
CDD Mode										
802.11 be-EHT160	26 Tone	RU 0	163	5815	5.62	8.47	2.10	12.39	≤ 30.00	Pass
		RU 73	163	5815	5.60	8.15	2.10	12.17	≤ 30.00	Pass
	52 Tone	RU 74	163	5815	9.84	11.63	2.10	15.94	≤ 30.00	Pass
		RU 105	163	5815	9.27	10.70	2.10	15.15	≤ 30.00	Pass
	106 Tone	RU 106	163	5815	11.96	14.00	2.10	18.21	≤ 30.00	Pass
		RU 121	163	5815	12.54	13.49	2.10	18.15	≤ 30.00	Pass
	242 Tone	RU 122	163	5815	15.72	17.01	2.10	21.52	≤ 30.00	Pass
		RU 129	163	5815	16.05	16.95	2.10	21.63	≤ 30.00	Pass
	484 Tone	RU 130	163	5815	16.53	17.74	2.10	22.29	≤ 30.00	Pass
		RU 133	163	5815	17.16	17.64	2.10	22.52	≤ 30.00	Pass
	996 Tone	RU 134	163	5815	16.65	17.65	2.10	22.29	≤ 30.00	Pass
		RU 135	163	5815	16.53	17.37	2.10	22.08	≤ 30.00	Pass
	1992 Tone	RU 136	163	5815	16.57	17.87	2.10	22.38	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 7 Average Power (dBm)	Ant Gain (dBi)	Total EIRP Power (dBm)	Average Power Limit (dBm)	Result
CDD Mode										
802.11 be-EHT20	52+26 Tone	MRU1	169	5845	10.35	11.17	2.10	15.89	≤ 30.00	Pass
		MRU1	173	5865	10.48	11.36	2.10	16.05	≤ 30.00	Pass
		MRU2	173	5865	10.11	11.22	2.10	15.81	≤ 30.00	Pass
		MRU3	173	5865	9.71	10.88	2.10	15.44	≤ 30.00	Pass
		MRU3	177	5885	9.60	10.72	2.10	15.31	≤ 30.00	Pass
	102+26 Tone	MRU1	169	5845	12.79	13.46	2.10	18.25	≤ 30.00	Pass
		MRU1	173	5865	12.69	13.38	2.10	18.16	≤ 30.00	Pass
		MRU2	173	5865	12.91	13.08	2.10	18.11	≤ 30.00	Pass
		MRU2	177	5885	12.04	13.21	2.10	17.77	≤ 30.00	Pass
802.11 be-EHT80	484+242 Tone	MRU1	171	5855	17.23	17.41	2.10	22.43	≤ 30.00	Pass
	484+242 Tone	MRU2	171	5855	16.84	17.20	2.10	22.13	≤ 30.00	Pass
802.11 be-EHT160	986+484 Tone	MRU1	163	5815	16.93	17.40	2.10	22.28	≤ 30.00	Pass
	986+484 Tone	MRU2	163	5815	16.74	17.28	2.10	22.13	≤ 30.00	Pass
	986+484 Tone	MRU3	163	5815	16.90	17.37	2.10	22.25	≤ 30.00	Pass
	986+484 Tone	MRU4	163	5815	16.90	17.40	2.10	22.27	≤ 30.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 Average Power (dBm)	Ant 7 Average Power (dBm)	Ant Gain (dBi)	Total EIRP Power (dBm)	Average Power Limit (dBm)	Result
CDD Mode										
802.11 be-EHT80	484+242 Tone	PUN1	171	5855	16.88	17.22	2.10	22.16	≤ 30.00	Pass
		PUN2	171	5855	16.98	17.53	2.10	22.37	≤ 30.00	Pass
		PUN3	171	5855	16.74	17.13	2.10	22.05	≤ 30.00	Pass
		PUN4	171	5855	16.88	17.27	2.10	22.19	≤ 30.00	Pass
802.11 be-EHT160	966+484 Tone	40-PUN1	163	5815	16.75	17.18	2.10	22.08	≤ 30.00	Pass
		40-PUN2	163	5815	16.56	17.09	2.10	21.94	≤ 30.00	Pass
		40-PUN3	163	5815	16.65	17.09	2.10	21.99	≤ 30.00	Pass
		40-PUN4	163	5815	16.99	17.49	2.10	22.36	≤ 30.00	Pass
	996+484+242 Tone	20-PUN1	163	5815	17.17	17.30	2.10	22.35	≤ 30.00	Pass
		20-PUN2	163	5815	16.70	17.18	2.10	22.06	≤ 30.00	Pass
		20-PUN3	163	5815	16.70	17.25	2.10	22.09	≤ 30.00	Pass
		20-PUN4	163	5815	16.65	17.24	2.10	22.07	≤ 30.00	Pass
		20-PUN5	163	5815	16.96	17.40	2.10	22.30	≤ 30.00	Pass
		20-PUN6	163	5815	16.68	17.30	2.10	22.11	≤ 30.00	Pass
		20-PUN7	163	5815	16.82	17.21	2.10	22.13	≤ 30.00	Pass
		20-PUN8	163	5815	16.72	17.29	2.10	22.12	≤ 30.00	Pass

