



MEASUREMENT REPORT

FCC ID : XBG-APC-15WR2

APPLICANT : AVALUE TECHNOLOGY INCORPORATION

Application Type : Certification

Product : Panel PC

Model No. : APC-15WR2

Serial Model No. : APC-15WR2XXXXXXXXXX(where "X" may be any alphanumeric character, blank or "-")

Brand Name : AVALUE

FCC Classification : Unlicensed National Information Infrastructure (UNII)

FCC Rule Part(s) : Part 15 Subpart E (Section 15.407)

Test Procedure(s) : ANSI C63.10-2013

Received Date : May 6, 2024

Test Date : June 19, 2024 ~ July 3, 2024

Test By : Owen Tsai
(Owen Tsai)

Reviewed By : Paddy Chen
(Paddy Chen)

Approved By : Chenz Ker
(Chenz Ker)



The test results only relate to the tested samples.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in ANSI C63.10. 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
2405TW3101-U4	1.0	Original Report	2024-09-13	

CONTENTS

Description	Page
General Information.....	6
1. INTRODUCTION	7
1.1. Scope	7
1.2. MRT Test Location	7
2. PRODUCT INFORMATION	8
2.1. Equipment Description.....	8
2.2. Operation Frequencies and Channel List.....	9
2.3. Test Mode	10
2.4. Test Software.....	10
2.5. Device Capabilities	11
2.6. Test Configuration	13
2.7. Test System Details.....	15
2.8. EMI Suppression Device(s)/Modifications	15
2.9. Labeling Requirements.....	15
3. DESCRIPTION OF TEST	16
3.1. Evaluation Procedure	16
3.2. AC Line Conducted Emissions	16
3.3. Radiated Emissions.....	17
4. ANTENNA REQUIREMENTS.....	18
5. TEST EQUIPMENT CALIBRATION DATE.....	19
6. MEASUREMENT UNCERTAINTY.....	20
7. TEST RESULT	21
7.1. Summary.....	21
7.2. 26dB Bandwidth Measurement.....	22
7.2.1. Test Limit	22
7.2.2. Test Procedure used.....	22
7.2.3. Test Setting.....	22
7.2.4. Test Setup	22
7.2.5. Test Result.....	23
7.3. 6dB Bandwidth Measurement.....	28
7.3.1. Test Limit	28
7.3.2. Test Procedure used.....	28

7.3.3. Test Setting.....	28
7.3.4. Test Setup	28
7.3.5. Test Result.....	29
7.4. Output Power Measurement.....	33
7.4.1. Test Limit	33
7.4.2. Test Procedure Used	34
7.4.3. Test Setting.....	35
7.4.4. Test Setup	35
7.4.5. Test Result.....	36
7.5. Transmit Power Control	38
7.5.1. Test Limit	38
7.5.2. Test Procedure Used	38
7.5.3. Test Setting.....	38
7.5.4. Test Setup	38
7.5.5. Test Result.....	39
7.6. Power Spectral Density Measurement.....	40
7.6.1. Test Limit	40
7.6.2. Test Procedure Used	40
7.6.3. Test Setting.....	41
7.6.4. Test Setup	41
7.6.5. Test Result.....	42
7.7. Frequency Stability Measurement	52
7.7.1. Test Limit	52
7.7.2. Test Limit	52
7.7.3. Test Setup	53
7.7.4. Test Result.....	53
7.8. Radiated Spurious Emission Measurement	54
7.8.1. Test Limit	54
7.8.2. Test Procedure Used	54
7.8.3. Test Setting.....	54
7.8.4. Test Setup	56
7.8.5. Test Result.....	58
7.9. Radiated Restricted Band Edge Measurement	98
7.9.1. Test Limit	98
7.9.2. Test Result.....	101
7.10. AC Conducted Emissions Measurement	131
7.10.1. Test Limit	131
7.10.2. Test Procedure	131

7.10.3. Test Setup	132
7.10.4. Test Result.....	133
8. CONCLUSION	137
Appendix A : Test Photograph	138
Appendix B : External Photograph	138
Appendix C : Internal Photograph	138

General Information

Applicant	AVALUE TECHNOLOGY INCORPORATION
Applicant Address	7F, 228, Lian-cheng Road, Zhonghe Dist., New Taipei City 235, Taiwan
Manufacturer	AVALUE TECHNOLOGY INCORPORATION
Manufacturer Address	7F, 228, Lian-cheng Road, Zhonghe Dist., New Taipei City 235, Taiwan
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 Subpart E (Section 15.407)
Model No.	APC-15WR2
Test Device Serial No.	#1-1 ☐ Production ☒ Pre-Production ☐ Engineering
FCC Classification	Unlicensed National Information Infrastructure (UNII)

Test Facility / Accreditations

Measurements were performed at MRT Laboratory located in Fuxing Rd., Taoyuan, Taiwan (R.O.C)

- 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.
- MRT facility is an IC registered (MRT Reg. No. 21723) test laboratory with the site description on file at Industry Canada.
- 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.

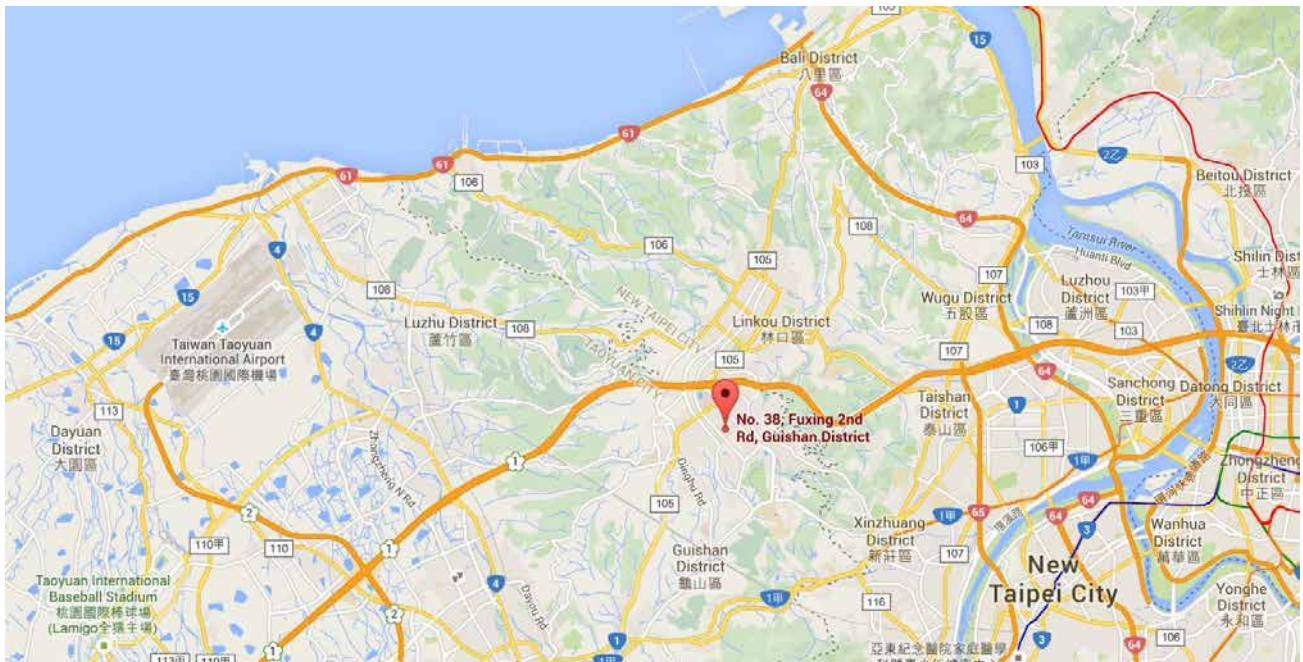
1. INTRODUCTION

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 Industry Canada 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	Panel PC
Model No.	APC-15WR2
Serial Model No.	APC-15WR2XXXXXXXXXX(where "X" may be any alphanumeric character, blank or "-")
Brand Name	AVALUE
Supports Radios Spec.	WPAN: Bluetooth V5.1 WLAN: 2.4G: 802.11b/g/n-20/n-40 5G: 802.11a/n-20/ac-20/n-40/ac-40/ac-80, Band 1,4
Frequency Range	<u>2.4GHz:</u> For 802.11b/g/n-HT20: 2412 ~ 2462 MHz For 802.11n-HT40: 2422 ~ 2452 MHz <u>5GHz:</u> For 802.11a/n-HT20/ac-VHT-20: 5180~5320MHz, 5745~5825MHz For 802.11n-HT40/ ac-VHT40: 5190~5310MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5775MHz
Modulation Type	802.11a/n-20/ac-20/n-40/ac-40/ac-80: OFDM (BPSK, QPSK, 16QAM, 64QAM,256QAM)
Accessory	
Power Adapter	Brand: FSP Model No: FSP060-DHAN3 Input: AC 100-240V~1.8A, 50-60Hz Output: DC 12.0V, 5.0A 60.0W Cable Out: Non-shielding, 1.5m with Core*1

Note:

1. Model Difference: The difference of models only for marketing different, the other hardware was the same. (declared by the manufacturer)
2. The test was performed base on APC-15WR2.

2.2. Operation Frequencies and Channel List

802.11 n-HT20/ ac-VHT20

Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz
48	5240 MHz	149	5745 MHz	153	5765 MHz
157	5785 MHz	161	5805 MHz	165	5825 MHz

802.11 n-HT40/ ac-VHT40

Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	151	5755 MHz
159	5795 MHz	--	--	--	--

802.11ac-VHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	155	5775 MHz	--	--

2.3. Test Mode

Test Mode	Mode 1: Transmit by 802.11a
	Mode 2: Transmit by 802.11n-HT20
	Mode 3: Transmit by 802.11n-HT40
	Mode 4: Transmit by 802.11ac-VHT80
	Mode 5: Transmit by 802.11a (By PoE)

Note :

1. mode5 only tested for RE 30MHz-1GHz.

2.4. Test Software

The test utility software used during testing was “adb.exe”.

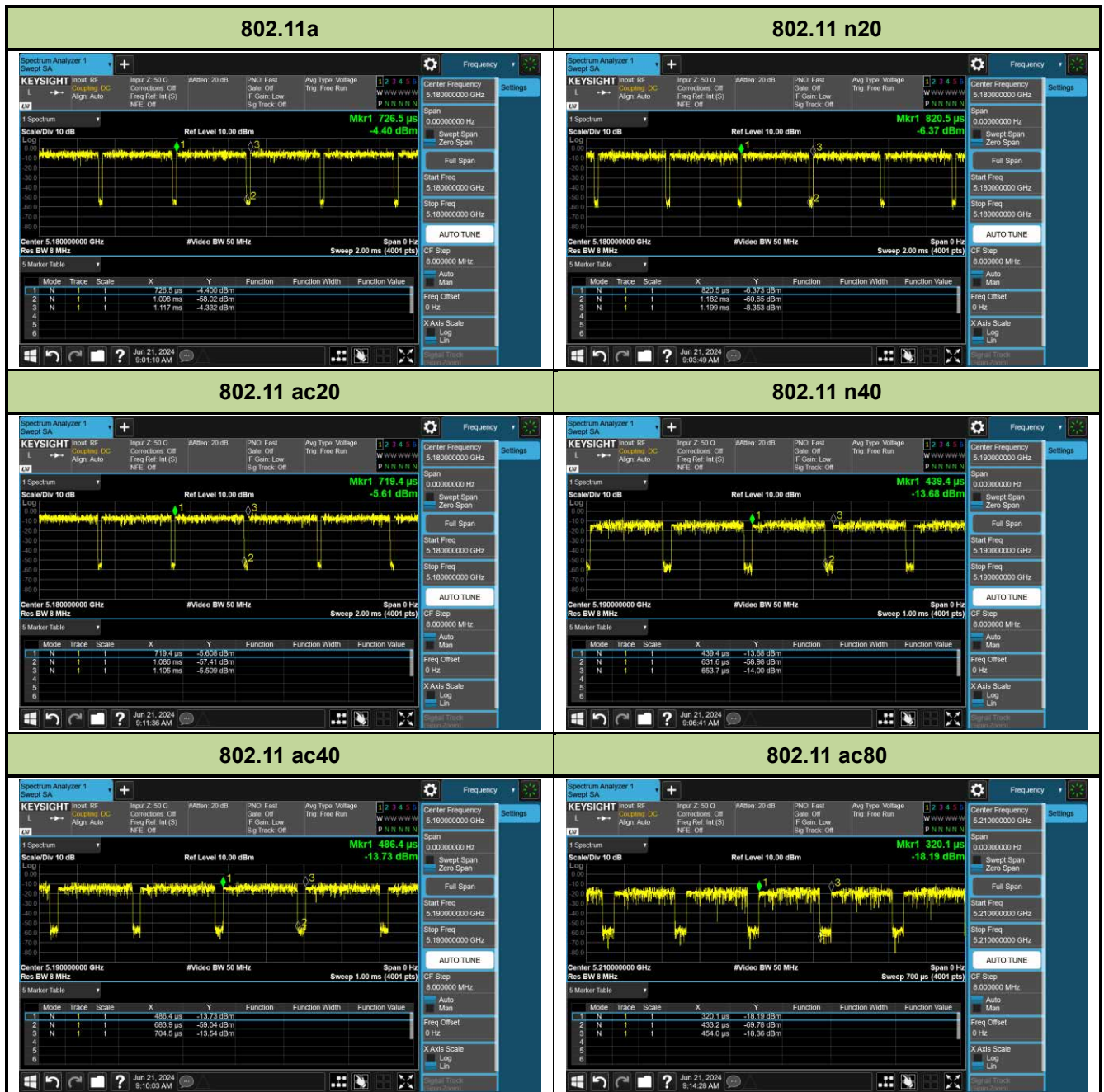
2.5. Device Capabilities

This device contains the following capabilities:

2.4GHz WLAN (DTS) and 5GHz WLAN (NII).

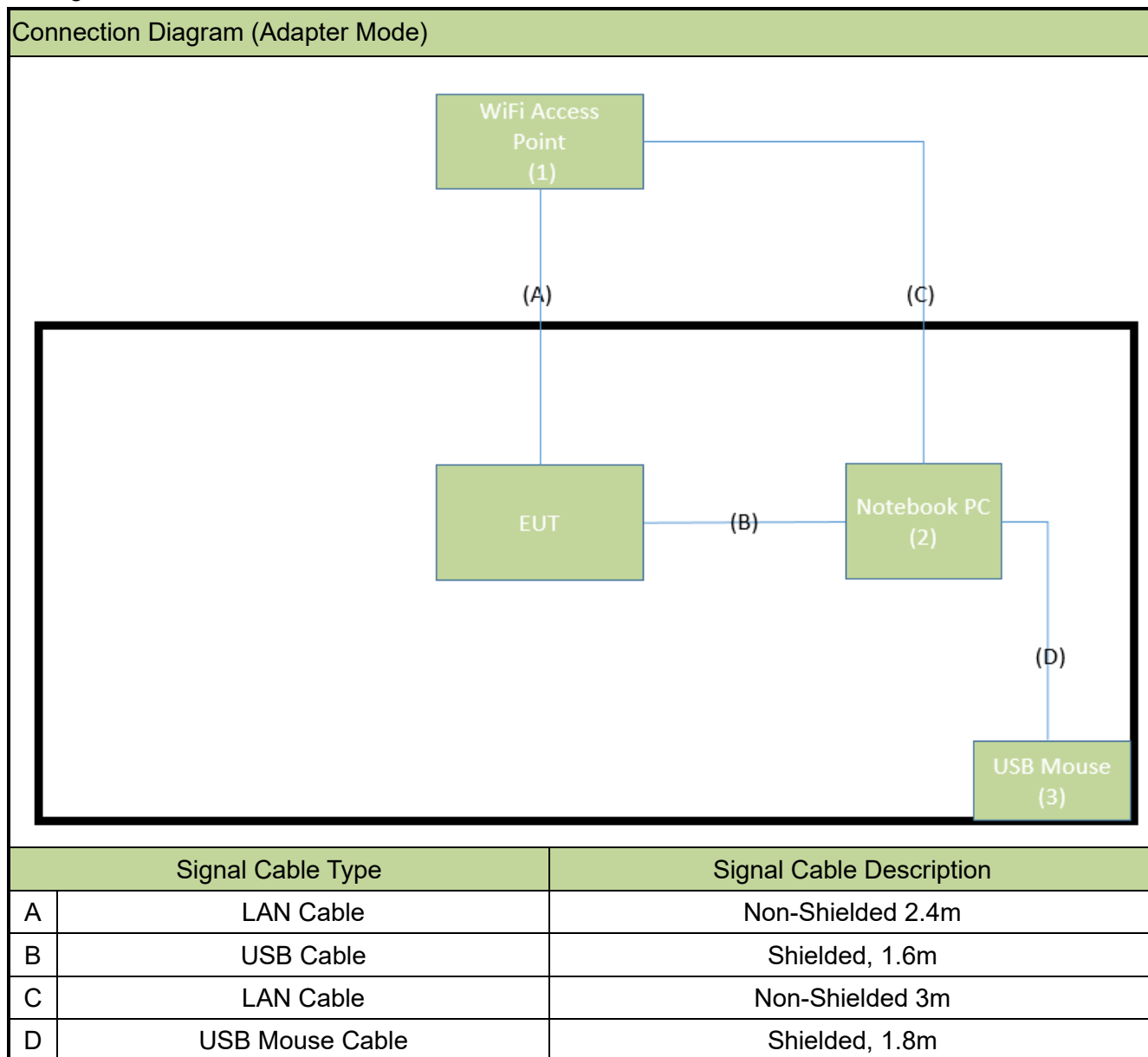
Note: 5GHz (NII) operation is possible in 20MHz, 40MHz and 80MHz channel bandwidths. The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = average per the guidance of Section B)2)b) of KDB 789033 D02v02r01. 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:

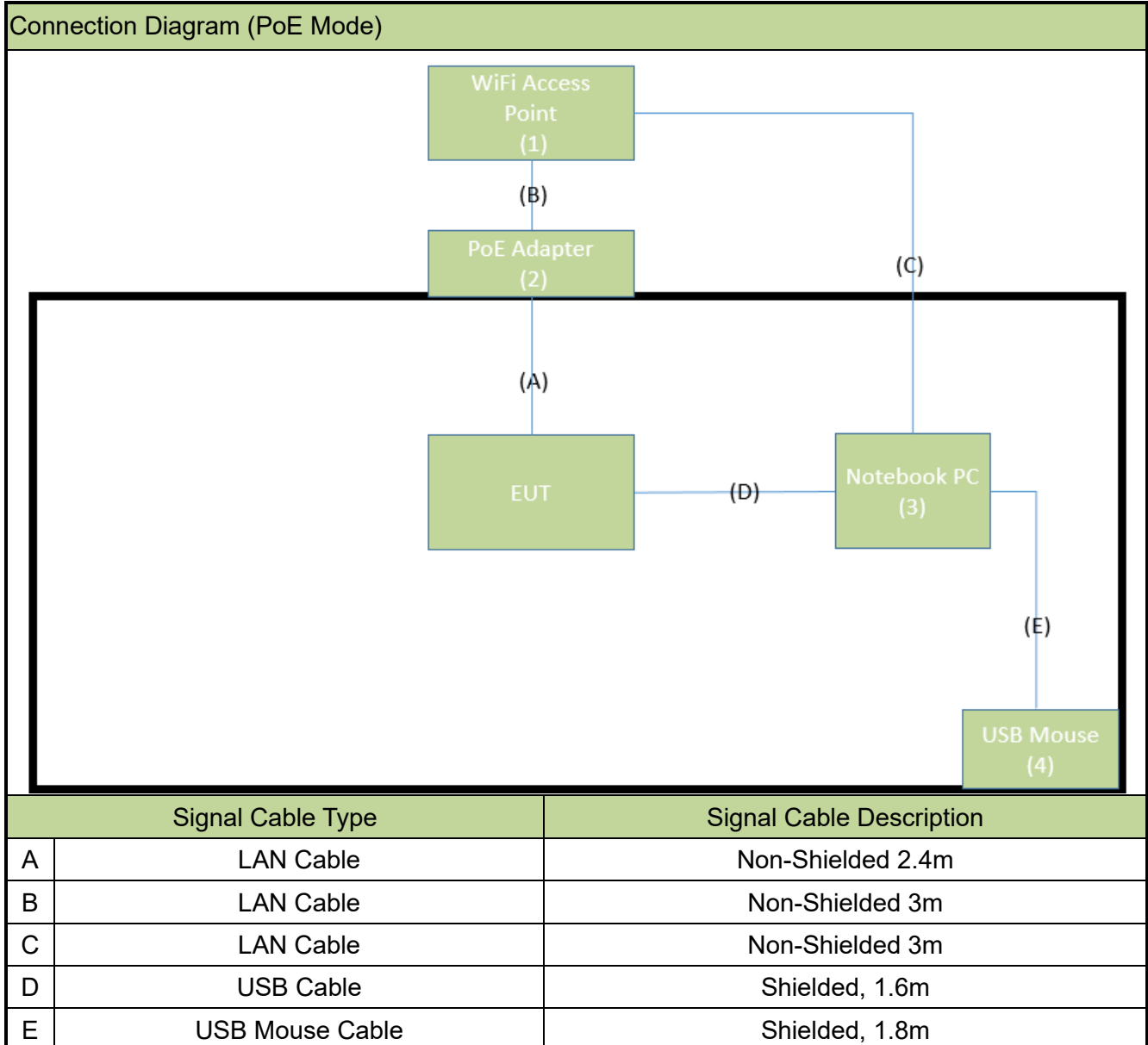
Test Mode	Duty Cycle
802.11a	95.13%
802.11n-HT20	95.51%
802.11ac-VHT20	95.07%
802.11n-HT40	89.69%
802.11ac-VHT40	90.55%
802.11ac-VHT80	84.47%



2.6. Test Configuration

This 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.





2.7. Test System Details

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

Adapter Mode:

No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	WiFi Access Point	D-LINK	DIR-612	N/A	Non-shielded, 1.5m
2	Notebook PC	Lenovo	V14 G3 ABA	N/A	Non-shielded, 0.8m
3	USB Mouse	Logitech	M90	N/A	N/A

PoE Mode:

No.	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	WiFi Access Point	D-LINK	DIR-612	N/A	Non-shielded, 1.5m
2	PoE Adapter	EUSSO	UPE5600-IHGE	N/A	Non-shielded, 1.8m
3	Notebook PC	Lenovo	V14 G3 ABA	N/A	Non-shielded, 0.8m
4	USB Mouse	Logitech	M90	N/A	N/A

2.8. EMI Suppression Device(s)/Modifications

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

2.9. 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 pamphlet 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 for Testing Unlicensed Wireless Devices (ANSI C63.10-2013), and the guidance provided in KDB 789033 were used in the measurement of the device.

Deviation from measurement procedure.....None

3.2. AC Line Conducted Emissions

The line-conducted facility is located inside an 9'x4'x3' 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.

Line conducted emissions test results are shown in Section 7.10.

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 turntable is used for radiated measurement. It is a continuously rotatable, remote controlled, 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

Excerpt from §15.203 of the FCC Rules/Regulations:

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

- The antenna of the **Panel PC**, is permanently attached.
- There are no provisions for connection to an external antenna.

Conclusion:

The EUT unit complies with the requirement of §15.203.

Antenna List

Antenna Type	Frequency	TX Paths	Max Antenna Gain (dBi)	BF Directional Gain (dBi)	CDD Directional Gain (dBi)	
	Band (MHz)				For Power	For PSD
Wi-Fi External Antenna						
PIFA Antenna	2412 ~ 2462	2	1.13	--	1.13	4.14
	5150 ~ 5250	2	1.09	--	1.09	4.10
	5725 ~ 5850	2	2.11	--	2.11	5.12

Note 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 $N_{ANT} \leq 4$;

Note 2: All information declared by manufacturer.

5. TEST EQUIPMENT CALIBRATION DATE

Conducted Emissions – SR2

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Two-Line V-Network	R&S	ENV216	MRTTWA00019	1 year	2025/3/5
Cable	Rosnol	N1C50-RG400-B 1C50-500CM	MRTTWE00013	1 year	2025/6/14
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2025/3/5

Radiated Emissions – AC2

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	MRTTWA00001	1 year	2024/10/31
Broadband Hornantenna	RFSPIN	DRH18-E	MRTTWA00087	1 year	2025/5/20
Broadband Preamplifier	EMC Instruments corporation	EMC118A45SE	MRTTWA00088	1 year	2025/5/14
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	FSVA3044	MRTTWA00092	1 year	2024/6/29
Antenna Cable	HUBERSUHNER	SF106	MRTTWE00034	1 year	2025/6/25
Cable	HUBERSUHNER	EMC105-NM-NM -3000	MRTTWE00035	1 year	2025/6/25
Temperature/Humidity Meter	TFA	35.1083	MRTTWA00050	1 year	2025/6/2

Conducted Test Equipment – SR6

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
X-Series USB Peak and Average Power Sensor	KEYSIGHT	U2021XA	MRTTWA00015	1 year	2025/3/12
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2024/10/17
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2024/7/19
Temperature/Humidity Meter	TFA	35.1083	MRTTWA00050	1 year	2025/6/2

Test Software

Software	Version	Function
e3	9.160520a	EMI Test Software
EMI	V3	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 $k = 2$.

Conducted Emission- Power Line
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 0.15MHz~30MHz: $\pm 2.53\text{dB}$
Radiated Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): 9kHz~30MHz: $\pm 3.92\text{dB}$ 30MHz~1GHz: $\pm 4.25\text{dB}$ 1GHz~18GHz: $\pm 4.40\text{dB}$ 18GHz~40GHz: $\pm 4.45\text{dB}$
Frequency Error
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 78.4\text{Hz}$
Conducted Power
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% ($U=2U_c(y)$): $\pm 0.82^\circ\text{C}/ \pm 3\%$
DC Voltage
Measuring Uncertainty for a Level of Confidence of 95% ($U=2U_c(y)$): $\pm 0.3\%$

7. TEST RESULT

7.1. Summary

Company Name: Panel PC
Model No.: APC-15WR2

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)(1)(i), (2), (3)	Maximum Conducted Output Power	Refer to Section 7.5		Pass	Section 7.4
15.407(h)(1)	Transmit Power Control	$\leq 24 \text{ dBm}$		N/A	Section 7.5
15.407(a)(1)(i), (2), (3), (5)	Power Spectral Density	Refer to Section 7.7		Pass	Section 7.6
15.407(g)	Frequency Stability	N/A		Pass	Section 7.7
15.407(b)(1), (4)	Undesirable Emissions	$\leq -27\text{dBm/MHz EIRP}$ $\leq -17\text{dBm/MHz EIRP}$	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 in 15.209		Pass	
15.207	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.10

Notes:

- 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.
- All channels, modes, and modulations/data rates were investigated among all UNII bands. The test results shown in the following sections represent the worst case emissions.
- 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.

7.2. 26dB Bandwidth Measurement

7.2.1. Test Limit

N/A

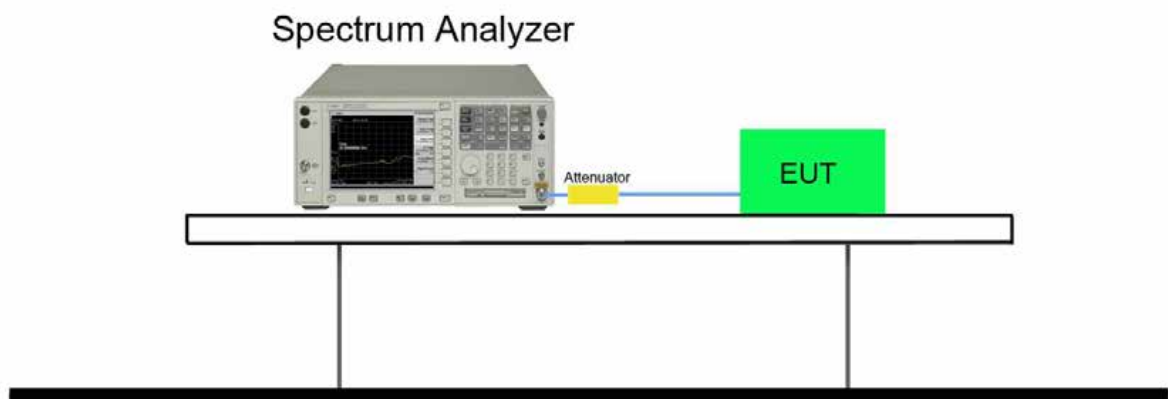
7.2.2. Test Procedure used

KDB 789033 D02v02r01 - Section C.1

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



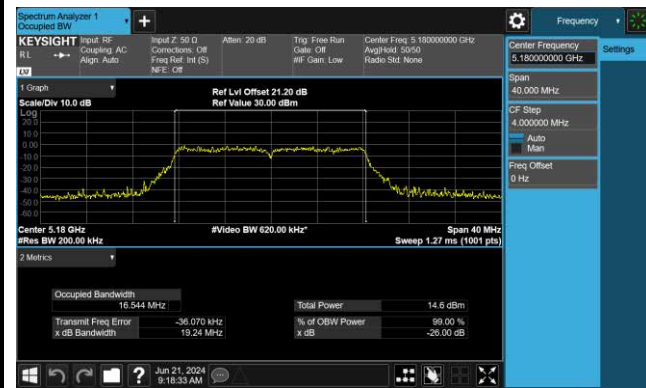
7.2.5. Test Result

Product	Panel PC	Test Engineer	Marvin
Test Site	SR6	Test Date	2024/6/21
Test Item	26dB Bandwidth		

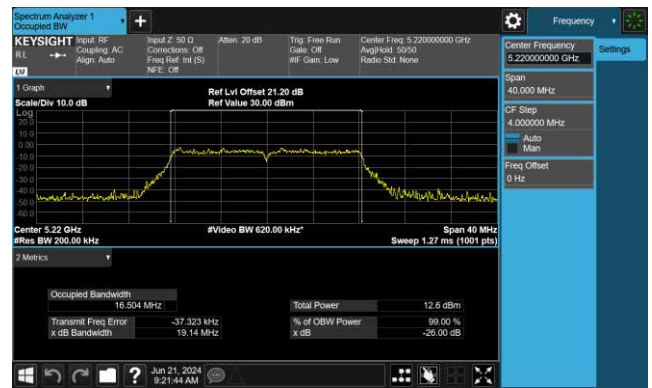
Test Mode	Channel No.	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
Ant 0				
802.11a	36	5180	19.24	16.544
802.11a	44	5220	19.14	16.504
802.11a	48	5240	18.96	16.518
802.11a	149	5745	19.04	16.492
802.11a	157	5785	19.03	16.487
802.11a	165	5825	18.89	16.496
802.11n-HT20	36	5180	19.75	17.620
802.11n-HT20	44	5220	19.43	17.621
802.11n-HT20	48	5240	19.57	17.609
802.11n-HT20	149	5745	19.58	17.621
802.11n-HT20	157	5785	19.72	17.626
802.11n-HT20	165	5825	19.87	17.618
802.11n-HT40	38	5190	39.71	36.160
802.11n-HT40	46	5230	40.16	36.134
802.11n-HT40	151	5755	40.13	36.194
802.11n-HT40	159	5795	40.37	36.182
802.11ac-VHT80	42	5210	81.03	75.942
802.11ac-VHT80	155	5775	80.85	75.975

802.11a 26dB Bandwidth & 99% Bandwidth - Ant 0

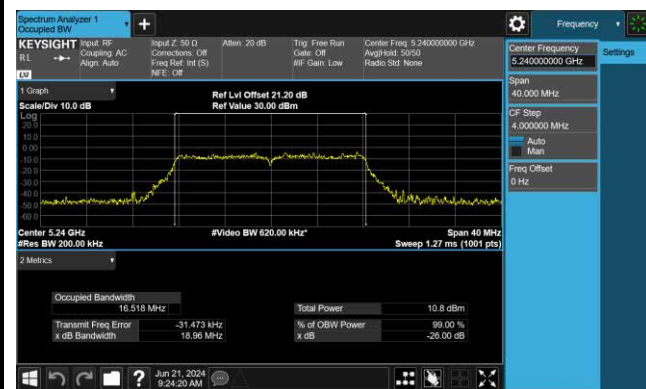
Channel 36 (5180MHz)



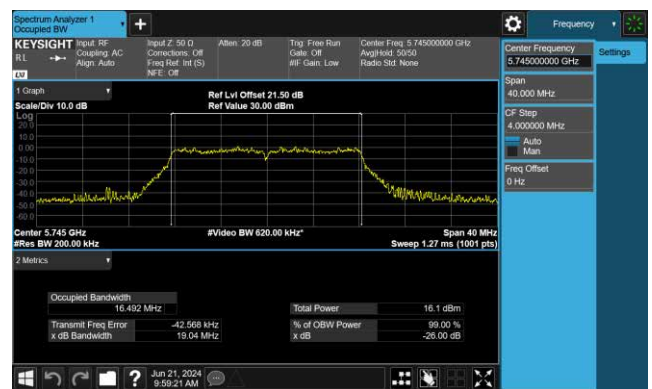
Channel 44 (5220MHz)



Channel 48 (5240MHz)



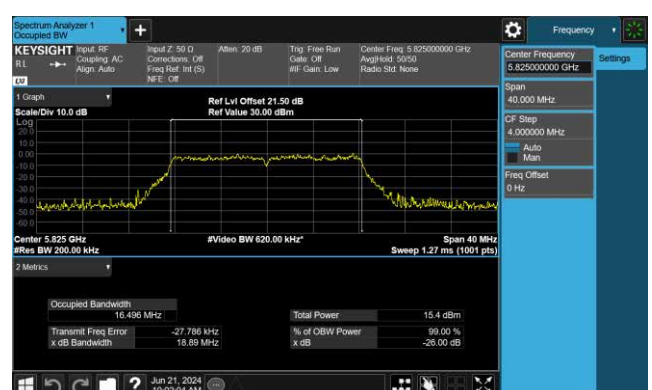
Channel 149 (5745MHz)



Channel 157 (5785MHz)

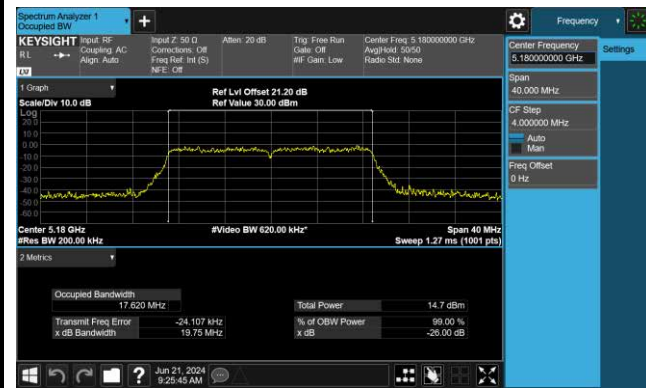


Channel 165 (5825MHz)

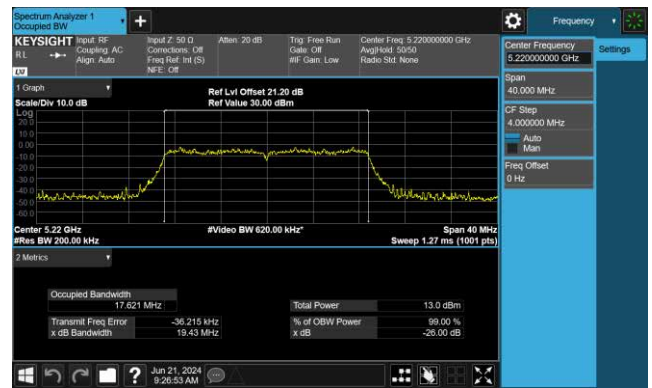


802.11n-HT20 26dB Bandwidth & 99% Bandwidth - Ant 0

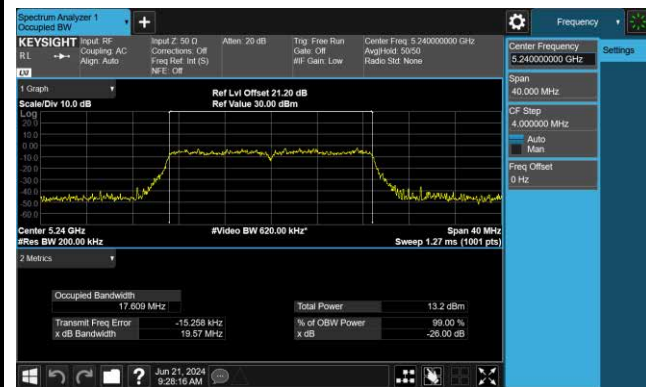
Channel 36 (5180MHz)



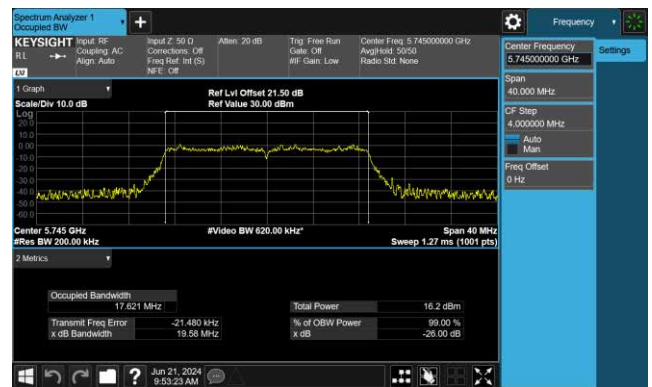
Channel 44 (5220MHz)



