

MEASUREMENT REPORT (C2PC for FCC, C2PC for ISED)

FCC ID : XBG-BA1GMNRCH8
IC : 21285-BA1GMNRCH8
Applicant : AVALUE TECHNOLOGY INCORPORATION
Application Type : Certification
Product : Intercom
Model Name : Monarch 8
Model No. : BUTTERFLYMX.M8.1
Trade Mark : 
FCC Classification : Unlicensed National Information Infrastructure (UNII)
FCC Rule Part(s) : Part 15 Subpart E (Section 15.407)
ISED Standard : RSS-247 Issue 3
Test Procedure(s) : ANSI C63.10-2013
Received Date : December 5, 2023
Test Date : December 6, 2023~ December 15, 2023

Tested By : 
(Kaunaz Lee)
Reviewed By : 
(Paddy Chen)
Approved By : 
(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
2401TWN801-U5	1.0	Original Report	2024-02-19	

Note:

1. The original report was FCC: 2209TWI301-U14 and IC: 2209TWI301-C14 (Monarch 8 (ButterflyMX.M8.1). This time, the Power Adapter was added and the WLAN (BT/BLE & Wi-Fi 2.4G/5G) Antenna was changed, so the FCC C2PC & ISED C2PC (Conducted Output Power, Spurious Emission & Band Edge, Conduction) is executed.
2. FCC Original Report Grant Date: 01/09/2023, FCC ID: XBG-BA1GMNRCH8.
3. ISED Original Report Grant Date: 01/22/2023, IC: 21285-BA1GMNRCH8.

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§2.1033 General Information

Applicant	AVALUE TECHNOLOGY INCORPORATION
Applicant Address	7F, 228, Lian-cheng Road, Zhonghe Dist., New Taipei City 235, Taiwan
Manufacturer	ButterflyMX, inc.
Manufacturer Address	44 West 28th Street, 4th Floor New York, NY 10001
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)
ISED Standard:	RSS-247 Issue 3
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 TELECOM Rules.

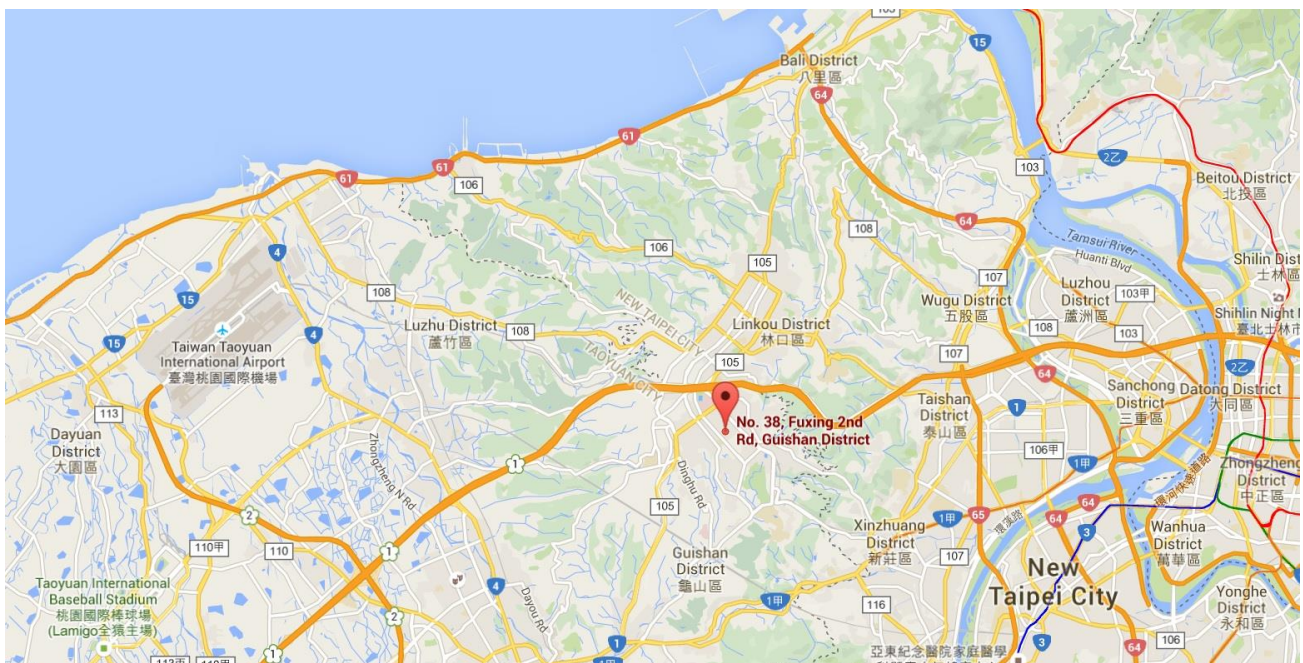
1. INTRODUCTION

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	Intercom
Model Name	Monarch 8
Model No.	BUTTERFLYMX.M8.1
Trade Mark	
Supports Radios Spec.	WPAN: Bluetooth Dual Mode: V5.0 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
Wi-Fi Specification	802.11a/n/ac (2TX / 2RX)
Frequency Range:	For 802.11a/n-HT20/ac-VHT20: 5180~5240MHz, 5260~5320MHz, 5500~5720MHz, 5745~5825MHz For 802.11n-HT40/ac-VHT40: 5190~5230MHz, 5270~5310MHz, 5510~5710MHz, 5755~5795MHz For 802.11ac-VHT80: 5210MHz, 5290MHz, 5530MHz, 5610 MHz, 5690MHz, 5775MHz
Modulation Type	802.11a/n-20/ac-20/n-40/ac-40/ac-80 OFDM (BPSK, QPSK, 16QAM, 64QAM, 256QAM)
Accessories	
Power Adapter #1	Brand Name: EDAC Model: EA10731F-240 Input: AC 100-240V~0.2A, 50-60Hz Output: DC 24.0V-2.08A
Power Adapter #2 (This time new addition)	Brand Name: EDAC Model: EA10681H-240 Input: AC 100-240V~2.0A, 50-60Hz Output: DC 24.0V-2.08A 50.0W DC Cable Out: Non-Shielded, 1.2m

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	52	5260 MHz	56	5280 MHz
60	5300 MHz	64	5320 MHz	100	5500 MHz
104	5520 MHz	108	5540 MHz	112	5560 MHz
120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz
144	5720 MHz	149	5745 MHz	153	5765 MHz
157	5785 MHz	161	5805 MHz	165	5825 MHz

802.11 n-HT40/ ac-VHT40

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

802.11ac-VHT80

Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530 MHz
122	5610 MHz	138	5690 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-VHT20
	Mode 5: Transmit by 802.11ac-VHT40
	Mode 6: Transmit by 802.11ac-VHT80
	Mode 7: Receiver by 802.11n-HT20

2.4. Test Software

The test utility software used during testing was “putty”, the version is ver0.78”.

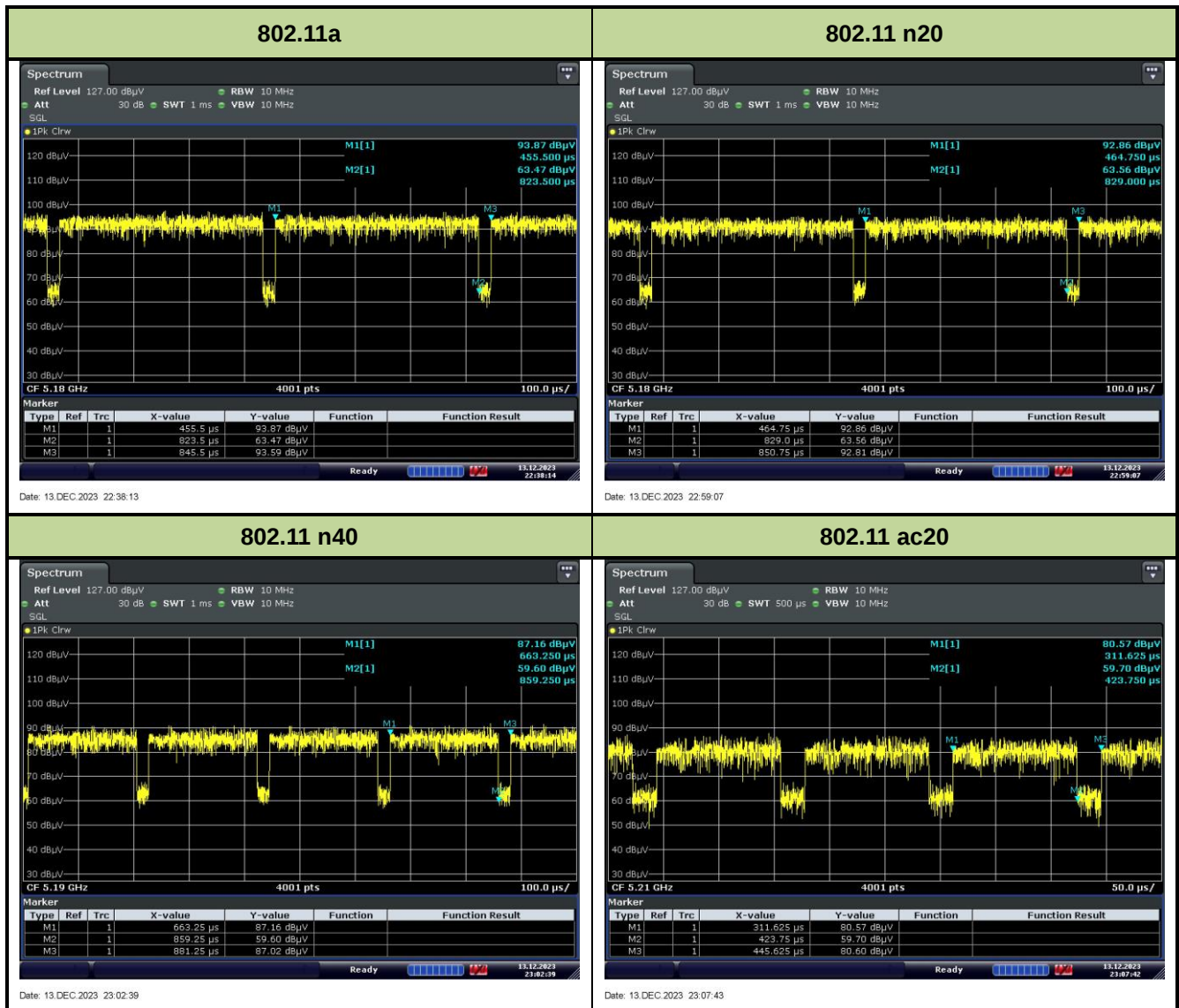
2.5. Device Capabilities

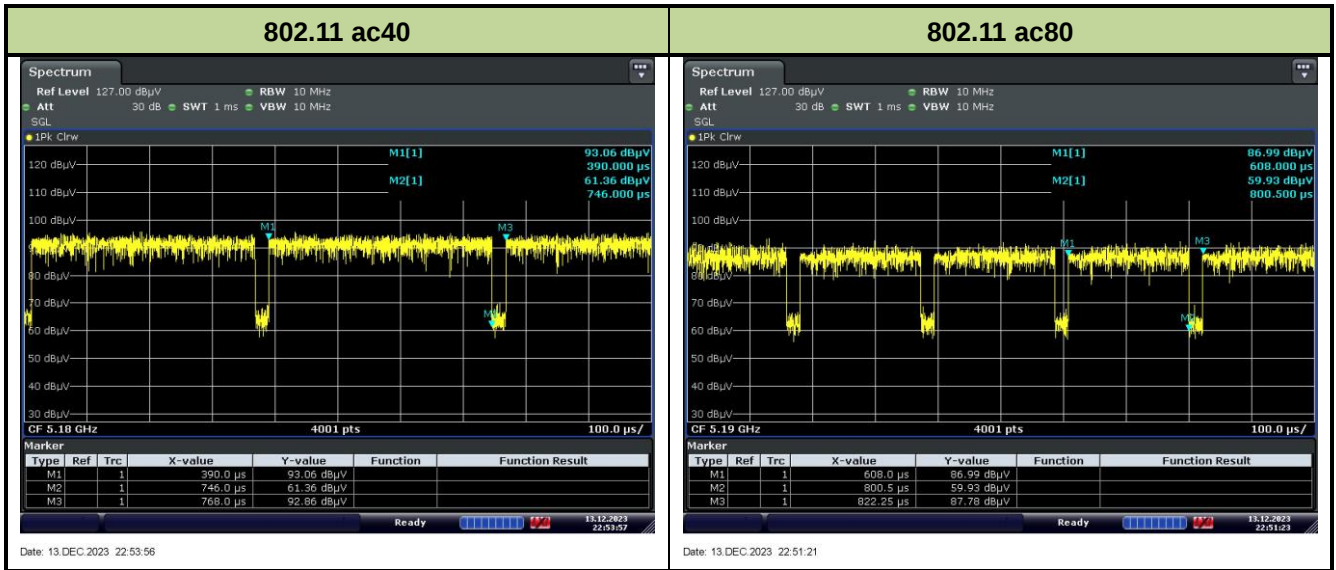
This device contains the following capabilities:

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 = 10MHz, VBW = 10MHz, 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	94.36%
802.11n-HT20	94.18%
802.11n-HT40	94.37%
802.11ac-VHT20	89.85%
802.11ac-VHT40	89.91%
802.11ac-VHT80	83.68%





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. EMI Suppression Device(s)/Modifications

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

2.8. 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 Intercom, 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

No.	Manufacturer	Part No.	Antenna Type	Antenna Gain (dBi)		
				BT/BLE	Wi-Fi 2.4G	Wi-Fi 5G
1	INPAQ TECHNOLOGY CO., LTD. (This time new addition)	WA-P-LB-01-314 and WA-P-LB-02-995	PCB	2.30	Ant 0: 2.30 Ant 1: 1.52	Ant 0_B1: 6.77 Ant 1_B1: 6.33 Ant 0_B4: 8.52 Ant 1_B4: 7.02

5. TEST EQUIPMENT CALIBRATION DATE

Radiated Emissions – AC1

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
Active Loop Antenna	SCHWARZBECK	FMZB 1519B	MRTTWA00002	1 year	2024/5/22
Broadband TRILOG Antenna	SCHWARZBECK	VULB 9162	MRTTWA00001	1 year	2024/10/31
Broadband Hornantenna	RFSPIN	DRH18-E	MRTTWA00087	1 year	2024/5/17
Broadband Preamplifier	EMC Instruments corporation	EMC118A45SE	MRTTWA00088	1 year	2024/5/17
Broadband Hornantenna	SCHWARZBECK	BBHA 9170	MRTTWA00004	1 year	2024/3/20
Broadband Amplifier	SCHWARZBECK	BBV 9721	MRTTWA00006	1 year	2024/3/27
EMI Test Receiver	R&S	ESR3	MRTTWA00009	1 year	2024/3/8
Signal Analyzer	R&S	FSVA3044	MRTTWA00092	1 year	2024/6/29
Antenna Cable	HUBERSUHNER	SF106	MRTTWE00034	1 year	2024/6/26
Cable	HUBERSUHNER	EMC105-NM-NM -3000	MRTTWE00035	1 year	2024/6/26