7.5. Power Spectral Density Measurement

7.5.1. Test Limit

For an indoor access point operating in the 5.850-5.895 GHz band, the maximum power spectral density must not exceed 14 dBm e.i.r.p. in any 1-megahertz band.

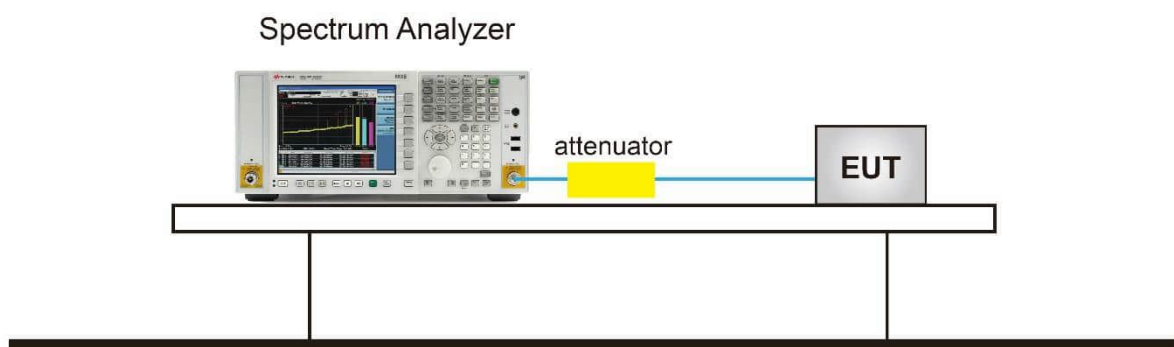
7.5.2. Test Procedure Used

KDB 789033 D02v02r01-SectionF

7.5.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add $10 \cdot \log(1/x)$, where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add $10 \cdot \log(1/0.25) = 6$ dB if the duty cycle is 25 percent.

7.5.4. Test Setup



7.5.5. Test Result

Product	Mobile Computer	Test Engineer	Marvin
Test Site	SR6	Test Date	2025/7/16~2025/7/24
Mode	Power Spectral Density (U-NII-4) CDD Mode		

Test Mode	Data Rate/MCS	Ch. No.	Freq. (MHz)	Ant 6 PSD (dBm/MHz)	Ant 7 PSD (dBm/MHz)	Duty Cycle (%)	Ant Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
11a	6Mbps	169	5845	6.049	6.510	99.39%	4.53	13.852	≤14.00	Pass
11a	6Mbps	173	5865	6.036	6.278	99.39%	4.53	13.726	≤14.00	Pass
11a	6Mbps	177	5885	6.135	6.478	99.39%	4.53	13.877	≤14.00	Pass
11ac-VHT20	MCS0	169	5845	6.135	6.670	99.82%	4.53	13.959	≤14.00	Pass
11ac-VHT20	MCS0	173	5865	6.163	6.603	99.82%	4.53	13.937	≤14.00	Pass
11ac-VHT20	MCS0	177	5885	6.177	6.674	99.82%	4.53	13.981	≤14.00	Pass
11ac-VHT40	MCS0	167	5835	4.115	4.378	99.27%	4.53	11.821	≤14.00	Pass
11ac-VHT40	MCS0	175	5875	3.992	4.283	99.27%	4.53	11.712	≤14.00	Pass
11ac-VHT80	MCS0	171	5855	0.585	1.117	99.63%	4.53	8.416	≤14.00	Pass
11ac-VHT160	MCS0	163	5815	-2.157	-1.908	99.82%	4.53	5.517	≤14.00	Pass
11be-EHT20	MCS0	169	5845	6.029	6.665	99.64%	4.53	13.915	≤14.00	Pass
11be-EHT20	MCS0	173	5865	6.090	6.585	99.64%	4.53	13.901	≤14.00	Pass
11be-EHT20	MCS0	177	5885	6.067	6.580	99.64%	4.53	13.887	≤14.00	Pass
11be-EHT40	MCS0	167	5835	3.702	4.522	98.92%	4.53	11.719	≤14.00	Pass
11be-EHT40	MCS0	175	5875	3.990	4.155	98.92%	4.53	11.661	≤14.00	Pass
11be-EHT80	MCS0	171	5855	0.654	0.912	98.56%	4.53	8.388	≤14.00	Pass
11be-EHT160	MCS0	163	5815	-2.157	-1.924	99.64%	4.53	5.517	≤14.00	Pass