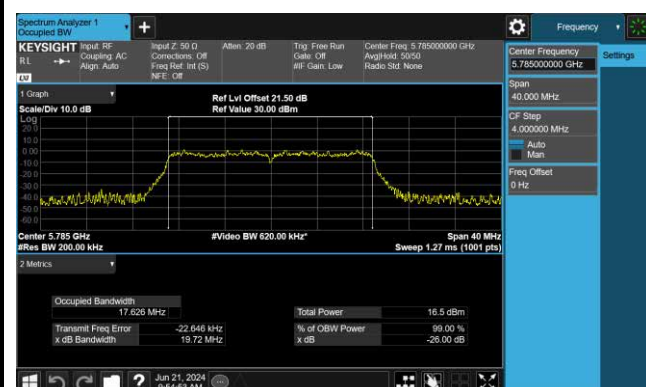
Channel 48 (5240MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

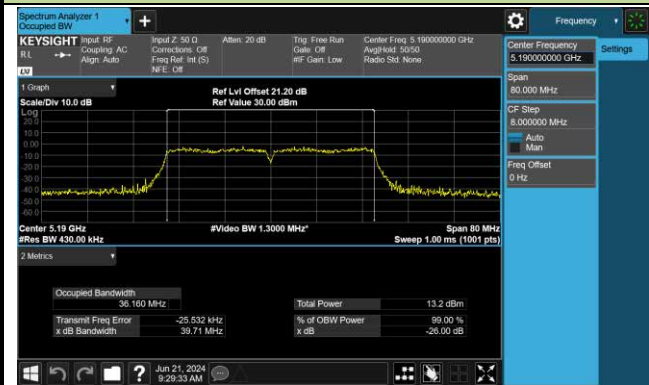


Channel 165 (5825MHz)

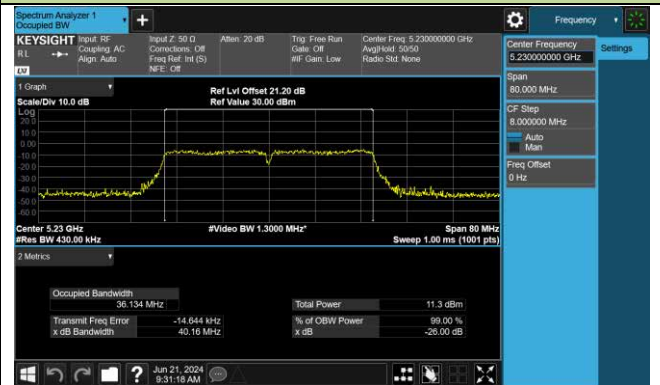


802.11n-HT40 26dB Bandwidth & 99% Bandwidth - Ant 0

Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)

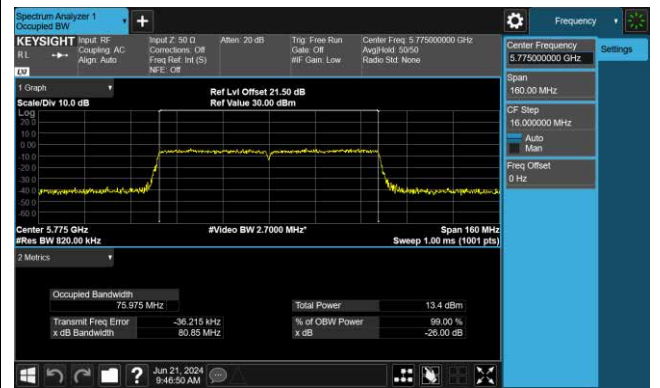


802.11ac-VHT80 26dB Bandwidth & 99% Bandwidth - Ant 0

Channel 42 (5210MHz)



Channel 155 (5775MHz)



7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

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

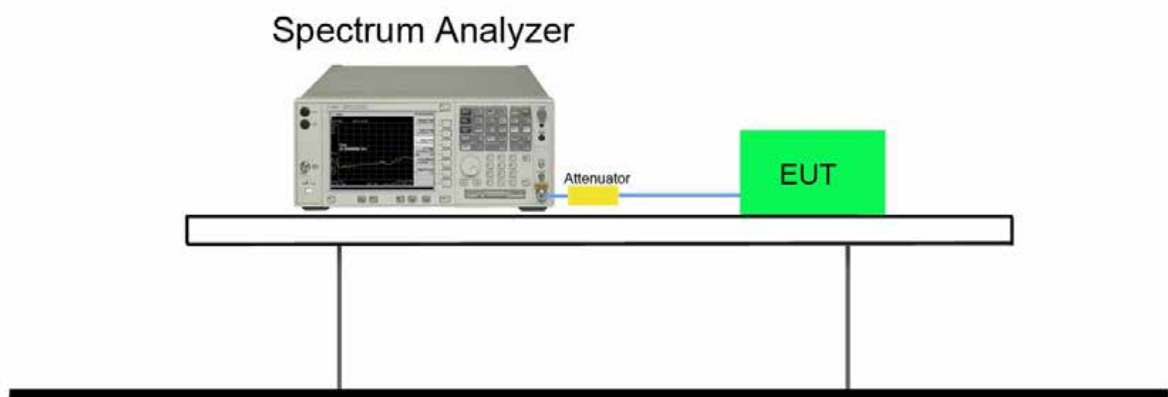
7.3.2. Test Procedure used

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 $\geq 3 \times$ 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



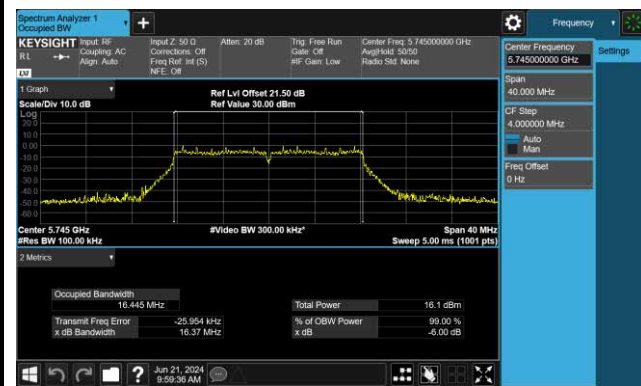
7.3.5. Test Result

Product	Panel PC	Test Engineer	Marvin
Test Site	SR6	Test Date	2024/6/21
Test Item	6dB Bandwidth		

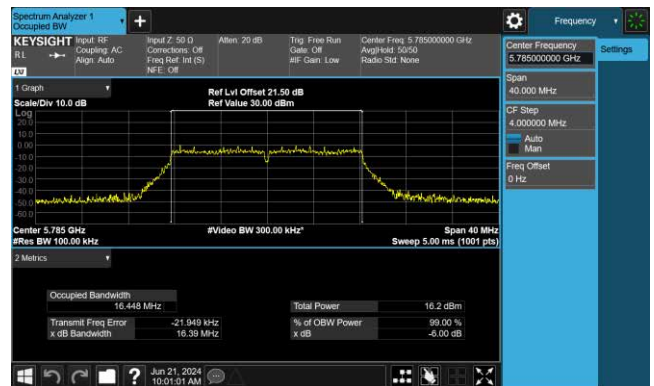
Test Mode	Channel No.	Frequency (MHz)	6dB Bandwidth (MHz)	Limit (MHz)	Result
Ant 0					
802.11a	149	5745	16.37	≥ 0.5	Pass
802.11a	157	5785	16.39	≥ 0.5	Pass
802.11a	165	5825	16.40	≥ 0.5	Pass
802.11n-HT20	149	5745	17.56	≥ 0.5	Pass
802.11n-HT20	157	5785	17.56	≥ 0.5	Pass
802.11n-HT20	165	5825	17.57	≥ 0.5	Pass
802.11n-HT40	151	5755	36.03	≥ 0.5	Pass
802.11n-HT40	159	5795	35.76	≥ 0.5	Pass
802.11ac-VHT80	155	5775	76.40	≥ 0.5	Pass

802.11a 6dB Bandwidth - Ant 0

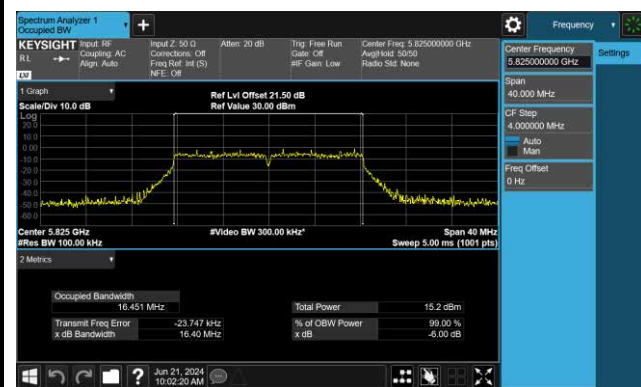
Channel 149 (5745MHz)



Channel 157 (5785MHz)

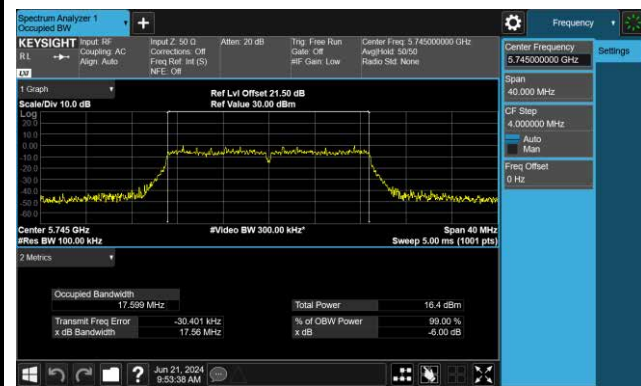


Channel 165 (5825MHz)

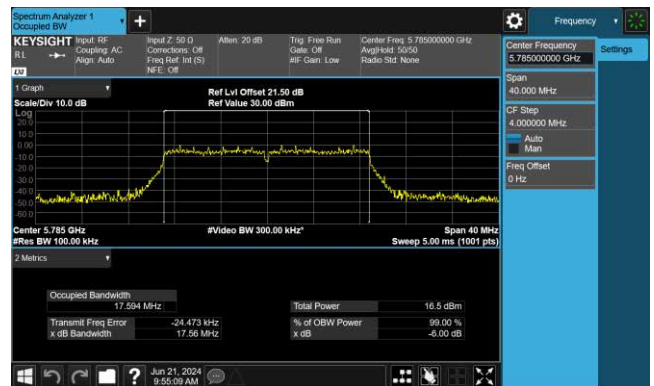


802.11n-HT20 6dB Bandwidth - Ant 0

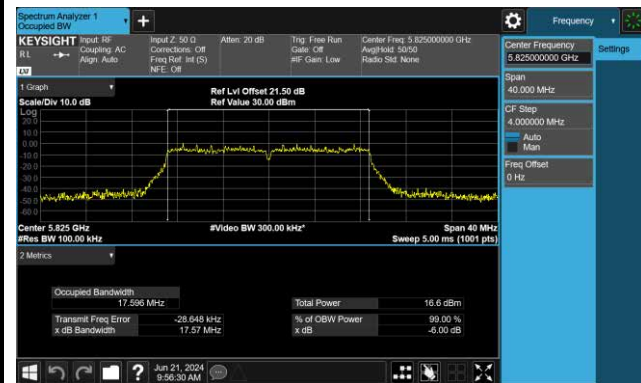
Channel 149 (5745MHz)



Channel 157 (5785MHz)

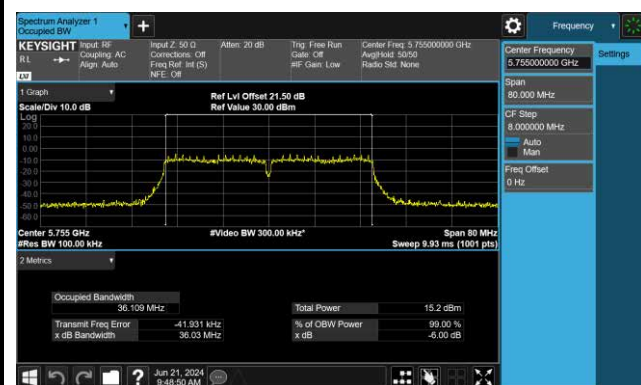


Channel 165 (5825MHz)

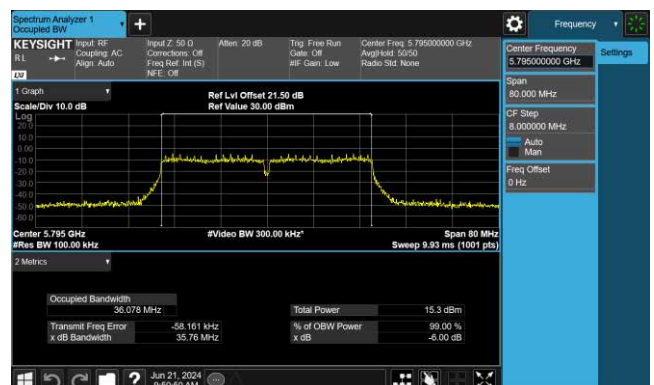


802.11n-HT40 6dB Bandwidth - Ant 0

Channel 151 (5755MHz)

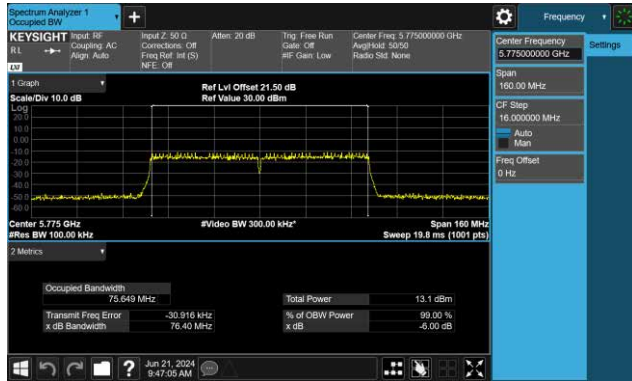


Channel 159 (5795MHz)



802.11ac-VHT80 6dB Bandwidth - Ant 0

Channel 155 (5775MHz)



7.4. Output Power Measurement

7.4.1. Test Limit

For FCC Power Measurement Limit

For client operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 250mW.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW (23.98dBm) or $11\text{dBm} + 10 \log(26\text{dB BW})$.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W (30dBm).

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

For IC Power Measurement Limit

For the band 5.15-5.25 GHz, the maximum e.i.r.p. shall not exceed 200 mW (23.01dBm) or $10 + 10 \cdot \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power shall not exceed 250 mW (23.98dBm) or $11 + 10 \log_{10} B$, dBm, whichever power is less. The maximum e.i.r.p. shall not exceed 1.0 W (30dBm) or $17 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz.

For the 5.725-5.85 GHz band, the maximum conducted output power shall not exceed 1 W.

If transmitting antennas of directional gain greater than 6dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Max Conducted Output Power Limit Calculation as below:

For U-NII-1 (5150-5250MHz)

24dBm for Client Device

For U-NII-2A (5250-5350MHz), U-NII-2C (5470-5725MHz)

802.11a: $11 + 10 \log_{10} (24.95\text{MHz}) = 25\text{dBm} > 24\text{dBm}$;

802.11n-HT20/ac-VHT20: $11 + 10 \log_{10} (23.95\text{MHz}) = 25\text{dBm} > 24\text{dBm}$;

802.11n-HT40/ac-VHT40: $11 + 10 \log_{10} (42.87\text{MHz}) = 27\text{dBm} > 24\text{dBm}$;

802.11n-HT80/ac-VHT80: $11 + 10 \log_{10} (83.55\text{MHz}) = 30\text{dBm} > 24\text{dBm}$;

802.11ac-VHT160: $11 + 10 \log_{10} (162.8\text{MHz}) = 33\text{dBm} > 24\text{dBm}$;

For U-NII-3 (5725-5850MHz)

30dBm for Client Device

EIRP Limit Calculation as below:

For U-NII-1 (5150-5250MHz)

36dBm with 6dBi Antenna Gain

For U-NII-2A (5250-5350MHz), U-NII-2C (5470-5725MHz)

30dBm with 6dBi Antenna Gain

For U-NII-3 (5725-5850MHz)

36dBm with 6dBi Antenna Gain

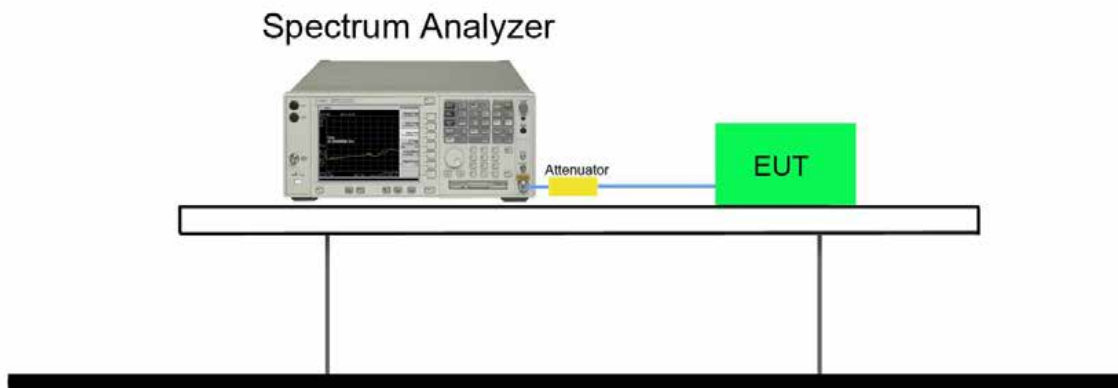
7.4.2. Test Procedure Used

KDB 789033 D02v02r01 - 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. The trace was averaged over 100 traces to obtain the final measured average power.

7.4.4. Test Setup



7.4.5. Test Result

Product	Panel PC	Test Engineer	Marvin
Test Site	SR6	Test Date	2024/6/21
Test Item	Output Power		

Model	Rate	Ch.	Freq. (MHz)	Ant 0 Power (dBm)	Ant 1 Power (dBm)	Ant 0+1 Power (dBm)	Power Limit (dBm)
802.11a Band1	6M	36	5180	11.27	11.50	14.40	23.98
	6M	44	5220	12.99	9.92	14.73	23.98
	6M	48	5240	12.80	9.44	14.45	23.98
802.11a Band4	6M	149	5745	10.68	12.94	14.97	30.00
	6M	157	5785	10.67	12.93	14.96	30.00
	6M	165	5825	10.71	12.38	14.64	30.00
n-HT20 Band1	MCS0	36	5180	11.60	11.85	14.74	23.98
	MCS0	44	5220	12.98	9.93	14.73	23.98
	MCS0	48	5240	12.99	9.98	14.75	23.98
n-HT20 Band4	MCS0	149	5745	10.68	12.98	14.99	30.00
	MCS0	157	5785	10.80	12.73	14.88	30.00
	MCS0	165	5825	10.72	12.87	14.94	30.00
ac-VHT20 Band1	MCS0	36	5180	11.52	11.78	14.66	23.98
	MCS0	44	5220	12.88	9.88	14.64	23.98
	MCS0	48	5240	12.93	9.96	14.70	23.98
ac-VHT20 Band4	MCS0	149	5745	10.82	12.39	14.69	30.00
	MCS0	157	5785	10.78	12.47	14.72	30.00
	MCS0	165	5825	10.84	12.74	14.90	30.00
n-HT40 Band1	MCS0	38	5190	10.22	10.55	13.40	23.98
	MCS0	46	5230	11.70	8.64	13.44	23.98
n-HT40 Band4	MCS0	151	5755	9.68	11.79	13.87	30.00
	MCS0	159	5795	9.62	11.82	13.87	30.00
ac-VHT40 Band1	MCS0	38	5190	10.11	10.50	13.32	23.98
	MCS0	46	5230	11.68	8.62	13.42	23.98
ac-VHT40 Band4	MCS0	151	5755	9.61	11.80	13.85	30.00
	MCS0	159	5795	9.66	11.78	13.86	30.00

ac-VHT80 Band1	MCS0	42	5210	9.29	7.85	11.64	23.98
ac-VHT80 Band4	MCS0	155	5775	10.04	7.40	11.93	30.00

Note: Output power =Reading value on power meter + duty cycle factor + cable loss。

7.5. Transmit Power Control

7.5.1. Test Limit

The U-NII-2A & U-NII-2C device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

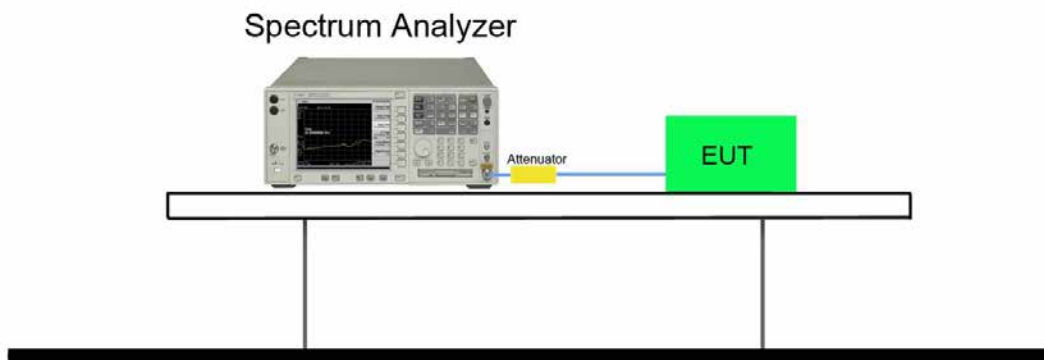
7.5.2. Test Procedure Used

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

7.5.3. 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. The trace was averaged over 100 traces to obtain the final measured average power.

7.5.4. Test Setup



7.5.5. Test Result

Note: TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

7.6. Power Spectral Density Measurement

7.6.1. Test Limit

For FCC Power Spectral Density Limit

For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

For IC Power Spectral Density Limit

For the band 5.15-5.25 GHz, the e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

For the 5.725-5.85 GHz band, the power spectral density shall not exceed 30 dBm in any 500 kHz band.

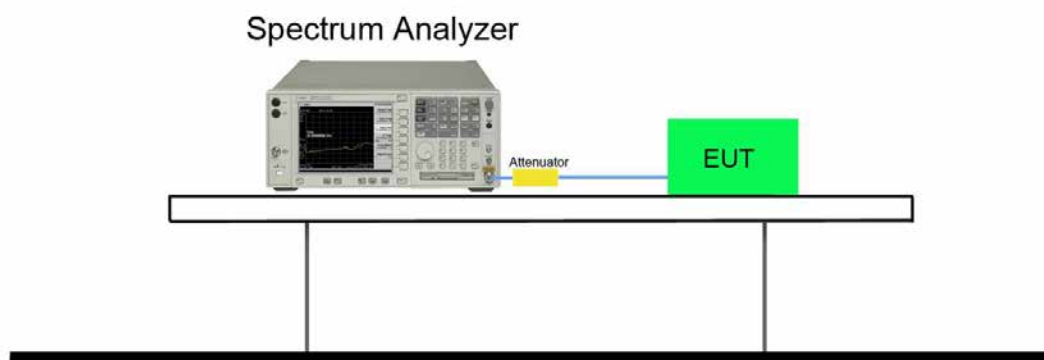
7.6.2. Test Procedure Used

KDB 789033 D02v02r01 - Section F

7.6.3. 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, if measurement bandwidth of Maximum PSD is specified in 500 kHz,
4. RBW = 100 kHz
5. VBW = 3MHz
6. Number of sweep points $\geq 2 \times (\text{span} / \text{RBW})$
7. Detector = power averaging (Average)
8. Sweep time = auto
9. Trigger = free run
10. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
11. 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.
12. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor $10 \cdot \log(500\text{kHz}/100\text{kHz}) = 7$ dB to the measured result

7.6.4. Test Setup



7.6.5. Test Result

Product	Panel PC	Test Engineer	Marvin
Test Site	SR6	Test Date	2024/6/21
Test Item	Power Spectral Density		

For FCC bands (UNII-1)

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant0 PSD (dBm/MHz)	Ant1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6	36	5180	-1.219	-0.514	95.13%	2.375	≤ 11	Pass
11a	6	44	5220	-3.008	-3.355	95.13%	0.049	≤ 11	Pass
11a	6	48	5240	-3.017	-3.159	95.13%	0.140	≤ 11	Pass
11n-HT20	6.5	36	5180	-1.260	-0.572	95.51%	2.307	≤ 11	Pass
11n-HT20	6.5	44	5220	-2.968	-2.228	95.51%	0.628	≤ 11	Pass
11n-HT20	6.5	48	5240	-2.880	-2.320	95.51%	0.619	≤ 11	Pass
11n-HT40	13.5	38	5190	-5.145	-4.664	89.69%	-1.415	≤ 11	Pass
11n-HT40	13.5	46	5230	-7.159	-6.189	89.69%	-3.164	≤ 11	Pass
11ac-VHT80	29.3	42	5210	-11.116	-10.435	84.47%	-7.019	≤ 11	Pass

Note: Total PSD (dBm/MHz) = Ant PSD (dBm/MHz) + 10*log(1/duty cycle)

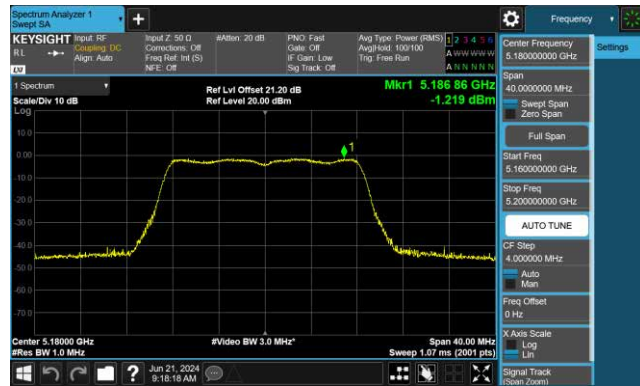
For FCC bands (UNII-4)

Test Mode	Data Rate (Mbps)	Channel No.	Freq. (MHz)	Ant0 PSD (dBm/MHz)	Ant1 PSD (dBm/MHz)	Duty Cycle (%)	Total PSD (dBm/MHz)	PSD Limit (dBm/MHz)	Result
11a	6	149	5745	-1.841	-2.088	95.13%	1.264	≤ 30	Pass
11a	6	157	5785	-1.890	-1.696	95.13%	1.435	≤ 30	Pass
11a	6	165	5825	-2.450	-2.855	95.13%	0.579	≤ 30	Pass
11n-HT20	6.5	149	5745	-1.722	-2.096	95.51%	1.305	≤ 30	Pass
11n-HT20	6.5	157	5785	-1.953	-2.023	95.51%	1.222	≤ 30	Pass
11n-HT20	6.5	165	5825	-1.831	-2.005	95.51%	1.293	≤ 30	Pass
11n-HT40	13.5	151	5755	-5.746	-6.044	89.69%	-2.410	≤ 30	Pass
11n-HT40	13.5	159	5795	-5.875	-6.033	89.69%	-2.470	≤ 30	Pass
11ac-VHT80	29.3	155	5775	-10.677	-11.076	84.47%	-7.129	≤ 30	Pass

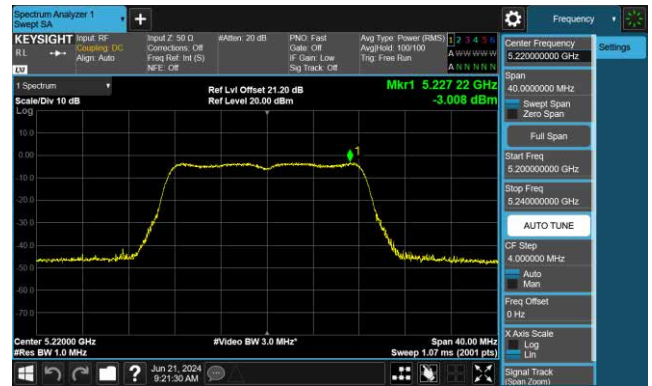
Note: Total PSD (dBm/500kHz) = Ant PSD (dBm/100kHz) + 10*log(1/duty cycle) + Constant Factor.

802.11a Power Spectral Density - Ant 0

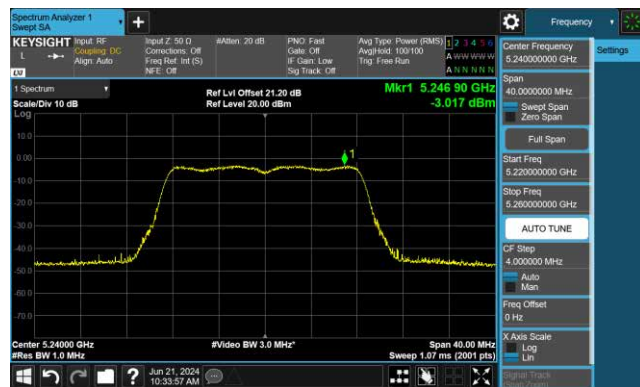
Channel 36 (5180MHz)



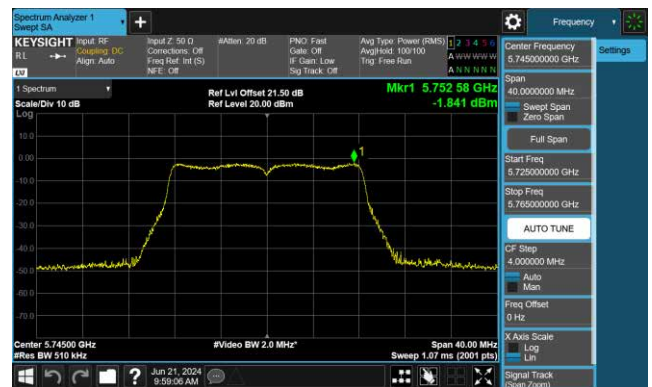
Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

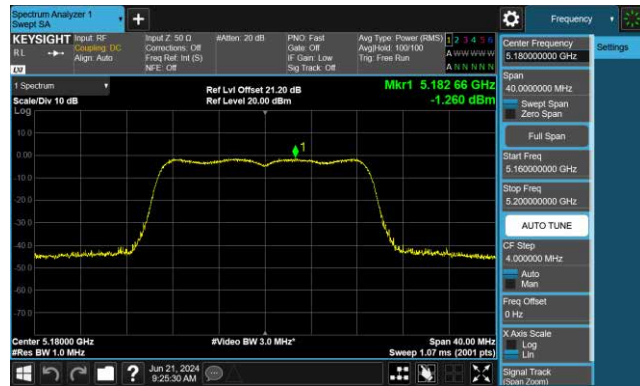


Channel 165 (5825MHz)

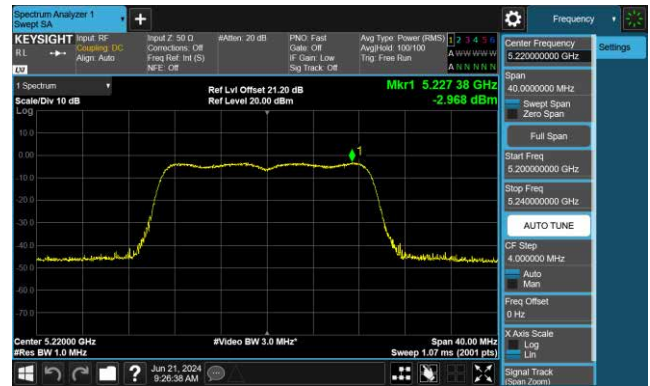


802.11n-HT20 Power Spectral Density - Ant 0

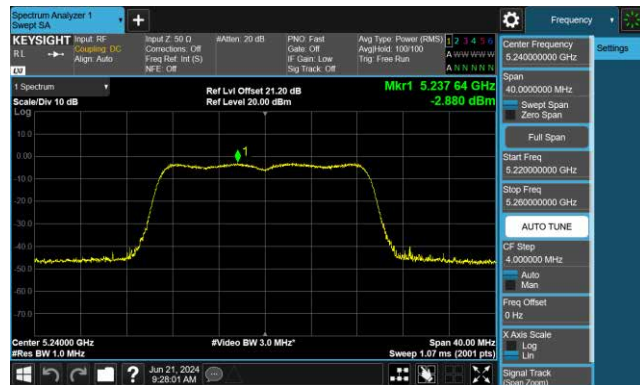
Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



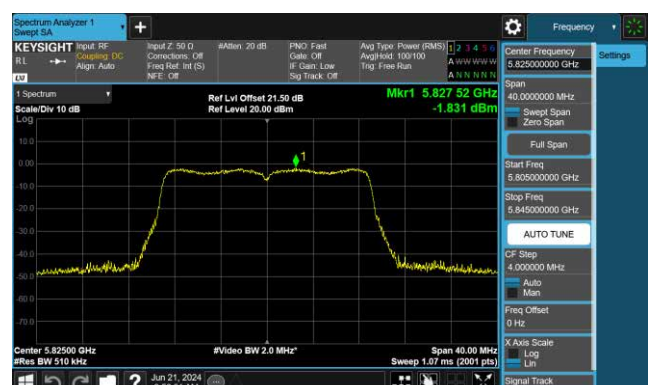
Channel 149 (5745MHz)



Channel 157 (5785MHz)

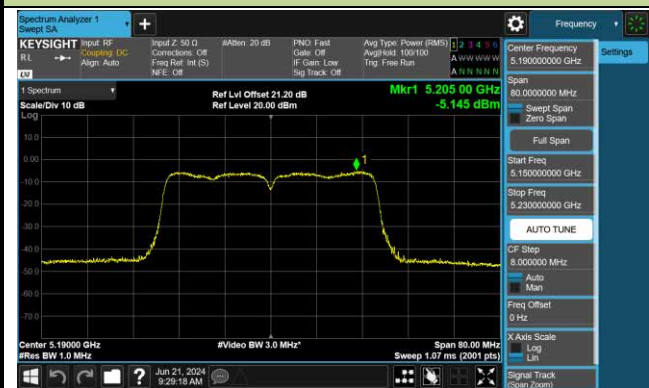


Channel 165 (5825MHz)

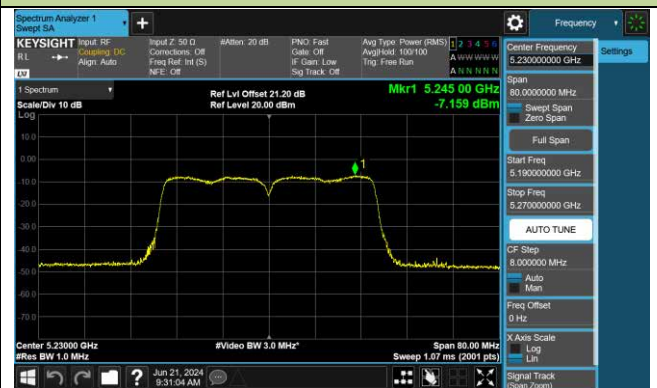


802.11n-HT40 Power Spectral Density - Ant 0

Channel 38 (5190MHz)



Channel 46 (5230MHz)



Channel 151 (5755MHz)



Channel 159 (5795MHz)



802.11ac-VHT80 Power Spectral Density - Ant 0

Channel 42 (5210MHz)

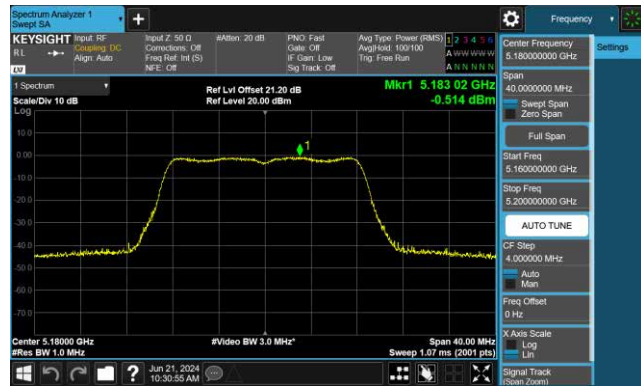


Channel 155 (5775MHz)

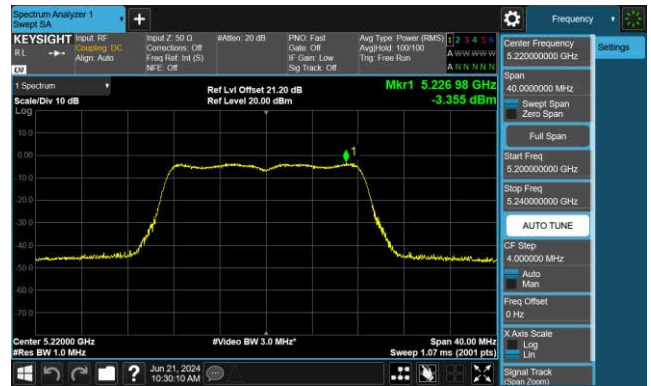


802.11a Power Spectral Density - Ant 1

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

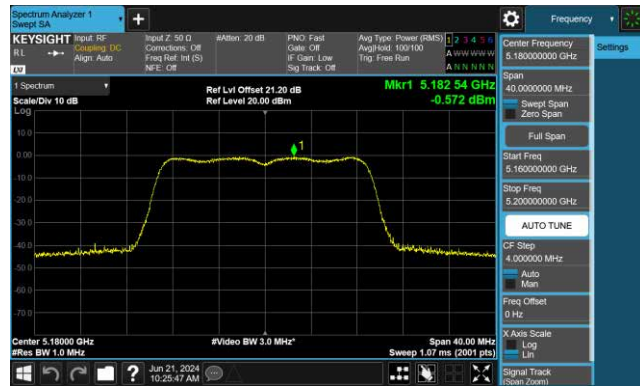


Channel 165 (5825MHz)

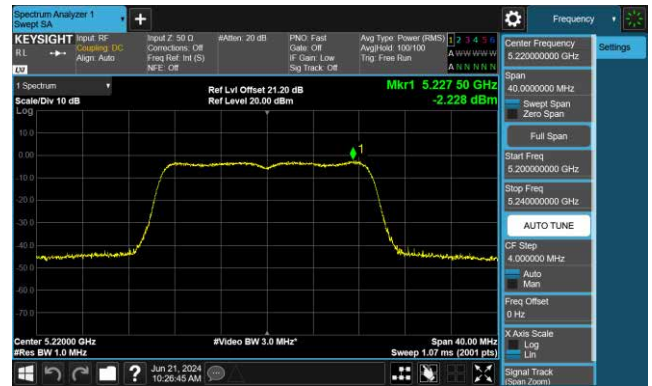


802.11n-HT20 Power Spectral Density - Ant 1

Channel 36 (5180MHz)