Conducted Test Equipment – SR6

Instrument	Manufacturer	Type No.	Asset No.	Cali. Interval	Cali. Due Date
EXA Signal Analyzer	KEYSIGHT	N9010A	MRTTWA00012	1 year	2024/10/17
EXA Signal Analyzer	KEYSIGHT	N9010B	MRTTWA00074	1 year	2024/7/19
USB Wideband Power Sensor	KEYSIGHT	U2021XA	MRTTWA00015	1 year	2024/3/16

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% ($U=2Uc(y)$): 0.15MHz~30MHz: $\pm 2.53\text{dB}$
Radiated Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): 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% ($U=2Uc(y)$): $\pm 78.4\text{Hz}$
Conducted Power
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 0.84\text{dB}$
Conducted Spurious Emission
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 2.65\text{ dB}$
Occupied Bandwidth
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 3.3\%$
Temp. / Humidity
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 0.82^\circ\text{C} / \pm 3\%$
DC Voltage
Measuring Uncertainty for a Level of Confidence of 95% ($U=2Uc(y)$): $\pm 0.3\%$

7. TEST RESULT

7.1. Summary

Product Name: Intercom

FCC Classification: Unlicensed National Information Infrastructure (UNII)

FCC Section(s)	ISED Section(s)	Test Description	Test Limit	Test Condition	Test Result	Reference
15.407(a)	RSS-247 §6.2.1	26dB Bandwidth	N/A	Conducted	N/A	Section 7.2
15.407(e)	RSS-247 §6.2.4	6dB Bandwidth	≥ 500kHz		N/A	Section 7.3
15.407(a)(1)(i), (2), (3)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	Maximum Conducted Output Power	Refer to Section 7.5		Pass	Section 7.4
15.407(h)(1)	RSS-247 §6.2.2, §6.2.3	Transmit Power Control	≤ 24 dBm		N/A	Section 7.5
15.407(a)(1)(i), (2), (3), (5)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	Power Spectral Density	Refer to Section 7.7		N/A	Section 7.6
15.407(b)(1), (4)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	Undesirable Emissions	≤ -27dBm/MHz EIRP ≤ -17dBm/MHz EIRP	Radiated	Pass	Section 7.7 & 7.8
15.205, 15.209 15.407(b)(5), (6), (7)	RSS-247 §6.2.1, §6.2.2, §6.2.3, §6.2.4	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	RSS-Gen 8.8	AC Conducted Emissions 150kHz - 30MHz	< FCC 15.207 limits	Line Conducted	Pass	Section 7.9

Notes:

- 1) Determining compliance is based on the test results met the regulation limits or requirements declared by clients, and the test results don't take into account the value of measurement uncertainty.
- 2) 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.
- 3) 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

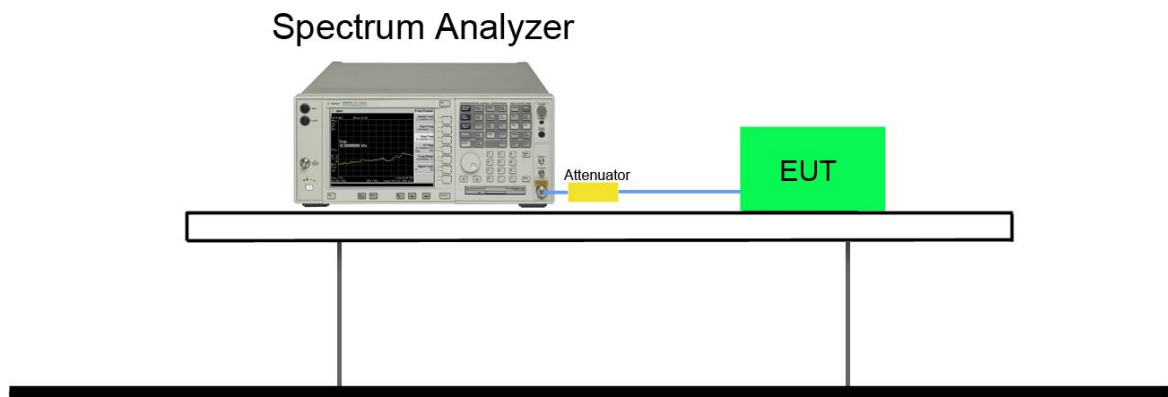
7.2.2. Test Procedure used

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

Note 1: Reference Original Report Grant Date: 01/09/2023, FCC ID: XBG-BA1GMNRCH8.

Note 2: Reference Original Report Grant Date: 01/22/2023, IC: 21285-BA1GMNRCH8.

7.3. 6dB Bandwidth Measurement

7.3.1. Test Limit

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

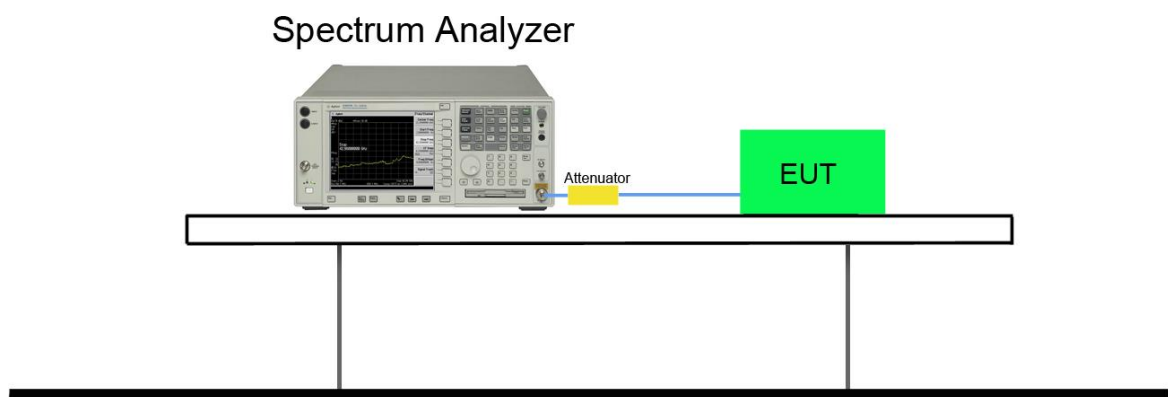
7.3.2. Test Procedure used

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

Note 1: Reference Original Report Grant Date: 01/09/2023, FCC ID: XBG-BA1GMNRCH8.

Note 2: Reference Original Report Grant Date: 01/22/2023, IC: 21285-BA1GMNRCH8.

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.

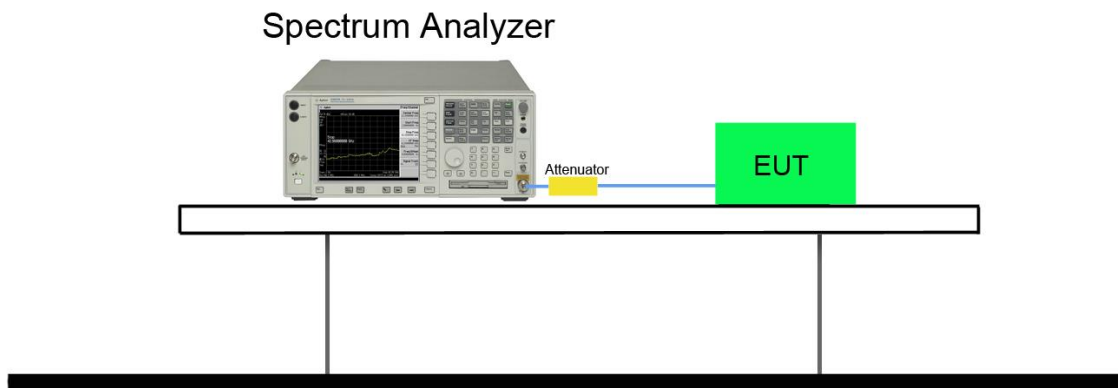
7.4.2. Test Procedure Used

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

FCC 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	13.14	13.25	16.21	23.21
	6M	44	5220	15.43	16.12	18.80	23.21
	6M	48	5240	15.50	16.19	18.87	23.21
802.11a Band4	6M	149	5745	12.68	13.05	15.88	27.48
	6M	157	5785	15.00	15.41	18.22	27.48
	6M	165	5825	15.01	15.41	18.22	27.48
n-HT20 Band1	MCS0	36	5180	12.29	12.31	15.31	23.21
	MCS0	44	5220	15.82	16.17	19.01	23.21
	MCS0	48	5240	15.65	16.27	18.98	23.21
n-HT20 Band4	MCS0	149	5745	14.07	14.34	17.22	27.48
	MCS0	157	5785	15.21	15.47	18.35	27.48
	MCS0	165	5825	15.11	15.51	18.32	27.48
ac-VHT20 Band1	MCS0	36	5180	12.70	13.28	16.01	23.21
	MCS0	44	5220	15.48	16.16	18.84	23.21
	MCS0	48	5240	15.41	16.21	18.84	23.21
ac-VHT20 Band4	MCS0	149	5745	13.78	14.11	16.96	27.48
	MCS0	157	5785	14.22	14.35	17.30	27.48
	MCS0	165	5825	14.12	14.50	17.32	27.48
n-HT40 Band1	MCS0	38	5190	9.21	9.29	12.26	23.21
	MCS0	46	5230	14.39	15.10	17.77	23.21
n-HT40 Band4	MCS0	151	5755	12.63	12.85	15.75	27.48
	MCS0	159	5795	14.77	15.32	18.06	27.48
ac-VHT40 Band1	MCS0	38	5190	10.22	11.39	13.85	23.21
	MCS0	46	5230	14.35	15.11	17.76	23.21
ac-VHT40 Band4	MCS0	151	5755	12.56	12.96	15.77	27.48
	MCS0	159	5795	14.78	15.30	18.06	27.48
ac-VHT80 Band1	MCS0	42	5210	5.54	5.21	8.39	23.21
ac-VHT80 Band4	MCS0	155	5775	13.35	13.92	16.65	27.48

Note: The Total Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Power} / 10)} + 10^{(\text{Ant 1 Power} / 10)}\}$.

IC Power:

Model	Rate	Ch.	Freq. (MHz)	Ant 0 AV Power (dBm)	Ant 1 AV Power (dBm)	Total Power (dBm)	Power Limit (dBm)	Ant Gain (dBi)	E.I.R.P Power (dBm)	E.I.R.P Limit (dBm)
802.11a Band1	6M	36	5180	7.70	8.03	10.88	N/A	9.78	20.66	22.94
	6M	44	5220	7.30	7.71	10.52	N/A	9.78	20.30	22.94
	6M	48	5240	7.29	7.89	10.61	N/A	9.78	20.39	22.94
802.11a Band4	6M	149	5745	12.68	13.05	15.88	30.00	N/A	N/A	N/A
	6M	157	5785	15.00	15.41	18.22	30.00	N/A	N/A	N/A
	6M	165	5825	15.01	15.41	18.22	30.00	N/A	N/A	N/A
n-HT20 Band1	MCS0	36	5180	8.52	9.35	11.97	N/A	9.78	21.75	22.93
	MCS0	44	5220	7.46	7.92	10.71	N/A	9.78	20.49	22.93
	MCS0	48	5240	7.63	7.96	10.81	N/A	9.78	20.59	22.93
n-HT20 Band4	MCS0	149	5745	14.07	14.34	17.22	30.00	N/A	N/A	N/A
	MCS0	157	5785	15.21	15.47	18.35	30.00	N/A	N/A	N/A
	MCS0	165	5825	15.11	15.51	18.32	30.00	N/A	N/A	N/A
ac-VHT20 Band1	MCS0	36	5180	7.85	8.26	11.07	N/A	9.78	20.85	22.93
	MCS0	44	5220	7.42	7.83	10.64	N/A	9.78	20.42	22.93
	MCS0	48	5240	7.37	7.93	10.67	N/A	9.78	20.45	22.93
ac-VHT20 Band4	MCS0	149	5745	13.78	14.11	16.96	30.00	N/A	N/A	N/A
	MCS0	157	5785	14.22	14.35	17.30	30.00	N/A	N/A	N/A
	MCS0	165	5825	14.12	14.50	17.32	30.00	N/A	N/A	N/A
n-HT40 Band1	MCS0	38	5190	7.83	8.02	10.94	N/A	9.78	20.72	23.01
	MCS0	46	5230	8.32	8.84	11.60	N/A	9.78	21.38	23.01
n-HT40 Band4	MCS0	151	5755	12.63	12.85	15.75	30.00	N/A	N/A	N/A
	MCS0	159	5795	14.77	15.32	18.06	30.00	N/A	N/A	N/A
ac-VHT40 Band1	MCS0	38	5190	7.63	8.12	10.89	N/A	9.78	20.67	23.01
	MCS0	46	5230	8.12	8.68	11.42	N/A	9.78	21.20	23.01
ac-VHT40 Band4	MCS0	151	5755	12.56	12.96	15.77	30.00	N/A	N/A	N/A
	MCS0	159	5795	14.78	15.30	18.06	30.00	N/A	N/A	N/A
ac-VHT80 Band1	MCS0	42	5210	5.54	5.21	8.39	N/A	9.78	18.17	23.01
ac-VHT80 Band4	MCS0	155	5775	13.35	13.92	16.65	30.00	N/A	N/A	N/A

Note1: The Total Power (dBm) = $10 \cdot \log \{10^{(\text{Ant 0 Power} / 10)} + 10^{(\text{Ant 1 Power} / 10)}\}$.

Note2: E.I.R.P Power (dBm) = The Total Power (dBm) + Antenna Gain (dBi).

7.5. Transmit Power Control

7.5.1. Test Limit

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

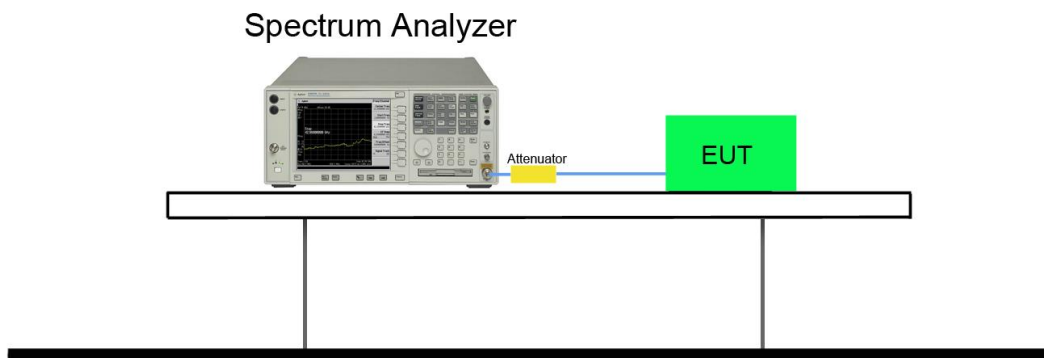
7.5.2. Test Procedure Used

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 1: Reference Original Report Grant Date: 01/09/2023, FCC ID: XBG-BA1GMNRCH8.

Note 2: Reference Original Report Grant Date: 01/22/2023, IC: 21285-BA1GMNRCH8.

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.