Note 1: The total PSD (dBm/MHz) = $10 \cdot \log \{10^{(\text{Ant 6 PSD}/10)} + 10^{(\text{Ant 7 PSD}/10)}\} + 10 \cdot \log (1/\text{Duty Cycle})$ (dBm/MHz).

Note 2: EIRP PSD (dBm/MHz) = Total PSD (dBm/MHz) + Antenna Gain (dBi).

Note 3: For Channels span the 5.725-5.850 GHz and 5.850-5.895 GHz bands, we record the maximum level of 5.725-5.850 GHz and 5.850-5.895 GHz with RBW=1MHz, and the level complied with the 5.850-5.895 GHz EIRP PSD Limit.

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 PSD (dBm/MHz)	Ant 7 PSD (dBm/MHz)	Duty Cycles (%)	Ant Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
CDD mode											
802.11 be-EHT20	26 Tone	RU 0	169	5845	5.343	6.573	98.64%	4.53	13.601	≤ 14.00	Pass
802.11 be-EHT20		RU 8	177	5885	5.685	6.557	98.64%	4.53	13.743	≤ 14.00	Pass
802.11 be-EHT20	52 Tone	RU 74	169	5845	6.147	6.670	99.06%	4.53	13.998	≤ 14.00	Pass
802.11 be-EHT20		RU 77	177	5885	5.963	6.021	99.06%	4.53	13.573	≤ 14.00	Pass
802.11 be-EHT20	106 Tone	RU 106	169	5845	5.824	6.091	99.09%	4.53	13.540	≤ 14.00	Pass
802.11 be-EHT20		RU 107	177	5885	5.728	6.224	99.09%	4.53	13.563	≤ 14.00	Pass
802.11 be-EHT20	242 Tone	RU 122	169	5845	6.087	6.250	98.64%	4.53	13.769	≤ 14.00	Pass
802.11 be-EHT20		RU 122	177	5885	6.121	6.624	98.64%	4.53	13.980	≤ 14.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 PSD (dBm/MHz)	Ant 7 PSD (dBm/MHz)	Duty Cycles (%)	Ant Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
CDD mode											
802.11 be-EHT20	52+26 Tone	MRU1	169	5845	2.885	4.777	99.34%	4.53	11.502	≤ 14.00	Pass
		MRU1	173	5865	5.181	6.829	99.34%	4.53	13.652	≤ 14.00	Pass
		MRU3	177	5885	2.275	4.009	99.34%	4.53	10.797	≤ 14.00	Pass
	102+26 Tone	MRU1	169	5845	3.422	4.938	99.31%	4.53	11.816	≤ 14.00	Pass
		MRU1	173	5865	5.365	6.848	99.31%	4.53	13.740	≤ 14.00	Pass
		MRU2	177	5885	2.804	4.645	99.31%	4.53	11.392	≤ 14.00	Pass
802.11 be-EHT80	484+242 Tone	MRU1	171	5855	0.766	1.735	95.81%	4.53	9.004	≤ 14.00	Pass
802.11 be-EHT160	996+484 Tone	MRU1	163	5815	-2.338	-1.216	97.67%	4.53	5.902	≤ 14.00	Pass