Channel 44 (5220MHz)



Channel 48 (5240MHz)



Channel 149 (5745MHz)



Channel 157 (5785MHz)

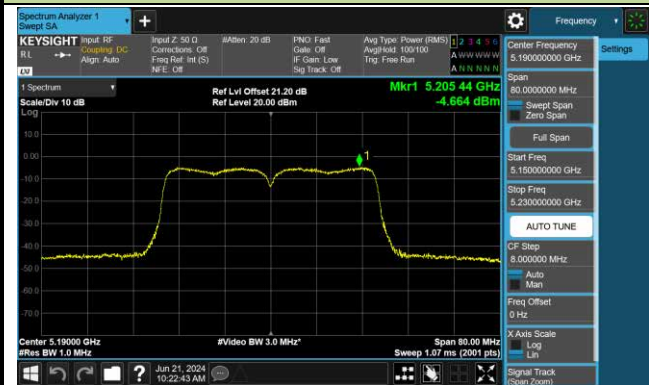


Channel 165 (5825MHz)

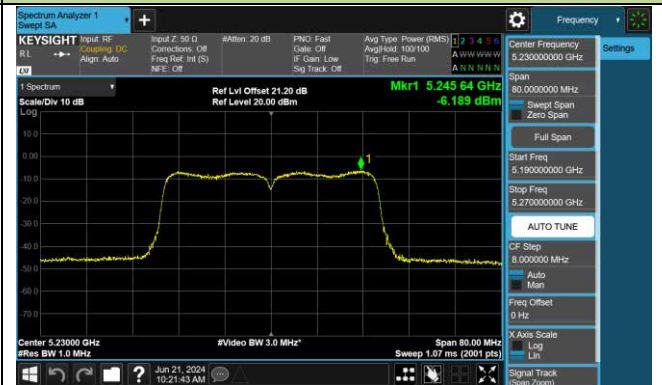


802.11n-HT40 Power Spectral Density - Ant 1

Channel 38 (5190MHz)



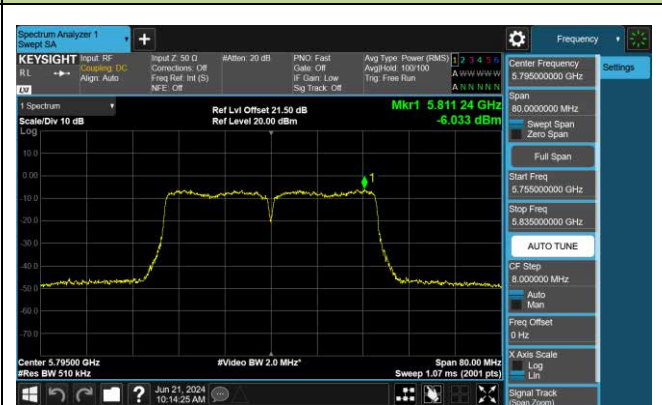
Channel 46 (5230MHz)



Channel 151 (5755MHz)

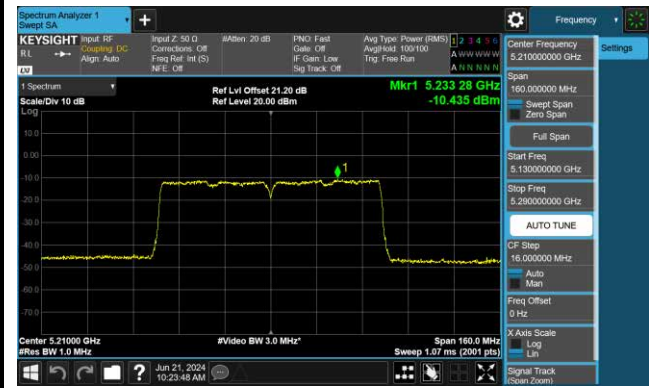


Channel 159 (5795MHz)

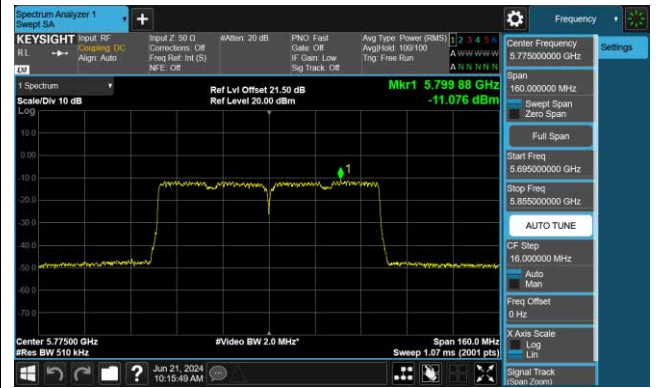


802.11ac-VHT80 Power Spectral Density - Ant 1

Channel 42 (5210MHz)



Channel 155 (5775MHz)



7.7. Frequency Stability Measurement

7.7.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

7.7.2. Test Limit

Frequency Stability Under Temperature Variations:

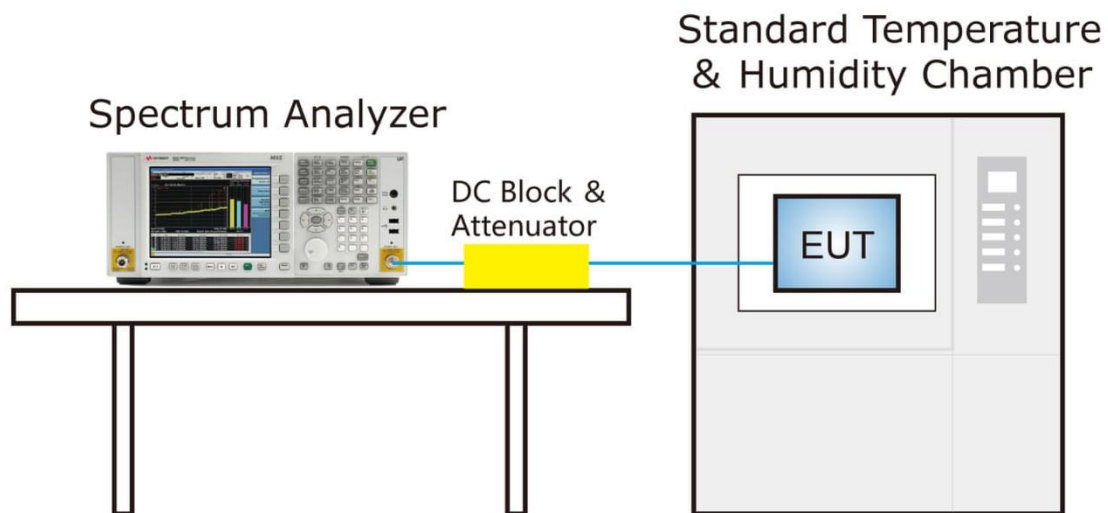
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 15\%$) and endpoint, record the maximum frequency change.

7.7.3. Test Setup



7.7.4. Test Result

Grantee ensure that the product meets e-CFR Title 47 section 15.407(g) and KDB 789033 D02v02r01 frequency stability such that the emissions are maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

7.8. Radiated Spurious Emission Measurement

7.8.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 – 0.490	2400/F (kHz)	300
0.490 – 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.8.2. Test Procedure Used

KDB 789033 D02v02r01 – Section G

7.8.3. Test Setting

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Quasi-Peak Measurements below 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

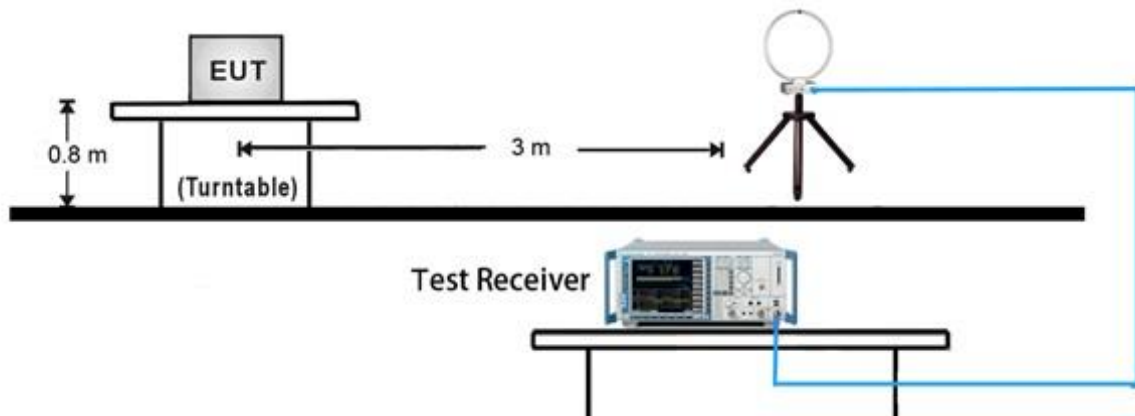
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (Average)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span/RBW}$)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

Quasi-Peak & Average Measurements below 30MHz

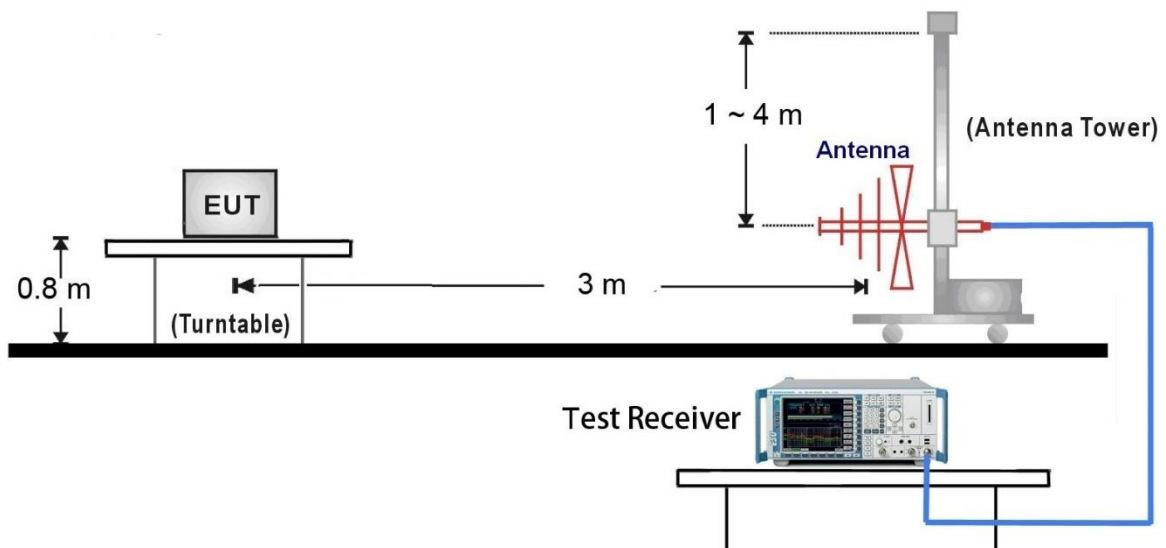
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
4. Detector = CISPR quasi-peak or power average (Average)
5. Sweep time = auto couple
6. Trace was allowed to stabilize

7.8.4. Test Setup

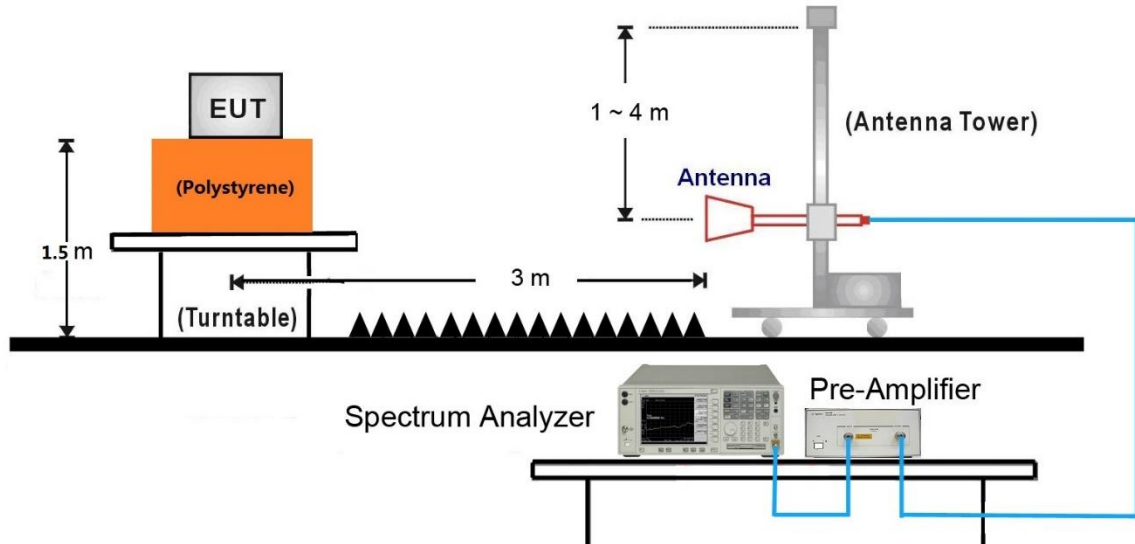
9kHz ~ 30MHz Test Setup:



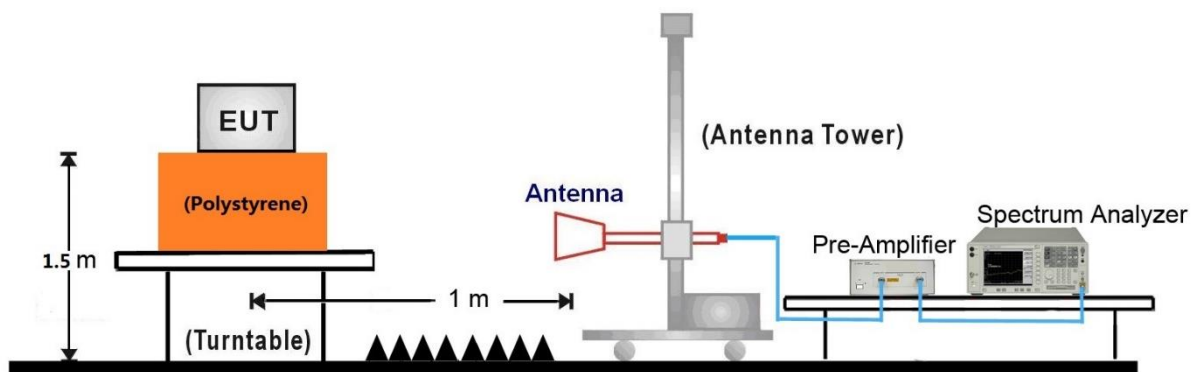
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:

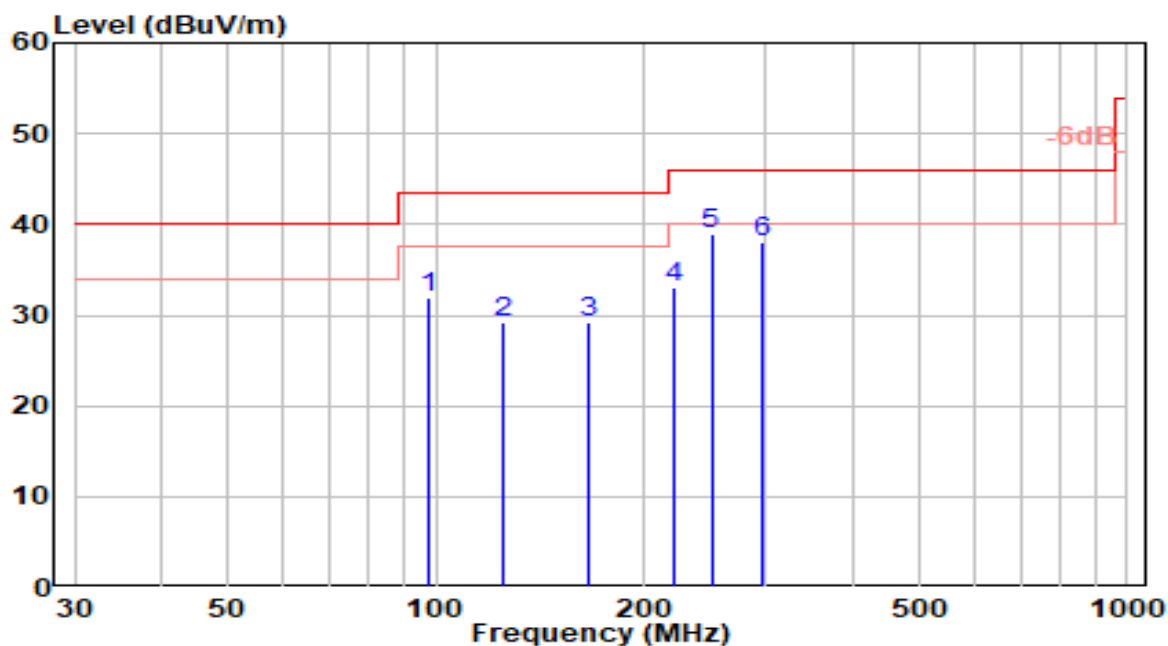


18GHz ~40GHz Test Setup:



7.8.5. Test Result

EUT	Panel PC	Date of Test	2024-07-02
Factor	VULB 9162	Temp. / Humidity	22°C / 60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

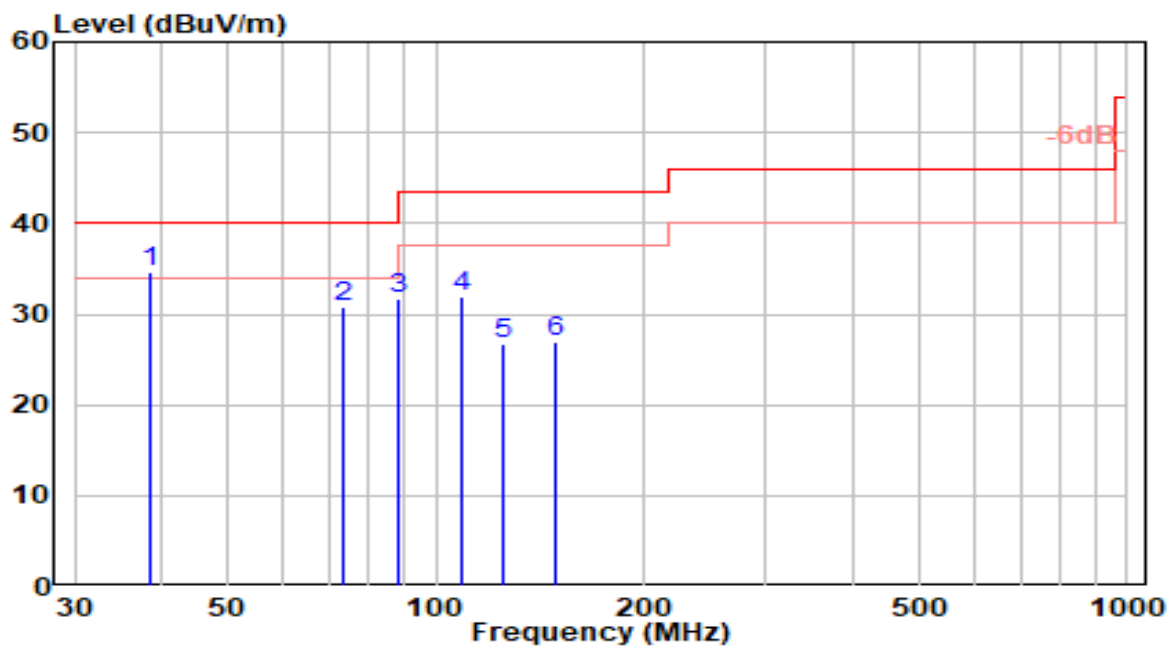


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	97.900	14.01	18.00	32.01	-11.49	43.50	150	262	QP
2	125.060	13.13	16.06	29.20	-14.30	43.50	200	81	QP
3	165.800	13.50	15.67	29.17	-14.33	43.50	150	300	QP
4	221.090	14.57	18.40	32.97	-13.03	46.00	100	0	QP
5	* 250.190	19.16	19.89	39.06	-6.94	46.00	100	358	QP
6	296.750	17.52	20.56	38.08	-7.92	46.00	100	160	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-07-02
Factor	VULB 9162	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

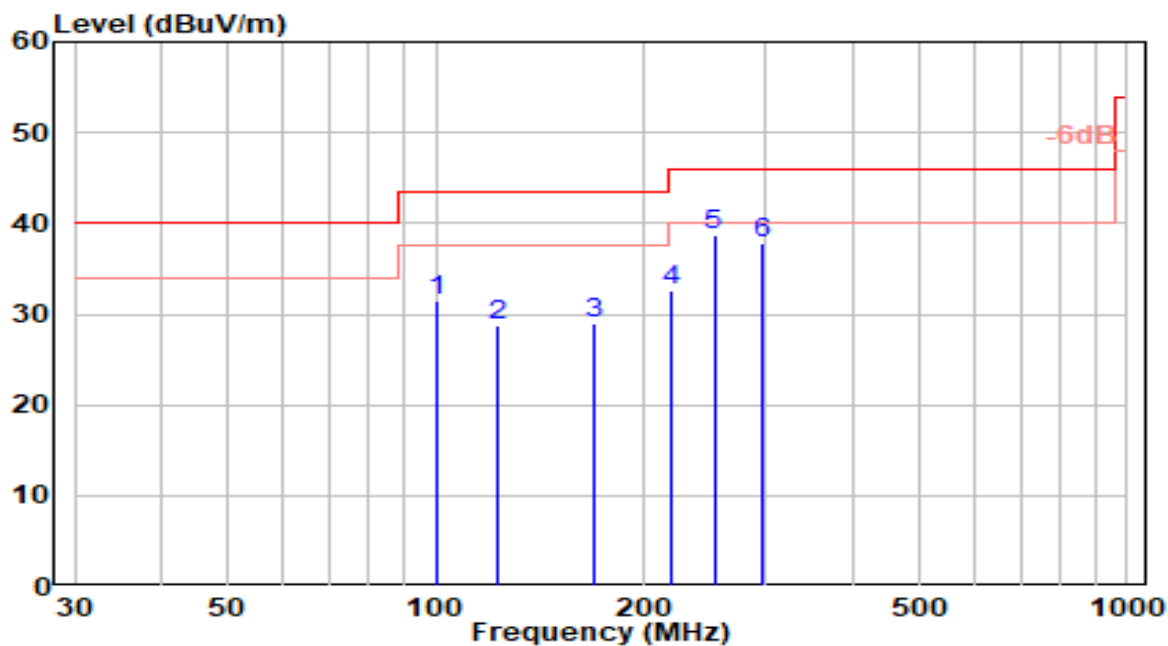


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	38.730	15.32	19.25	34.57	-5.43	40.00	100	142	QP
2		73.650	15.89	14.95	30.84	-9.16	40.00	128	360	QP
3		88.200	15.43	16.29	31.72	-11.78	43.50	150	98	QP
4		108.570	13.62	18.37	31.99	-11.51	43.50	100	43	QP
5		125.060	10.76	16.06	26.83	-16.67	43.50	100	35	QP
6		148.340	11.89	15.09	26.98	-16.52	43.50	100	44	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-07-03
Factor	VULB 9162	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 44_ANT 0+1	Test Voltage	By PoE

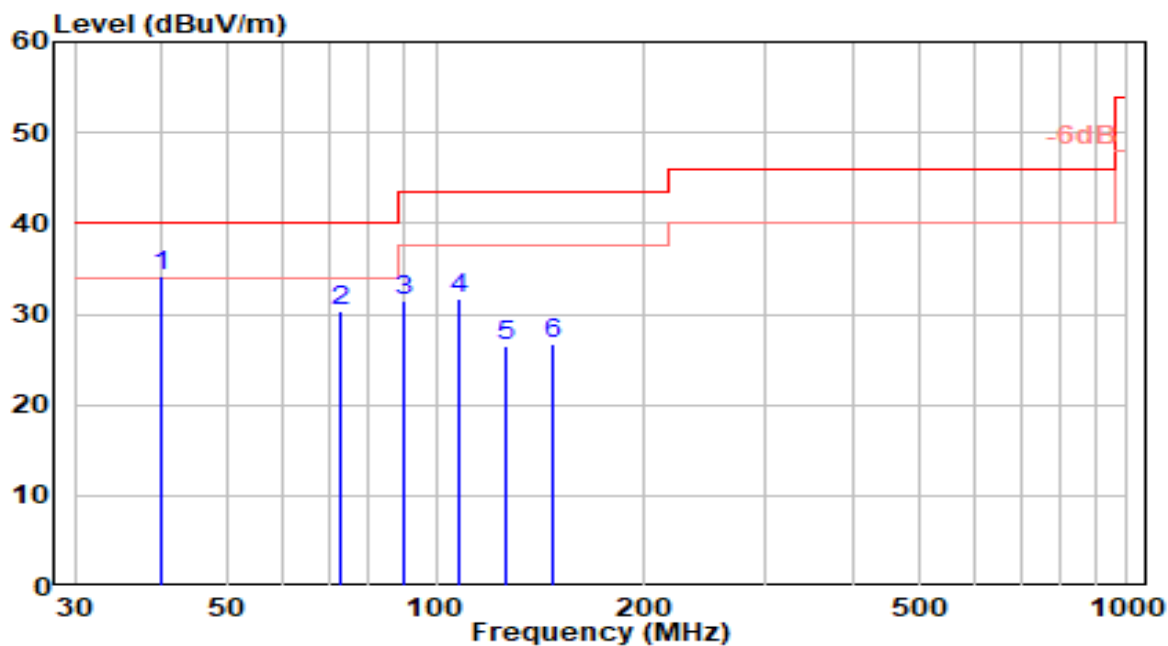


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	100.560	13.26	18.31	31.57	-11.93	43.50	150	269	QP
2	123.040	12.42	16.38	28.80	-14.70	43.50	200	88	QP
3	168.840	13.12	15.77	28.90	-14.60	43.50	150	307	QP
4	219.130	14.42	18.28	32.70	-13.30	46.00	100	7	QP
5	* 252.490	18.86	19.93	38.79	-7.21	46.00	100	5	QP
6	295.410	17.27	20.54	37.81	-8.19	46.00	100	167	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-07-03
Factor	VULB 9162	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 44_ANT 0+1	Test Voltage	By PoE

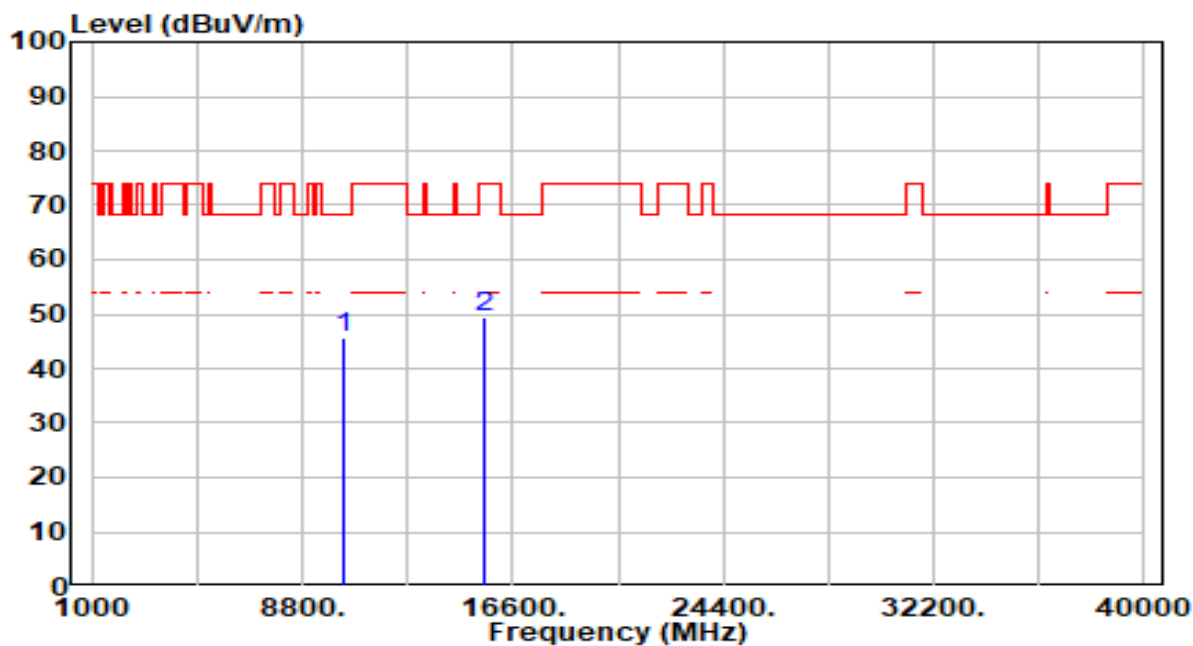


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	40.060	14.38	19.75	34.13	-5.87	40.00	100	149	QP
2		72.640	15.31	15.13	30.44	-9.56	40.00	128	7	QP
3		89.720	14.71	16.75	31.45	-12.05	43.50	150	105	QP
4		107.590	13.35	18.36	31.72	-11.78	43.50	100	50	QP
5		126.210	10.67	15.88	26.56	-16.94	43.50	100	42	QP
6		147.670	11.65	15.06	26.71	-16.79	43.50	100	51	QP

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

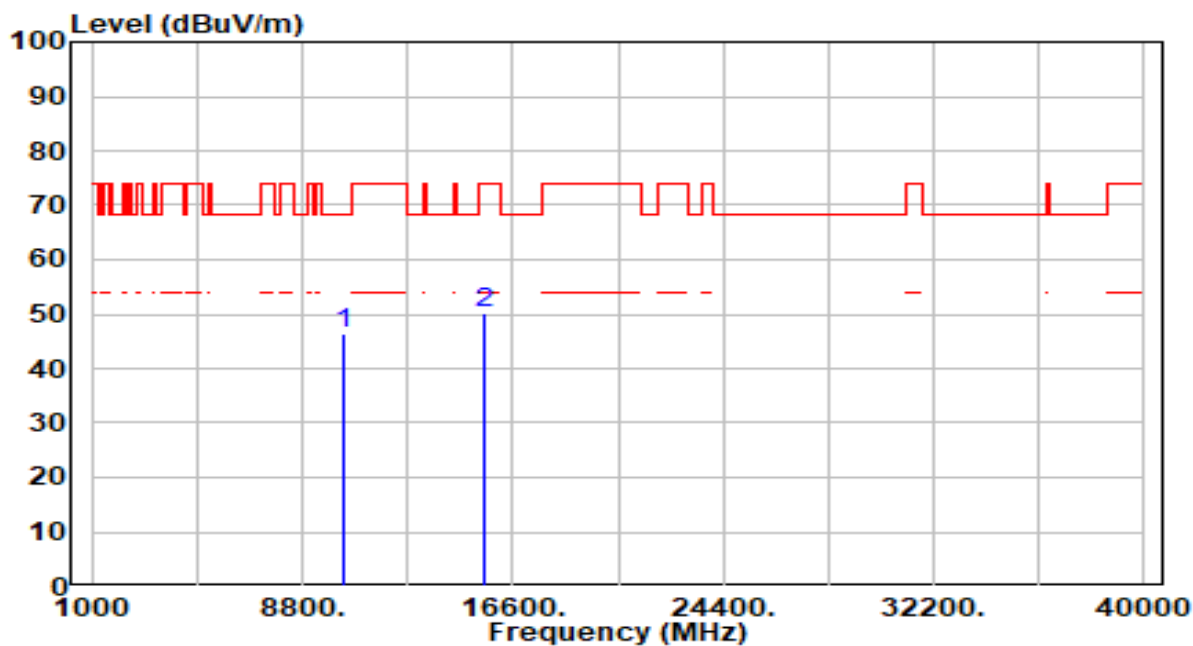


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10360.000	40.97	4.87	45.84	-22.36	68.20	100	320	Peak
2		15540.000	43.31	6.21	49.52	-24.48	74.00	100	360	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

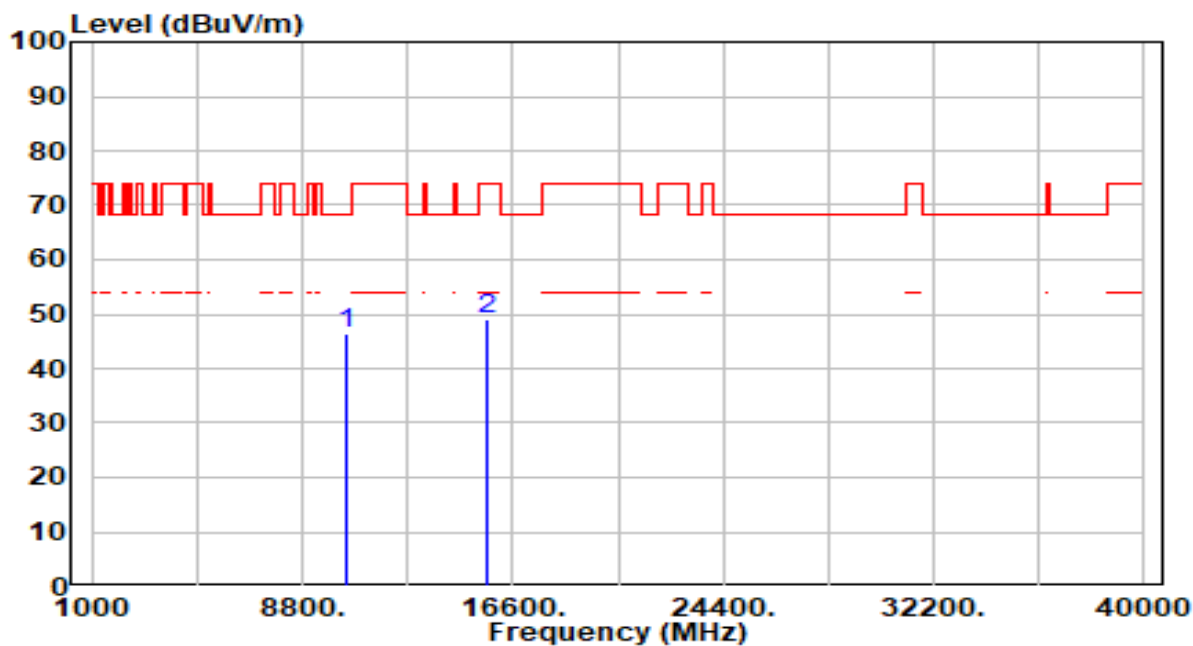


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10360.000	41.53	4.87	46.40	-21.80	68.20	100	87	Peak
2		15540.000	43.96	6.21	50.17	-23.83	74.00	200	360	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

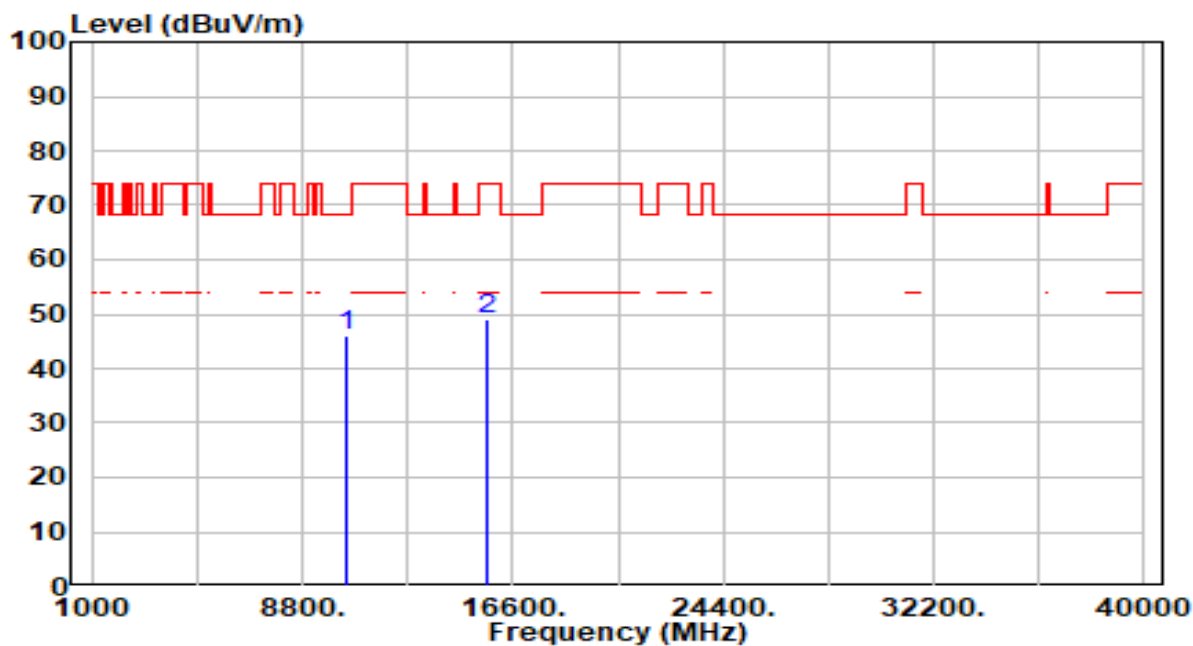


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10440.000	41.81	4.76	46.57	-21.63	68.20	100	106	Peak
2	15660.000	42.89	6.27	49.16	-24.84	74.00	100	31	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