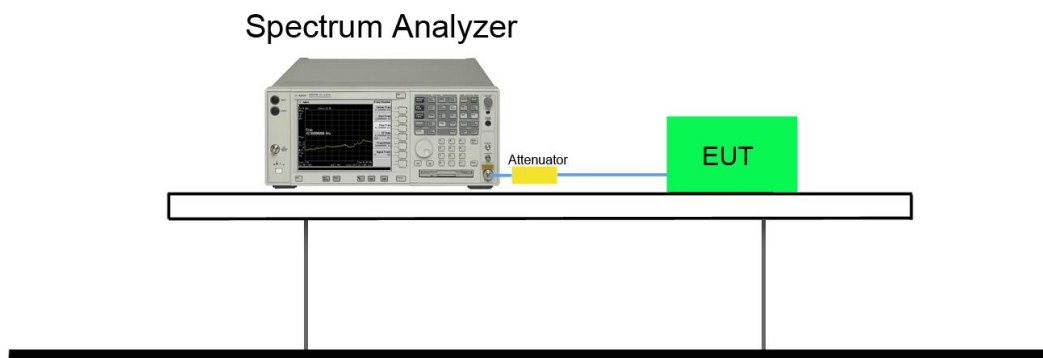
7.6.2. Test Procedure Used

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

Note 1: Reference Original Report Grant Date: 01/09/2023, FCC ID: XBG-BA1GMNRCH8.

Note 2: Reference Original Report Grant Date: 01/22/2023, IC: 21285-BA1GMNRCH8.

7.7. Radiated Spurious Emission Measurement

7.7.1. 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

7.7.2. Test Procedure Used

KDB 789033 D02v02r01 – Section G

7.7.3. 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)

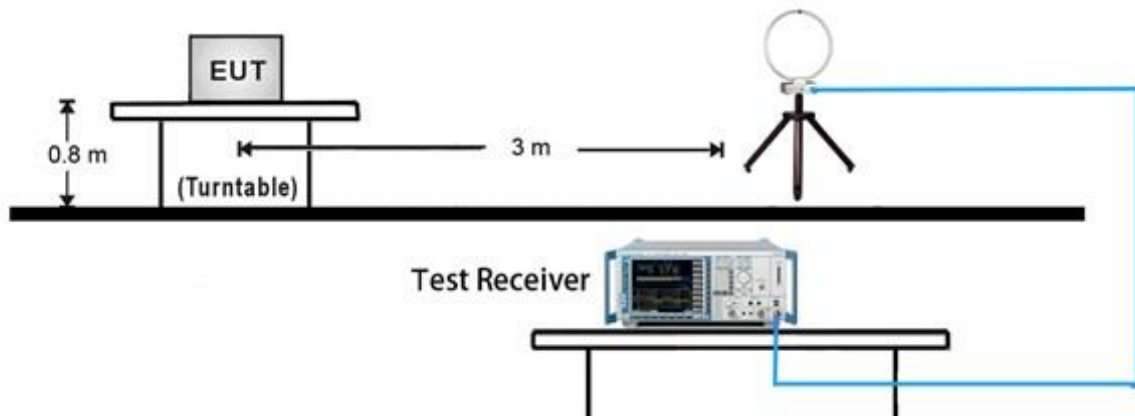
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (Average)
5. Number of measurement points = 1001 (Number of points must be $> 2 \times \text{span}/\text{RBW}$)
6. Sweep time = auto
7. Trace was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

Quasi-Peak & Average Measurements below 30MHz

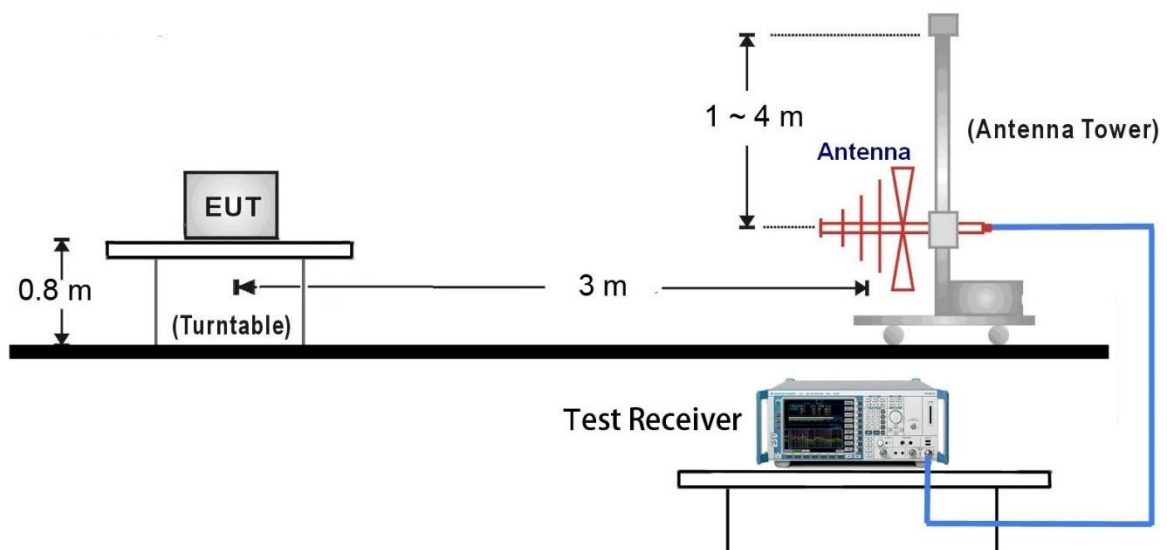
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
4. Detector = CISPR quasi-peak or power average (Average)
5. Sweep time = auto couple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

7.7.4. Test Setup

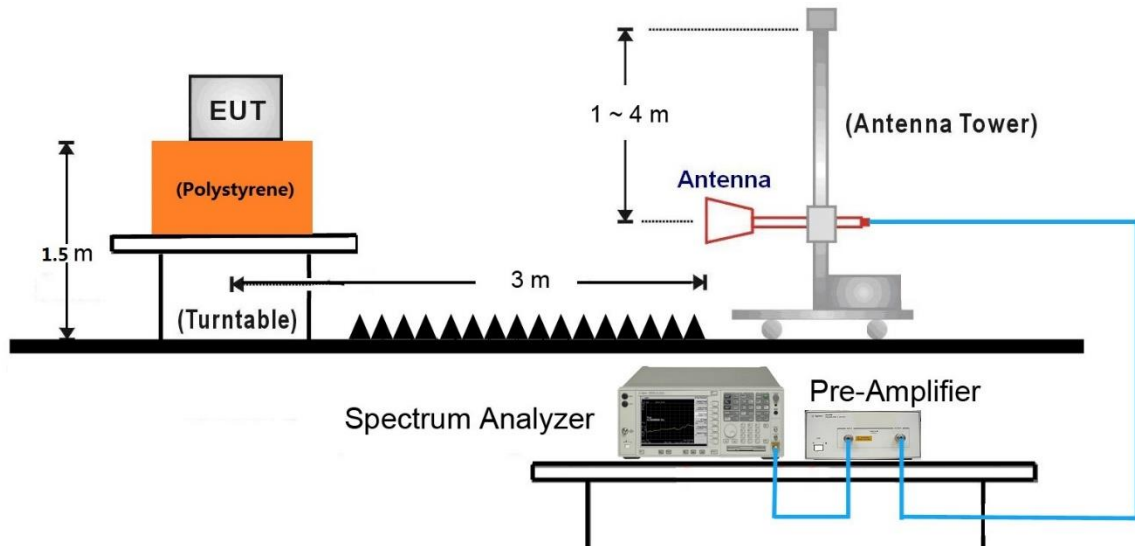
9kHz ~ 30MHz Test Setup:



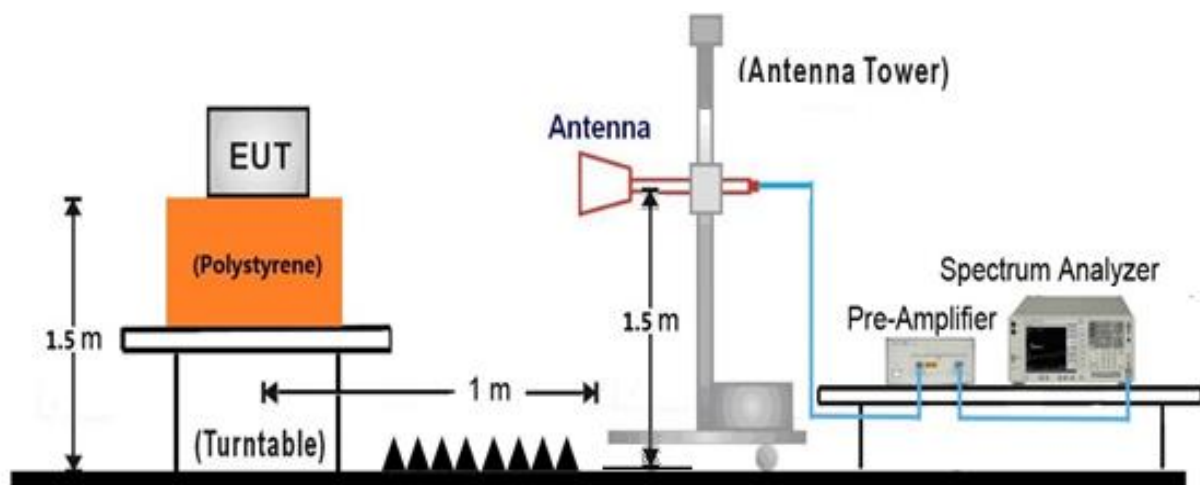
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:

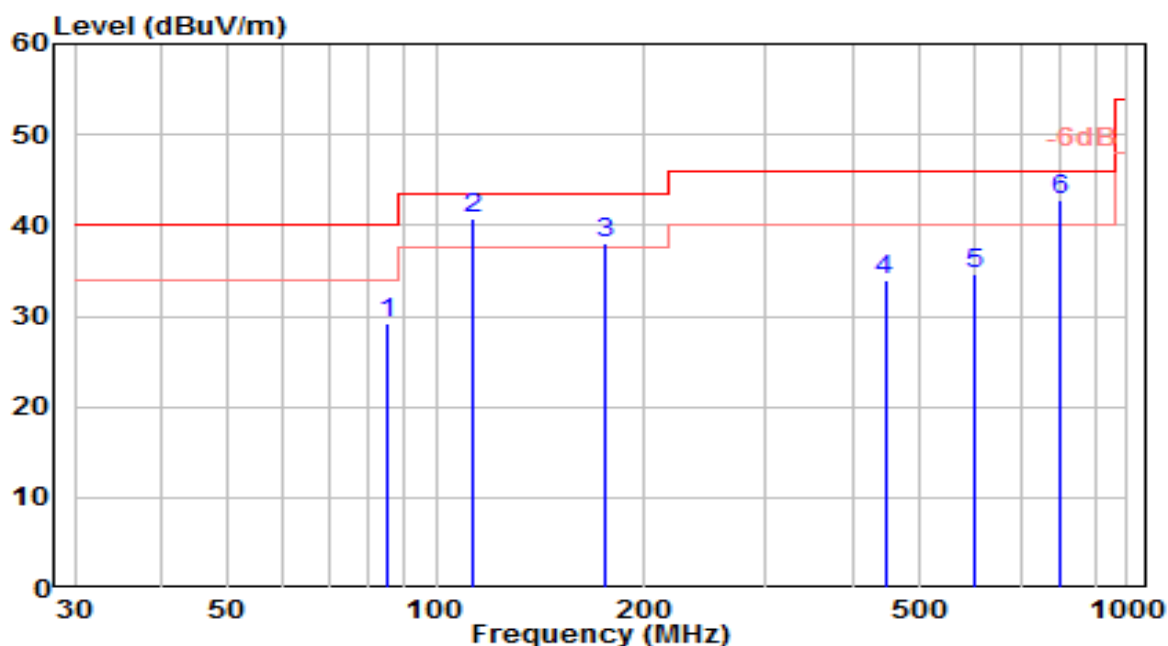


18GHz ~40GHz Test Setup:



7.7.5. Test Result

EUT	Intercom	Date of Test	2023-12-07
Factor	VULB 9162	Temp. / Humidity	24°C /59%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

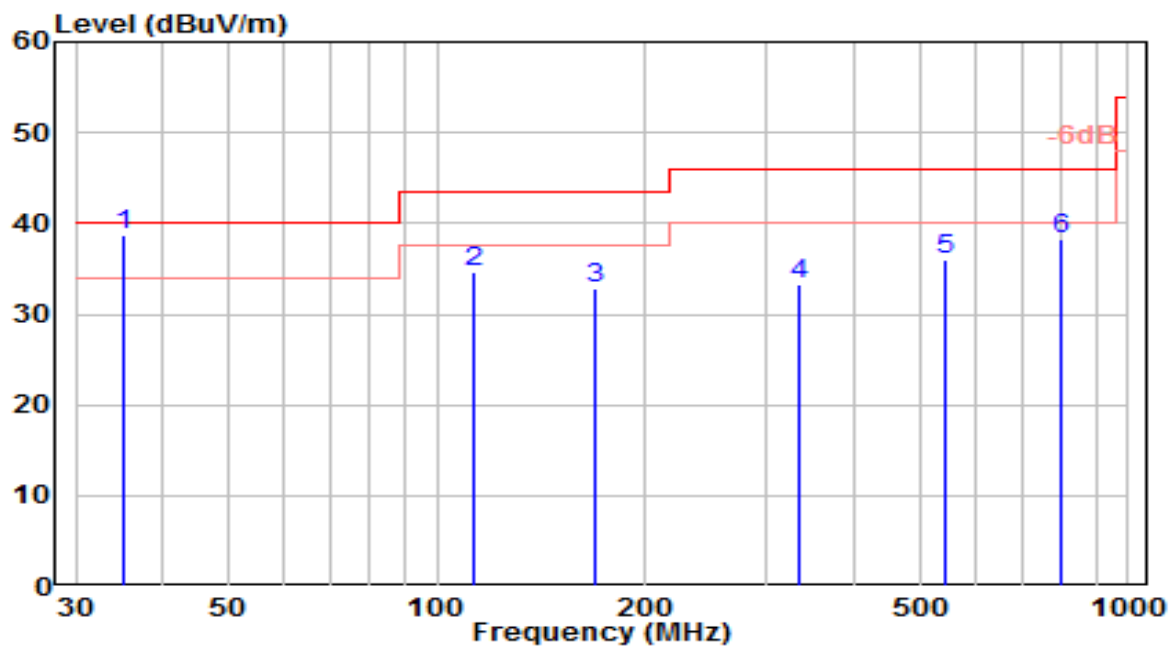


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	85.334	13.64	15.48	29.12	-10.88	40.00	150	250	QP
2	* 113.470	22.75	17.90	40.65	-2.85	43.50	150	60	QP
3	175.630	21.61	16.35	37.96	-5.54	43.50	150	60	QP
4	446.191	9.86	24.16	34.02	-11.98	46.00	150	150	QP
5	600.271	7.11	27.60	34.72	-11.28	46.00	150	120	QP
6	800.627	12.59	30.12	42.70	-3.30	46.00	100	180	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	Intercom	Date of Test	2023-12-07
Factor	VULB 9162	Temp. / Humidity	24°C /59%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