Test Mode	RU Size	RU Index	Channel No.	Freq. (MHz)	Ant 6 PSD (dBm/MHz)	Ant 7 PSD (dBm/MHz)	Duty Cycles (%)	Ant Gain (dBi)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Result
CDD Mode											
802.11 be-EHT80	484+242 Tone	PUN1	171	5855	1.253	1.974	97.98%	4.53	9.257	≤ 14.00	Pass
		PUN2	171	5855	1.657	1.804	97.98%	4.53	9.360	≤ 14.00	Pass
		PUN3	171	5855	1.511	1.541	97.98%	4.53	9.155	≤ 14.00	Pass
		PUN4	171	5855	1.093	1.009	97.98%	4.53	8.680	≤ 14.00	Pass
802.11 be-EHT160	966+484 Tone	40-PUN1	163	5815	-1.667	-1.538	99.45%	4.53	5.962	≤ 14.00	Pass
		40-PUN2	163	5815	-1.953	-1.542	99.45%	4.53	5.822	≤ 14.00	Pass
		40-PUN3	163	5815	-1.696	-1.222	99.45%	4.53	6.112	≤ 14.00	Pass
		40-PUN4	163	5815	-1.948	-1.858	99.45%	4.53	5.661	≤ 14.00	Pass
	996+484+242 Tone	20-PUN1	163	5815	-2.467	-1.851	99.27%	4.53	5.424	≤ 14.00	Pass
		20-PUN2	163	5815	-2.593	-2.701	99.27%	4.53	4.925	≤ 14.00	Pass
		20-PUN3	163	5815	-2.150	-1.803	99.27%	4.53	5.599	≤ 14.00	Pass
		20-PUN4	163	5815	-2.484	-2.603	99.27%	4.53	5.029	≤ 14.00	Pass
		20-PUN5	163	5815	-2.536	-2.279	99.27%	4.53	5.167	≤ 14.00	Pass
		20-PUN6	163	5815	-2.122	-1.848	99.27%	4.53	5.589	≤ 14.00	Pass
		20-PUN7	163	5815	-2.921	-1.741	99.27%	4.53	5.281	≤ 14.00	Pass
		20-PUN8	163	5815	-2.358	-2.231	99.27%	4.53	5.278	≤ 14.00	Pass

802.11a Power Spectral Density - Ant 6

Channel 169 (5845MHz)



Channel 173 (5865MHz)

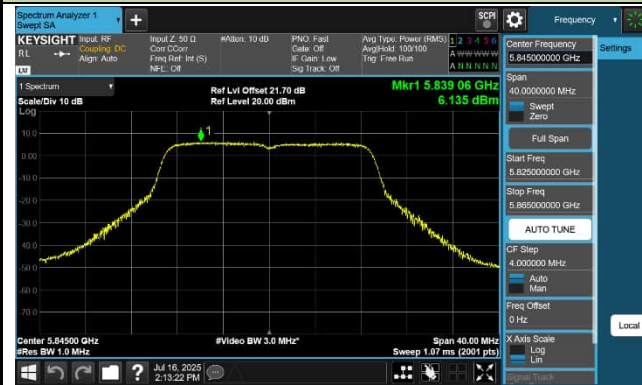


Channel 177 (5885MHz)



802.11ac-VHT20 Power Spectral Density - Ant 6

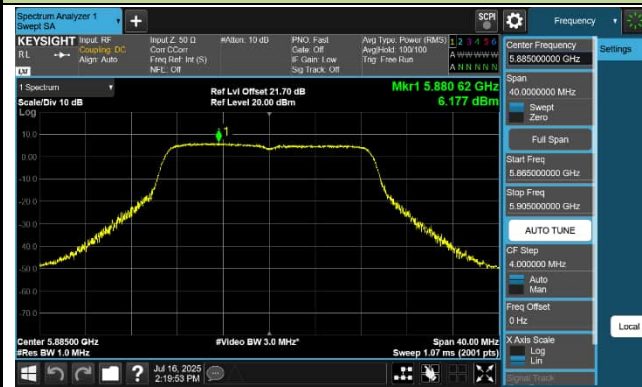
Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)



802.11ac-VHT40 Power Spectral Density - Ant 6

Channel 167 (5835MHz)