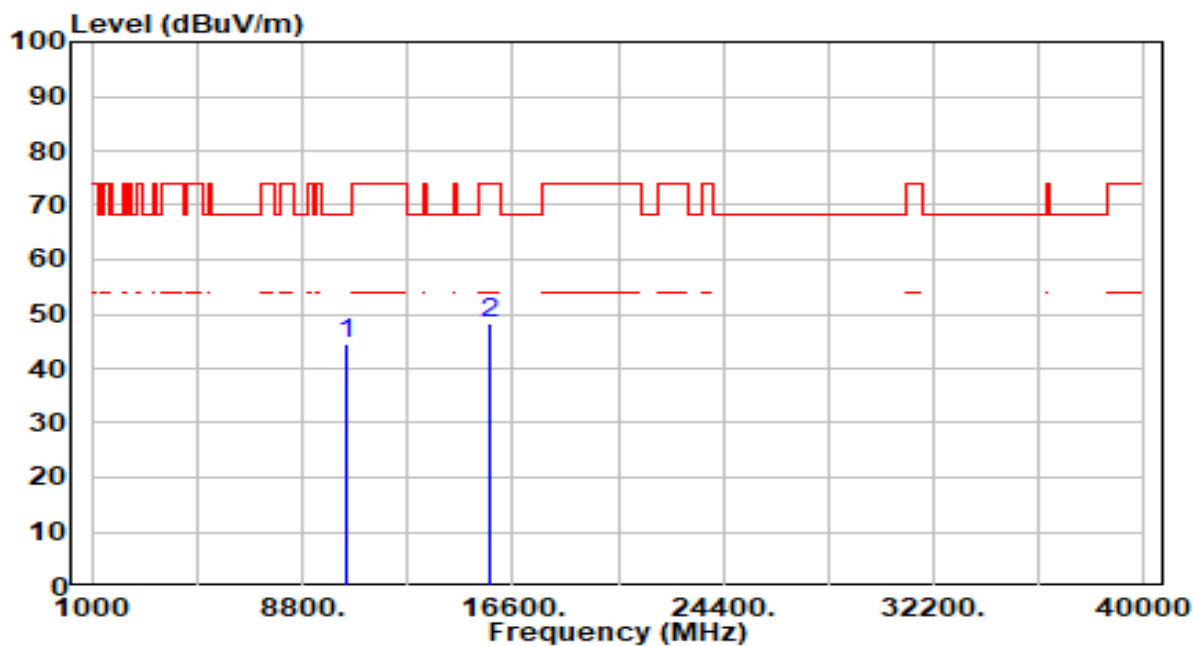


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10440.000	41.40	4.76	46.16	-22.04	68.20	100	137	Peak
2	15660.000	42.69	6.27	48.95	-25.05	74.00	100	0	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

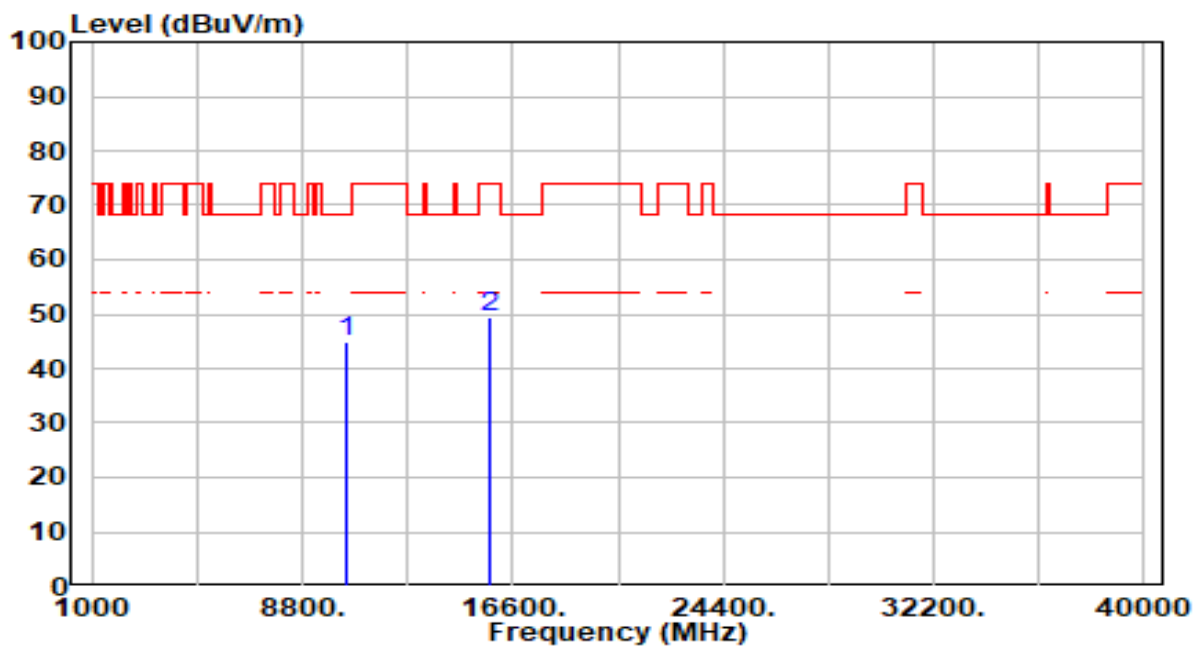


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10480.000	40.00	4.71	44.71	-23.49	68.20	100	83	Peak
2		15720.000	41.90	6.39	48.29	-25.71	74.00	100	347	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

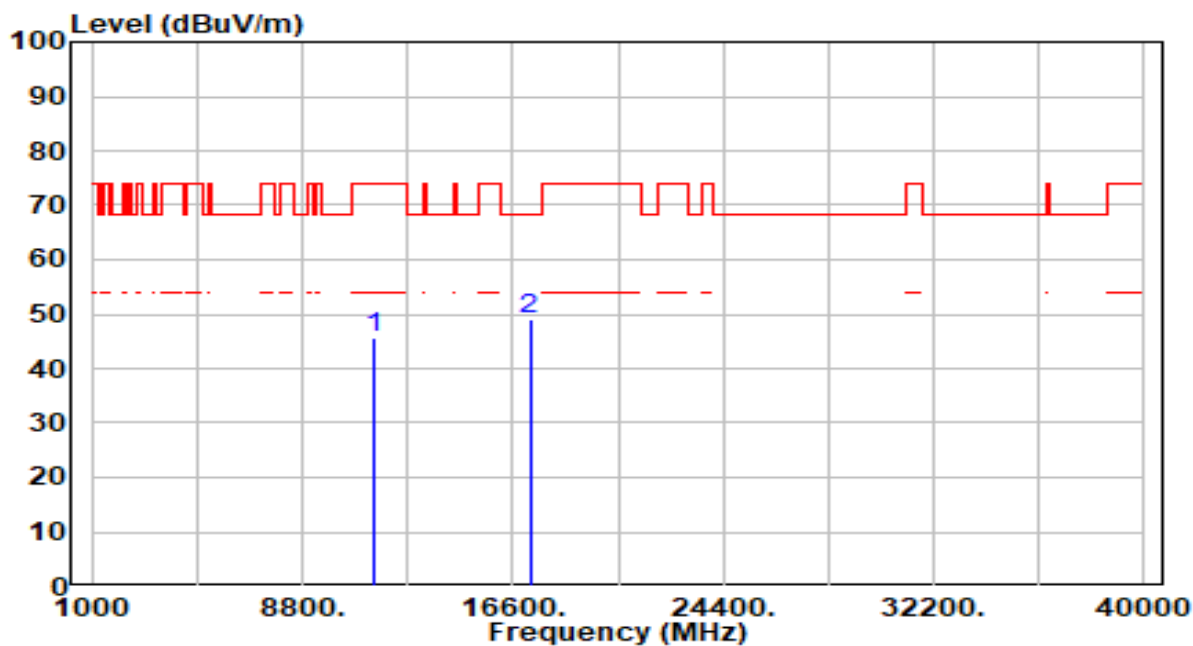


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10480.000	40.11	4.71	44.82	-23.38	68.20	100	216	Peak
2	15720.000	43.02	6.39	49.41	-24.59	74.00	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

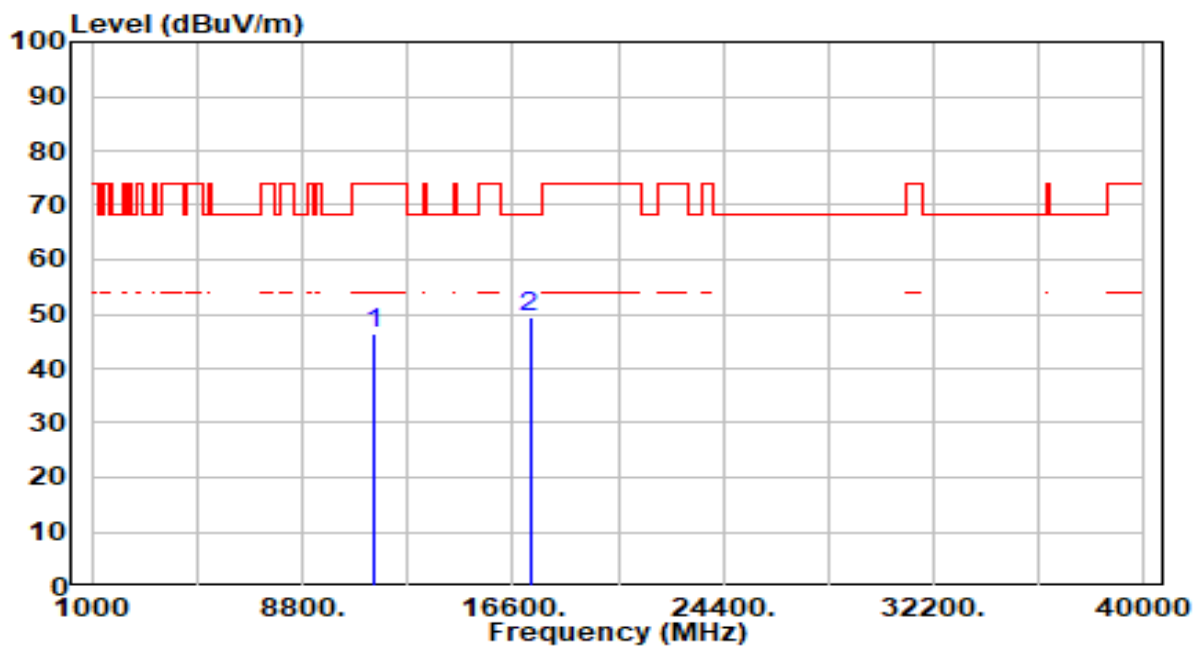


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11490.000	40.44	5.32	45.76	-28.24	74.00	100	0	Peak
2	* 17235.000	43.44	5.71	49.15	-19.05	68.20	100	173	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

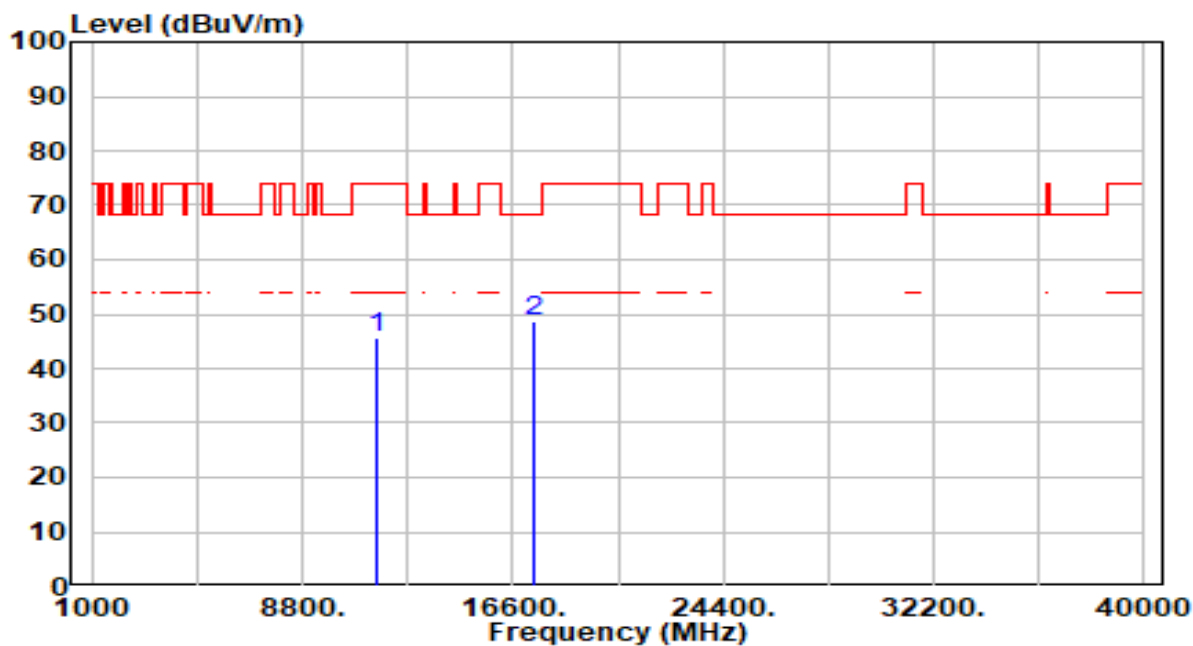


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11490.000	40.99	5.32	46.31	-27.69	74.00	100	360	Peak
2	* 17235.000	43.88	5.71	49.59	-18.61	68.20	100	14	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

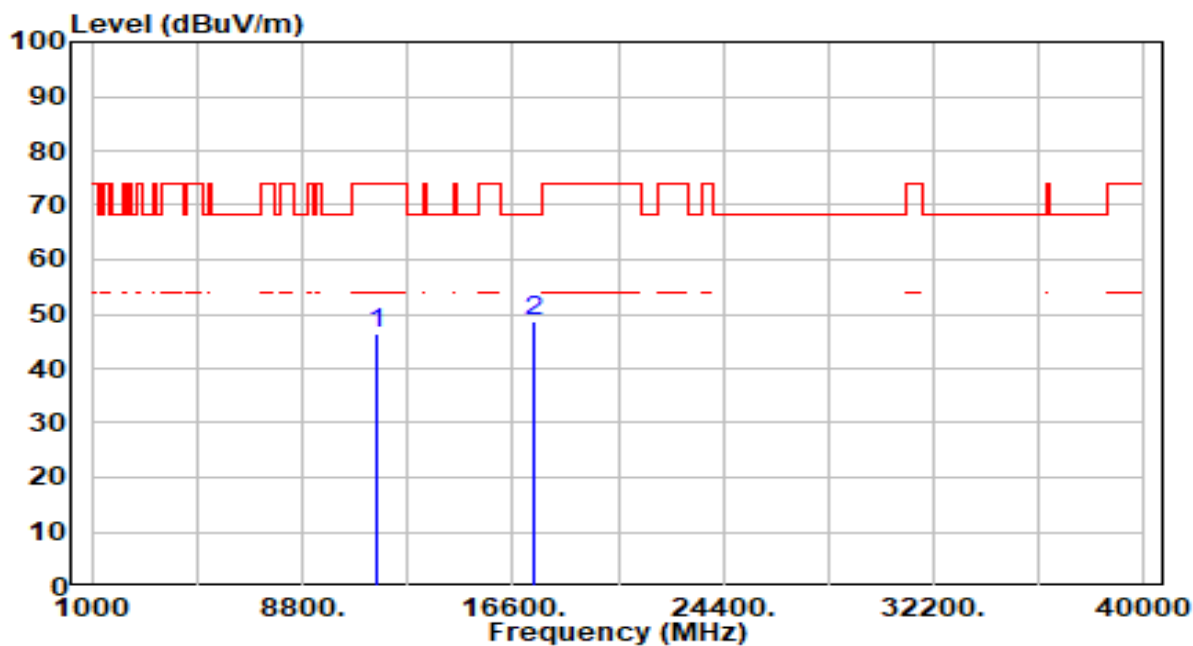


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11570.000	40.30	5.38	45.67	-28.33	74.00	100	191	Peak
2	* 17355.000	43.46	5.39	48.85	-19.35	68.20	100	312	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

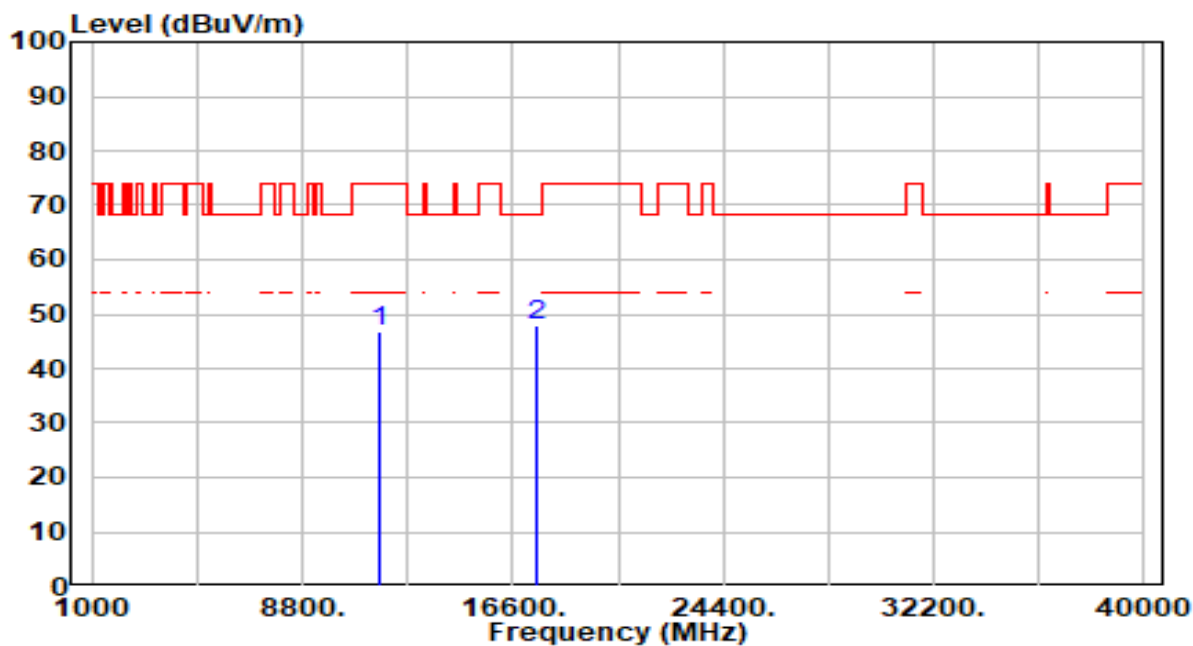


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11570.000	41.01	5.38	46.38	-27.62	74.00	100	273	Peak
2	* 17355.000	43.37	5.39	48.75	-19.45	68.20	100	198	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

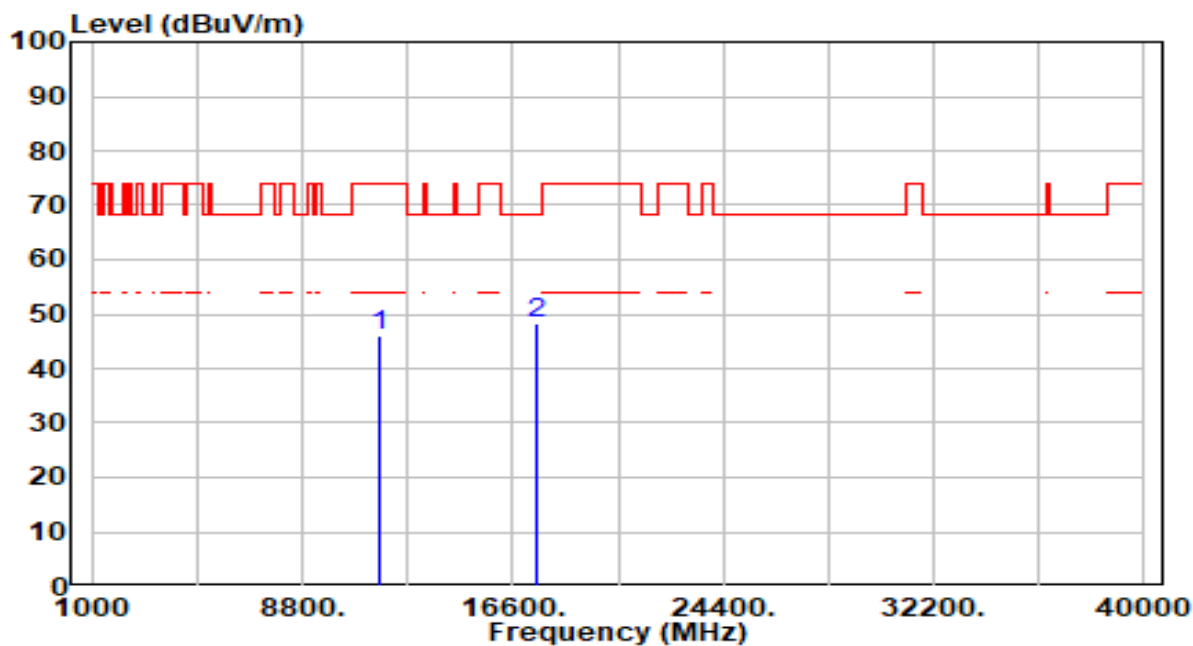


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11650.000	41.39	5.36	46.75	-27.25	74.00	100	49	Peak
2	* 17475.000	42.67	5.29	47.96	-20.24	68.20	100	119	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

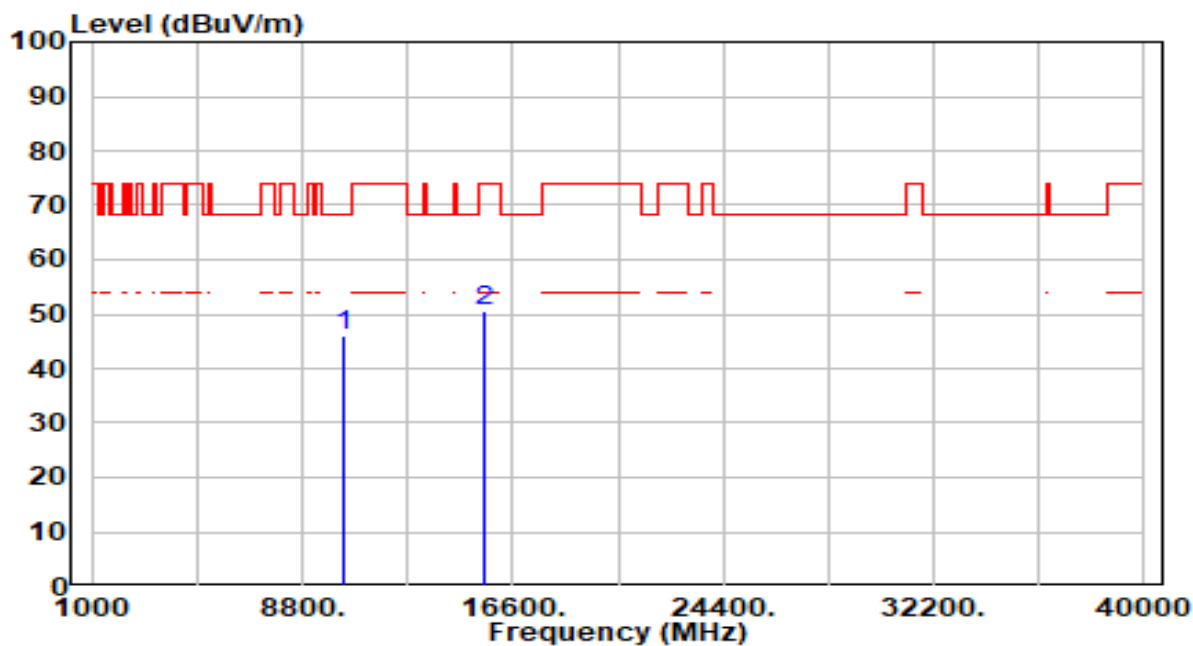


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11650.000	40.86	5.36	46.22	-27.78	74.00	100	54	Peak
2	* 17475.000	43.17	5.29	48.46	-19.74	68.20	100	227	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

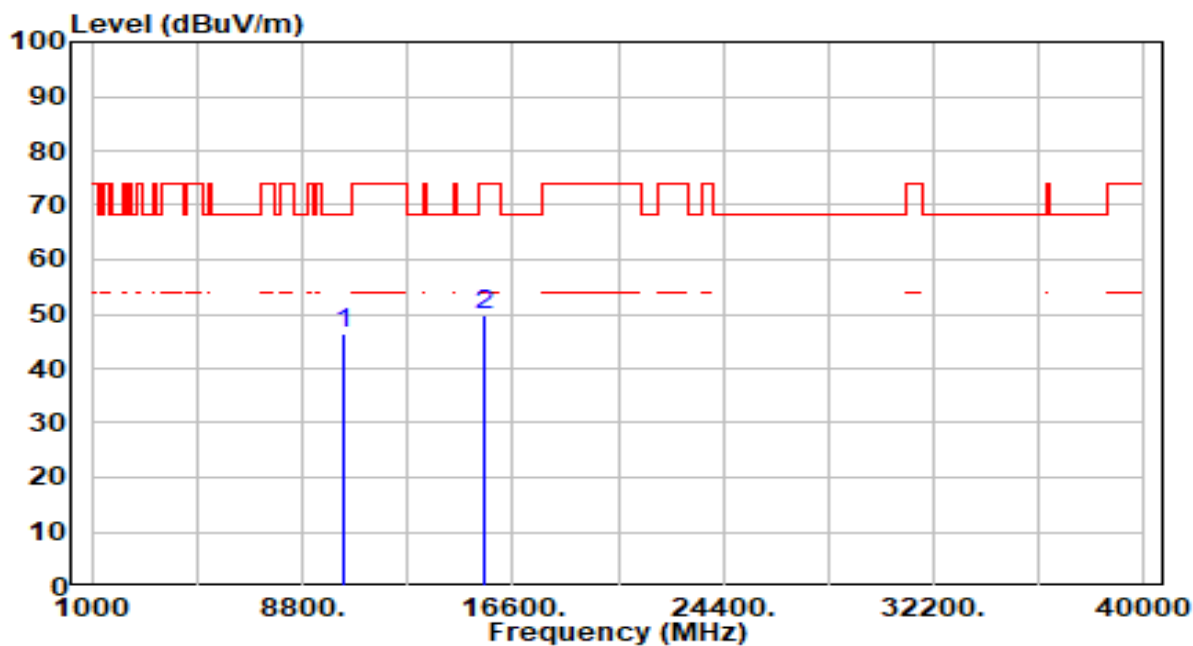


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10360.000	41.05	4.87	45.92	-22.28	68.20	100	147	Peak
2	15540.000	44.37	6.21	50.58	-23.42	74.00	100	49	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

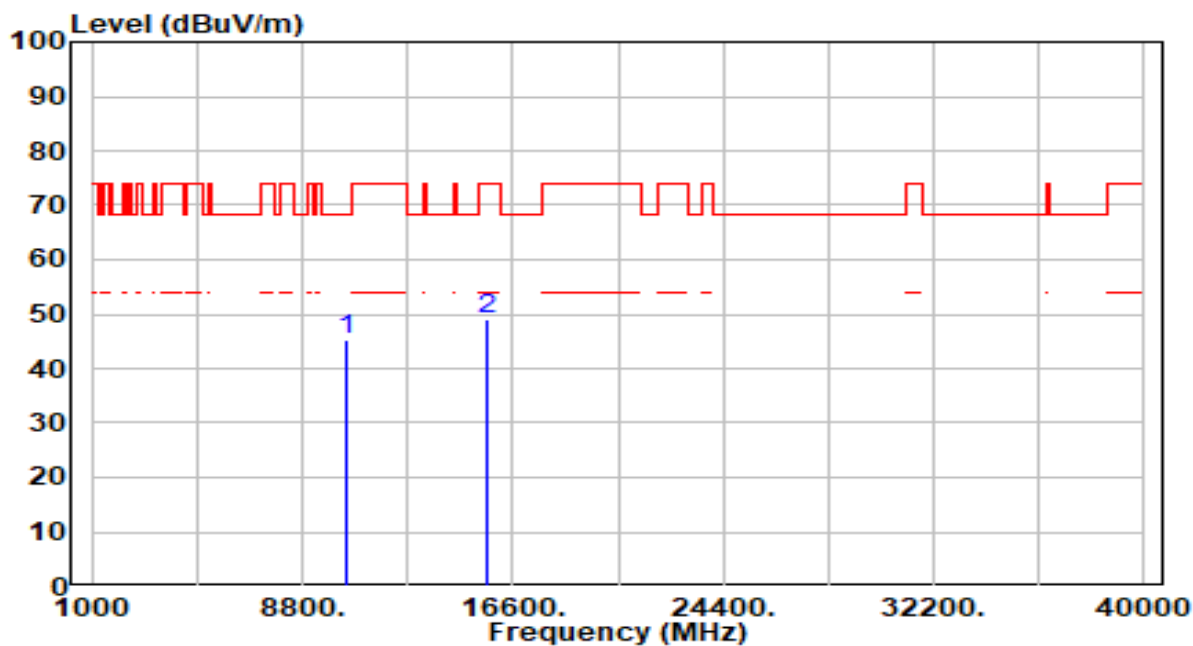


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10360.000	41.70	4.87	46.57	-21.63	68.20	100	48	Peak
2		15540.000	43.44	6.21	49.65	-24.35	74.00	100	331	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

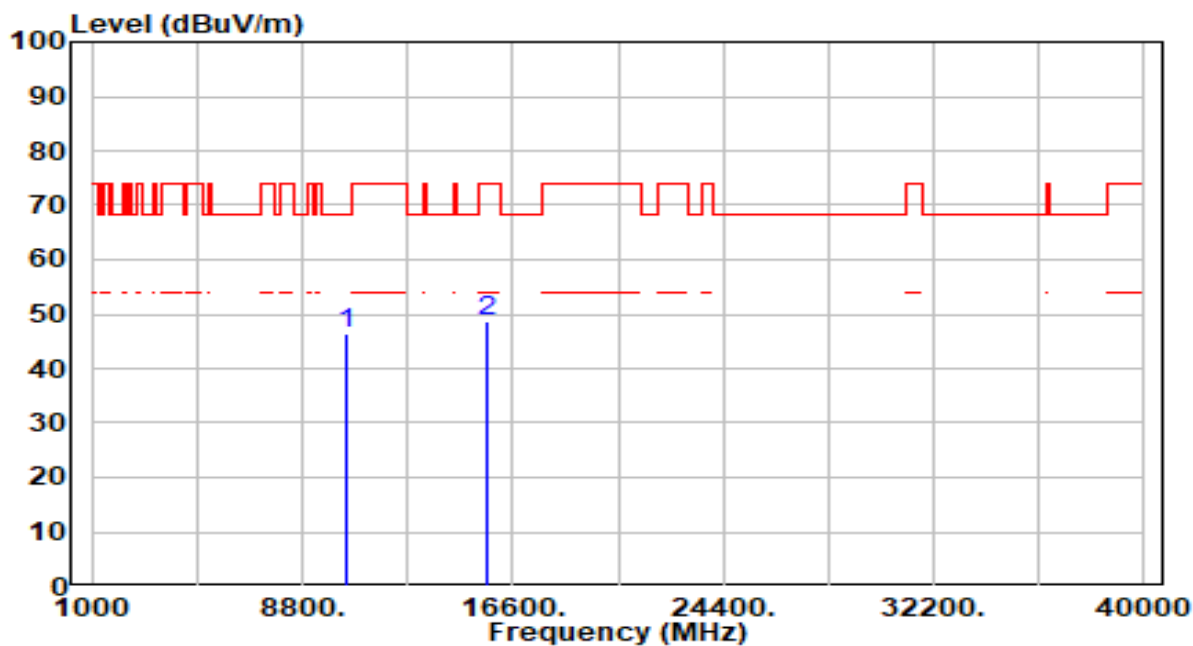


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10440.000	40.68	4.76	45.45	-22.75	68.20	100	15	Peak
2	15660.000	42.68	6.27	48.95	-25.05	74.00	100	112	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

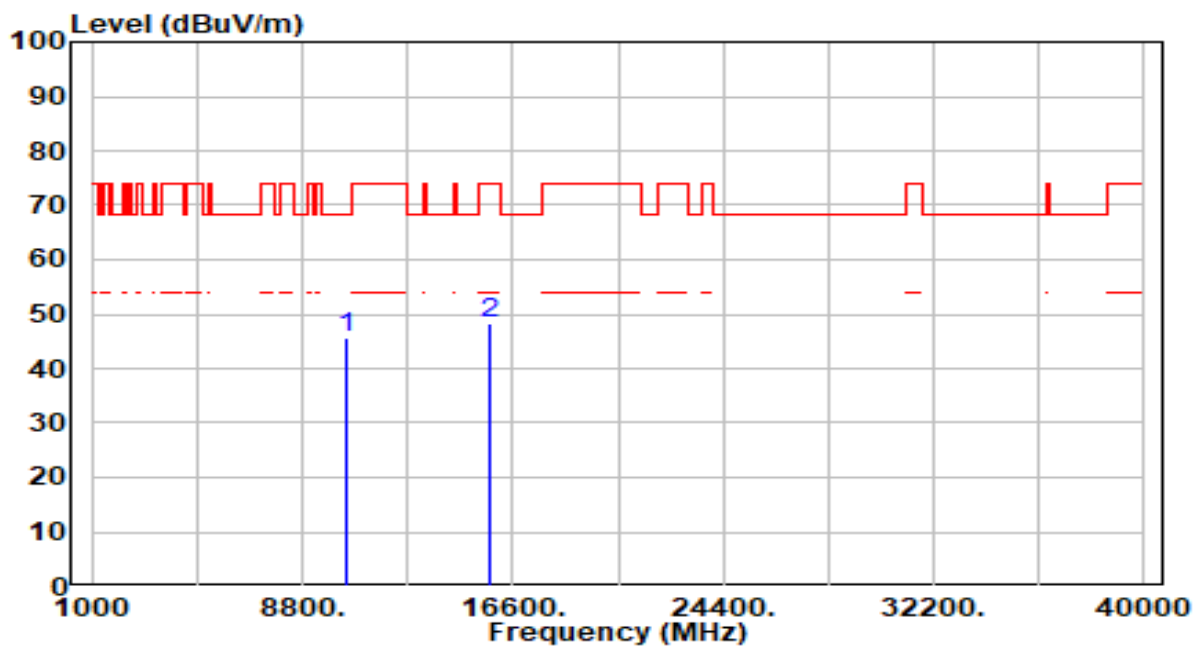


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10440.000	41.48	4.76	46.24	-21.96	68.20	100	308	Peak
2	15660.000	42.43	6.27	48.70	-25.30	74.00	100	23	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

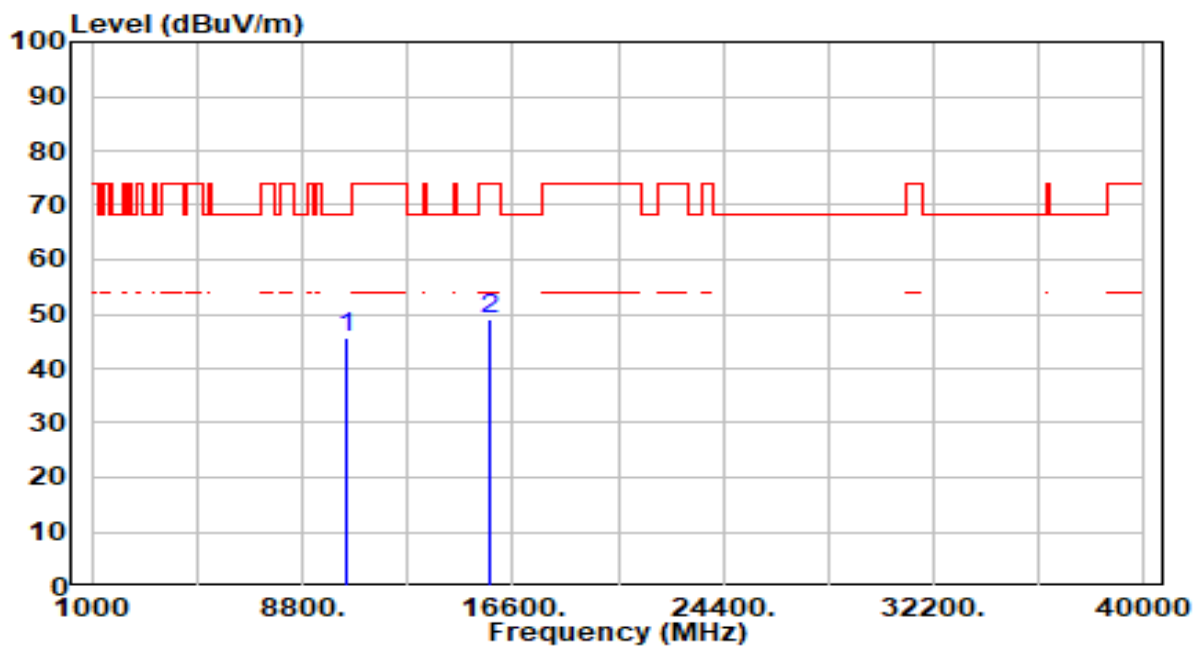


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10480.000	41.11	4.71	45.82	-22.38	68.20	100	156	Peak
2	15720.000	41.93	6.39	48.32	-25.69	74.00	100	243	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