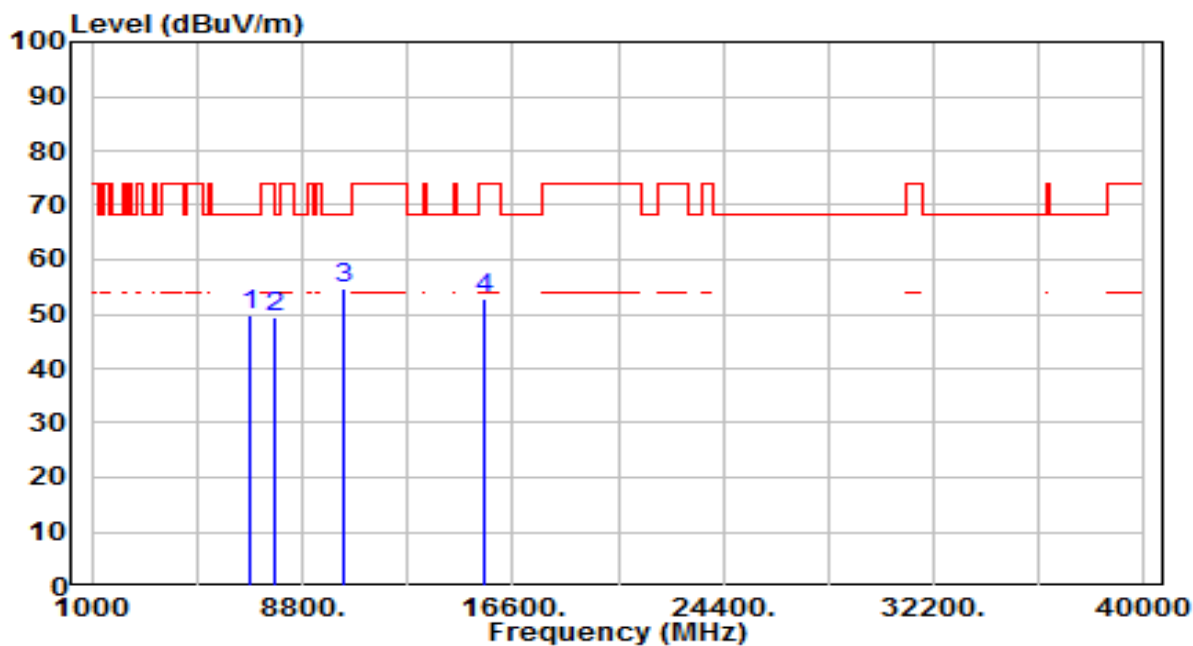


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	35.047	21.08	17.74	38.81	-1.19	40.00	100	250	QP
2		113.392	16.72	17.91	34.63	-8.87	43.50	100	340	QP
3		168.662	16.76	16.02	32.78	-10.72	43.50	100	20	QP
4		334.399	11.01	22.33	33.34	-12.66	46.00	150	190	QP
5		544.966	9.90	26.14	36.04	-9.96	46.00	100	270	QP
6		801.636	8.12	30.14	38.27	-7.73	46.00	100	230	QP

Note:

- "*", means this data is the worst emission level.
- C.F (Correction Factor) = Antenna Factor (dB/m)+ Cable Loss (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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

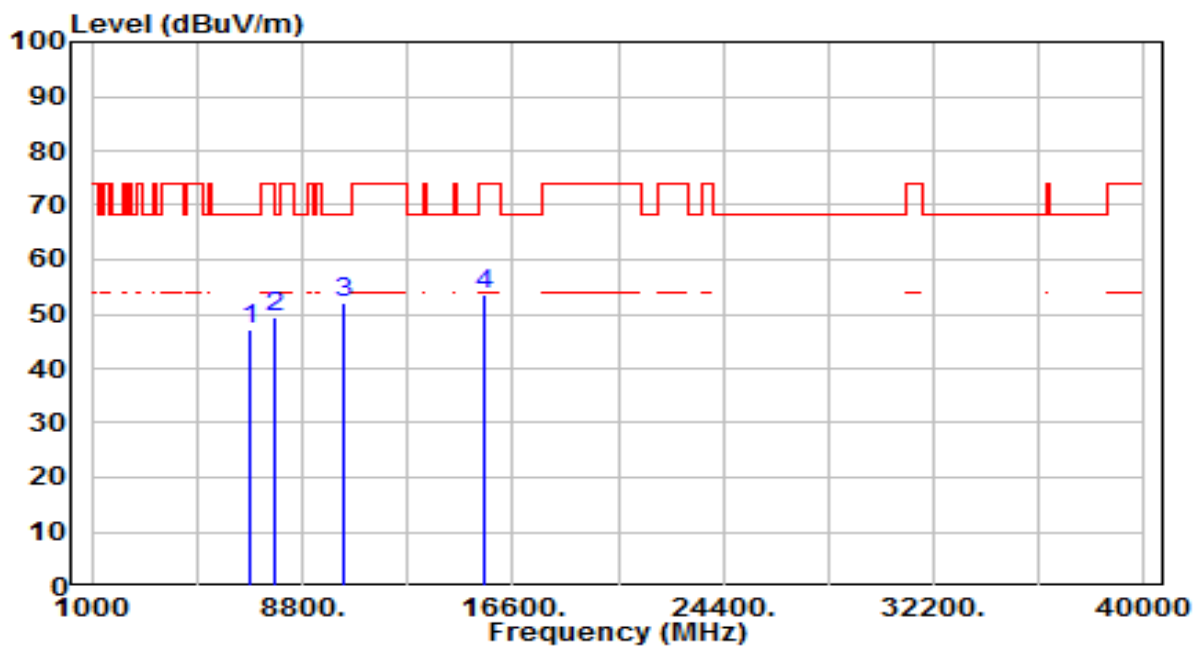


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6906.969	39.04	10.68	49.72	-18.48	68.20	200	156	Peak
2	7768.656	36.40	13.21	49.61	-18.59	68.20	200	149	Peak
3	* 10360.000	36.74	17.96	54.71	-13.49	68.20	200	142	Peak
4	15540.000	31.80	21.20	53.00	-21.00	74.00	200	135	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

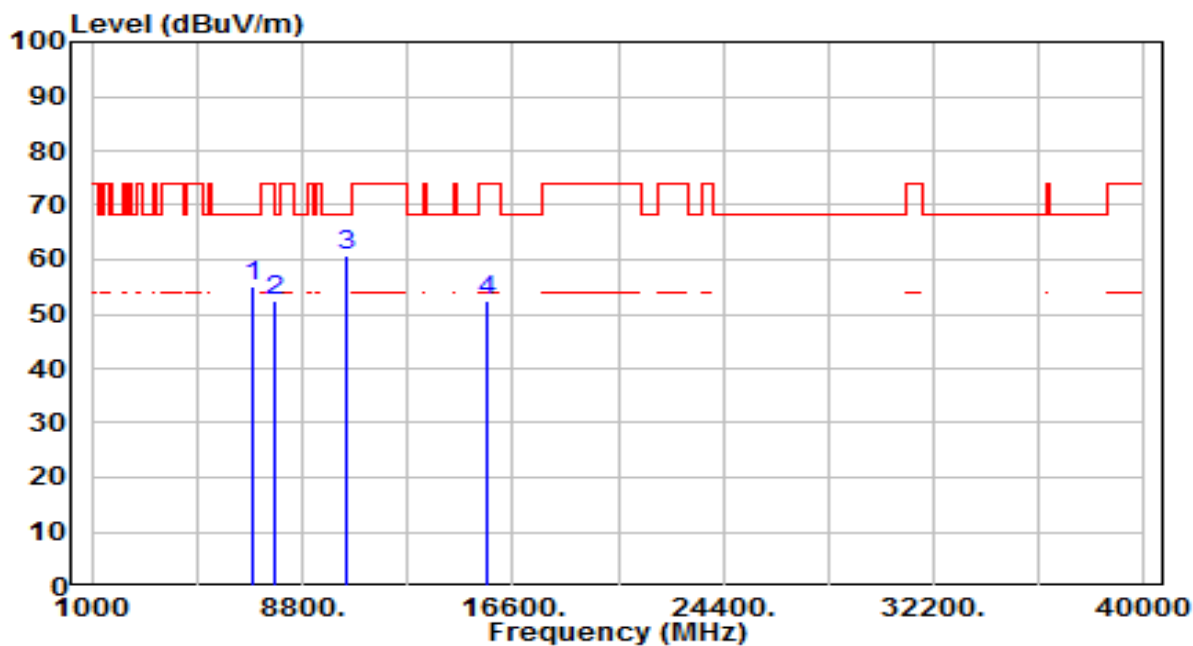


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6906.969	36.35	10.68	47.03	-21.17	68.20	200	238	Peak
2	7772.906	36.18	13.21	49.39	-18.81	68.20	200	206	Peak
3	* 10360.000	34.04	17.96	52.01	-16.19	68.20	200	220	Peak
4	15540.000	32.29	21.20	53.49	-20.51	74.00	200	358	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

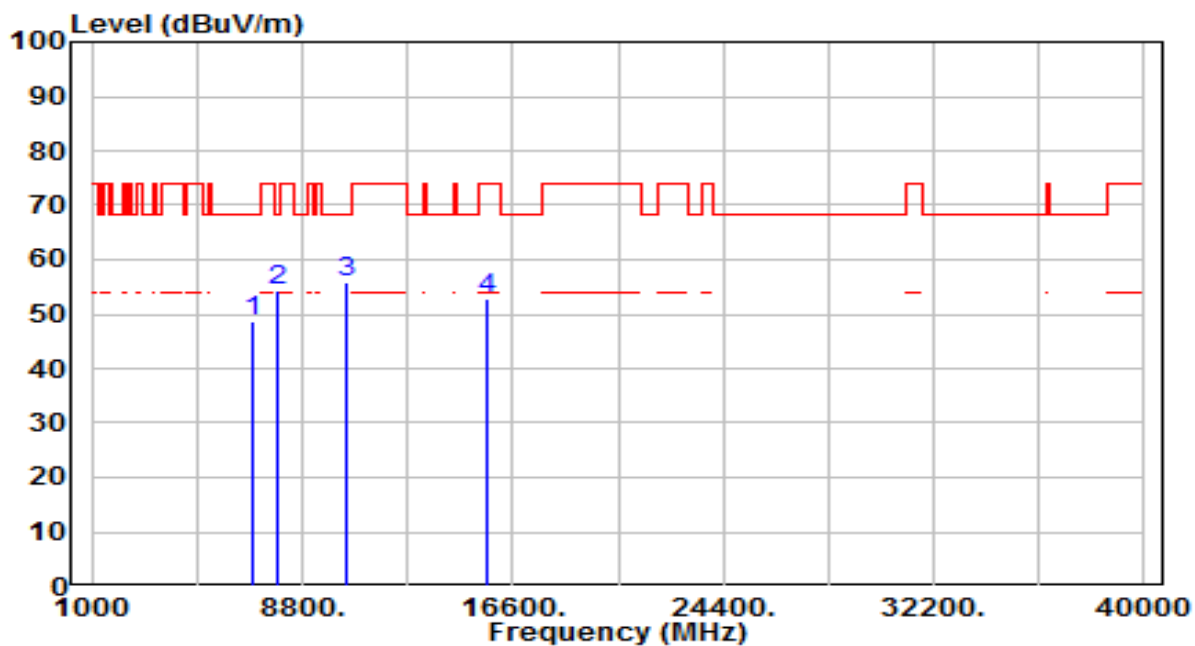


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6960.094	44.11	10.92	55.04	-13.16	68.20	200	155	Peak
2	7828.688	39.27	13.28	52.55	-15.65	68.20	200	172	Peak
3	* 10440.000	42.40	18.28	60.68	-7.52	68.20	200	127	Peak
4	15660.000	31.70	20.87	52.57	-21.43	74.00	200	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

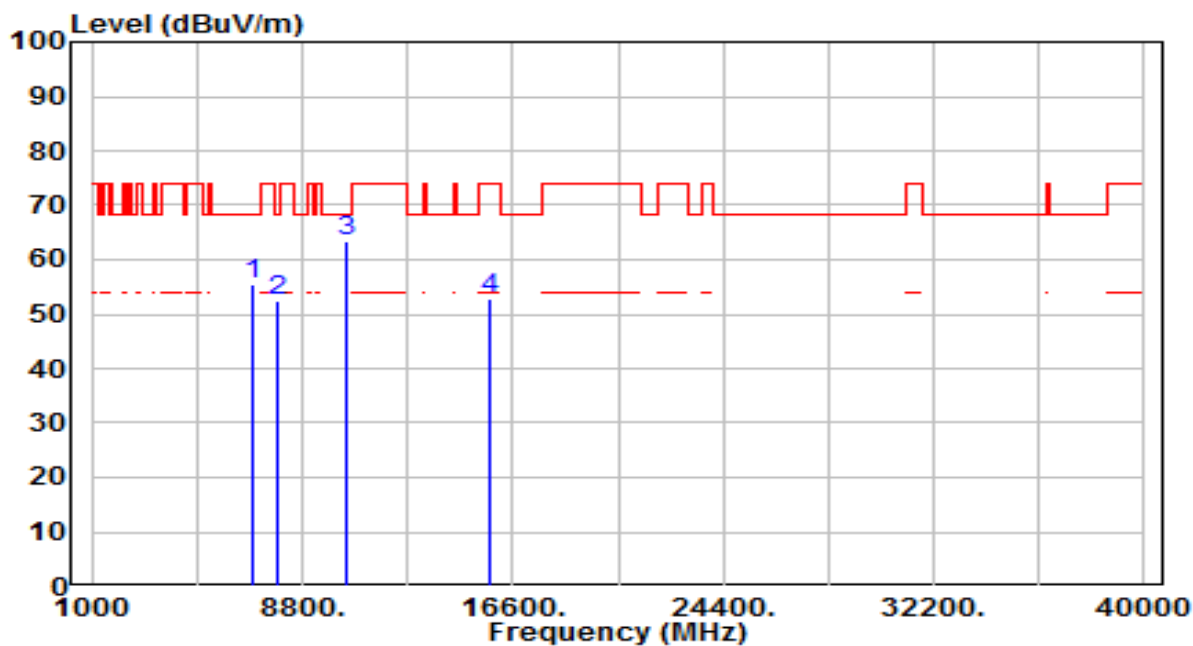


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6959.563	37.88	10.92	48.80	-19.40	68.20	200	238	Peak
2	7836.125	41.05	13.29	54.34	-13.86	68.20	200	198	Peak
3	* 10440.000	37.75	18.28	56.03	-12.17	68.20	200	149	Peak
4	15660.000	31.88	20.87	52.75	-21.25	74.00	200	249	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