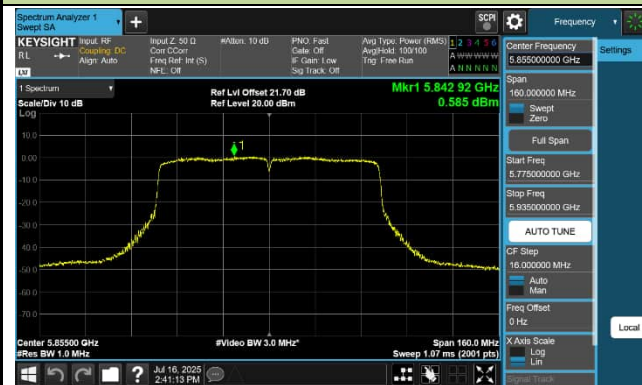


Channel 175 (5875MHz)



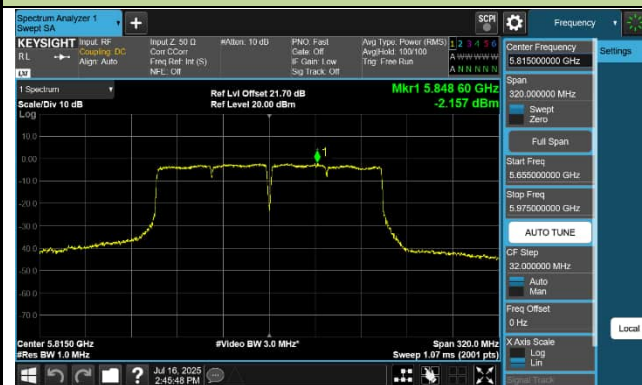
802.11ac-VHT80 Power Spectral Density - Ant 6

Channel 171 (5855MHz)



802.11ac-VHT160 Power Spectral Density - Ant 6

Channel 163 (5815MHz)



802.11be-EHT20 Power Spectral Density - Ant 6

Channel 169 (5845MHz)



Channel 173 (5865MHz)



Channel 177 (5885MHz)



802.11be-EHT40 Power Spectral Density - Ant 6

Channel 167 (5835MHz)



Channel 175 (5875MHz)



802.11be-EHT80 Power Spectral Density - Ant 6

Channel 171 (5855MHz)



802.11be-EHT160 Power Spectral Density - Ant 6

Channel 163 (5815MHz)



802.11ax-HE20 Power Spectral Density - Ant 6

26 Tone_RU0_CH169 (5845MHz)



26 Tone_RU8_CH177 (5885MHz)



52 Tone_RU74_CH169 (5845MHz)



52 Tone_RU77_CH177 (5885MHz)



106 Tone_RU106_CH169 (5845MHz)



106 Tone_RU107_CH177 (5885MHz)



242 Tone_RU122_CH169 (5845MHz)



242 Tone_RU122_CH177 (5885MHz)



802.11be-EHT20 Power Spectral Density - Ant 6

52+26 Tone_MRU1_CH169 (5845MHz)



52+26 Tone_MRU1_CH173 (5865MHz)



52+26 Tone_MRU3_CH177 (5885MHz)



102+26 Tone_MRU1_CH169 (5845MHz)



102+26 Tone_MRU1_CH173 (5865MHz)



102+26 Tone_MRU2_CH177 (5885MHz)



802.11be-EHT80 Power Spectral Density - Ant 6

484+242 Tone_MRU1_CH171 (5855MHz)



802.11be-EHT160 Power Spectral Density - Ant 6

996+484 Tone_MRU1_CH163 (5815MHz)

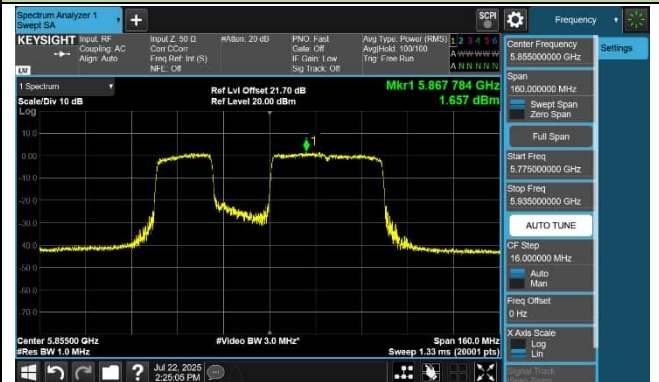


802.11be-EHT80 Power Spectral Density - Ant 6

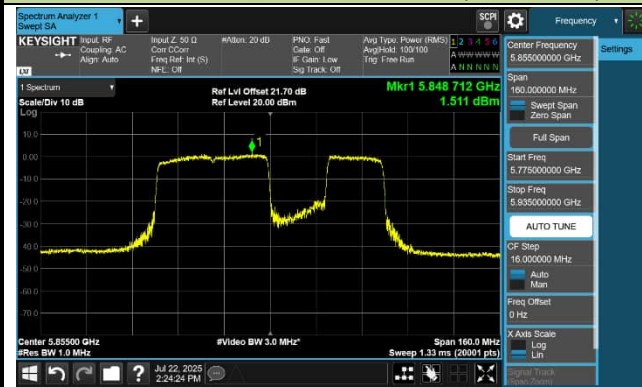
484+242 Tone_PUN1_CH171 (5855MHz)