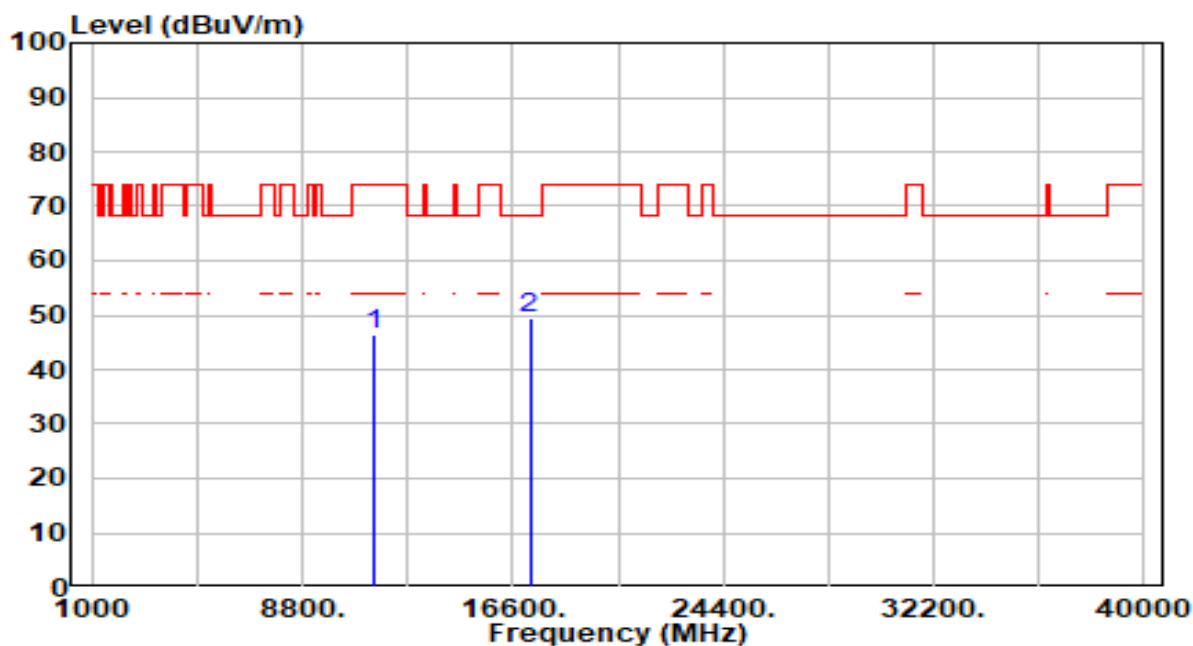


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10480.000	40.95	4.71	45.66	-22.54	68.20	100	0	Peak
2	15720.000	42.61	6.39	49.00	-25.00	74.00	100	242	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

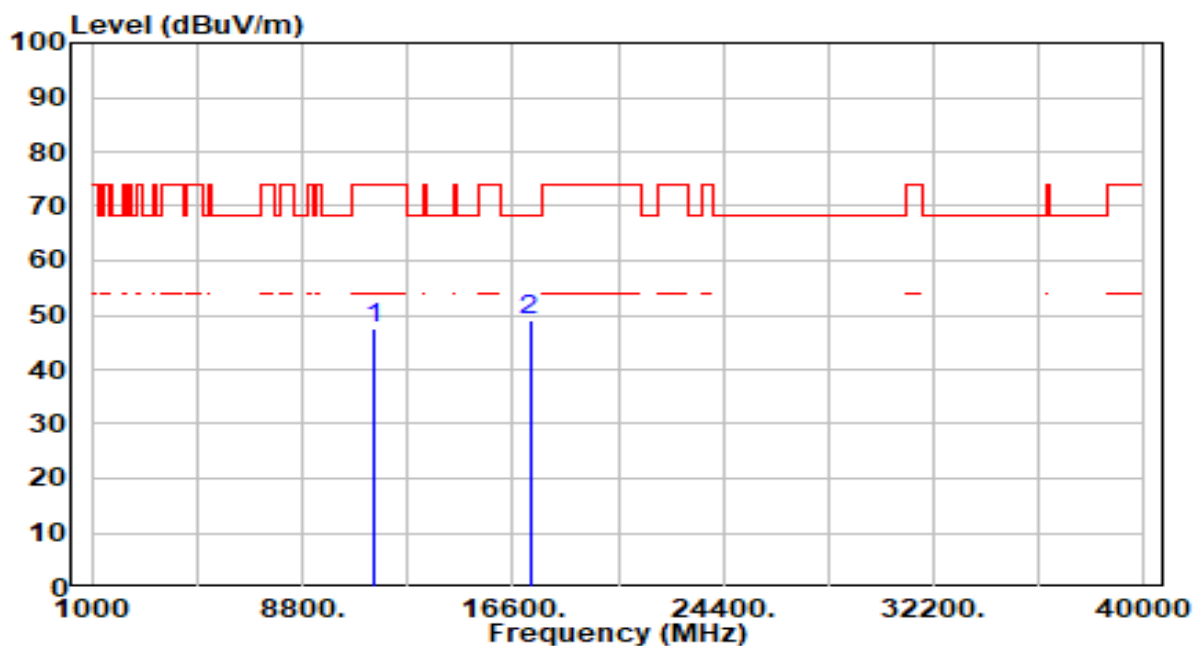


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11490.000	41.21	5.32	46.53	-27.47	74.00	100	52	Peak
2	* 17235.000	43.58	5.71	49.29	-18.91	68.20	100	32	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

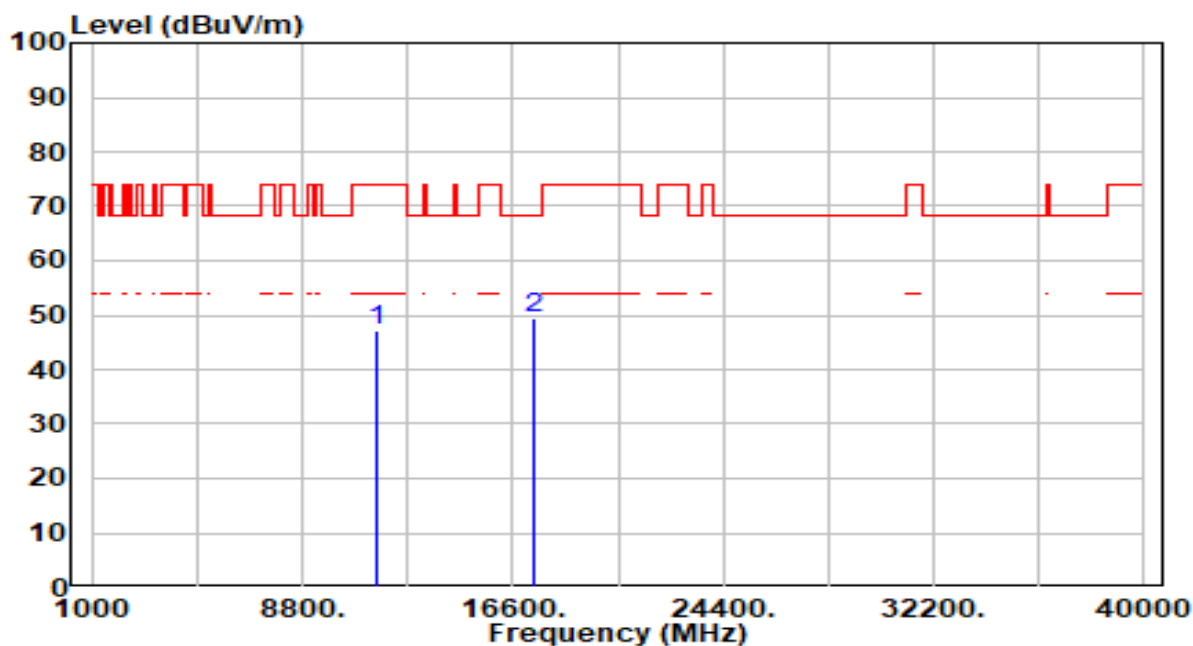


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11490.000	42.20	5.32	47.52	-26.48	74.00	100	0	Peak
2	* 17235.000	43.24	5.71	48.95	-19.25	68.20	100	303	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

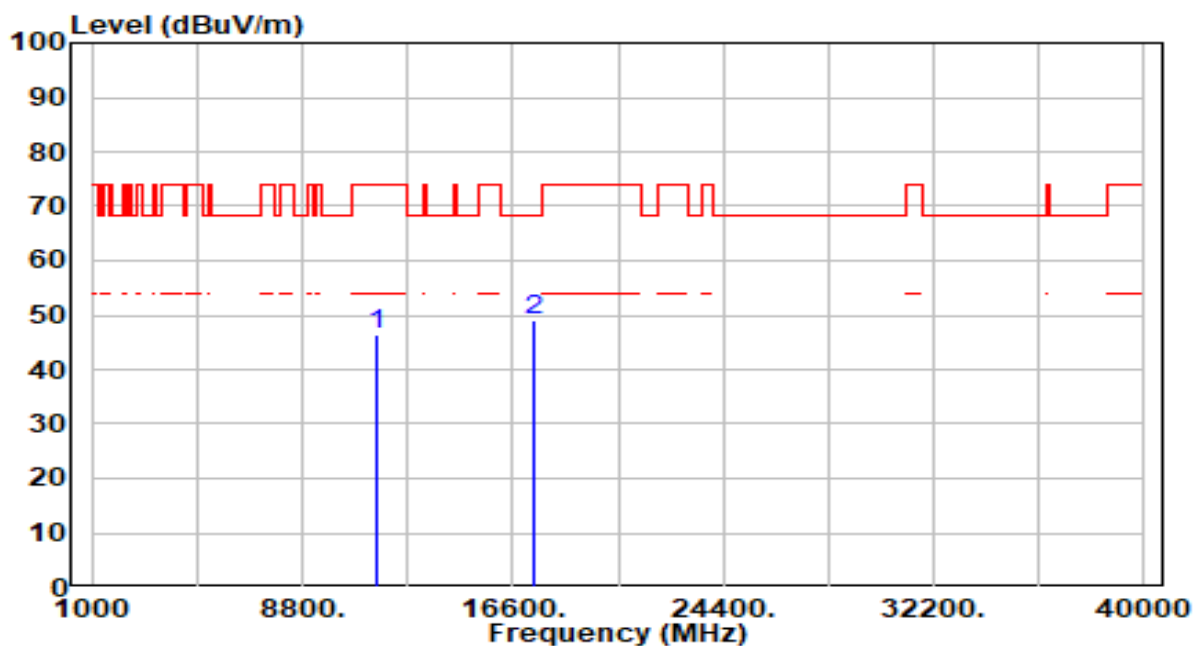


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11570.000	41.88	5.38	47.25	-26.75	74.00	100	54	Peak
2	* 17355.000	43.87	5.39	49.26	-18.94	68.20	100	74	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

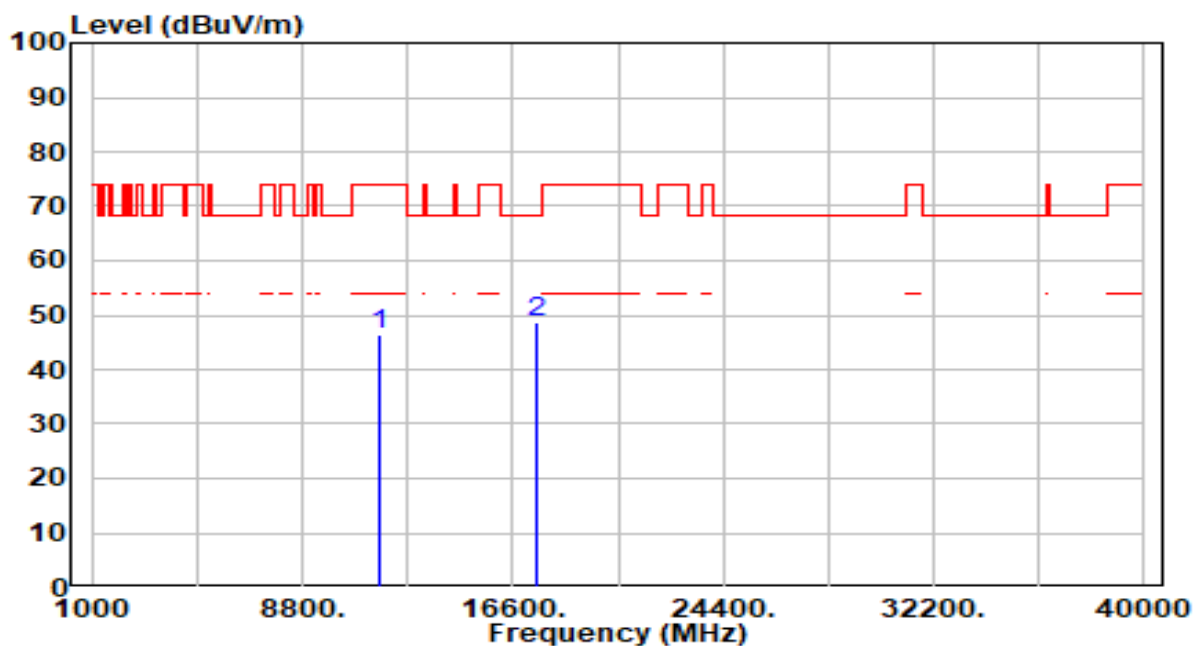


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11570.000	41.05	5.38	46.43	-27.57	74.00	100	316	Peak
2	* 17355.000	43.52	5.39	48.91	-19.29	68.20	100	302	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

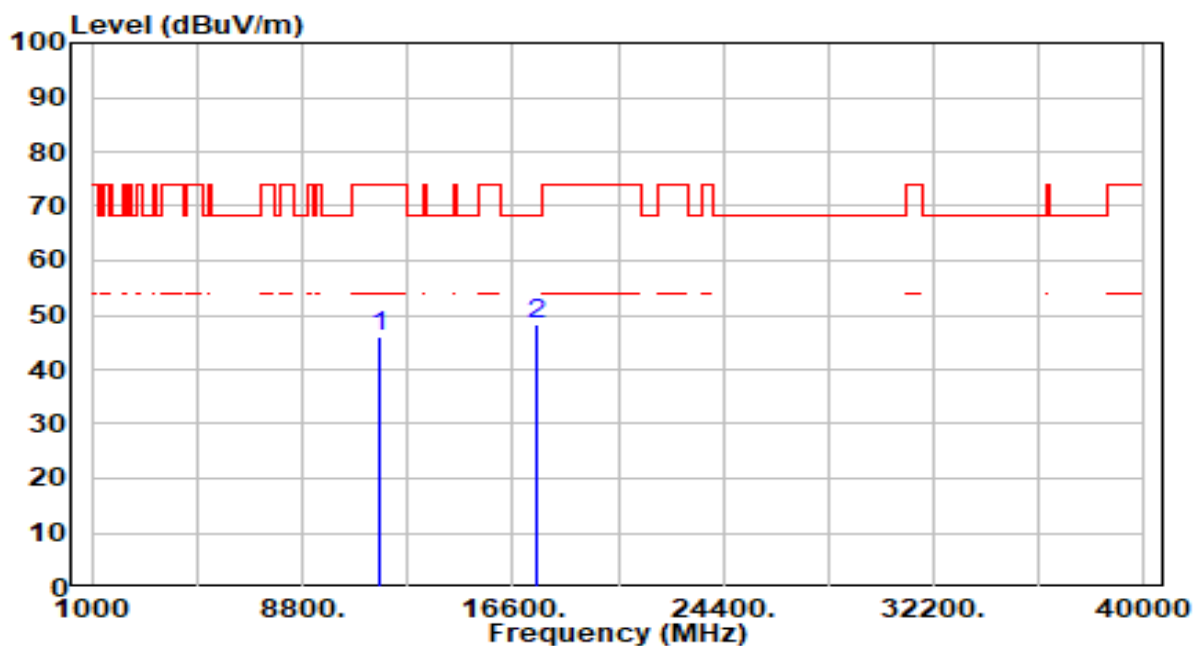


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11650.000	41.04	5.36	46.41	-27.59	74.00	100	98	Peak
2	* 17475.000	43.45	5.29	48.74	-19.46	68.20	100	297	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

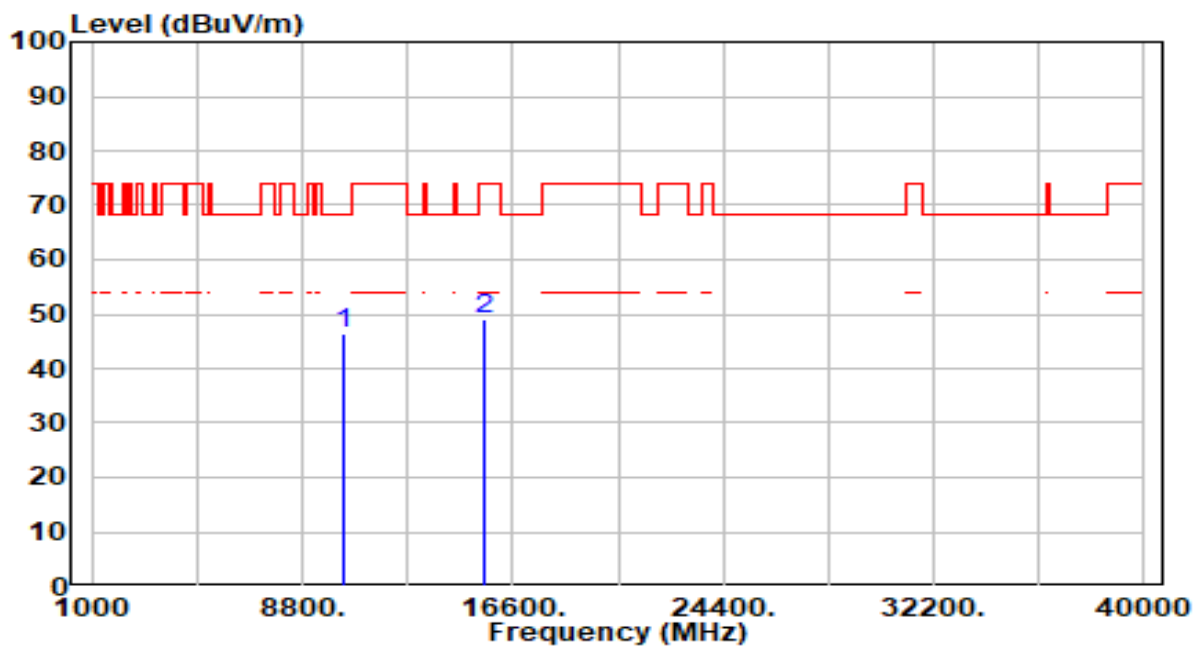


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11650.000	40.81	5.36	46.17	-27.83	74.00	100	3	Peak
2	* 17475.000	42.88	5.29	48.17	-20.03	68.20	100	55	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

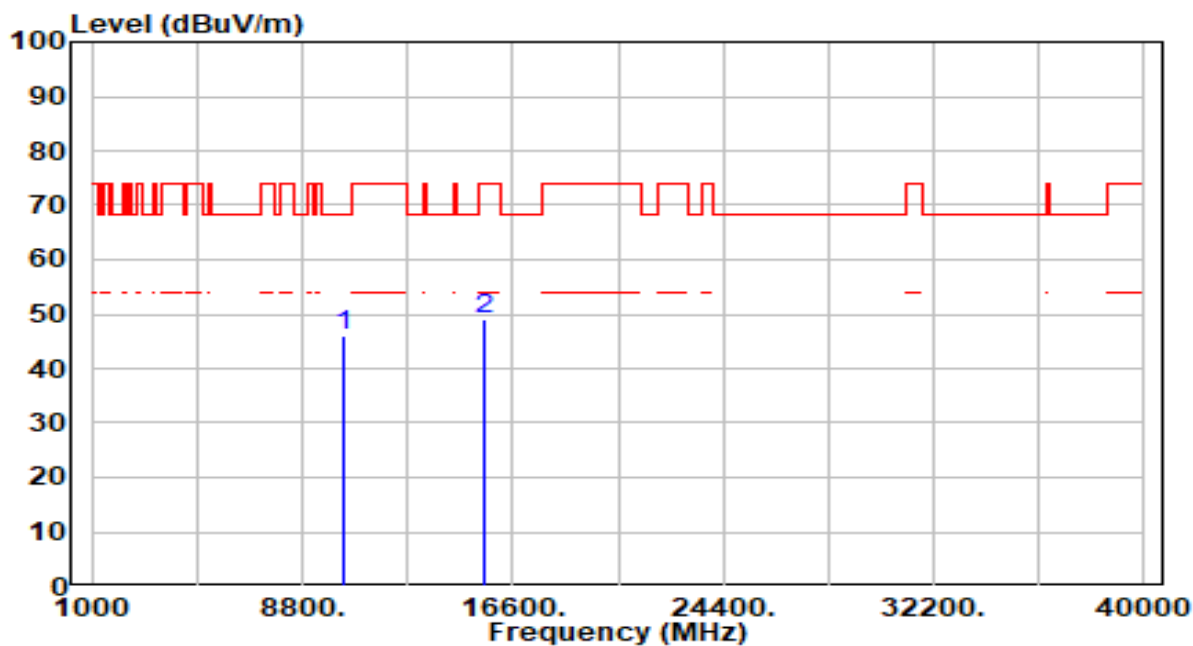


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10380.000	41.63	4.84	46.47	-21.73	68.20	100	0	Peak
2		15570.000	42.90	6.18	49.07	-24.93	74.00	100	207	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

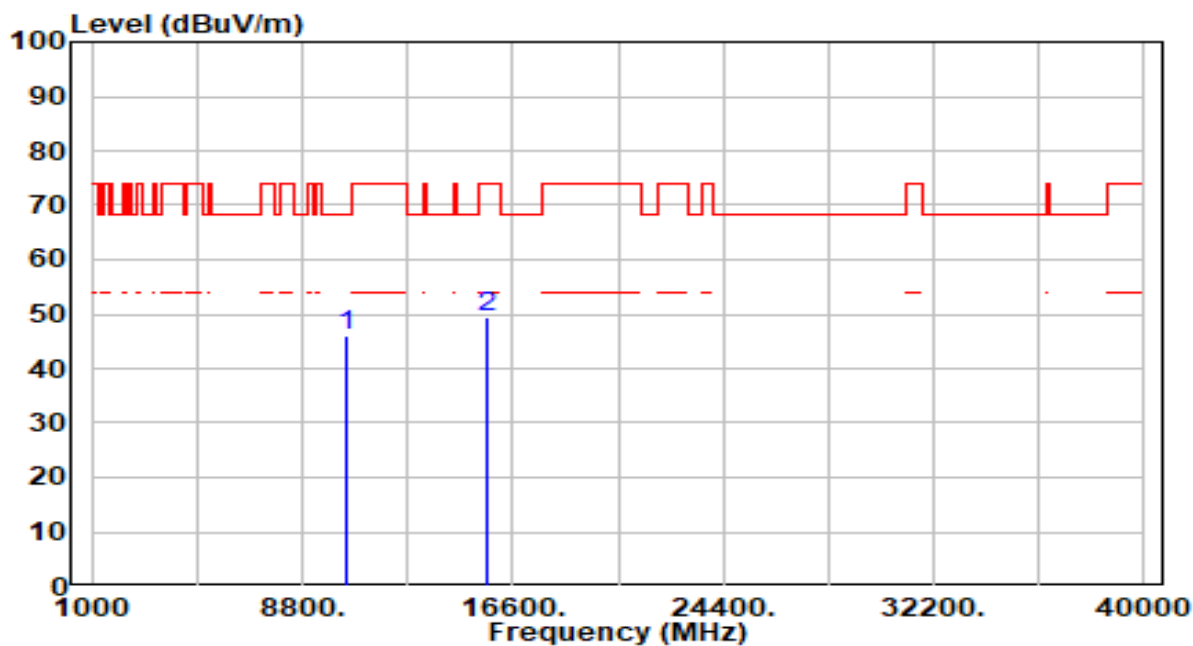


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10380.000	41.28	4.84	46.13	-22.07	68.20	100	208	Peak
2		15570.000	42.86	6.18	49.04	-24.96	74.00	100	306	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 46_ANT 0+1	Test Voltage	AC 120V/60Hz

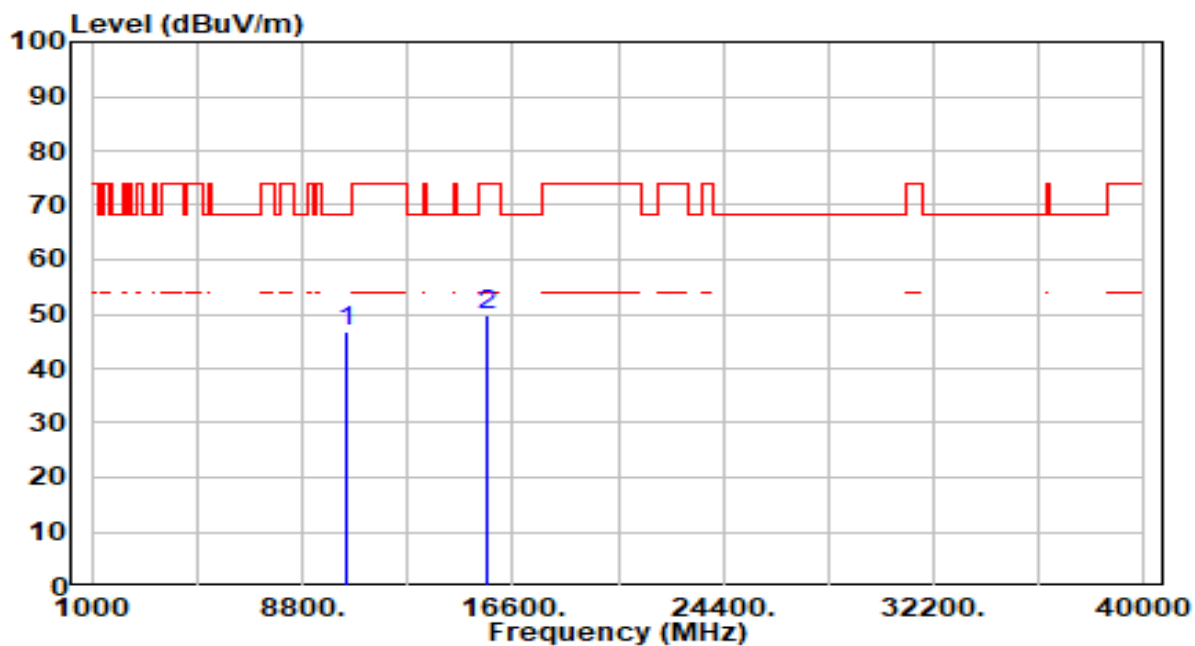


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10460.000	41.11	4.74	45.85	-22.35	68.20	100	0	Peak
2		15690.000	43.25	6.33	49.58	-24.42	74.00	100	149	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 46_ANT 0+1	Test Voltage	AC 120V/60Hz

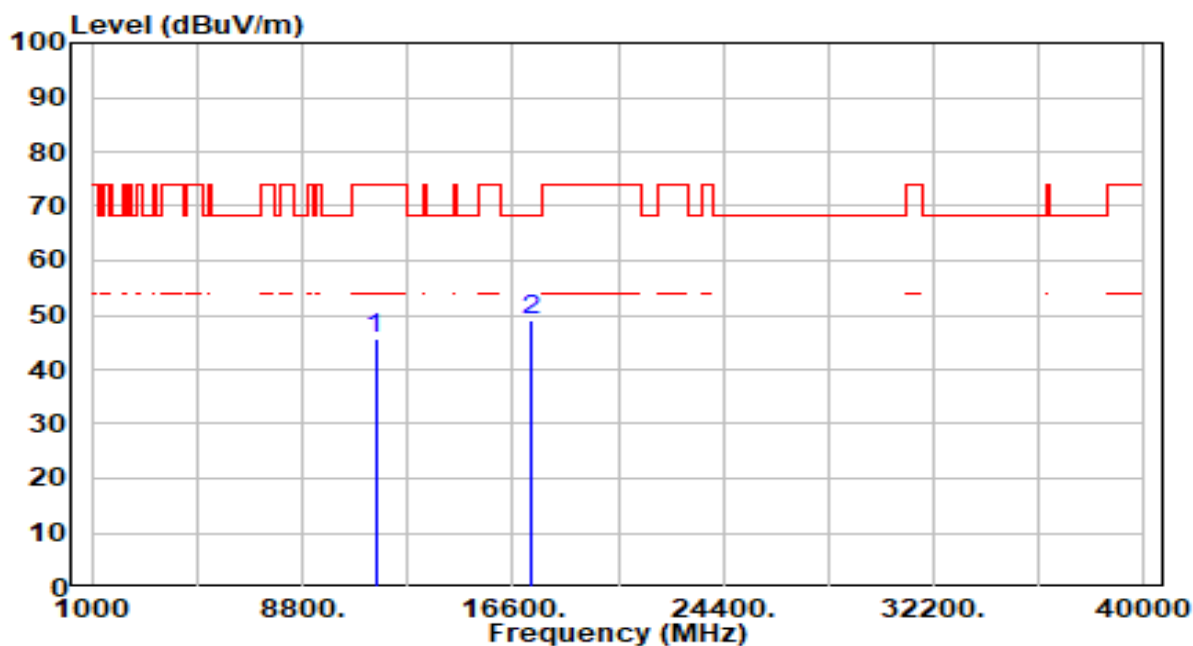


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	10460.000	42.06	4.74	46.80	-21.40	68.20	100	49	Peak
2		15690.000	43.30	6.33	49.63	-24.37	74.00	100	314	Peak

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

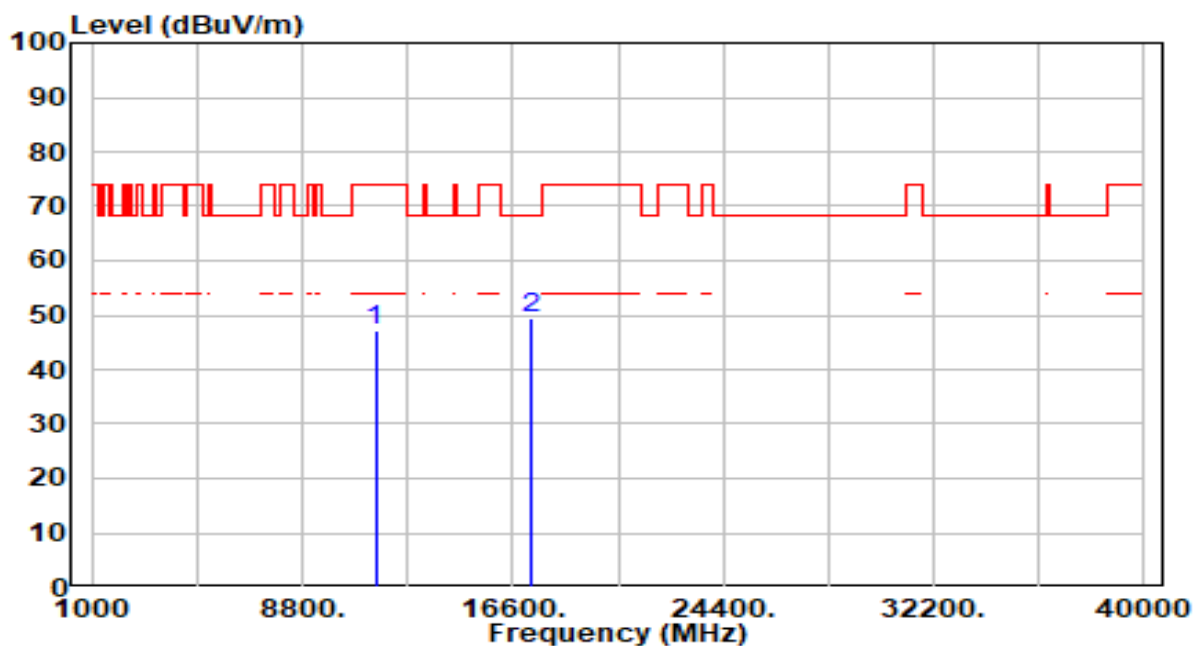


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11510.000	40.48	5.33	45.81	-28.19	74.00	100	274	Peak
2	* 17265.000	43.44	5.63	49.07	-19.13	68.20	100	360	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

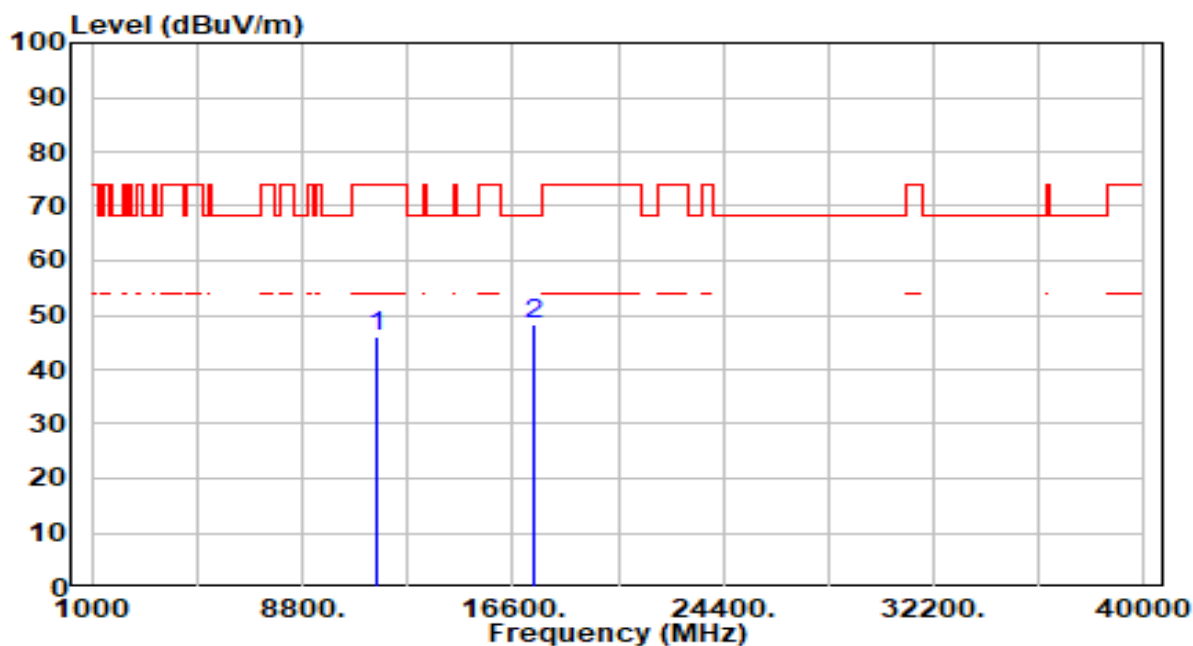


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11510.000	41.80	5.33	47.14	-26.86	74.00	100	211	Peak
2	* 17265.000	43.98	5.63	49.61	-18.59	68.20	100	72	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

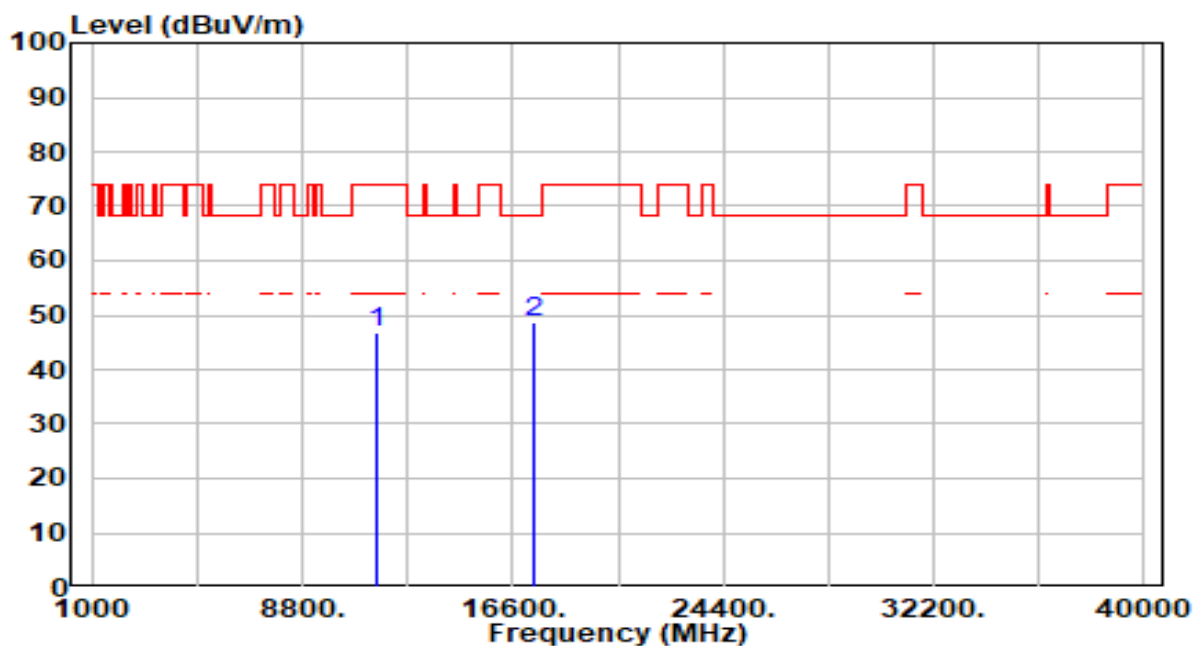


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11590.000	40.73	5.39	46.12	-27.88	74.00	100	360	Peak
2	* 17385.000	42.88	5.31	48.19	-20.01	68.20	100	320	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