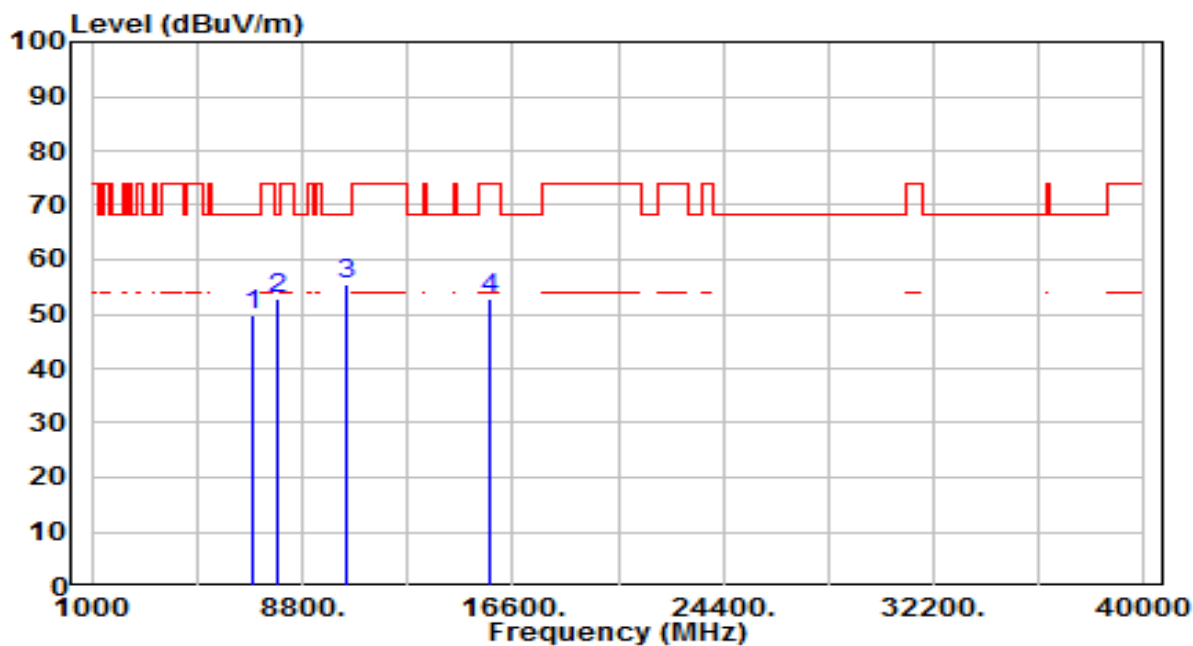


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6986.656	44.54	11.05	55.59	-12.61	68.20	200	138	Peak
2	7860.031	39.13	13.32	52.46	-15.74	68.20	200	130	Peak
3	* 10480.000	45.15	18.43	63.58	-4.62	68.20	200	130	Peak
4	15720.000	32.07	20.70	52.77	-21.23	74.00	200	10	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

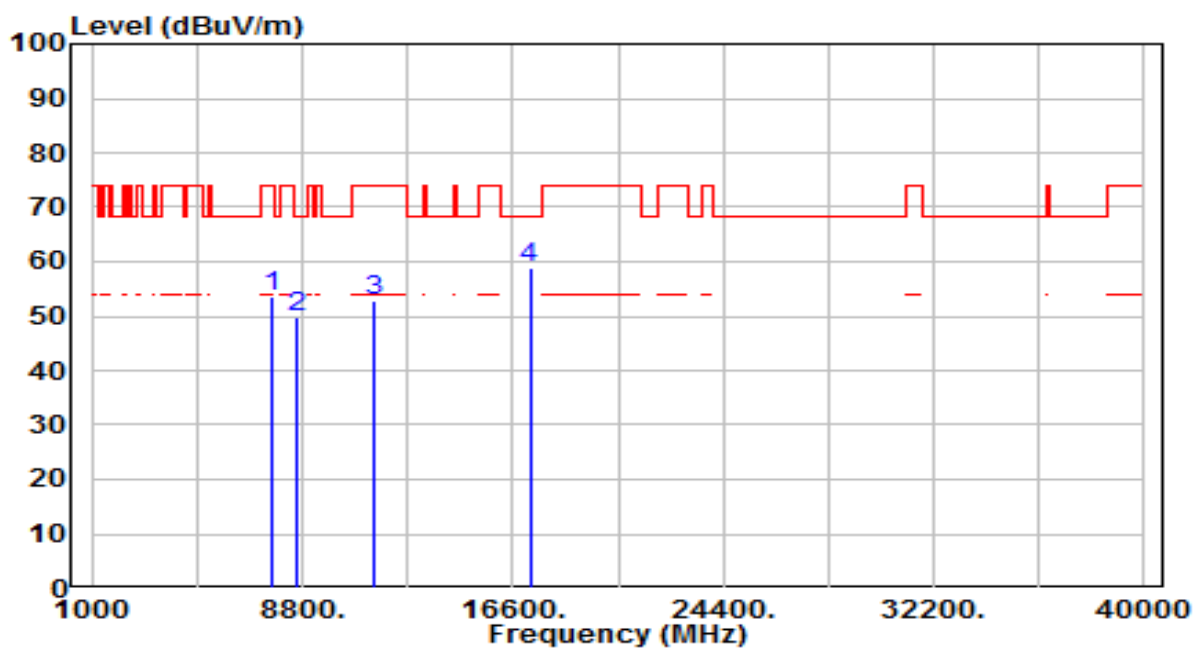


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6986.656	38.67	11.05	49.72	-18.48	68.20	200	190	Peak
2	7858.438	39.64	13.32	52.96	-15.24	68.20	200	201	Peak
3	* 10480.000	37.13	18.43	55.57	-12.63	68.20	200	148	Peak
4	15720.000	32.07	20.70	52.77	-21.23	74.00	200	268	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

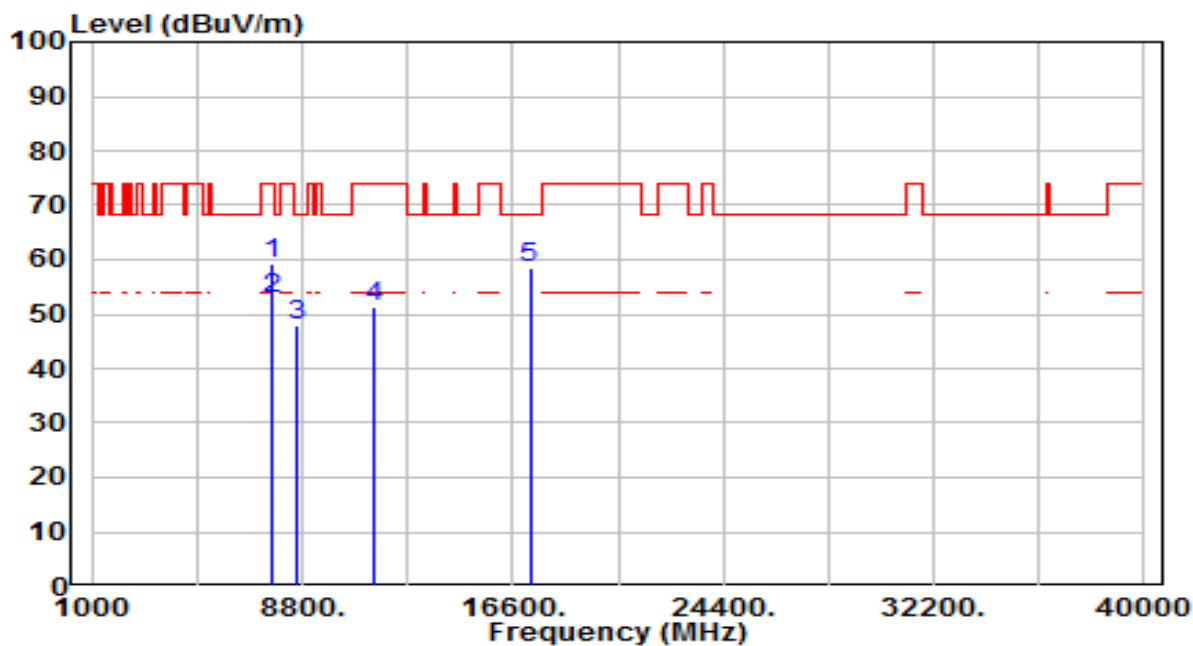


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7659.750	40.40	13.07	53.46	-20.54	74.00	200	143	Peak
2	8625.031	35.68	14.16	49.84	-18.36	68.20	200	143	Peak
3	11490.000	33.05	19.82	52.88	-21.12	74.00	200	218	Peak
4	* 17235.000	33.14	25.67	58.80	-9.40	68.20	200	72	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

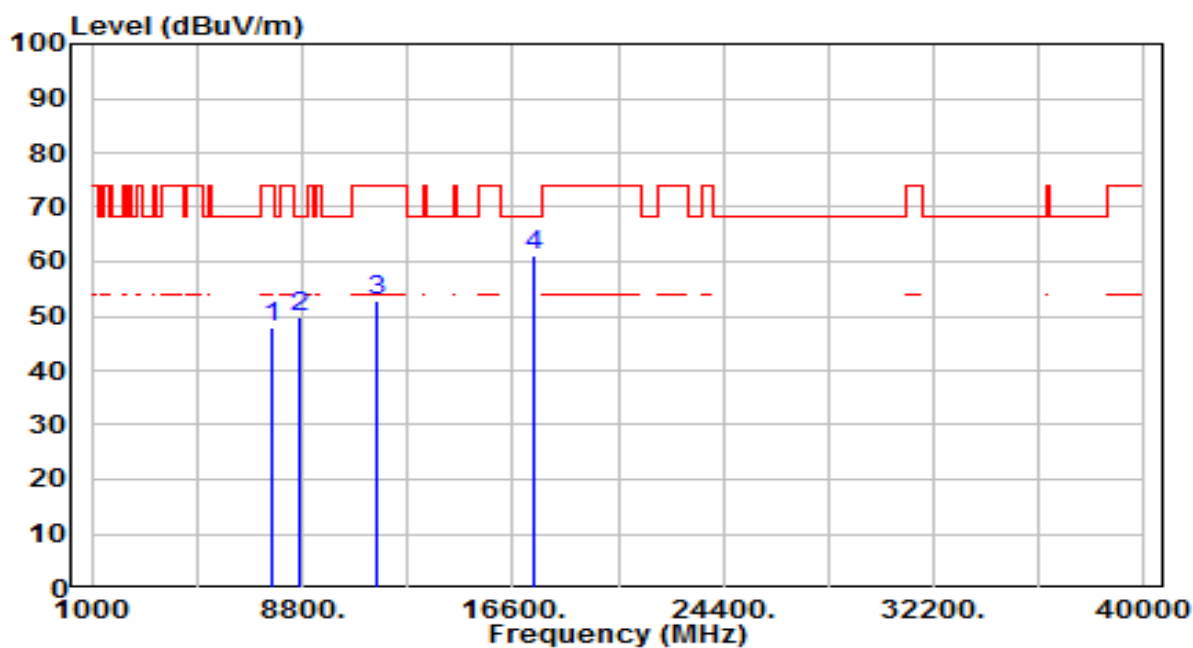


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7660.281	46.03	13.07	59.10	-14.90	74.00	145	212	Peak
2	* 7660.281	39.70	13.07	52.77	-1.23	54.00	145	212	Average
3	8619.188	33.80	14.15	47.95	-20.25	68.20	200	155	Peak
4	11490.000	31.42	19.82	51.24	-22.76	74.00	200	173	Peak
5	* 17235.000	32.75	25.67	58.42	-9.78	68.20	200	13	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

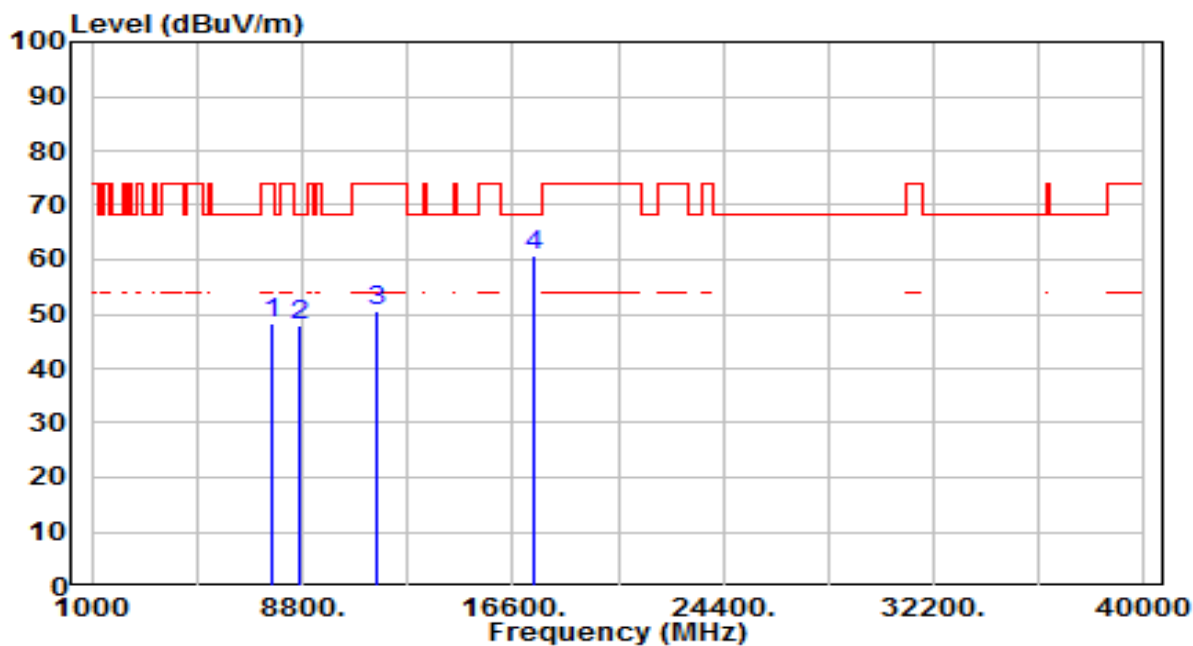


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7713.406	34.72	13.14	47.86	-26.14	74.00	200	145	Peak
2	8674.969	35.54	14.29	49.83	-18.37	68.20	200	222	Peak
3	11570.000	33.28	19.72	53.00	-21.00	74.00	200	124	Peak
4	* 17355.000	34.44	26.57	61.01	-7.19	68.20	200	13	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