484+242 Tone_PUN2_CH171 (5855MHz)



484+242 Tone_PUN3_CH171 (5855MHz)

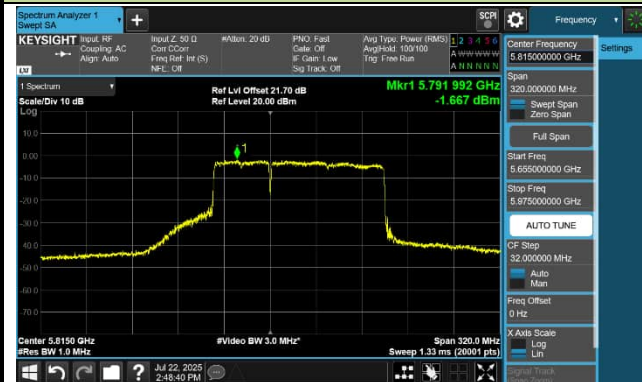


484+242 Tone_PUN4_CH171 (5855MHz)



802.11be-EHT160 Power Spectral Density - Ant 6

996+484 Tone_40-PUN1_CH163 (5815MHz)



996+484 Tone_40-PUN2_CH163 (5815MHz)



996+484 Tone_40-PUN3_CH163 (5815MHz)



996+484 Tone_40-PUN4_CH163 (5815MHz)

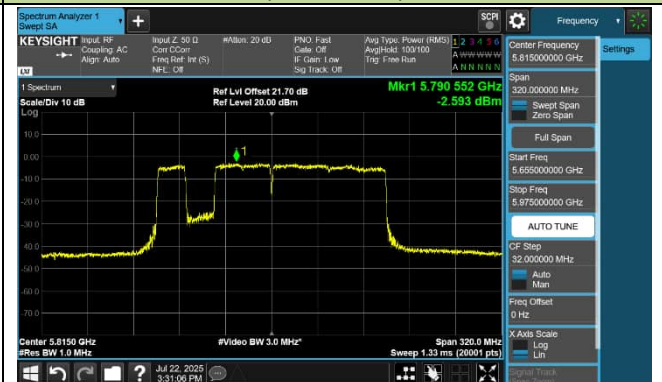


802.11be-EHT160 Power Spectral Density - Ant 6

996+484+242 Tone_20-PUN1_CH163
(5815MHz)



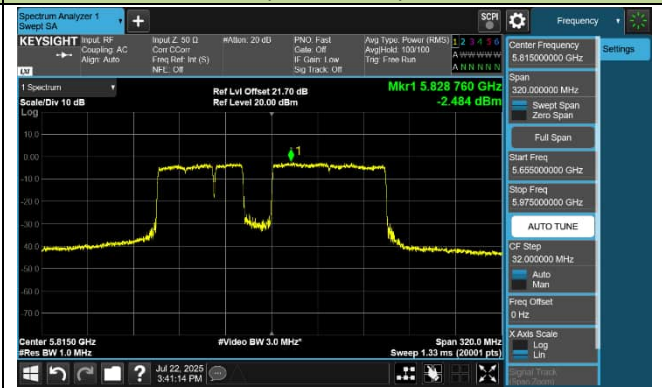
996+484+242 Tone_20-PUN2_CH163
(5815MHz)



996+484+242 Tone_20-PUN3_CH163
(5815MHz)



996+484+242 Tone_20-PUN4_CH163
(5815MHz)



802.11be-EHT160 Power Spectral Density - Ant 6

996+484+242 Tone_20-PUN5_CH163
(5815MHz)



996+484+242 Tone_20-PUN6_CH163
(5815MHz)



996+484+242 Tone_20-PUN7_CH163
(5815MHz)



996+484+242 Tone_20-PUN8_CH163
(5815MHz)