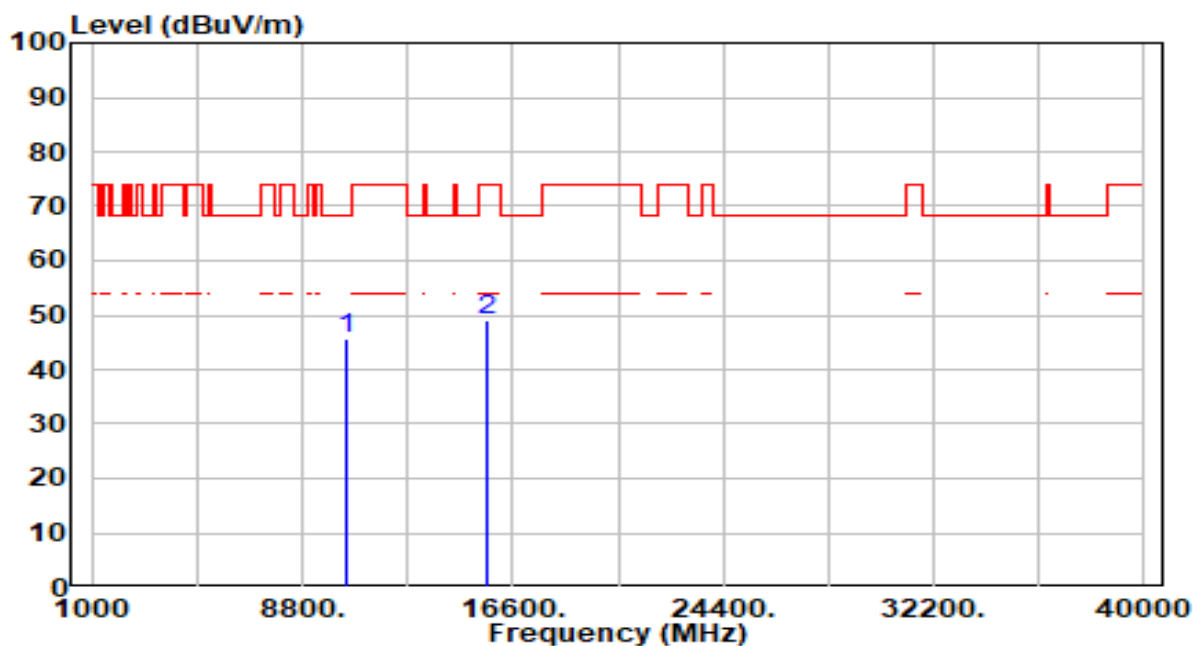


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11590.000	41.23	5.39	46.62	-27.38	74.00	100	343	Peak
2	* 17385.000	43.48	5.31	48.79	-19.41	68.20	100	92	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band1_TX_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

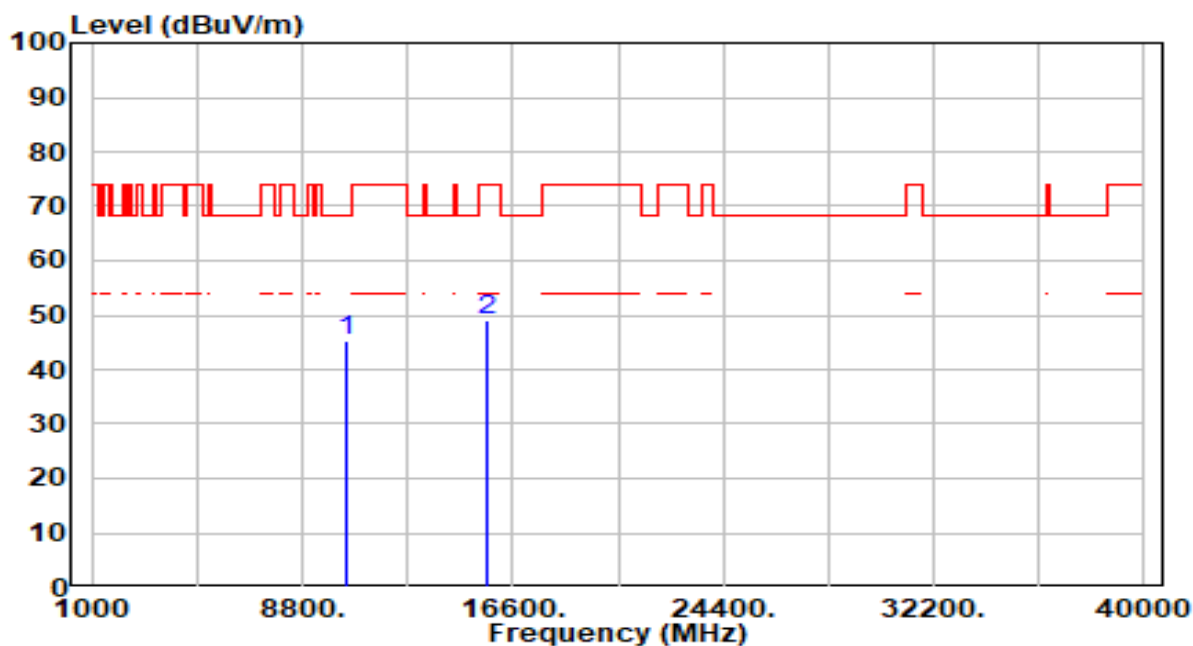


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10420.000	41.01	4.79	45.80	-22.40	68.20	100	359	Peak
2	15630.000	42.77	6.21	48.97	-25.03	74.00	100	133	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band1_TX_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

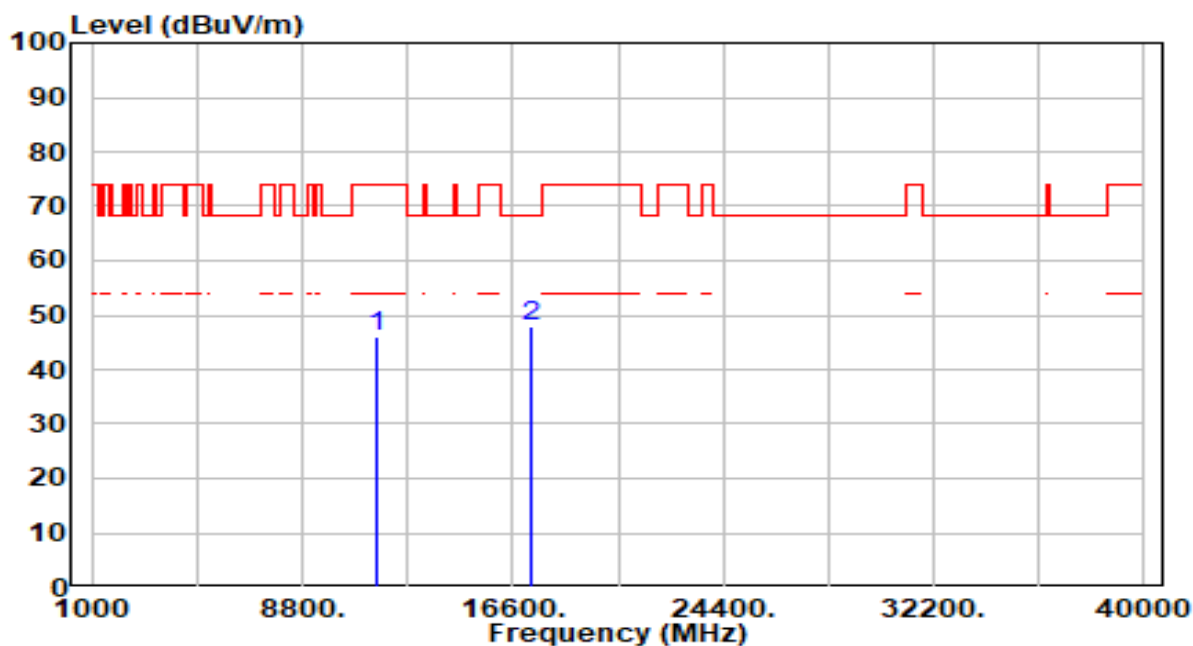


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 10420.000	40.43	4.79	45.22	-22.98	68.20	100	166	Peak
2	15630.000	42.74	6.21	48.94	-25.06	74.00	100	282	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band4_TX_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz

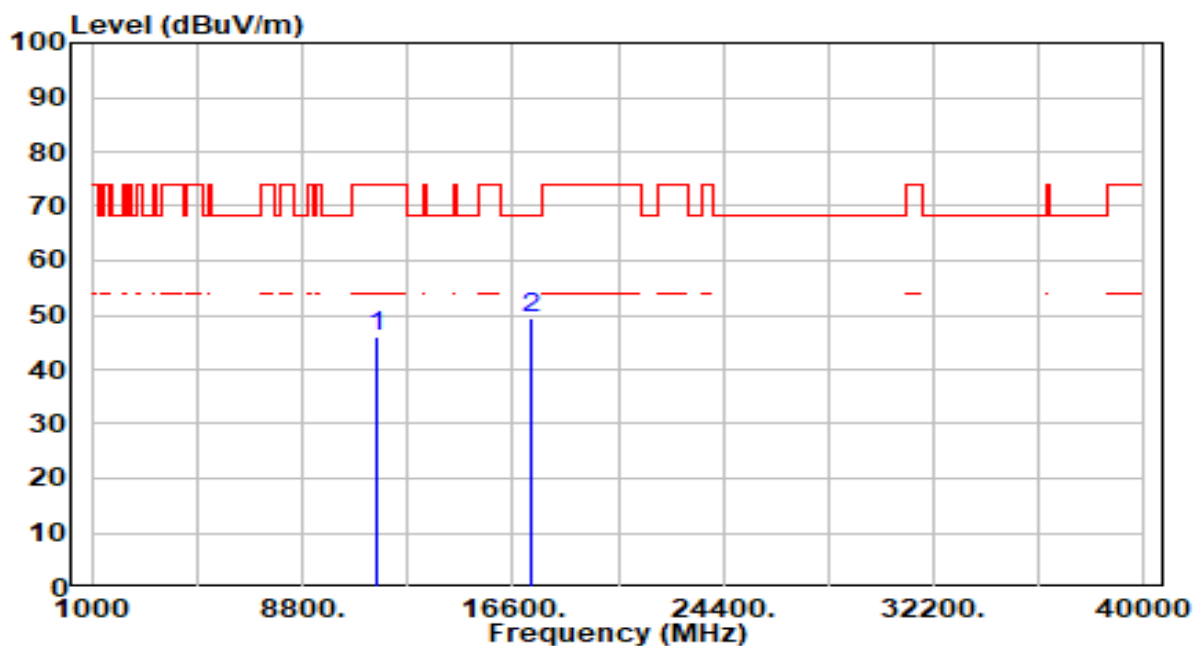


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11550.000	40.55	5.36	45.92	-28.08	74.00	100	355	Peak
2	* 17325.000	42.38	5.47	47.85	-20.35	68.20	100	233	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E & BBHA 9170	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band4_TX_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz



No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	11550.000	40.77	5.36	46.14	-27.86	74.00	100	236	Peak
2	* 17325.000	43.83	5.47	49.30	-18.90	68.20	100	258	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB).
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7.9. Radiated Restricted Band Edge Measurement

7.9.1. Test Limit

For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
¹ 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.25 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	(²)
13.36 - 13.41	--	--	--

For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For FCC transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

For IC transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

Refer to KDB 789033 D02v02r01 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

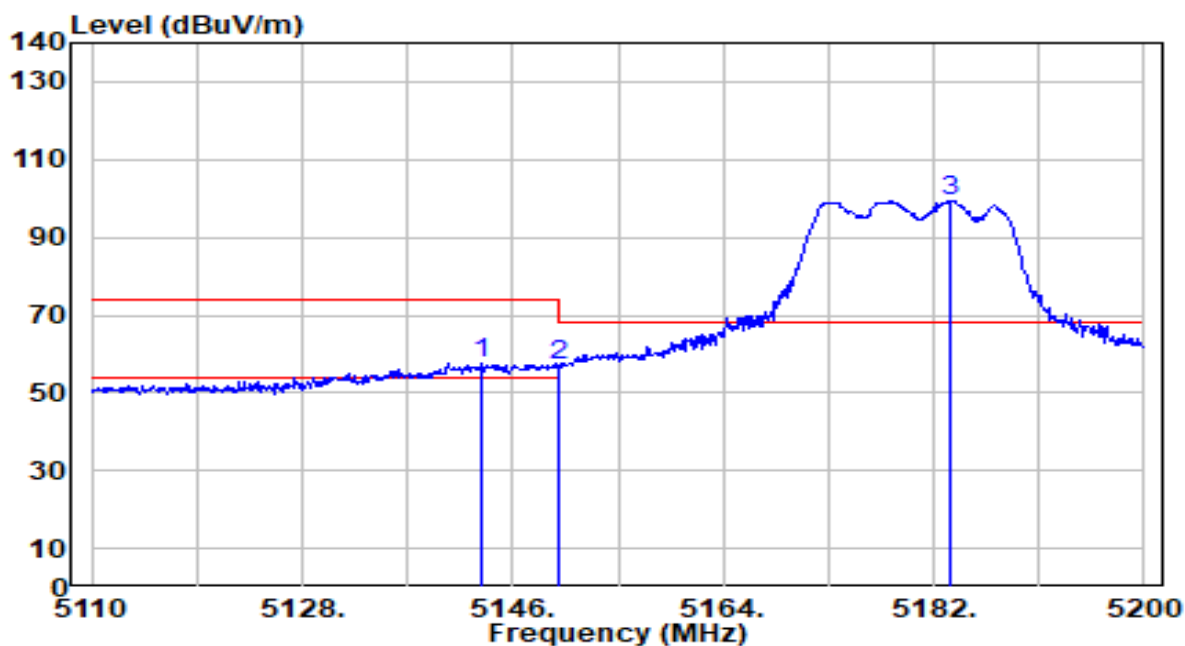
All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC-Radiated emission limits; general requirements.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [V/m]	Measured Distance [Meters]
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

7.9.2. Test Result

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

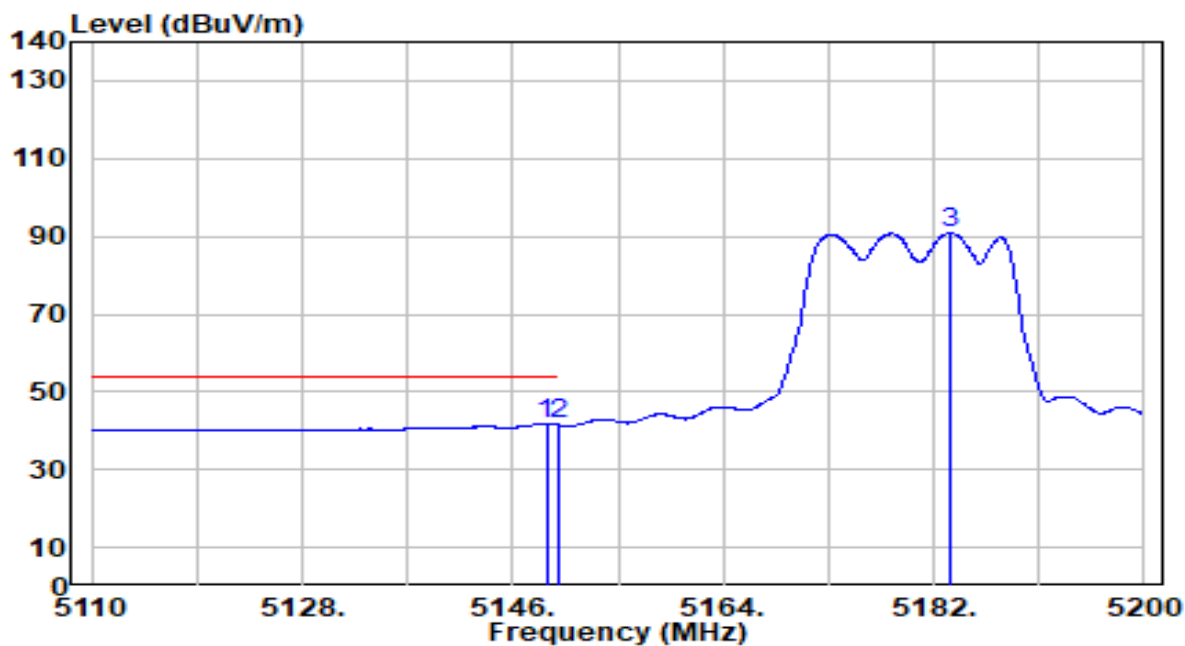


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5143.390	56.95	0.68	57.63	-16.37	74.00	185	55	Peak
2		5150.000	56.57	0.68	57.24	-16.76	74.00	185	55	Peak
3		5183.350	98.80	0.67	99.47	N/A	N/A	185	55	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

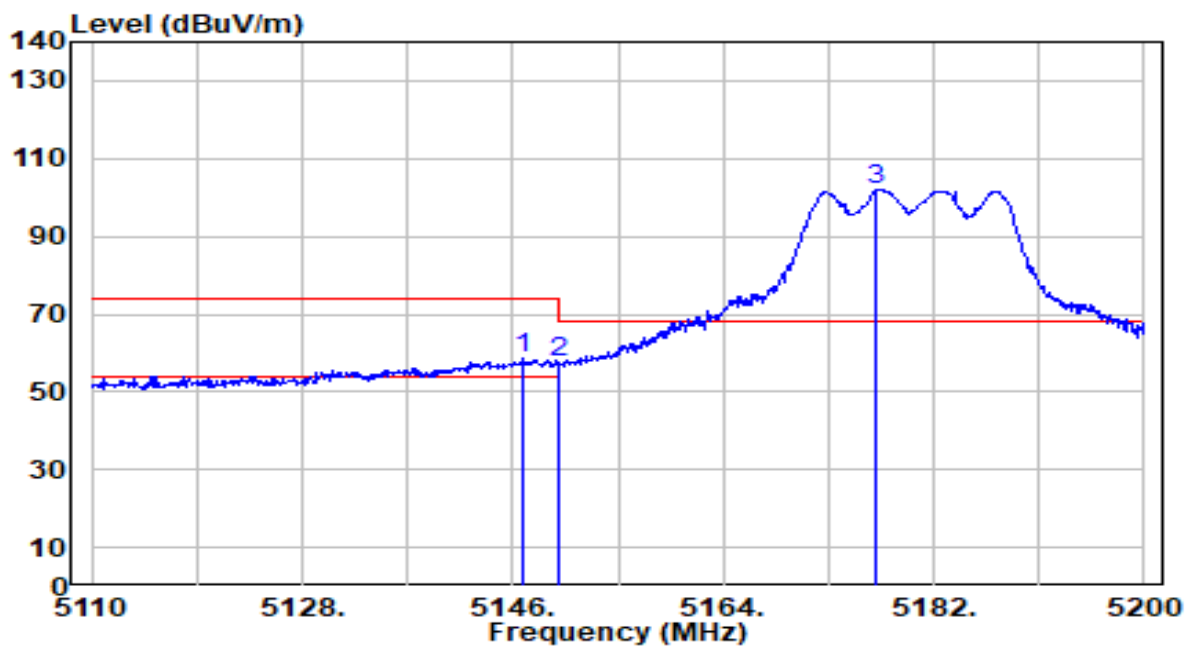


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 5148.880	41.07	0.68	41.75	-12.25	54.00	185	55	Average
2	5150.000	40.83	0.68	41.51	-12.49	54.00	185	55	Average
3	5183.440	90.18	0.67	90.86	N/A	N/A	185	55	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

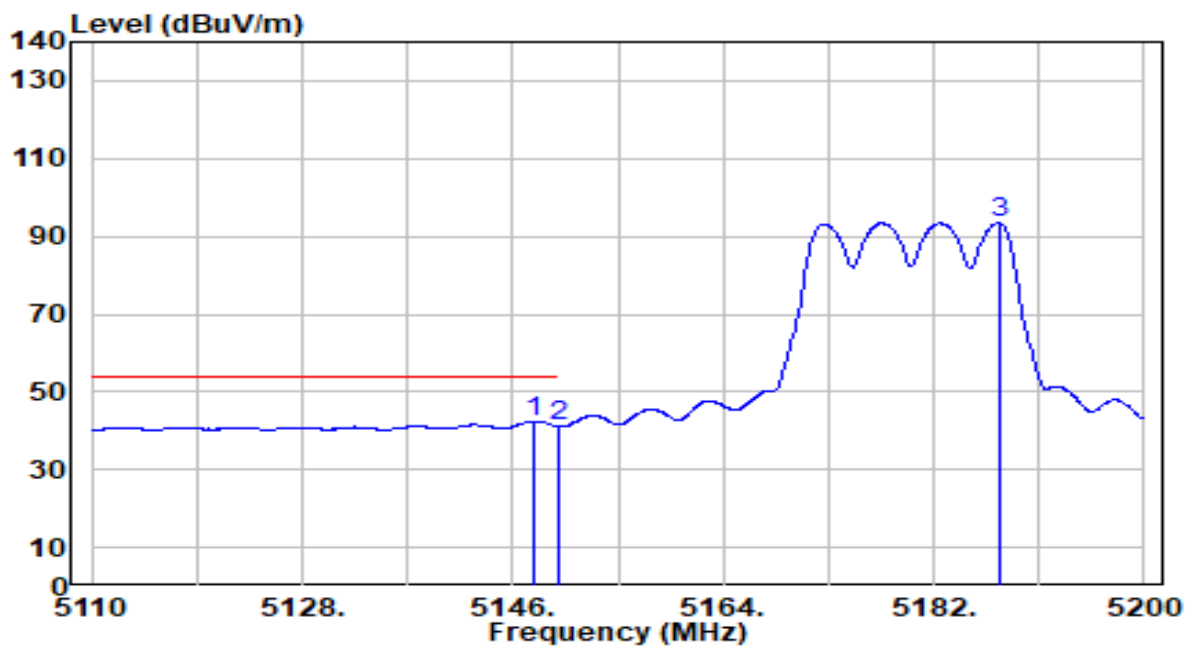


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5146.900	58.16	0.68	58.83	-15.17	74.00	200	178	Peak
2		5150.000	56.73	0.68	57.41	-16.59	74.00	200	178	Peak
3		5177.140	101.43	0.67	102.10	N/A	N/A	200	178	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

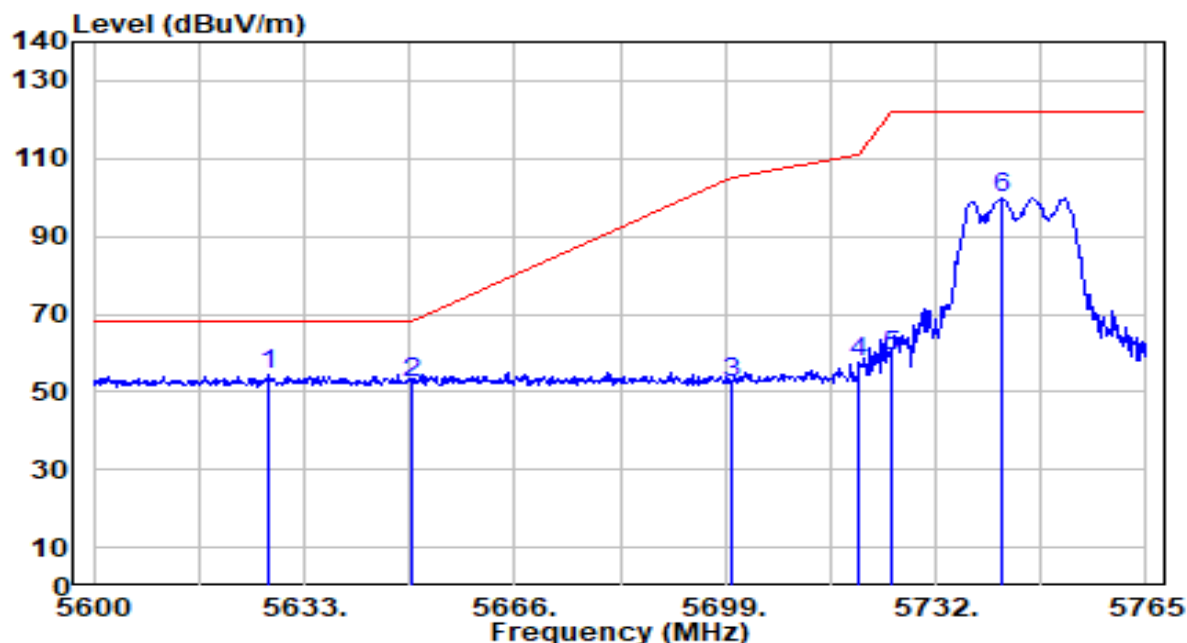


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.890	41.82	0.68	42.49	-11.51	54.00	200	178	Average
2		5150.000	40.40	0.68	41.07	-12.93	54.00	200	178	Average
3		5187.580	92.84	0.67	93.51	N/A	N/A	200	178	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

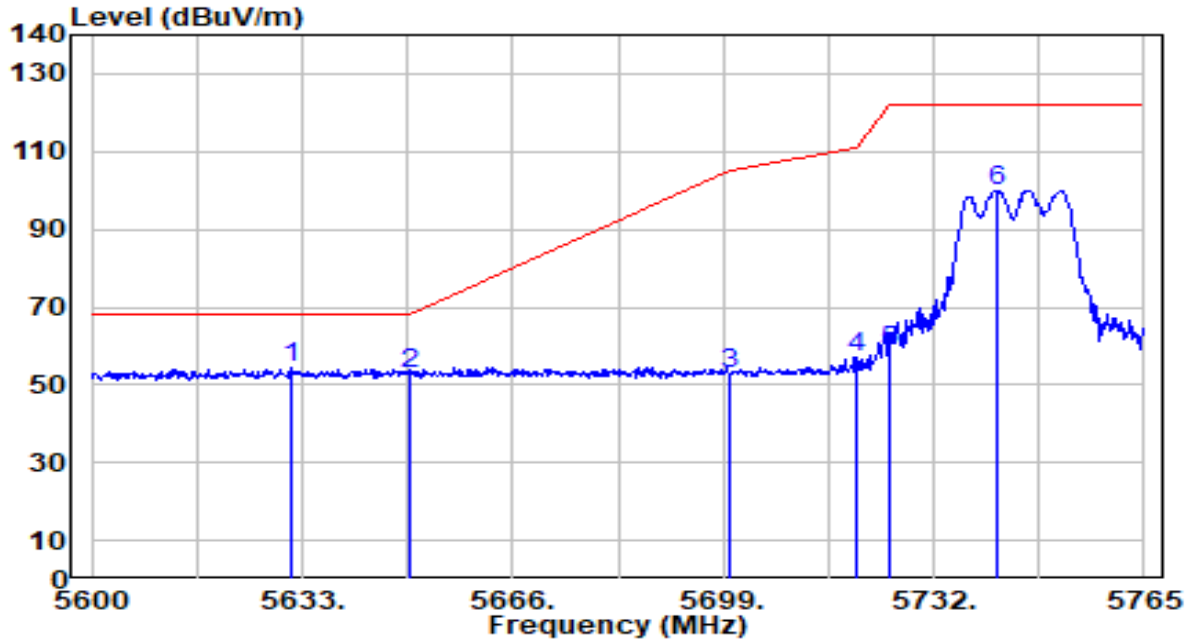


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5627.225	53.21	1.31	54.52	-13.68	68.20	315	207	Peak
2		5650.000	50.78	1.44	52.22	-15.98	68.20	315	207	Peak
3		5700.000	50.67	1.72	52.39	-52.81	105.20	315	207	Peak
4		5720.000	55.88	1.84	57.71	-53.09	110.80	315	207	Peak
5		5725.000	57.44	1.86	59.30	-62.90	122.20	315	207	Peak
6		5742.230	97.97	1.96	99.93	N/A	N/A	315	207	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

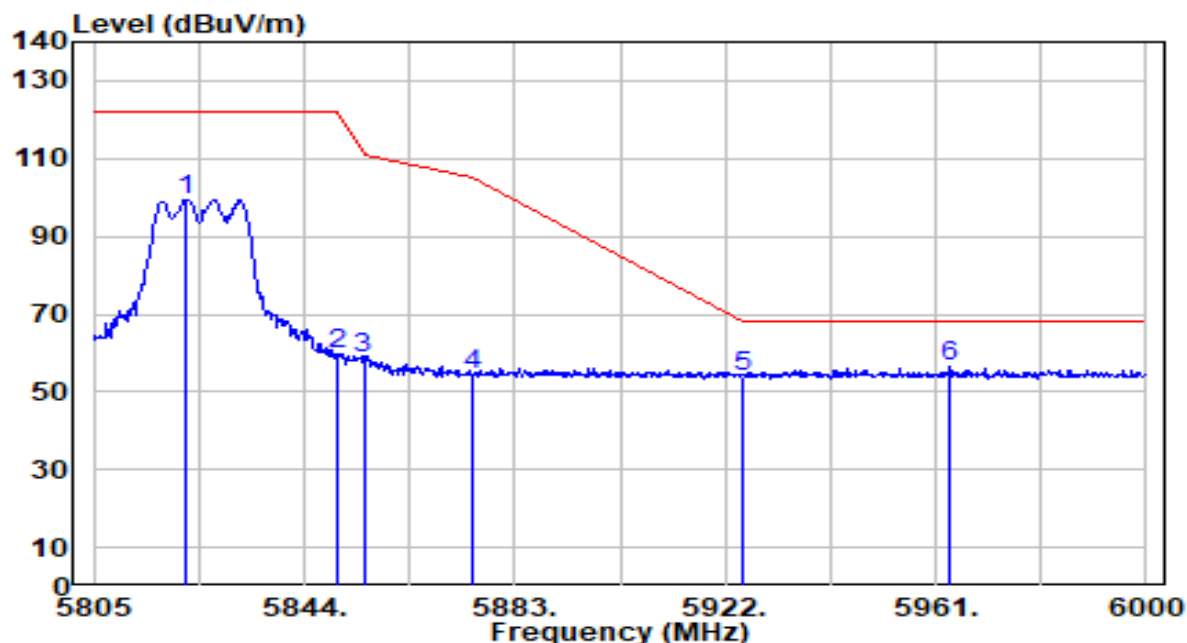


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 5631.185	52.84	1.33	54.18	-14.02	68.20	207	308	Peak
2	5650.000	51.53	1.44	52.97	-15.23	68.20	207	308	Peak
3	5700.000	51.31	1.72	53.03	-52.17	105.20	207	308	Peak
4	5720.000	55.39	1.84	57.23	-53.57	110.80	207	308	Peak
5	5725.000	56.76	1.86	58.62	-63.58	122.20	207	308	Peak
6	5741.900	98.14	1.96	100.10	N/A	N/A	207	308	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

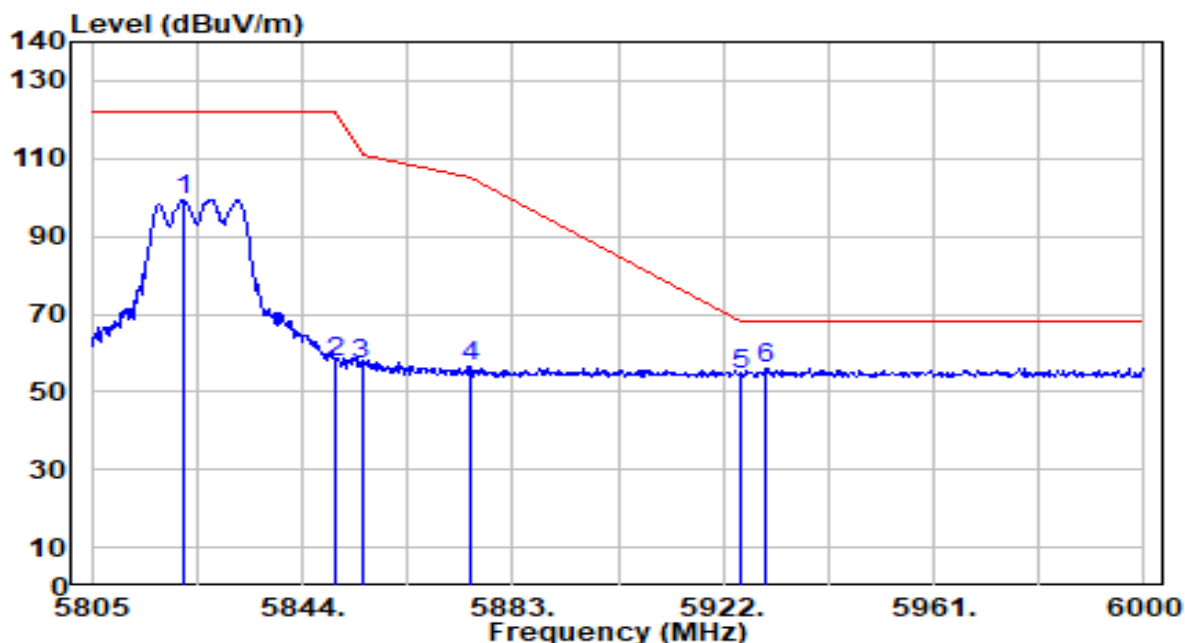


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5822.160	97.25	2.28	99.53	N/A	N/A	280	205	Peak
2	5850.000	57.38	2.27	59.65	-62.55	122.20	280	205	Peak
3	5855.000	56.29	2.27	58.56	-52.24	110.80	280	205	Peak
4	5875.000	52.15	2.26	54.41	-50.79	105.20	280	205	Peak
5	5925.000	51.74	2.25	53.98	-14.22	68.20	280	205	Peak
6	* 5963.535	54.22	2.23	56.45	-11.75	68.20	280	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11a_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

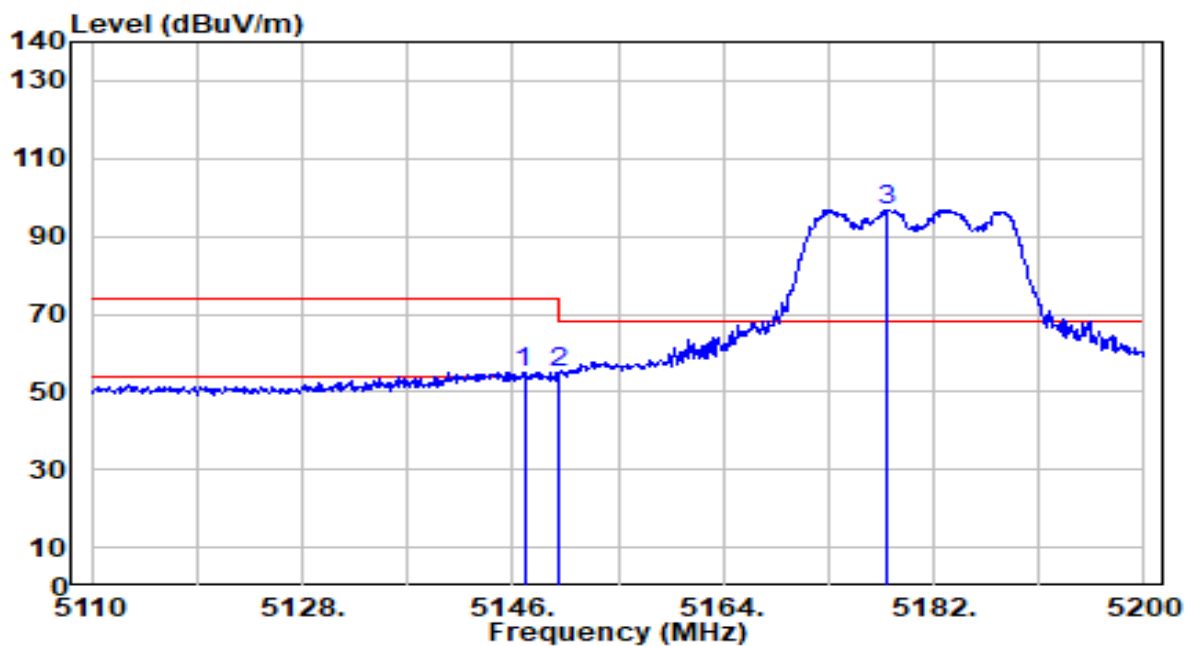


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5821.965	97.24	2.28	99.52	N/A	N/A	100	163	Peak
2	5850.000	55.33	2.27	57.60	-64.60	122.20	100	163	Peak
3	5855.000	54.64	2.27	56.91	-53.89	110.80	100	163	Peak
4	5875.000	54.16	2.26	56.43	-48.77	105.20	100	163	Peak
5	5925.000	52.20	2.25	54.44	-13.76	68.20	100	163	Peak
6	* 5929.605	53.87	2.24	56.12	-12.08	68.20	100	163	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

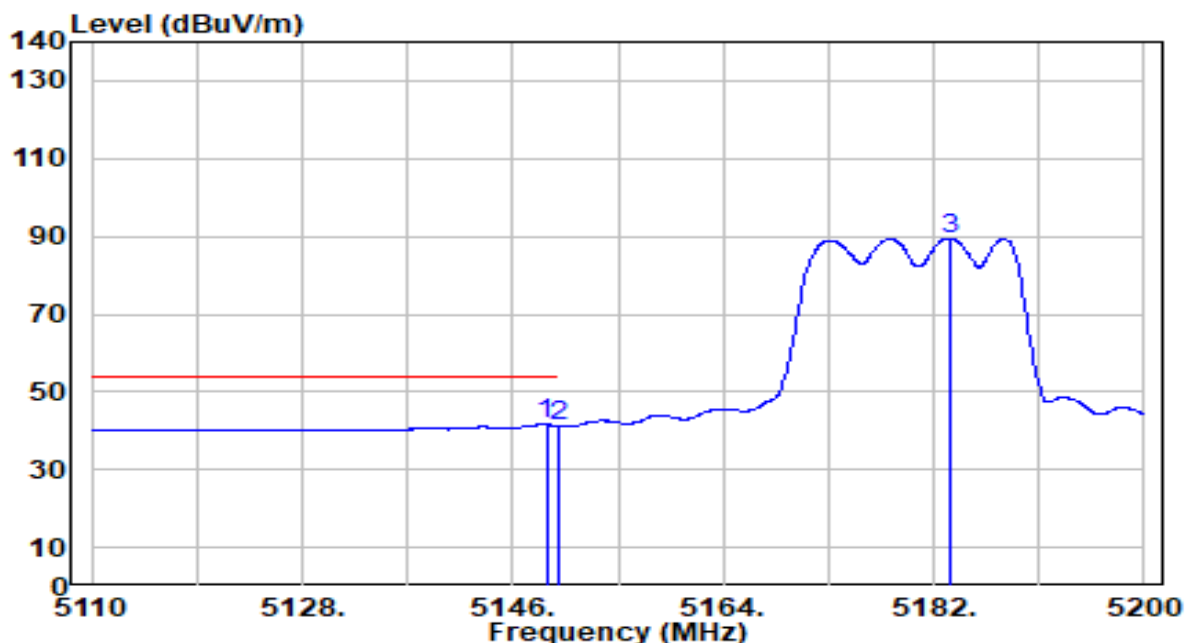


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5146.990	54.50	0.68	55.17	-18.83	74.00	185	55	Peak
2		5150.000	54.28	0.68	54.95	-19.05	74.00	185	55	Peak
3		5177.950	96.24	0.67	96.91	N/A	N/A	185	55	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