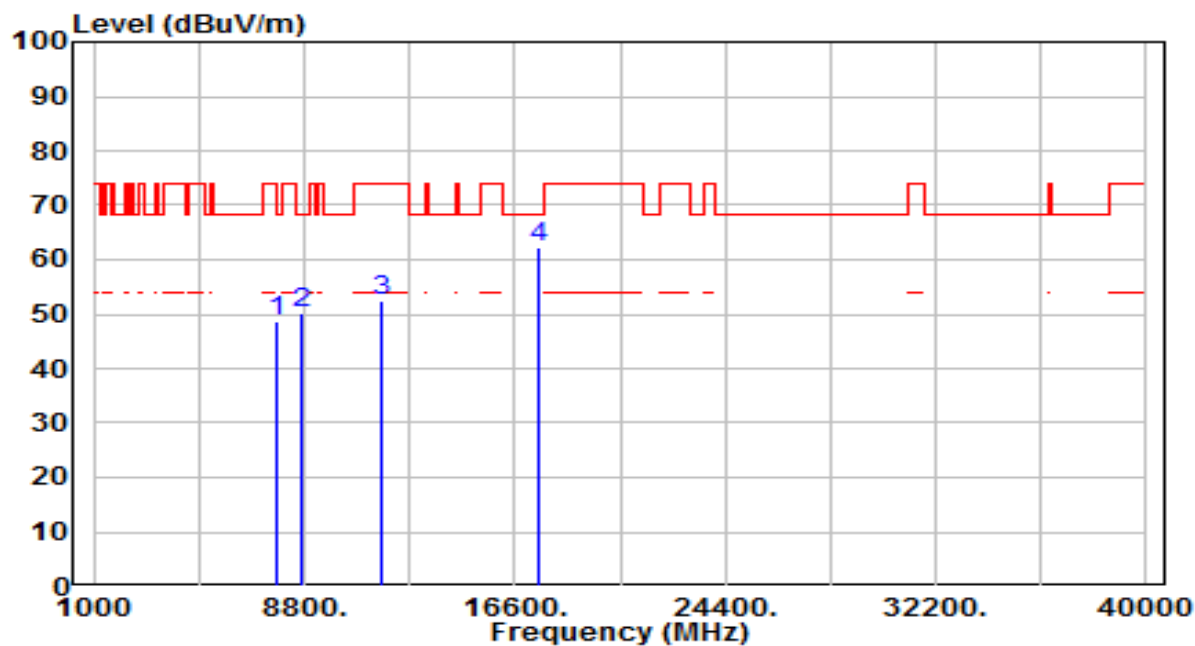


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7713.406	35.01	13.14	48.15	-25.85	74.00	200	210	Peak
2	8684.000	33.65	14.31	47.96	-20.24	68.20	200	124	Peak
3	11570.000	30.97	19.72	50.69	-23.31	74.00	200	152	Peak
4	* 17355.000	34.34	26.57	60.91	-7.29	68.20	200	298	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

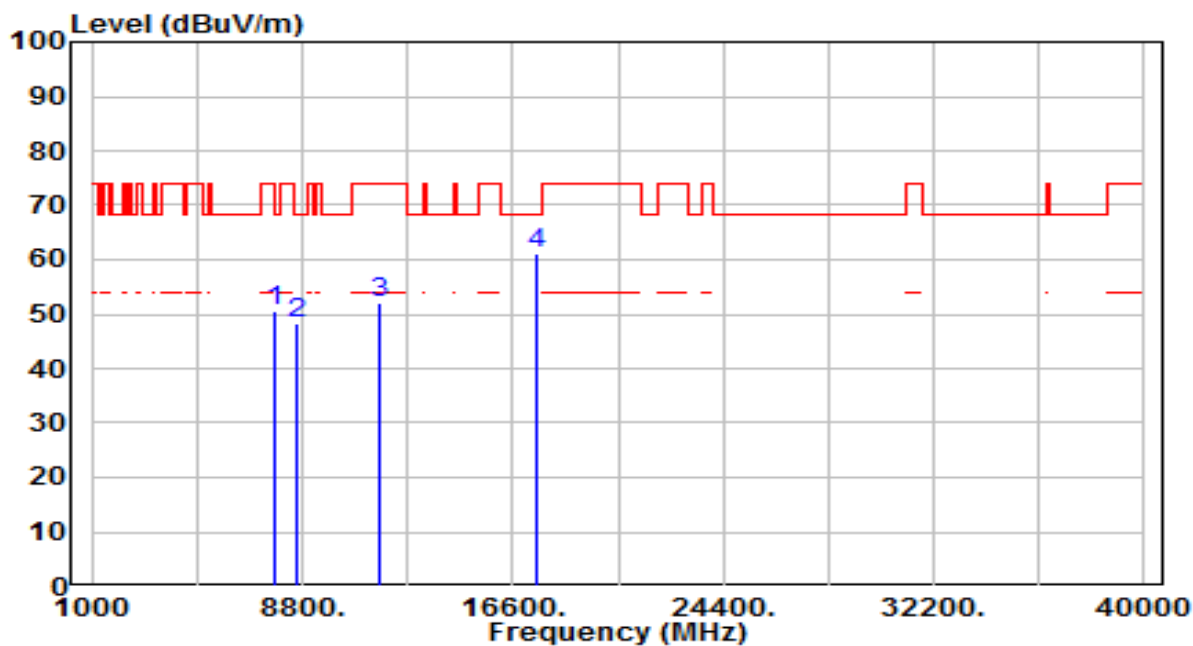


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7766.531	35.42	13.20	48.63	-19.57	68.20	200	130	Peak
2	8738.719	35.78	14.44	50.23	-17.97	68.20	200	151	Peak
3	11650.000	32.77	19.59	52.36	-21.64	74.00	200	126	Peak
4	* 17475.000	34.88	27.48	62.36	-5.84	68.20	200	8	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

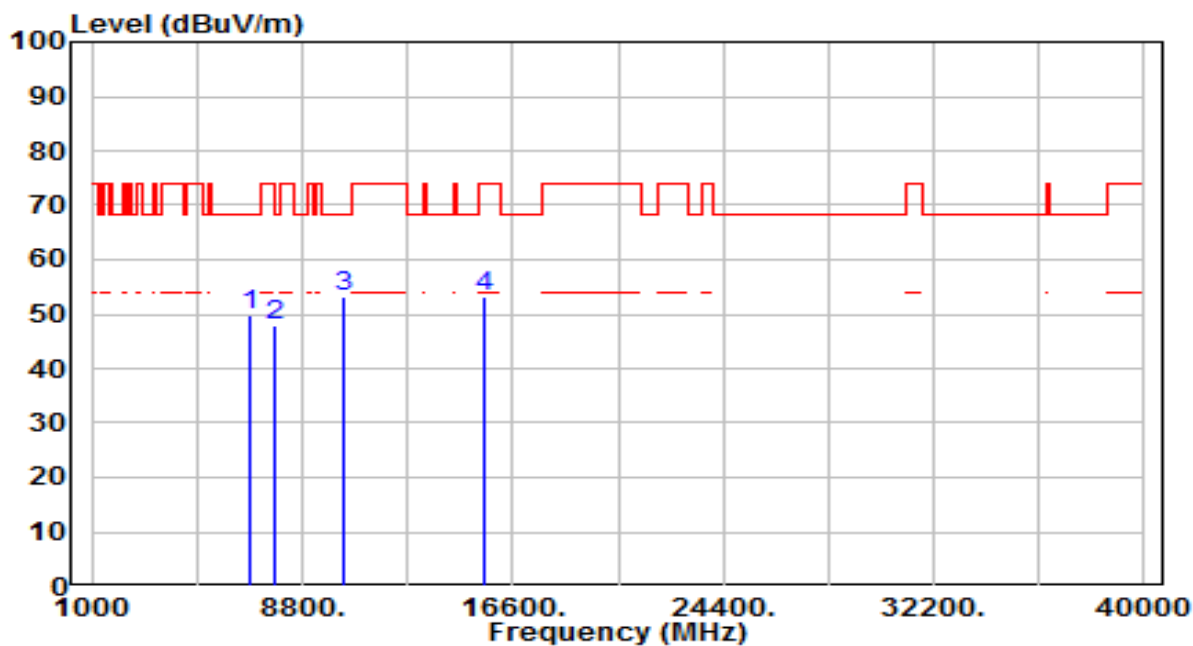


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7766.000	37.27	13.20	50.48	-17.72	68.20	200	202	Peak
2	8645.750	34.07	14.22	48.28	-19.92	68.20	200	0	Peak
3	11650.000	32.43	19.59	52.02	-21.98	74.00	200	356	Peak
4	* 17475.000	33.76	27.48	61.24	-6.96	68.20	200	98	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

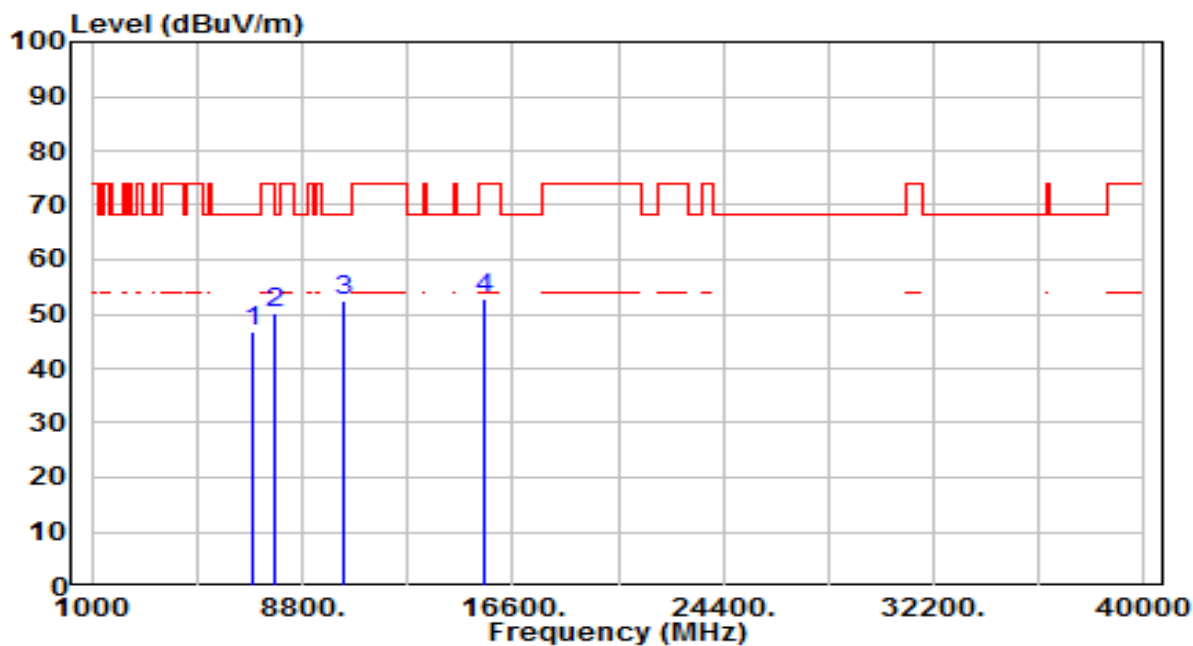


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6906.438	39.23	10.67	49.91	-18.29	68.20	200	154	Peak
2	7775.563	34.68	13.21	47.90	-20.30	68.20	200	133	Peak
3	* 10360.000	35.33	17.96	53.29	-14.91	68.20	200	129	Peak
4	15540.000	32.09	21.20	53.29	-20.71	74.00	200	165	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

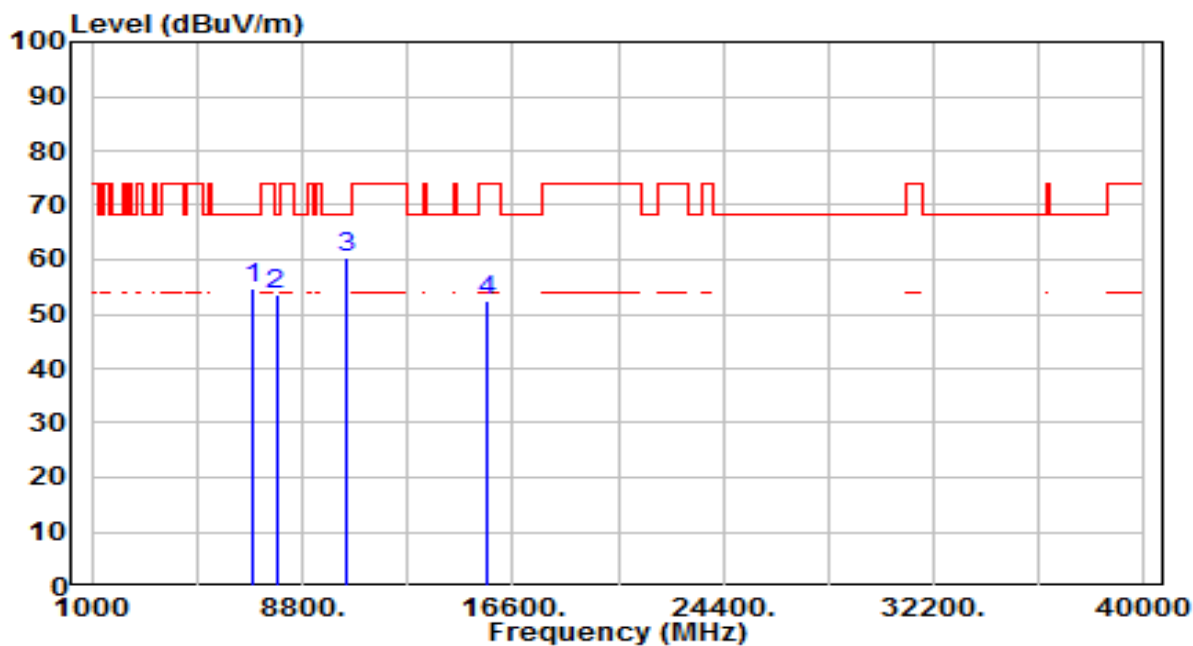


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6982.406	35.66	11.03	46.68	-21.52	68.20	200	130	Peak
2	7778.219	36.80	13.22	50.01	-18.19	68.20	200	216	Peak
3	* 10360.000	34.39	17.96	52.35	-15.85	68.20	200	251	Peak
4	15540.000	31.54	21.20	52.74	-21.26	74.00	200	37	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

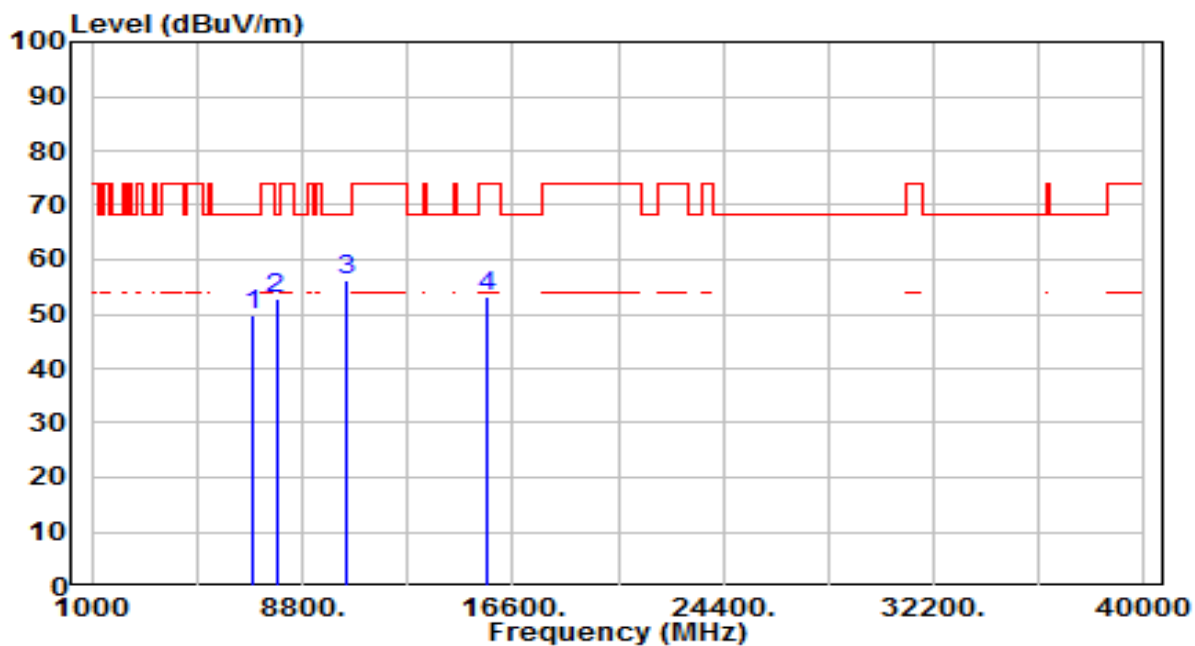


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6960.094	43.74	10.92	54.67	-13.53	68.20	200	151	Peak
2	7832.938	40.36	13.29	53.65	-14.55	68.20	200	173	Peak
3	* 10440.000	41.99	18.28	60.27	-7.93	68.20	200	125	Peak
4	15660.000	31.73	20.87	52.60	-21.40	74.00	200	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