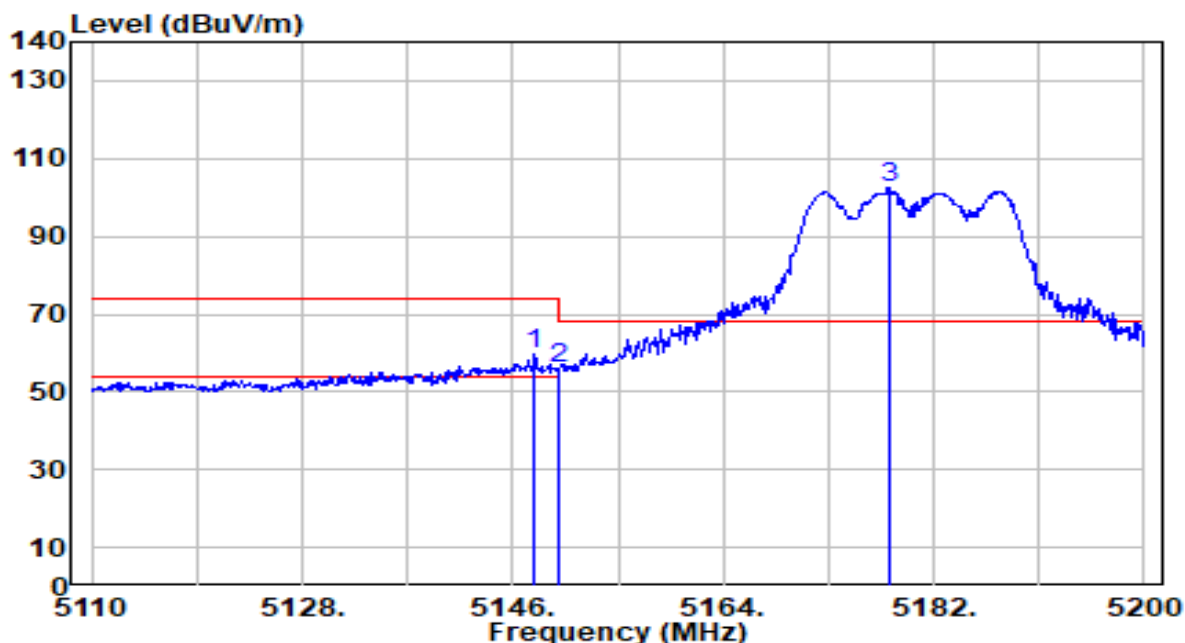


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 5148.880	40.93	0.68	41.61	-12.39	54.00	185	55	Average
2	5150.000	40.62	0.68	41.29	-12.71	54.00	185	55	Average
3	5183.350	88.82	0.67	89.49	N/A	N/A	185	55	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

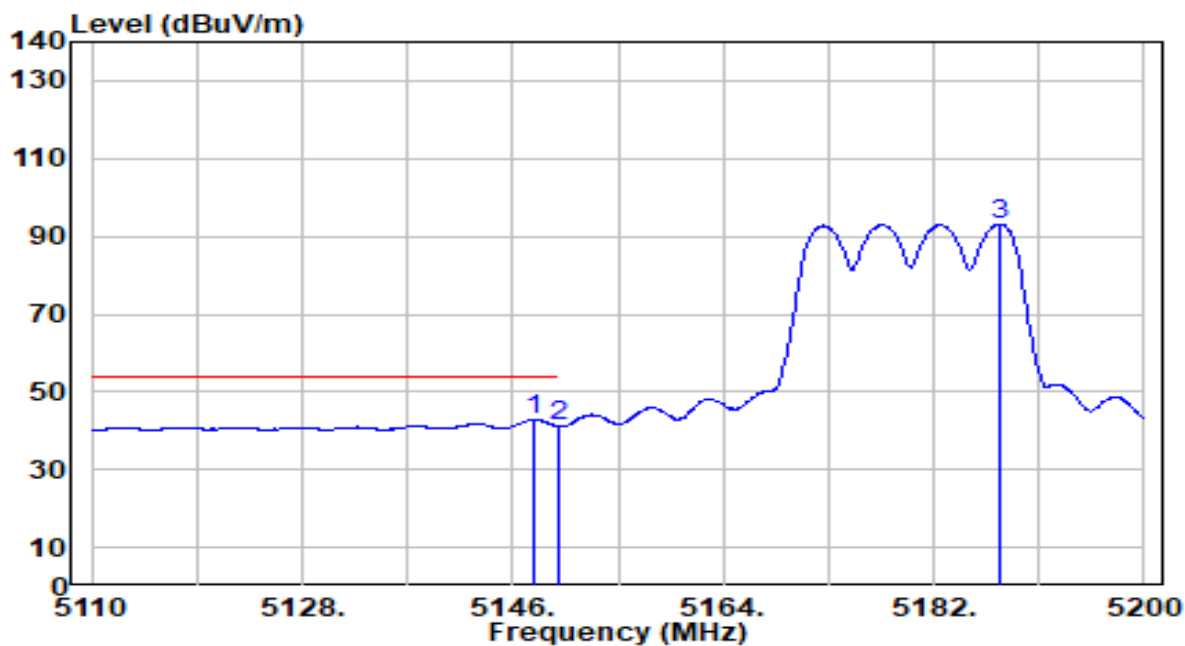


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.800	58.90	0.68	59.58	-14.42	74.00	200	178	Peak
2		5150.000	55.42	0.68	56.10	-17.90	74.00	200	178	Peak
3		5178.130	101.93	0.67	102.60	N/A	N/A	200	178	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band1_TX_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

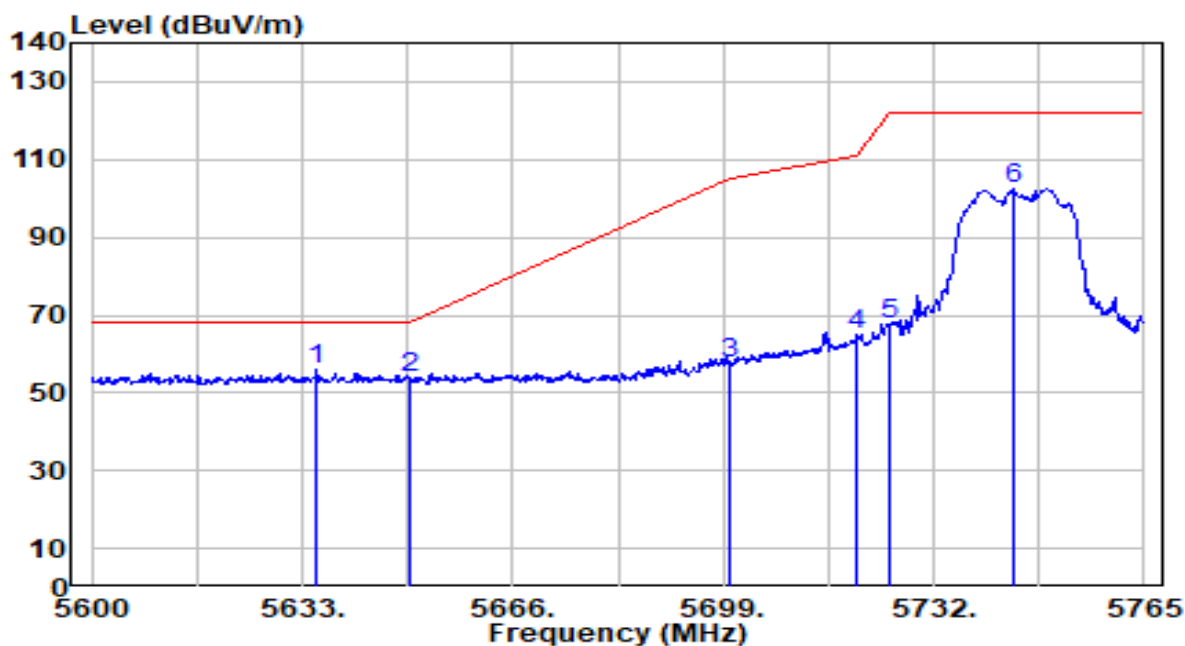


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.890	42.11	0.68	42.78	-11.22	54.00	200	178	Average
2		5150.000	40.40	0.68	41.07	-12.93	54.00	200	178	Average
3		5187.670	92.57	0.67	93.24	N/A	N/A	200	178	Average

Note:

1. " *" , means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

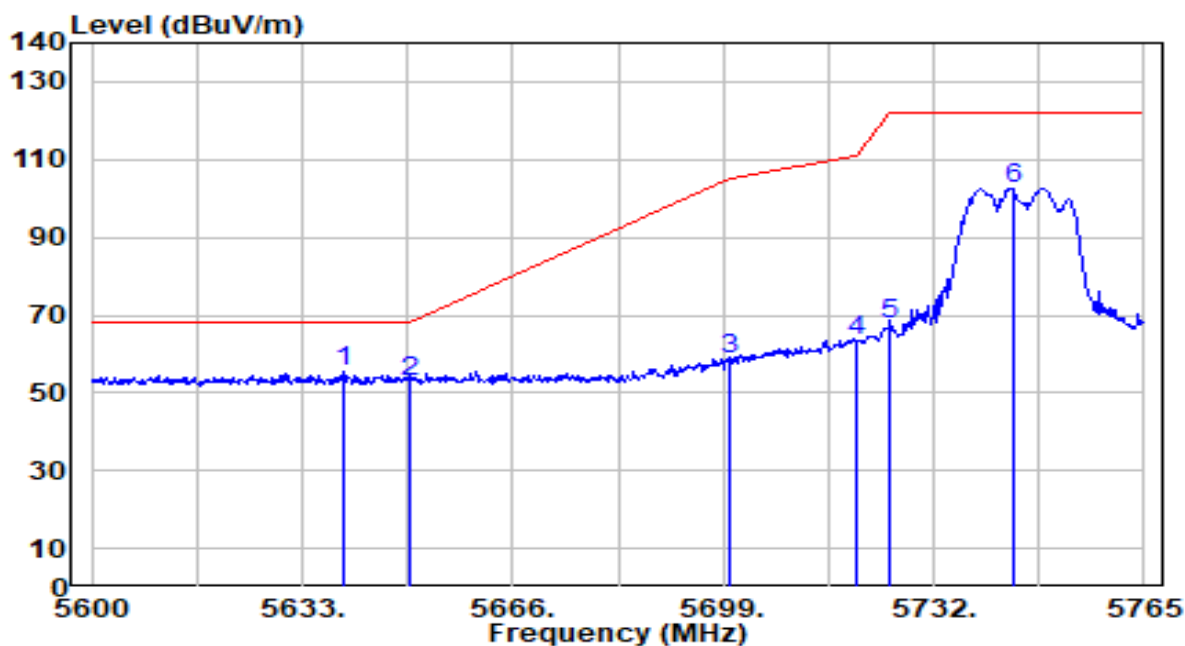


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5635.310	54.76	1.36	56.11	-12.09	68.20	315	207	Peak
2		5650.000	52.60	1.44	54.04	-14.16	68.20	315	207	Peak
3		5700.000	55.60	1.72	57.32	-47.88	105.20	315	207	Peak
4		5720.000	62.96	1.84	64.80	-46.00	110.80	315	207	Peak
5		5725.000	65.66	1.86	67.53	-54.67	122.20	315	207	Peak
6		5744.540	100.61	1.97	102.58	N/A	N/A	315	207	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

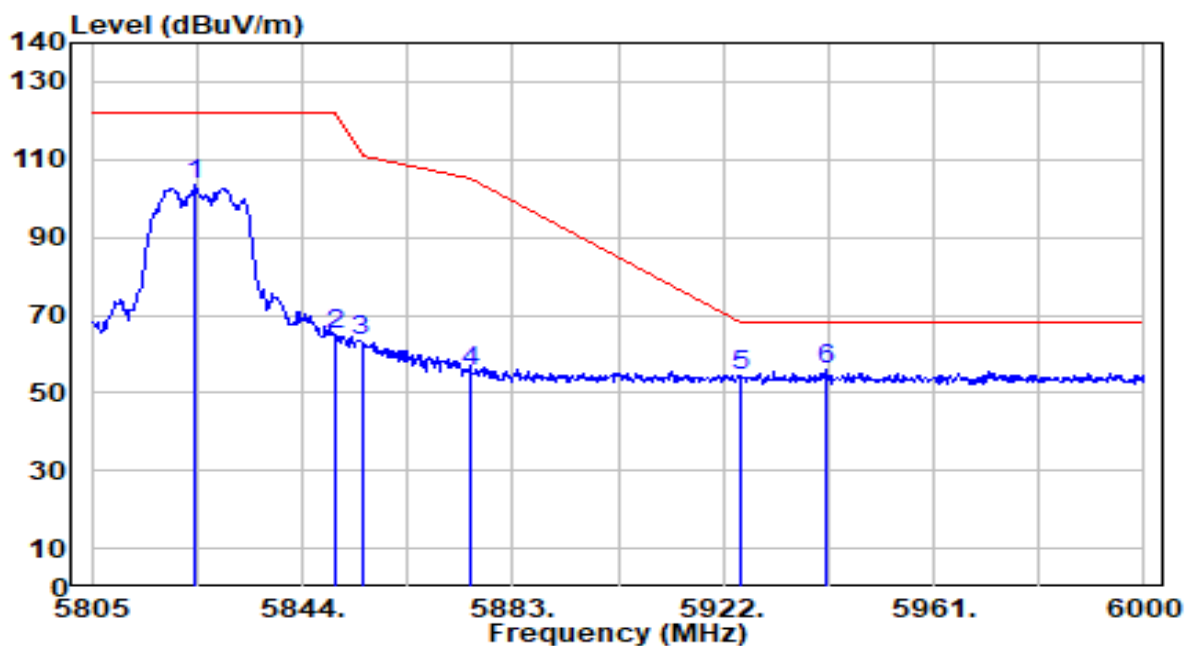


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5639.435	54.17	1.38	55.55	-12.65	68.20	207	308	Peak
2		5650.000	51.30	1.44	52.74	-15.46	68.20	207	308	Peak
3		5700.000	56.68	1.72	58.41	-46.79	105.20	207	308	Peak
4		5720.000	61.76	1.84	63.60	-47.20	110.80	207	308	Peak
5		5725.000	65.87	1.86	67.74	-54.46	122.20	207	308	Peak
6		5744.705	100.60	1.98	102.58	N/A	N/A	207	308	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

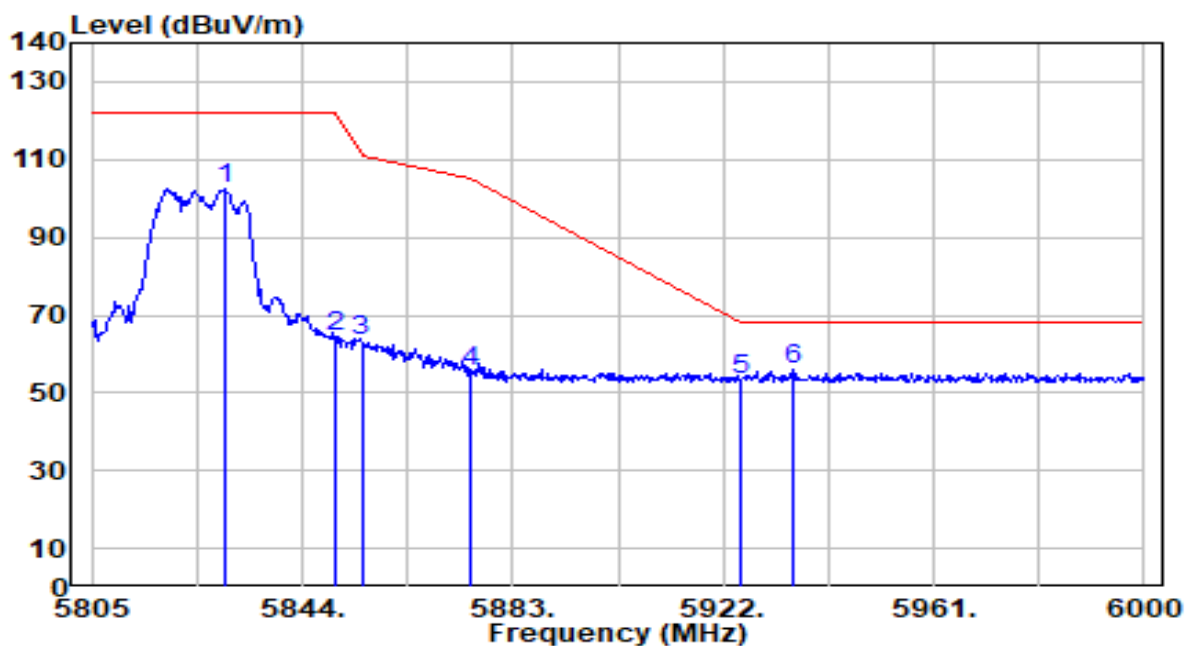


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5824.305	101.09	2.28	103.37	N/A	N/A	280	205	Peak
2	5850.000	62.92	2.27	65.19	-57.01	122.20	280	205	Peak
3	5855.000	61.39	2.27	63.66	-47.14	110.80	280	205	Peak
4	5875.000	53.47	2.26	55.73	-49.47	105.20	280	205	Peak
5	5925.000	51.91	2.25	54.16	-14.04	68.20	280	205	Peak
6	* 5940.915	53.50	2.24	55.74	-12.46	68.20	280	205	Peak

Note:

- " *", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-20MHz_Band4_TX_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

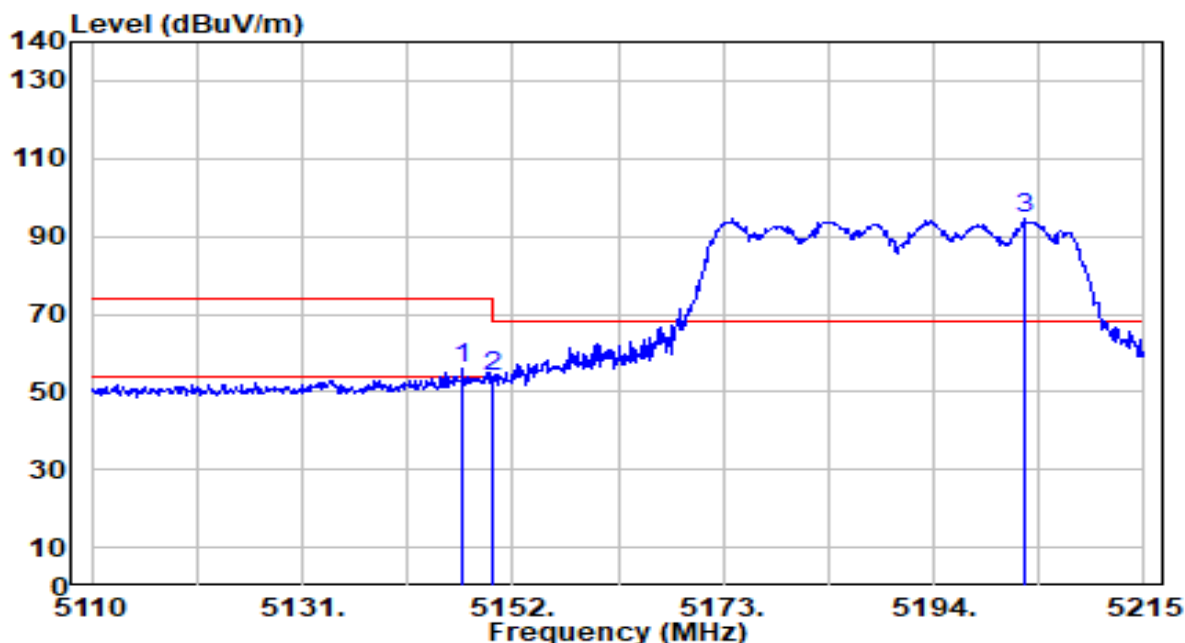


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5829.765	99.99	2.28	102.27	N/A	N/A	100	163	Peak
2	5850.000	62.33	2.27	64.60	-57.60	122.20	100	163	Peak
3	5855.000	60.95	2.27	63.22	-47.58	110.80	100	163	Peak
4	5875.000	53.03	2.26	55.29	-49.91	105.20	100	163	Peak
5	5925.000	51.26	2.25	53.50	-14.70	68.20	100	163	Peak
6	* 5934.870	53.71	2.24	55.95	-12.25	68.20	100	163	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

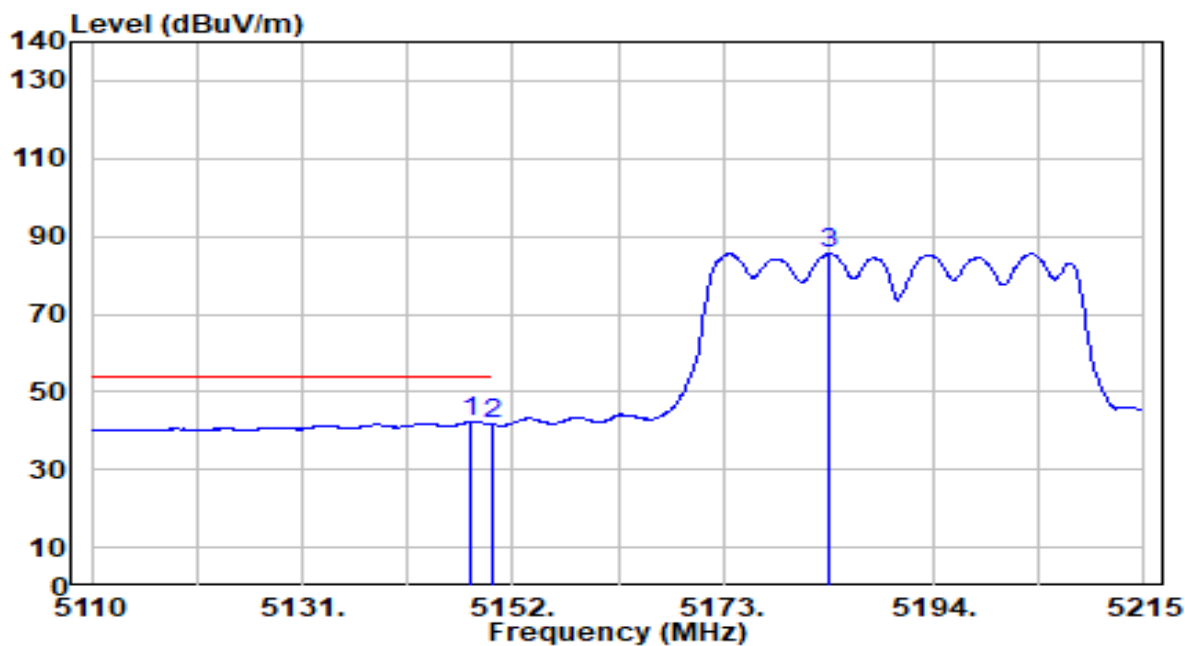


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.065	55.51	0.68	56.18	-17.82	74.00	185	55	Peak
2		5150.000	53.10	0.68	53.77	-20.23	74.00	185	55	Peak
3		5203.030	93.97	0.67	94.64	N/A	N/A	185	55	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

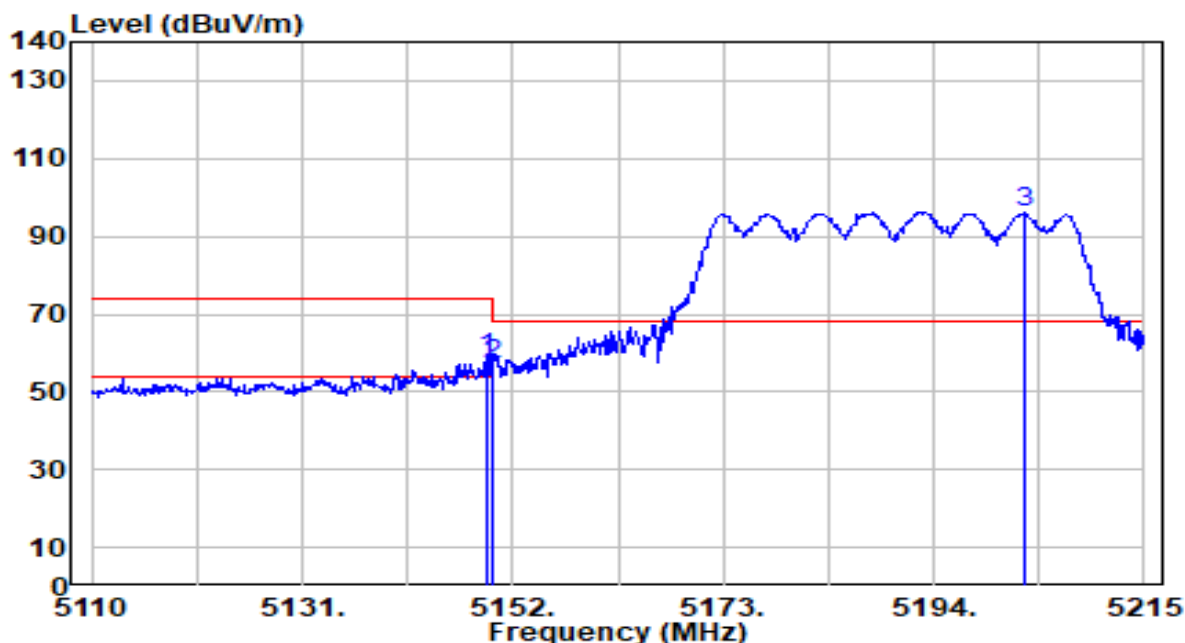


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 5147.800	41.56	0.68	42.24	-11.76	54.00	185	55	Average
2	5150.000	40.94	0.68	41.61	-12.39	54.00	185	55	Average
3	5183.605	84.92	0.67	85.59	N/A	N/A	185	55	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

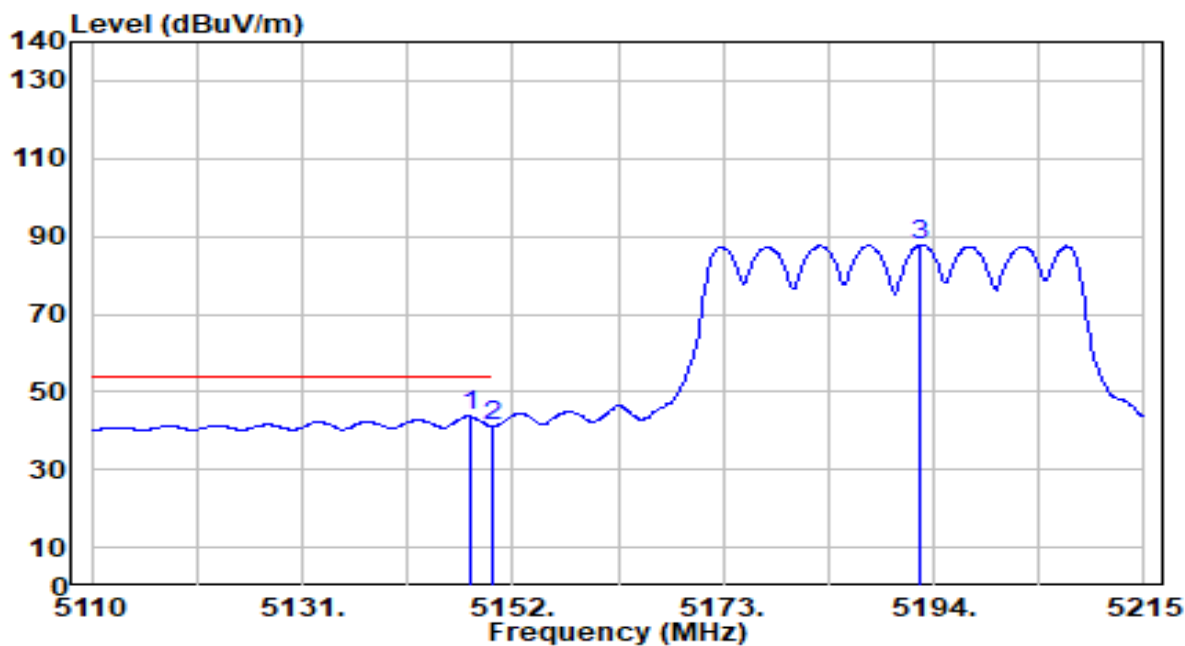


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5149.480	57.76	0.68	58.44	-15.56	74.00	200	178	Peak
2		5150.000	56.35	0.68	57.03	-16.97	74.00	200	178	Peak
3		5203.030	95.67	0.67	96.34	N/A	N/A	200	178	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band1_TX_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

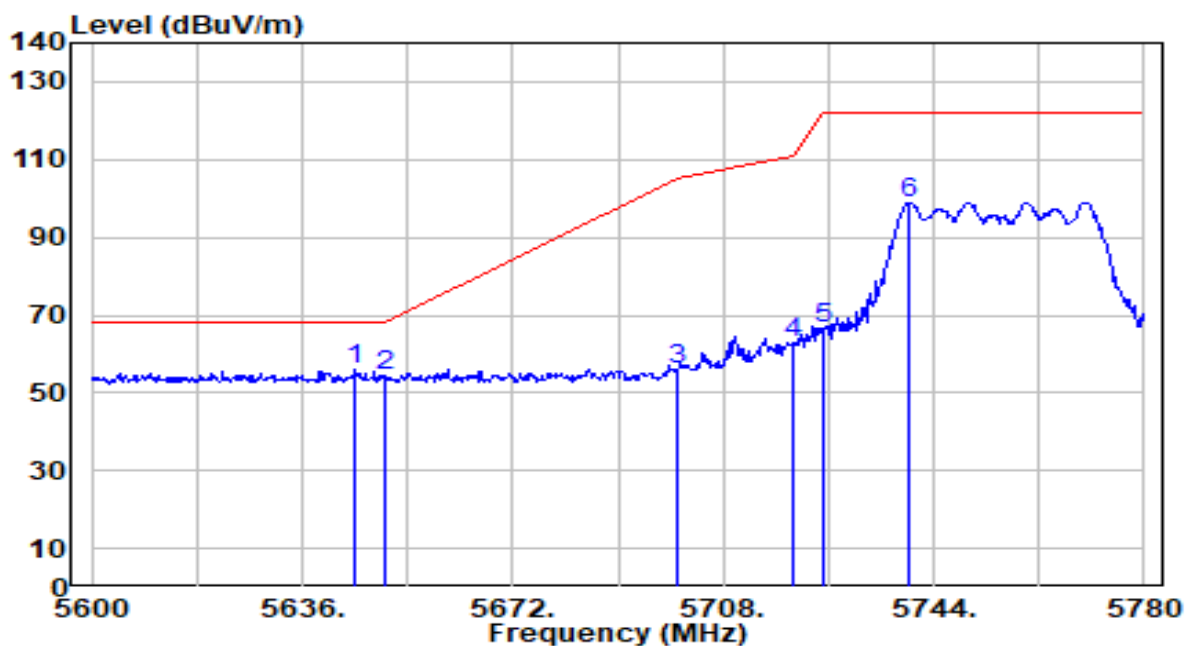


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.695	43.08	0.68	43.75	-10.25	54.00	200	178	Average
2		5150.000	40.47	0.68	41.15	-12.85	54.00	200	178	Average
3		5192.740	87.28	0.67	87.95	N/A	N/A	200	178	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

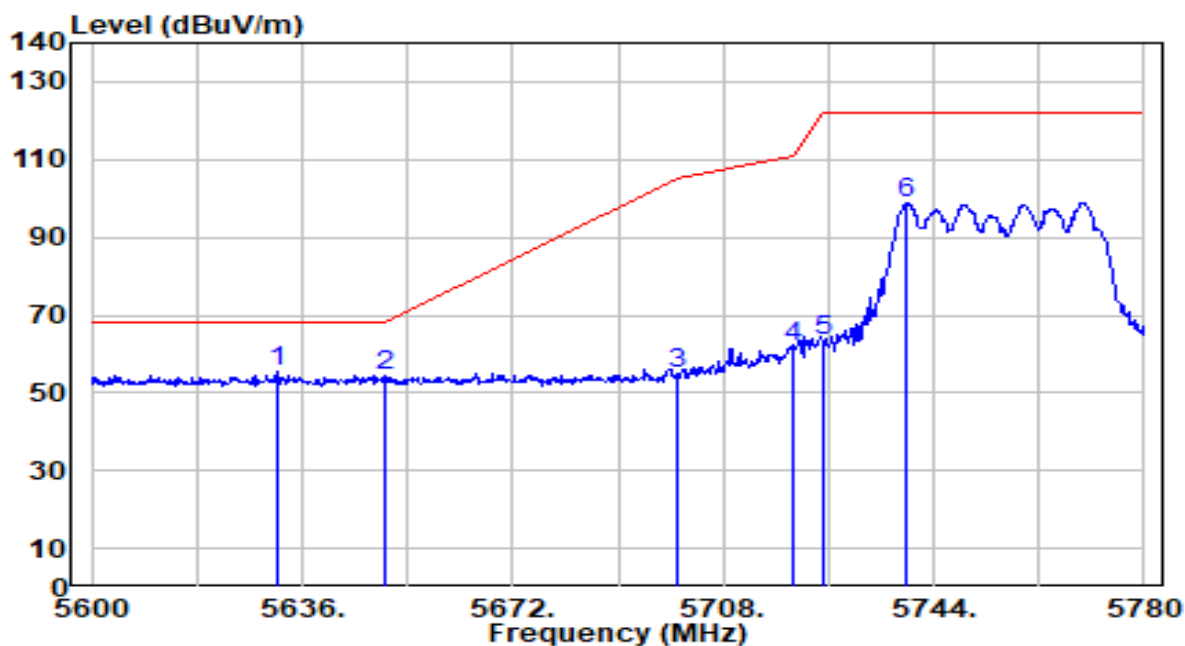


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5645.000	54.63	1.41	56.04	-12.16	68.20	315	207	Peak
2		5650.000	52.90	1.44	54.34	-13.86	68.20	315	207	Peak
3		5700.000	54.25	1.72	55.97	-49.23	105.20	315	207	Peak
4		5720.000	60.93	1.84	62.76	-48.04	110.80	315	207	Peak
5		5725.000	64.63	1.86	66.49	-55.71	122.20	315	207	Peak
6		5739.860	97.01	1.95	98.96	N/A	N/A	315	207	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

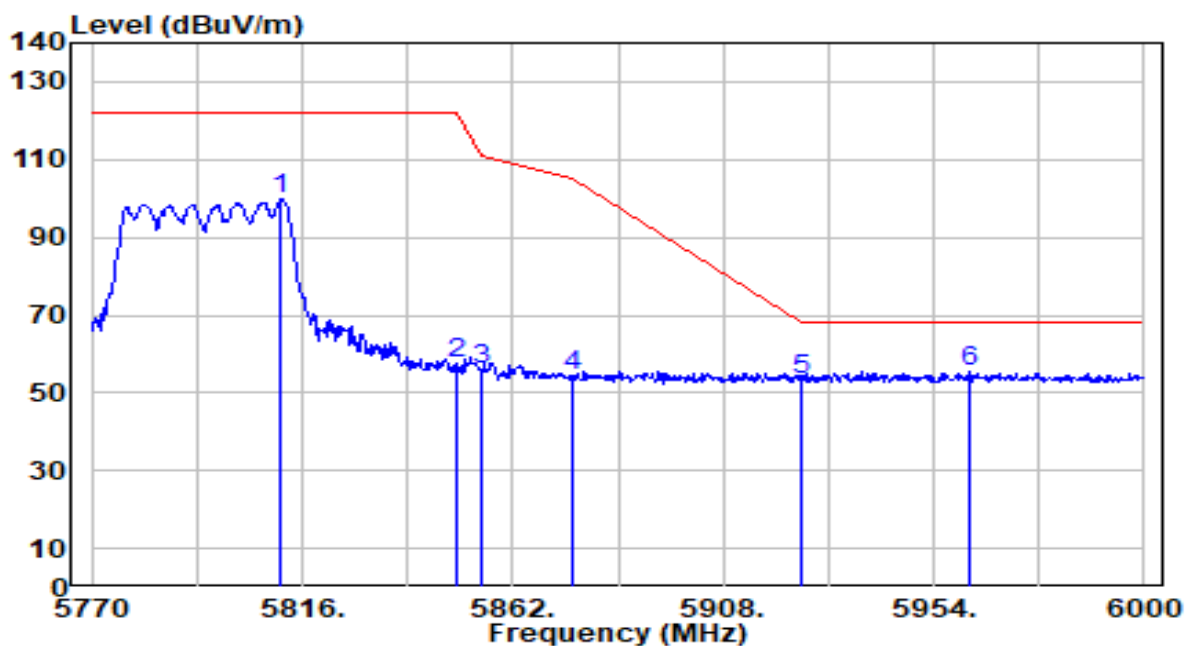


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5631.680	53.91	1.34	55.25	-12.95	68.20	207	308	Peak
2		5650.000	52.81	1.44	54.25	-13.95	68.20	207	308	Peak
3		5700.000	53.06	1.72	54.78	-50.42	105.20	207	308	Peak
4		5720.000	59.75	1.84	61.58	-49.22	110.80	207	308	Peak
5		5725.000	61.53	1.86	63.40	-58.80	122.20	207	308	Peak
6		5739.500	96.92	1.95	98.87	N/A	N/A	207	308	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

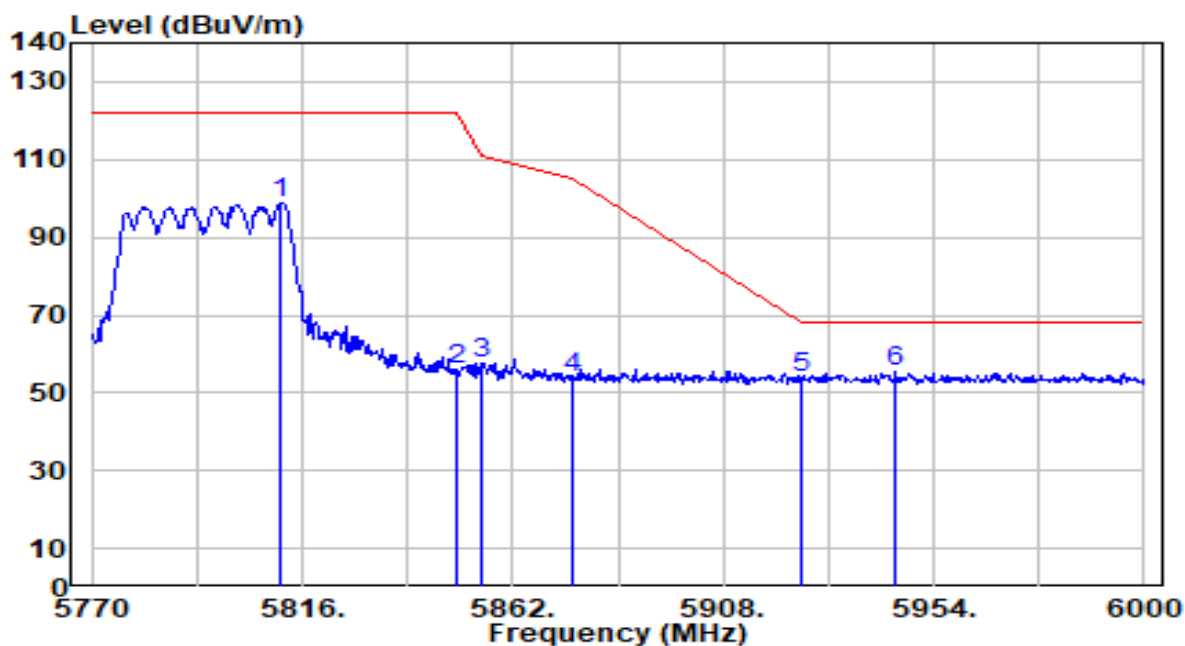


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5811.400	97.53	2.28	99.82	N/A	N/A	280	205	Peak
2	5850.000	55.43	2.27	57.70	-64.50	122.20	280	205	Peak
3	5855.000	53.92	2.27	56.19	-54.61	110.80	280	205	Peak
4	5875.000	52.23	2.26	54.49	-50.71	105.20	280	205	Peak
5	5925.000	51.37	2.25	53.62	-14.58	68.20	280	205	Peak
6	* 5961.820	53.37	2.23	55.61	-12.59	68.20	280	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11n-40MHz_Band4_TX_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

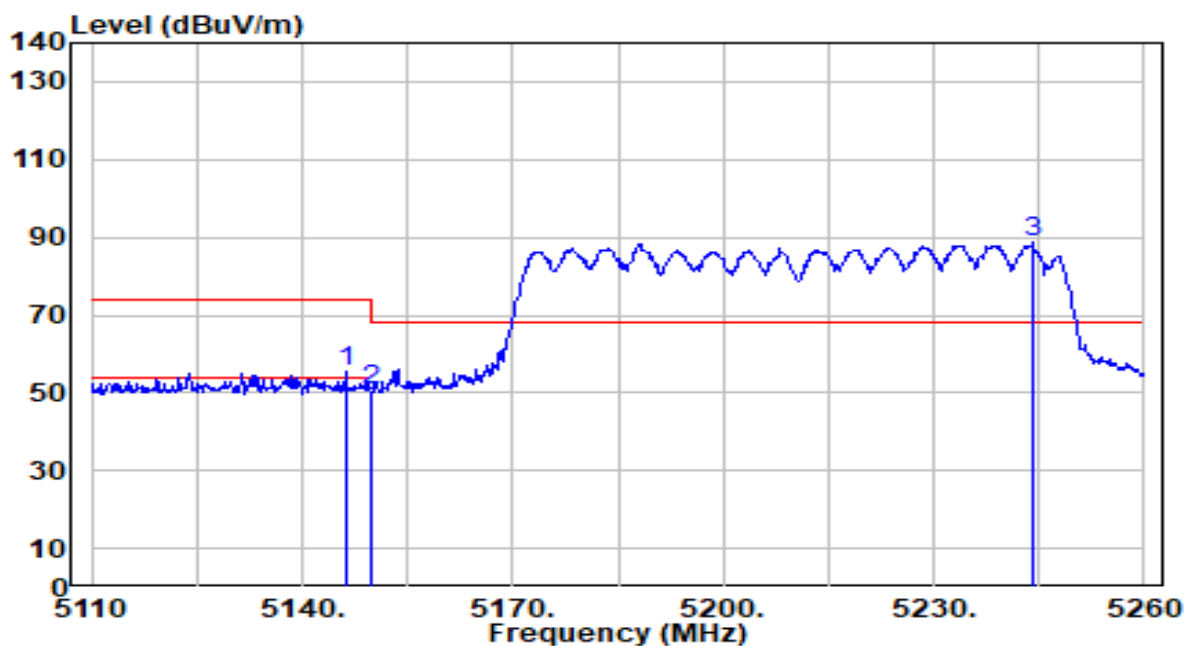


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5811.400	96.75	2.28	99.04	N/A	N/A	100	163	Peak
2	5850.000	53.52	2.27	55.79	-66.41	122.20	100	163	Peak
3	5855.000	55.13	2.27	57.40	-53.40	110.80	100	163	Peak
4	5875.000	51.88	2.26	54.15	-51.05	105.20	100	163	Peak
5	5925.000	51.60	2.25	53.85	-14.35	68.20	100	163	Peak
6	* 5945.490	53.08	2.24	55.32	-12.88	68.20	100	163	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band1_TX_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

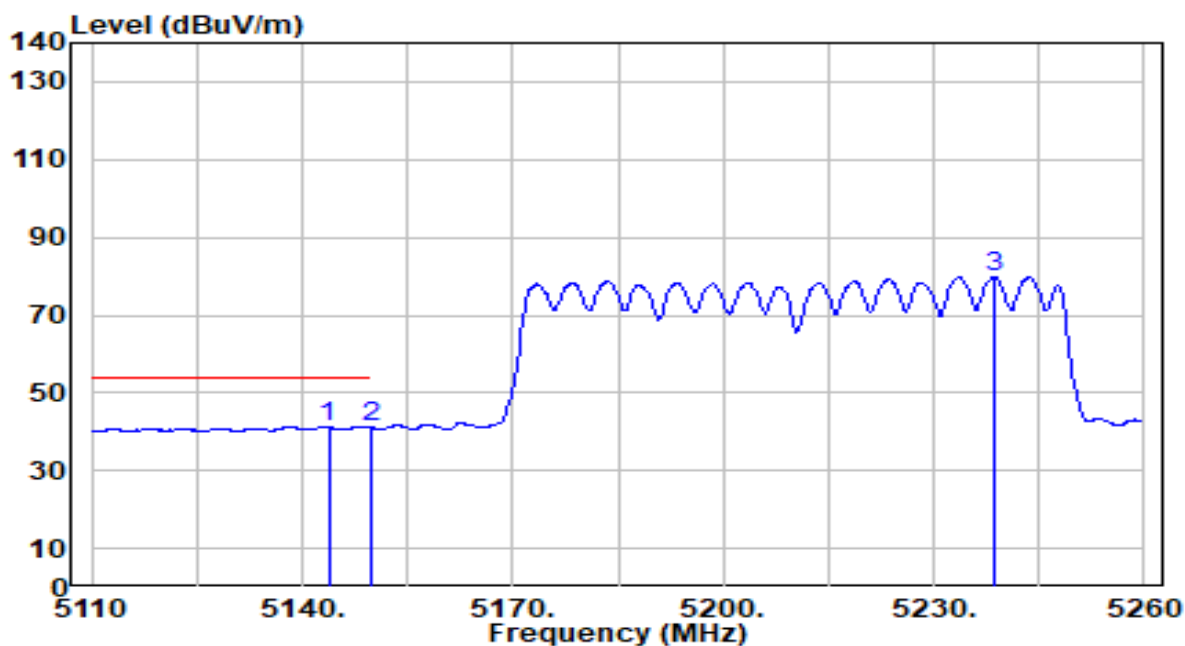


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5146.150	54.93	0.68	55.61	-18.39	74.00	185	55	Peak
2		5150.000	49.97	0.68	50.65	-23.35	74.00	185	55	Peak
3		5244.100	88.08	0.62	88.70	N/A	N/A	185	55	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band1_TX_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

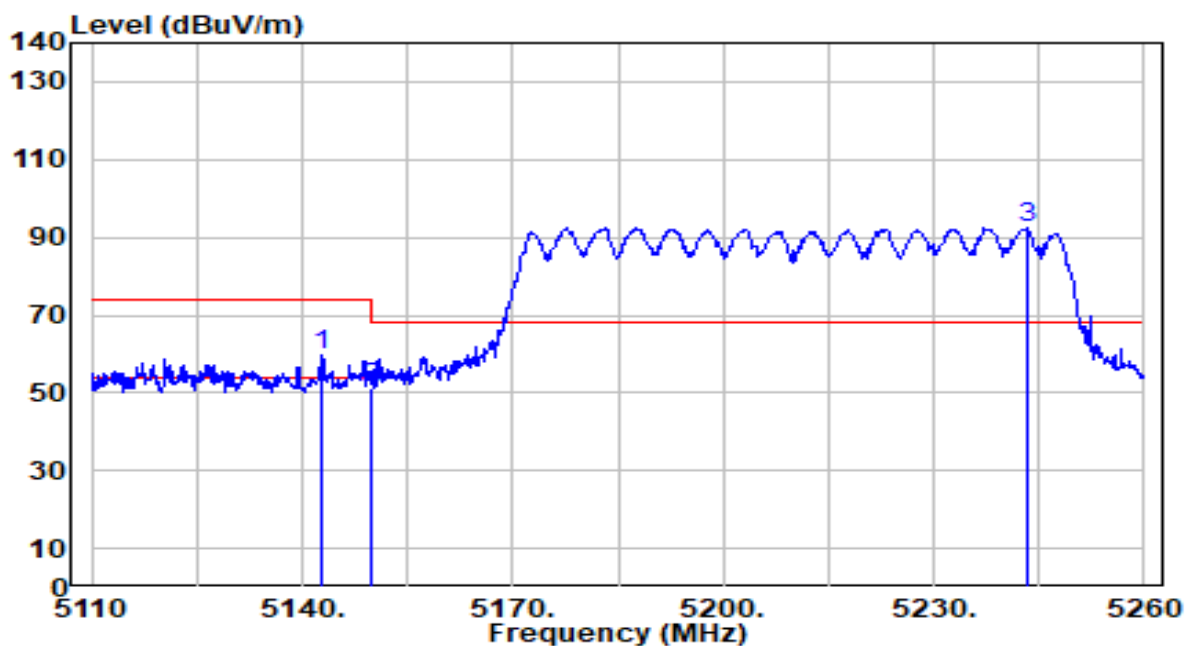


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5143.750	40.79	0.68	41.47	-12.53	54.00	185	55	Average
2		5150.000	40.33	0.68	41.00	-13.00	54.00	185	55	Average
3		5238.700	79.12	0.63	79.75	N/A	N/A	185	55	Average

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band1_TX_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

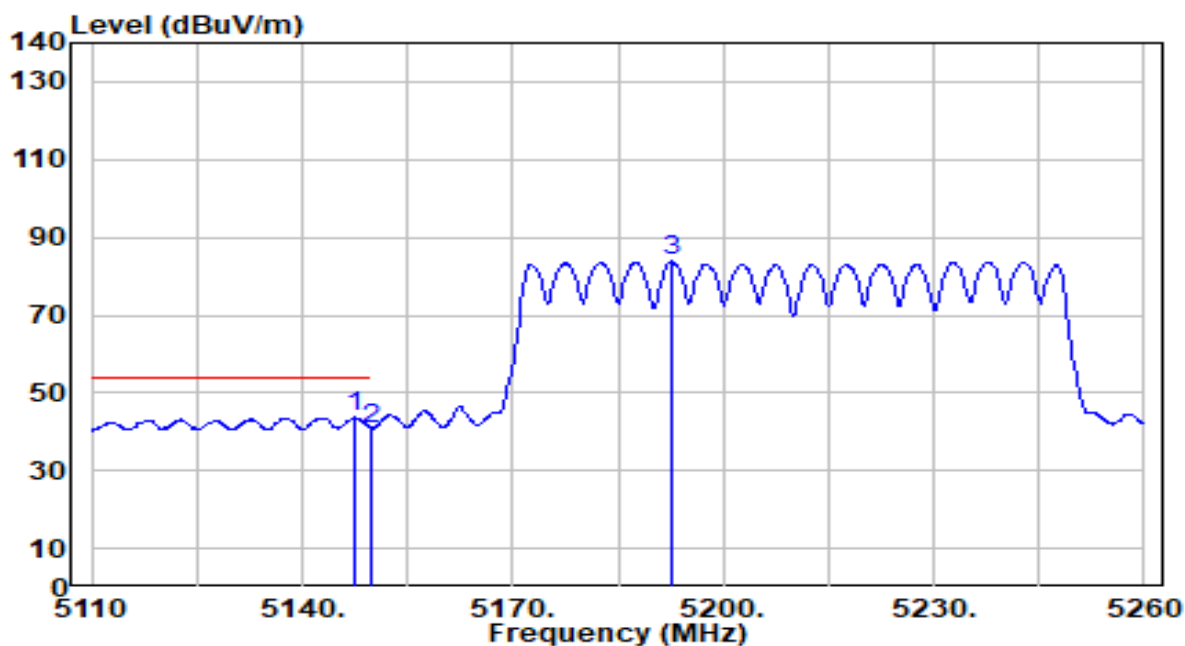


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5142.700	59.08	0.68	59.75	-14.25	74.00	200	178	Peak
2		5150.000	50.72	0.68	51.39	-22.61	74.00	200	178	Peak
3		5243.200	91.69	0.62	92.32	N/A	N/A	200	178	Peak

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band1_TX_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

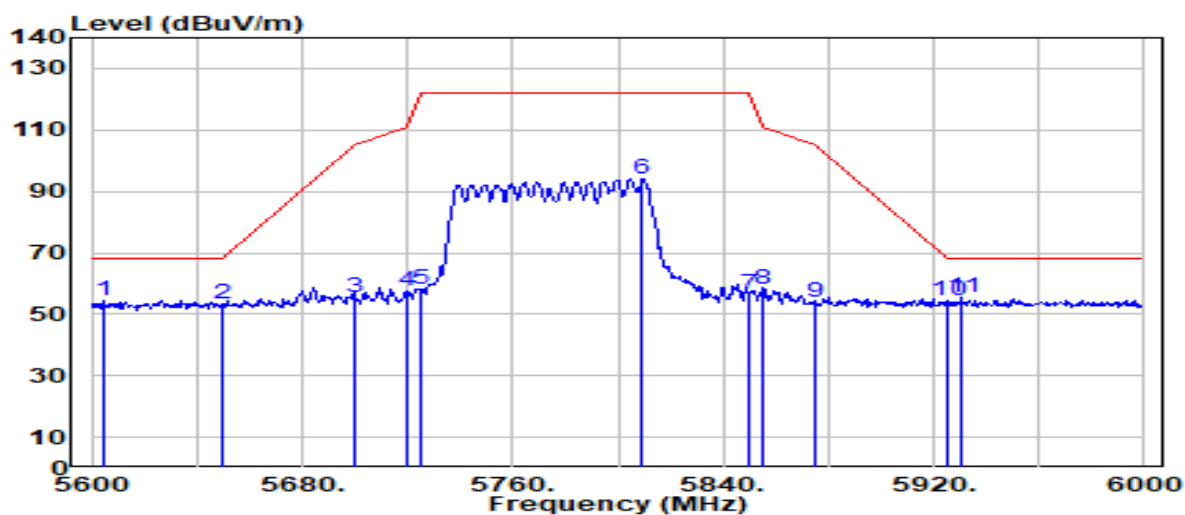


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.500	42.99	0.68	43.67	-10.33	54.00	200	178	Average
2		5150.000	40.22	0.68	40.90	-13.10	54.00	200	178	Average
3		5192.650	83.08	0.67	83.75	N/A	N/A	200	178	Average

Note:

- "*" means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
- Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Horizontal	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band4_TX_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz

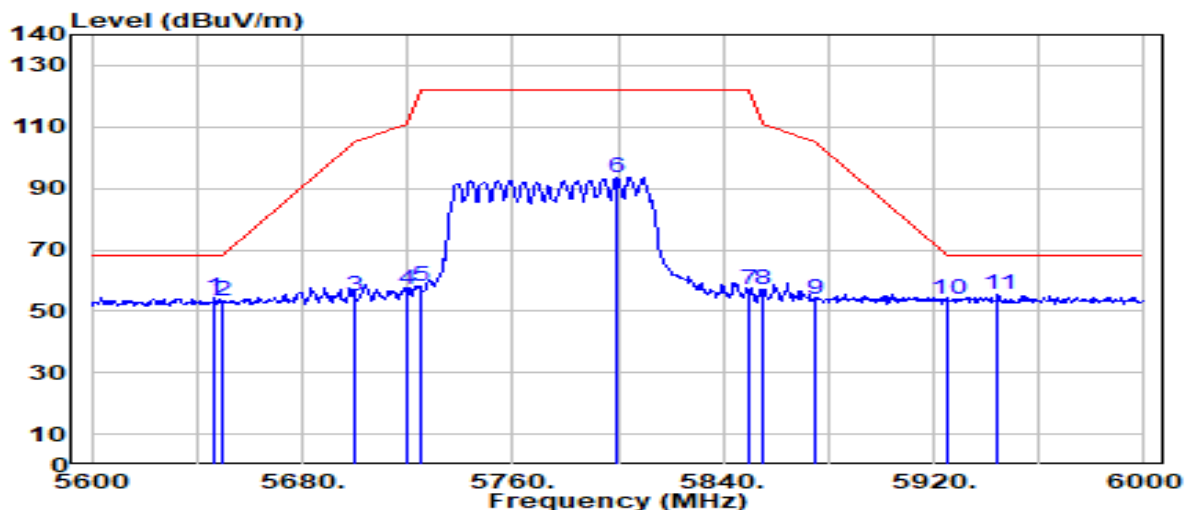


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5604.400	53.43	1.18	54.61	-13.59	68.20	280	205	Peak
2	5650.000	51.84	1.44	53.28	-14.92	68.20	280	205	Peak
3	5700.000	53.82	1.72	55.55	-49.65	105.20	280	205	Peak
4	5720.000	55.52	1.84	57.36	-53.44	110.80	280	205	Peak
5	5725.000	56.39	1.86	58.25	-63.95	122.20	280	205	Peak
6	5809.200	91.81	2.28	94.09	N/A	N/A	280	205	Peak
7	5850.000	54.41	2.27	56.68	-65.52	122.20	280	205	Peak
8	5855.000	56.06	2.27	58.32	-52.48	110.80	280	205	Peak
9	5875.000	51.85	2.26	54.11	-51.09	105.20	280	205	Peak
10	5925.000	52.13	2.25	54.37	-13.83	68.20	280	205	Peak
11	* 5930.800	53.06	2.24	55.31	-12.89	68.20	280	205	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

EUT	Panel PC	Date of Test	2024-06-19
Factor	DRH18-E	Temp. / Humidity	22°C /60%
Polarity	Vertical	Site / Test Engineer	AC2 / Stanley
Test Mode	802.11ac-80MHz_Band4_TX_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz



No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5646.800	52.93	1.42	54.35	-13.85	68.20	100	163	Peak
2	5650.000	51.88	1.44	53.32	-14.88	68.20	100	163	Peak
3	5700.000	53.37	1.72	55.09	-50.11	105.20	100	163	Peak
4	5720.000	55.26	1.84	57.09	-53.71	110.80	100	163	Peak
5	5725.000	56.18	1.86	58.04	-64.16	122.20	100	163	Peak
6	5799.600	91.28	2.29	93.57	N/A	N/A	100	163	Peak
7	5850.000	54.75	2.27	57.02	-65.18	122.20	100	163	Peak
8	5855.000	54.98	2.27	57.25	-53.55	110.80	100	163	Peak
9	5875.000	51.67	2.26	53.93	-51.27	105.20	100	163	Peak
10	5925.000	51.79	2.25	54.03	-14.17	68.20	100	163	Peak
11	* 5944.400	53.27	2.24	55.50	-12.70	68.20	100	163	Peak

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = Antenna Factor (dB/m) + Cable Loss (dB) – Preamplifier(dB) + 10dB Attenuation.
3. Measurement (dBuV/m) = Reading(dBuV) + C.F (Correction Factor).
4. The emission levels of other frequencies are very lower than the limit and not show in test report.

7.10. AC Conducted Emissions Measurement

7.10.1. Test Limit

FCC Part 15.207 Limits		
Frequency (MHz)	QP (dB μ V)	AV (dB μ V)
0.15 ~ 0.50	66 ~ 56	56 ~ 46
0.50 ~ 5.0	56	46
5.0 ~ 30	60	50

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.5MHz.

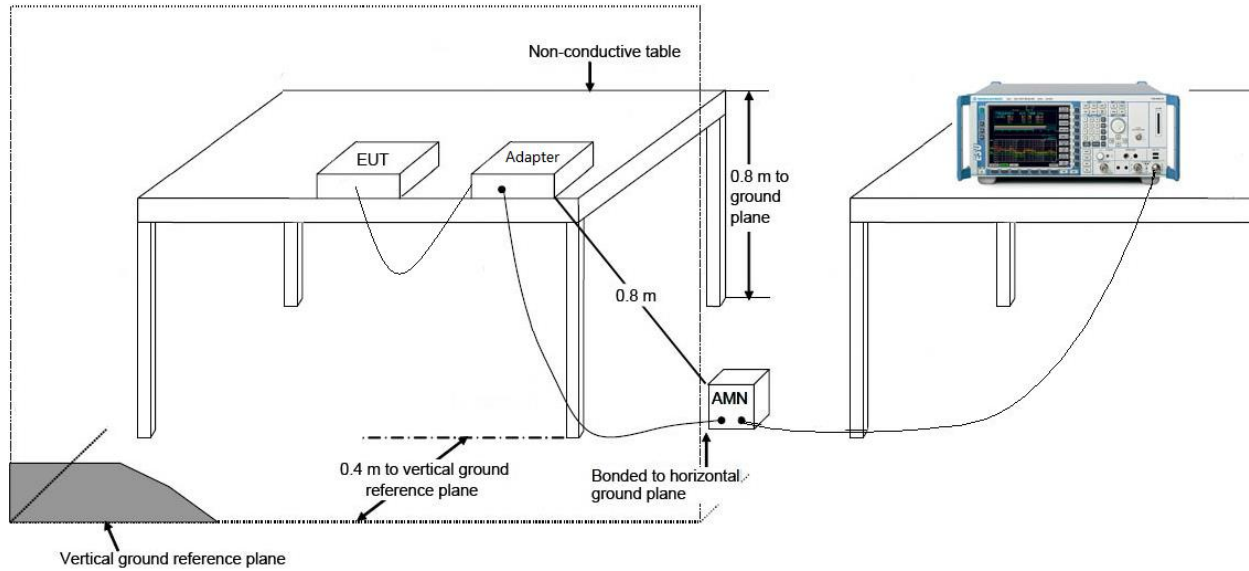
7.10.2. Test Procedure

The EUT was setup according to ANSI C63.4, 2009 and tested according to KDB 789033 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs) Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.

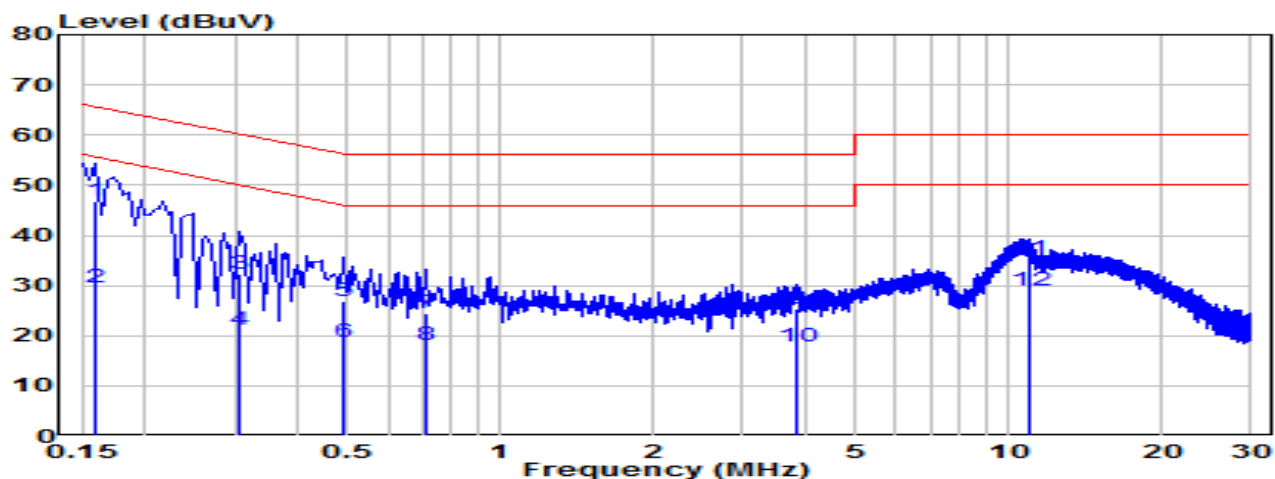
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

7.10.3. Test Setup



7.10.4. Test Result

EUT	Panel PC	Date of Test	2024-07-01
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	27.5°C /50%
Polarity	Line1	Site / Test Engineer	SR2 / Will
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

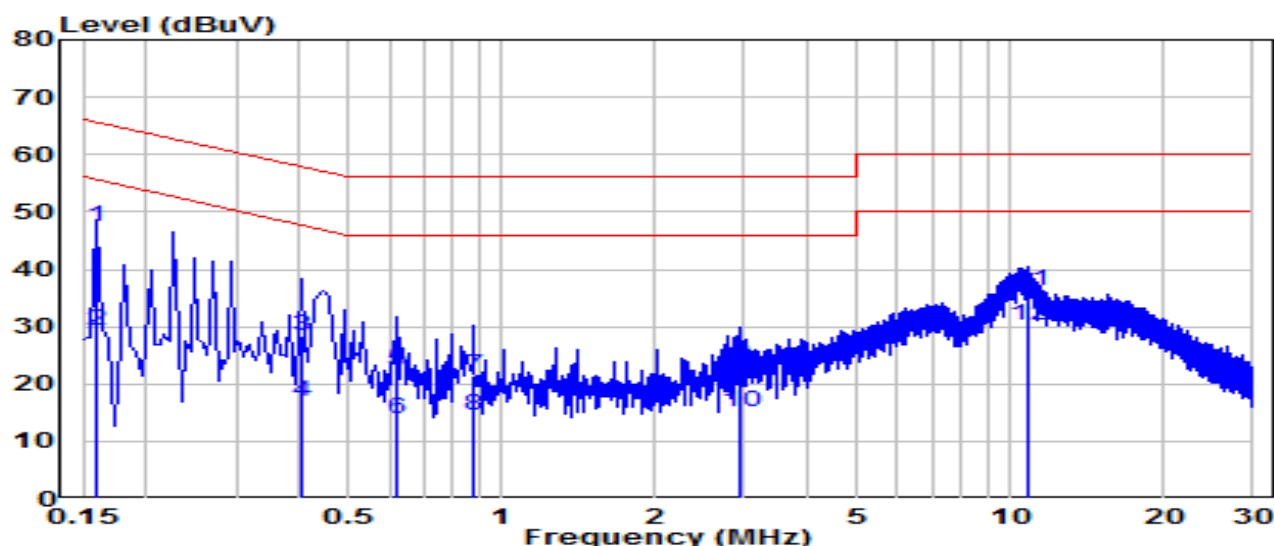


No		Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV)	Margin (dB)	Limit (dBUV)	Remark (QP/PK/AV)
1	*	0.159	37.13	9.63	46.76	-18.76	65.52	QP
2	*	0.159	20.03	9.63	29.66	-25.86	55.52	Average
3		0.307	22.80	9.64	32.44	-27.60	60.04	QP
4		0.307	11.58	9.64	21.22	-28.82	50.04	Average
5		0.492	17.34	9.65	26.99	-29.14	56.13	QP
6		0.492	9.14	9.65	18.79	-27.34	46.13	Average
7		0.712	14.91	9.66	24.57	-31.43	56.00	QP
8		0.712	8.58	9.66	18.25	-27.75	46.00	Average
9		3.849	15.59	9.73	25.32	-30.68	56.00	QP
10		3.849	8.23	9.73	17.96	-28.04	46.00	Average
11		10.971	25.50	9.88	35.38	-24.62	60.00	QP
12		10.971	19.25	9.88	29.13	-20.87	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBUV) = Reading(dBUV) + C.F (Correction Factor).

EUT	Panel PC	Date of Test	2024-07-01
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	27.5°C / 50%
Polarity	Neutral	Site / Test Engineer	SR2 / Will
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

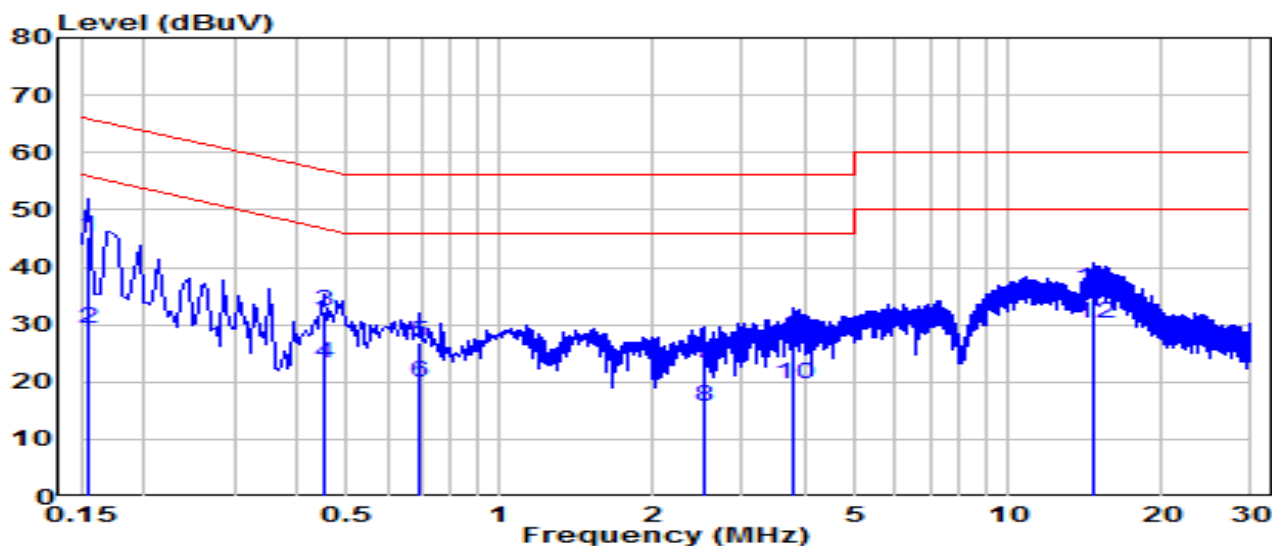


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1	*	0.159	37.62	9.63	47.25	-18.26	65.52	QP
2	*	0.159	19.64	9.63	29.27	-26.25	55.52	Average
3		0.406	18.67	9.64	28.32	-29.40	57.72	QP
4		0.406	7.22	9.64	16.86	-30.86	47.72	Average
5		0.618	12.81	9.66	22.47	-33.53	56.00	QP
6		0.618	4.32	9.66	13.98	-32.02	46.00	Average
7		0.879	11.71	9.67	21.38	-34.62	56.00	QP
8		0.879	4.68	9.67	14.35	-31.65	46.00	Average
9		2.935	13.86	9.72	23.59	-32.41	56.00	QP
10		2.935	5.43	9.72	15.16	-30.84	46.00	Average
11		10.908	26.34	9.90	36.24	-23.76	60.00	QP
12		10.908	20.21	9.90	30.11	-19.89	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

EUT	Panel PC	Date of Test	2024-07-01
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	27.5°C /50%
Polarity	Line1	Site / Test Engineer	SR2 / Will
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 240V/60Hz

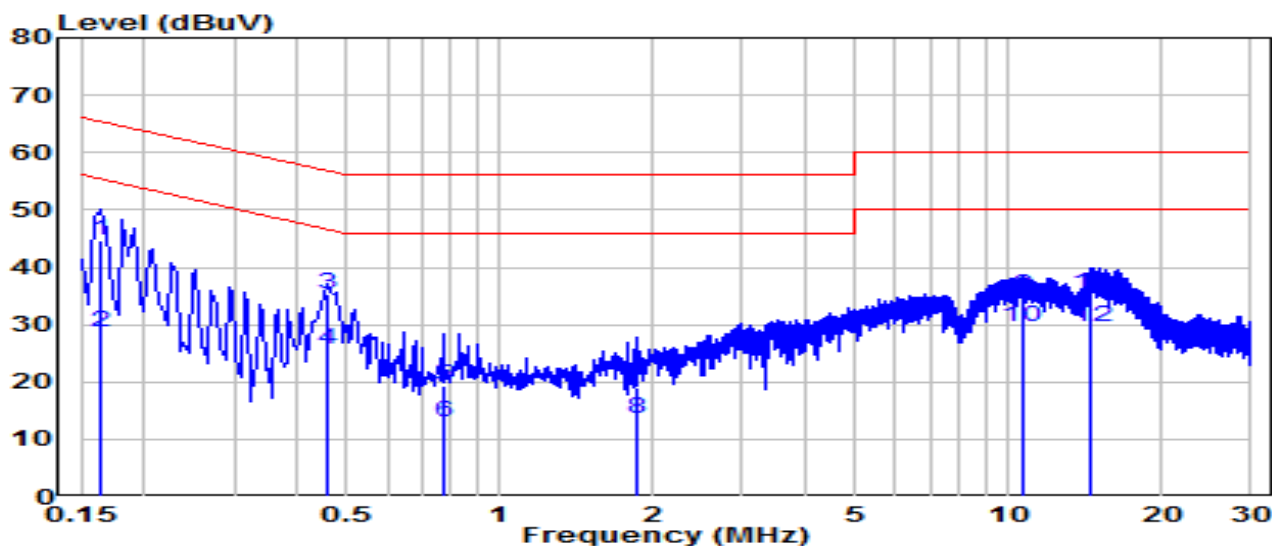


No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.154	35.64	9.63	45.27	-20.49	65.75	QP
2		0.154	19.53	9.63	29.16	-26.60	55.75	Average
3		0.451	22.78	9.65	32.43	-24.42	56.85	QP
4		0.451	13.59	9.65	23.24	-23.61	46.85	Average
5		0.694	17.22	9.66	26.89	-29.11	56.00	QP
6		0.694	10.12	9.66	19.78	-26.22	46.00	Average
7		2.512	13.46	9.71	23.17	-32.83	56.00	QP
8		2.512	5.94	9.71	15.65	-30.35	46.00	Average
9		3.772	18.12	9.73	27.84	-28.16	56.00	QP
10		3.772	9.80	9.73	19.53	-26.47	46.00	Average
11	*	14.666	26.26	9.90	36.16	-23.84	60.00	QP
12	*	14.666	20.30	9.90	30.20	-19.80	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

EUT	Panel PC	Date of Test	2024-07-01
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	27.5°C /50%
Polarity	Neutral	Site / Test Engineer	SR2 / Will
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 240V/60Hz



No		Frequency (MHz)	Reading (dBuV)	C.F (dB)	Measurement (dBuV)	Margin (dB)	Limit (dBuV)	Remark (QP/PK/AV)
1		0.163	35.08	9.63	44.71	-20.58	65.28	QP
2		0.163	18.96	9.63	28.59	-26.70	55.28	Average
3		0.460	25.70	9.65	35.35	-21.33	56.68	QP
4		0.460	16.15	9.65	25.80	-20.88	46.68	Average
5		0.771	9.56	9.67	19.22	-36.78	56.00	QP
6		0.771	3.46	9.67	13.13	-32.87	46.00	Average
7		1.851	9.27	9.71	18.98	-37.02	56.00	QP
8		1.851	3.77	9.71	13.47	-32.53	46.00	Average
9	*	10.620	25.18	9.90	35.07	-24.93	60.00	QP
10	*	10.620	19.75	9.90	29.65	-20.35	50.00	Average
11		14.468	25.42	9.93	35.36	-24.64	60.00	QP
12		14.468	19.53	9.93	29.46	-20.54	50.00	Average

Note:

1. " *", means this data is the worst emission level.
2. C.F (Correction Factor) = LISN Factor (dB)+ Cable Loss (dB).
3. Measurement (dBuV) = Reading(dBuV) + C.F (Correction Factor).

8. CONCLUSION

The data collected relate only the item(s) tested and show that the **Panel PC, FCC ID:**

XBG-APC-15WR2, Model Number: APC-15WR2 is in compliance with Part 15E of the FCC Rules & IC Rules.

Appendix A : Test Photograph

Refer to “2405TW3101-UT” file.

Appendix B : External Photograph

Refer to “2405TW3101-UE” file.

Appendix C : Internal Photograph

Refer to “2405TW3101-UI” file.

_____ The End _____