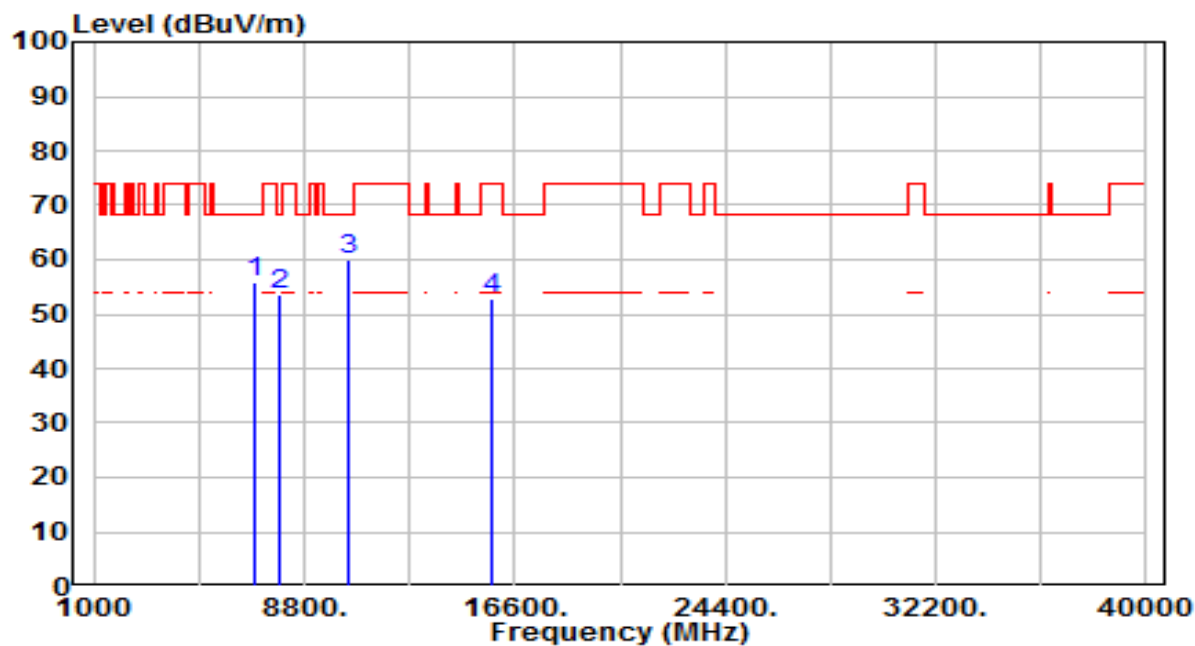


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6960.094	38.92	10.92	49.84	-18.36	68.20	200	240	Peak
2	7834.531	39.46	13.29	52.75	-15.45	68.20	200	204	Peak
3	* 10440.000	37.87	18.28	56.15	-12.05	68.20	200	211	Peak
4	15660.000	32.51	20.87	53.38	-20.62	74.00	200	287	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

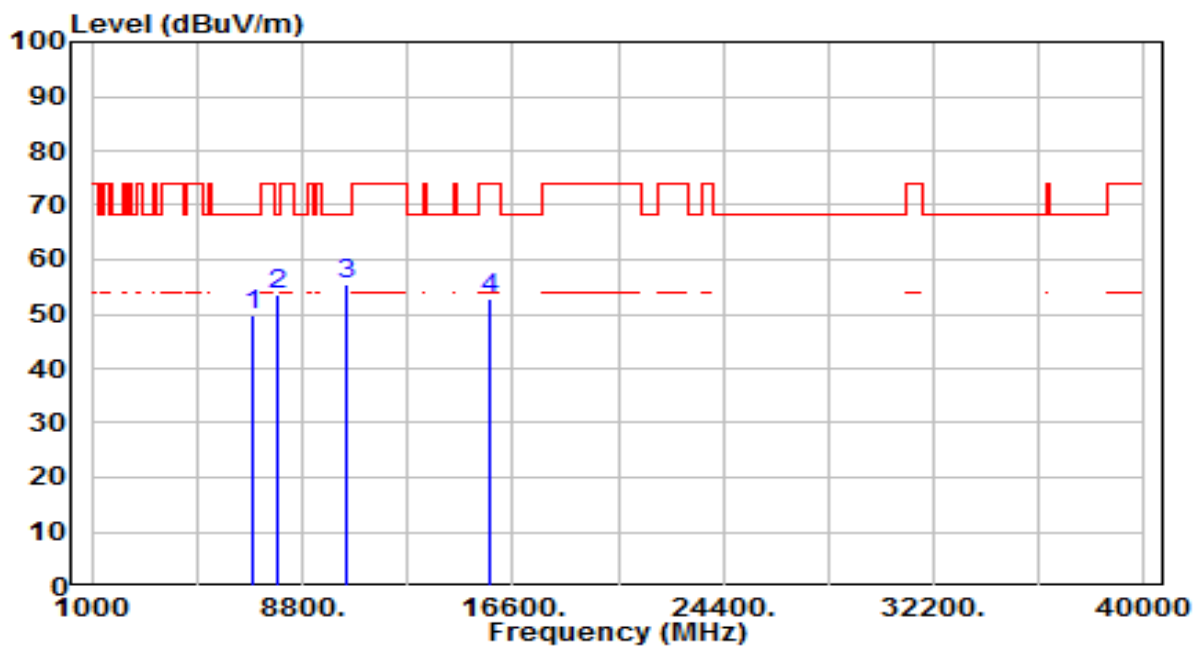


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6987.188	44.80	11.05	55.85	-12.35	68.20	200	158	Peak
2	7862.156	40.08	13.32	53.40	-14.80	68.20	200	128	Peak
3	* 10480.000	41.74	18.43	60.18	-8.02	68.20	200	135	Peak
4	15720.000	32.14	20.70	52.84	-21.16	74.00	200	64	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 48_ANT 0+1	Test Voltage	AC 120V/60Hz

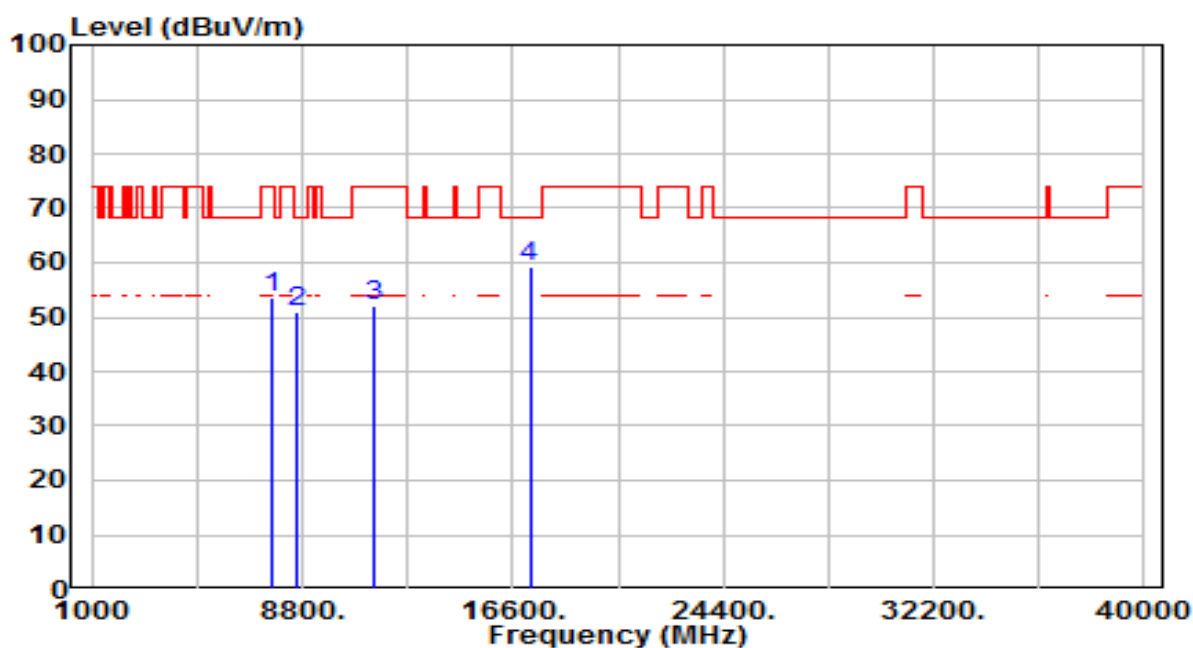


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6986.125	38.60	11.05	49.64	-18.56	68.20	200	236	Peak
2	7861.625	40.30	13.32	53.63	-14.57	68.20	200	208	Peak
3	* 10480.000	37.11	18.43	55.54	-12.66	68.20	200	215	Peak
4	15720.000	32.28	20.70	52.99	-21.01	74.00	200	323	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

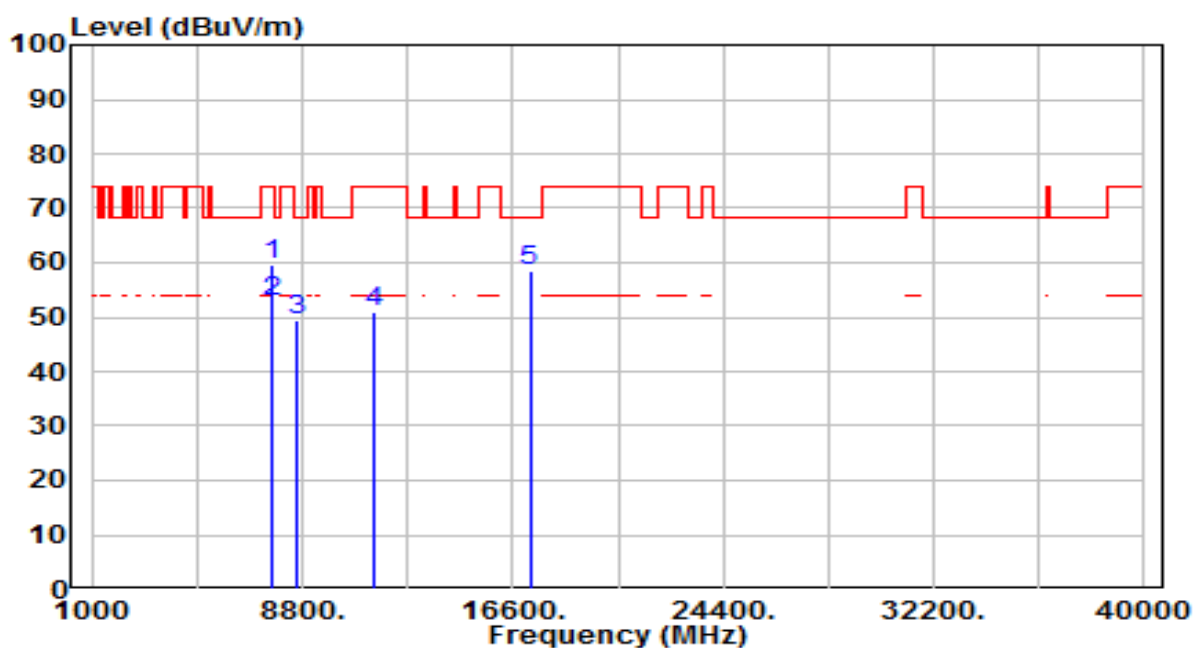


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7660.281	40.65	13.07	53.71	-20.29	74.00	200	148	Peak
2	8625.563	36.62	14.17	50.79	-17.41	68.20	200	155	Peak
3	11490.000	32.11	19.82	51.94	-22.06	74.00	200	230	Peak
4	* 17235.000	33.68	25.67	59.35	-8.85	68.20	200	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).
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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

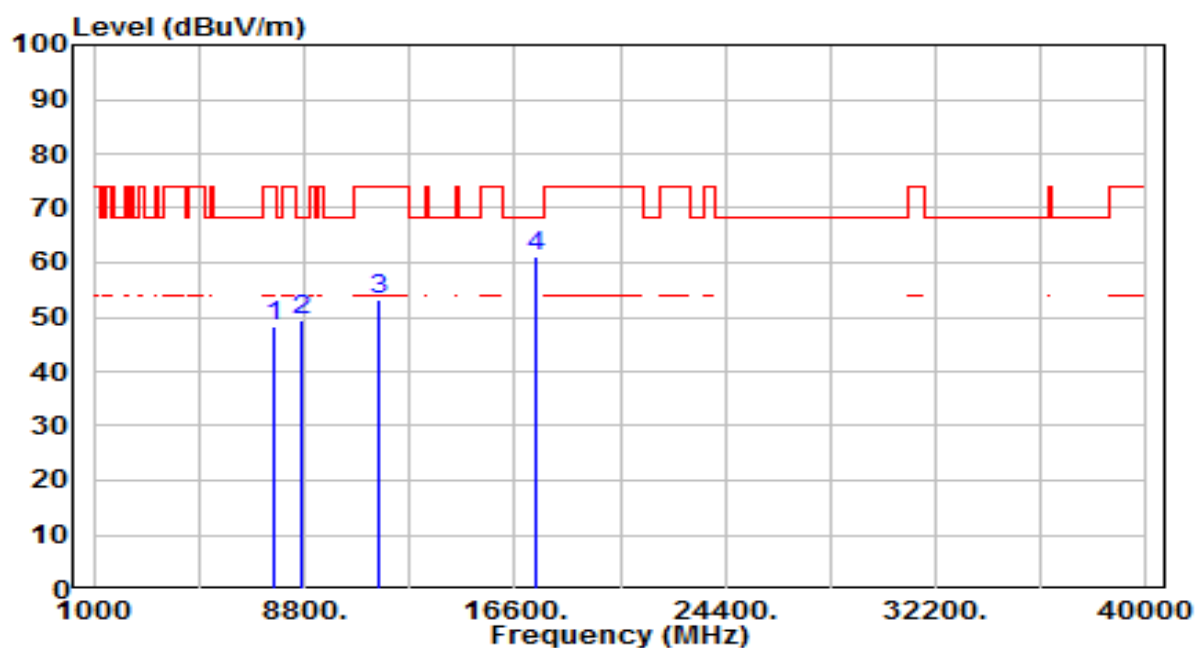


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7659.750	46.70	13.07	59.77	-14.23	74.00	138	213	Peak
2	* 7659.750	39.80	13.07	52.87	-1.13	54.00	138	213	Average
3	8619.719	35.28	14.15	49.43	-18.77	68.20	200	208	Peak
4	11490.000	31.07	19.82	50.89	-23.11	74.00	200	343	Peak
5	* 17235.000	32.85	25.67	58.52	-9.68	68.20	200	154	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

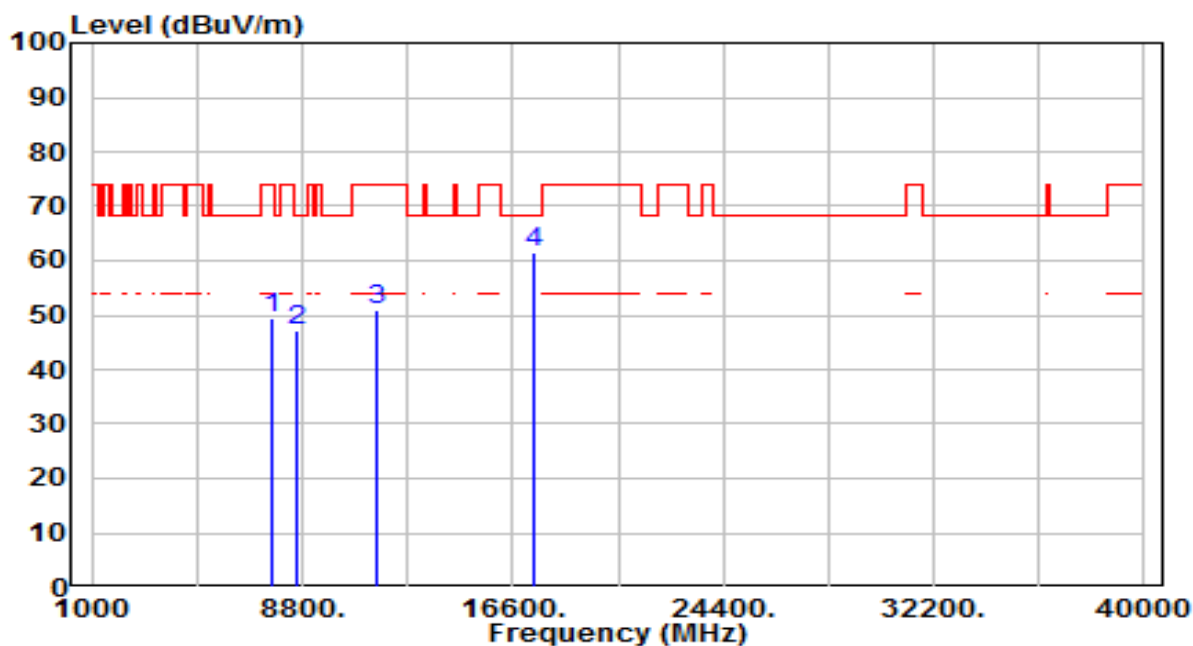


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7712.875	35.07	13.14	48.21	-25.79	74.00	200	128	Peak
2	8676.563	35.16	14.29	49.45	-18.75	68.20	200	216	Peak
3	11570.000	33.63	19.72	53.36	-20.64	74.00	200	113	Peak
4	* 17355.000	34.66	26.57	61.24	-6.96	68.20	200	241	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 157_ANT 0+1	Test Voltage	AC 120V/60Hz

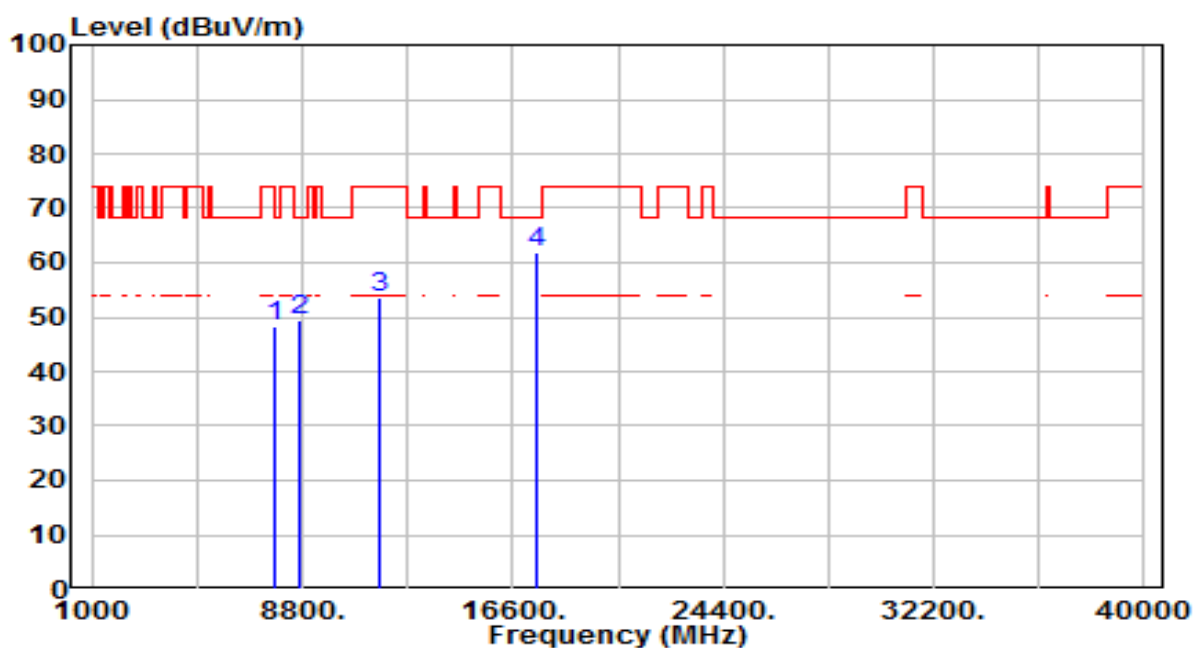


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7713.938	36.26	13.14	49.39	-24.61	74.00	200	215	Peak
2	8633.000	32.92	14.18	47.11	-21.09	68.20	200	186	Peak
3	11570.000	31.33	19.72	51.05	-22.95	74.00	200	244	Peak
4	* 17355.000	34.79	26.57	61.37	-6.83	68.20	200	180	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

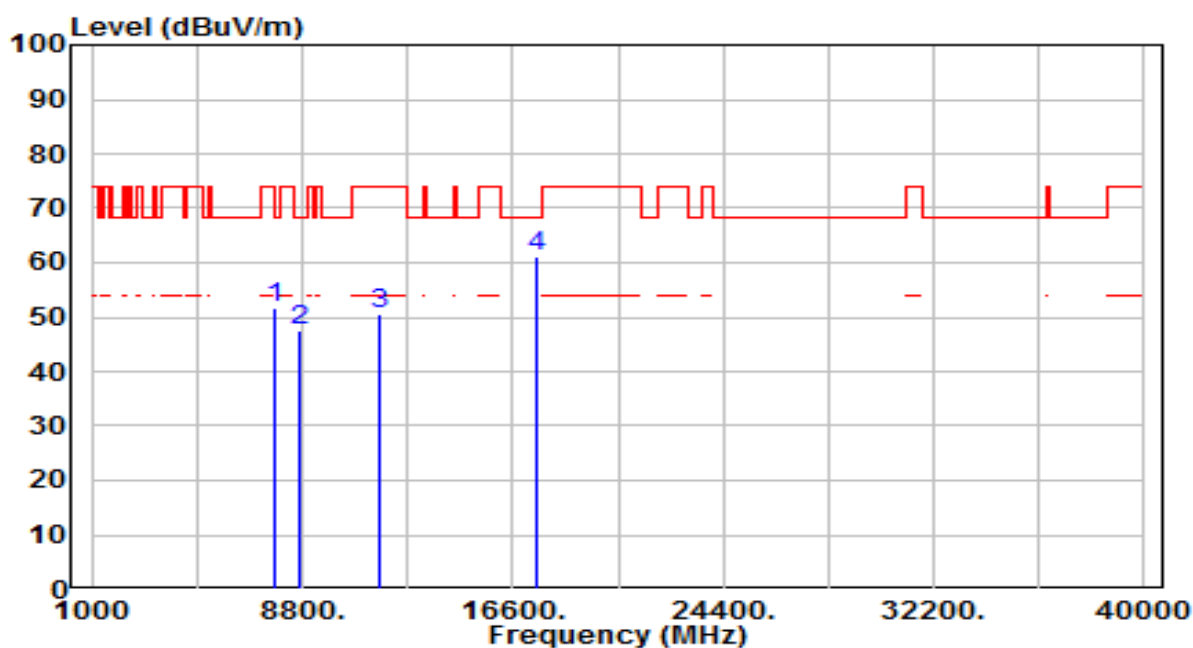


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7766.531	35.29	13.20	48.49	-19.71	68.20	200	125	Peak
2	8737.656	34.81	14.44	49.25	-18.95	68.20	200	143	Peak
3	11650.000	33.98	19.59	53.57	-20.43	74.00	200	110	Peak
4	* 17475.000	34.56	27.48	62.04	-6.16	68.20	200	132	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

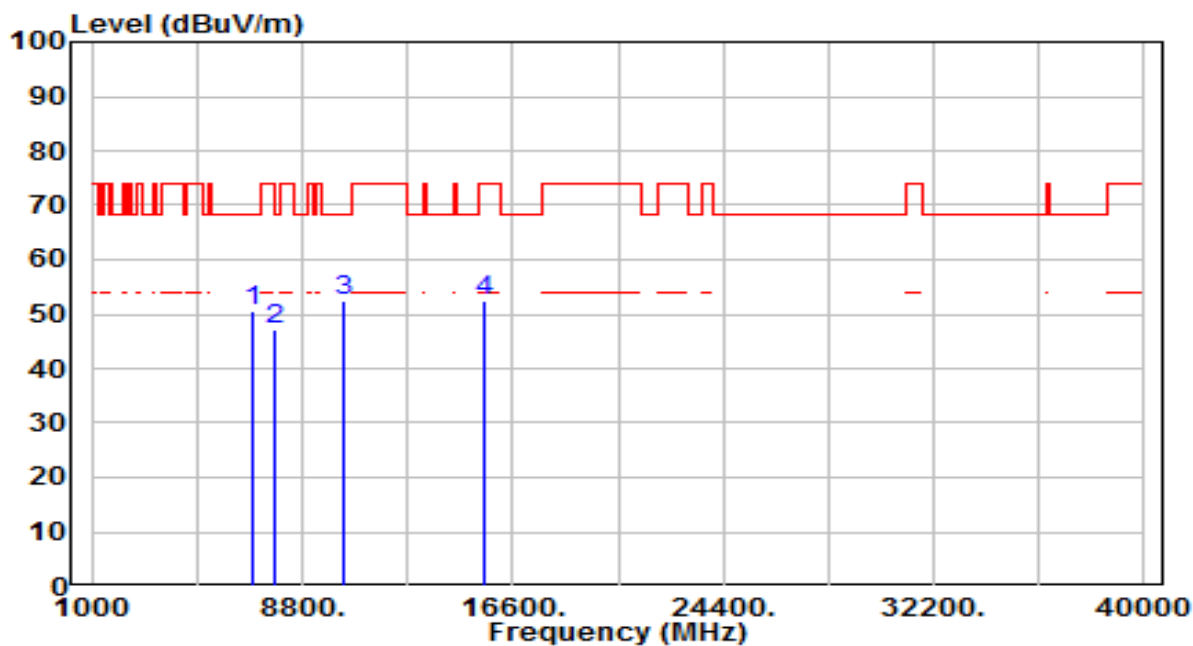


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7766.000	38.31	13.20	51.51	-16.69	68.20	200	220	Peak
2	8735.000	32.97	14.44	47.41	-20.79	68.20	200	134	Peak
3	11650.000	30.95	19.59	50.54	-23.46	74.00	200	358	Peak
4	* 17475.000	33.71	27.48	61.19	-7.01	68.20	200	170	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

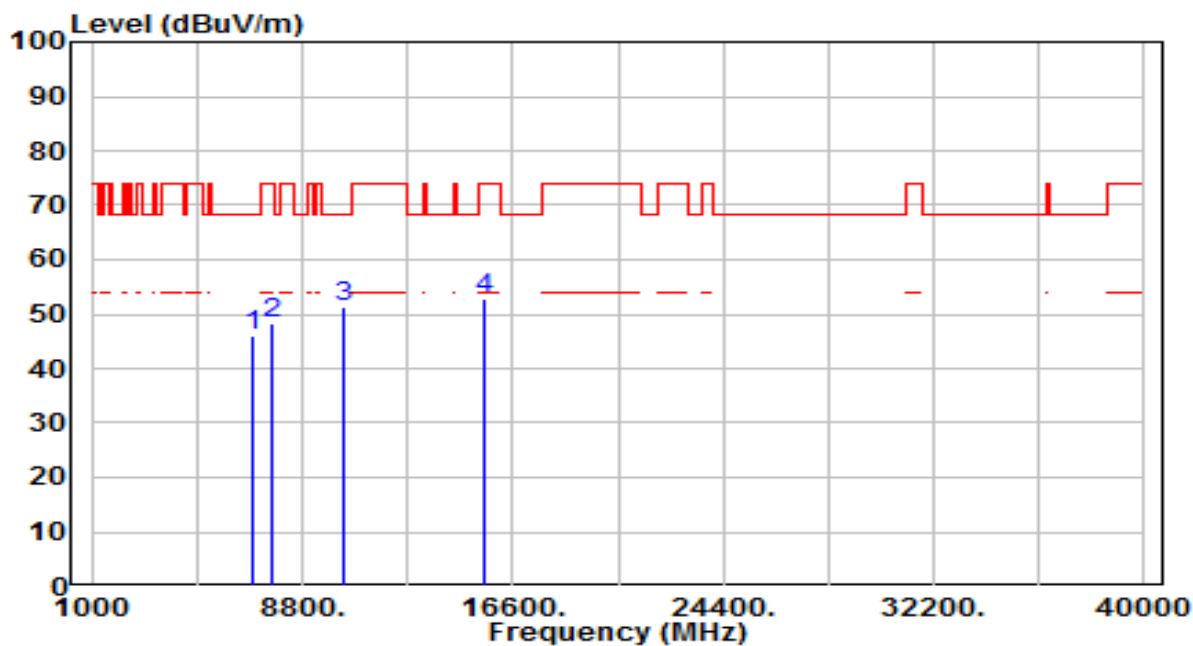


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6979.750	39.52	11.02	50.53	-17.67	68.20	200	125	Peak
2	7787.781	34.11	13.23	47.34	-20.86	68.20	200	158	Peak
3	* 10380.000	34.50	18.04	52.54	-15.66	68.20	200	56	Peak
4	15570.000	31.42	21.12	52.54	-21.46	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

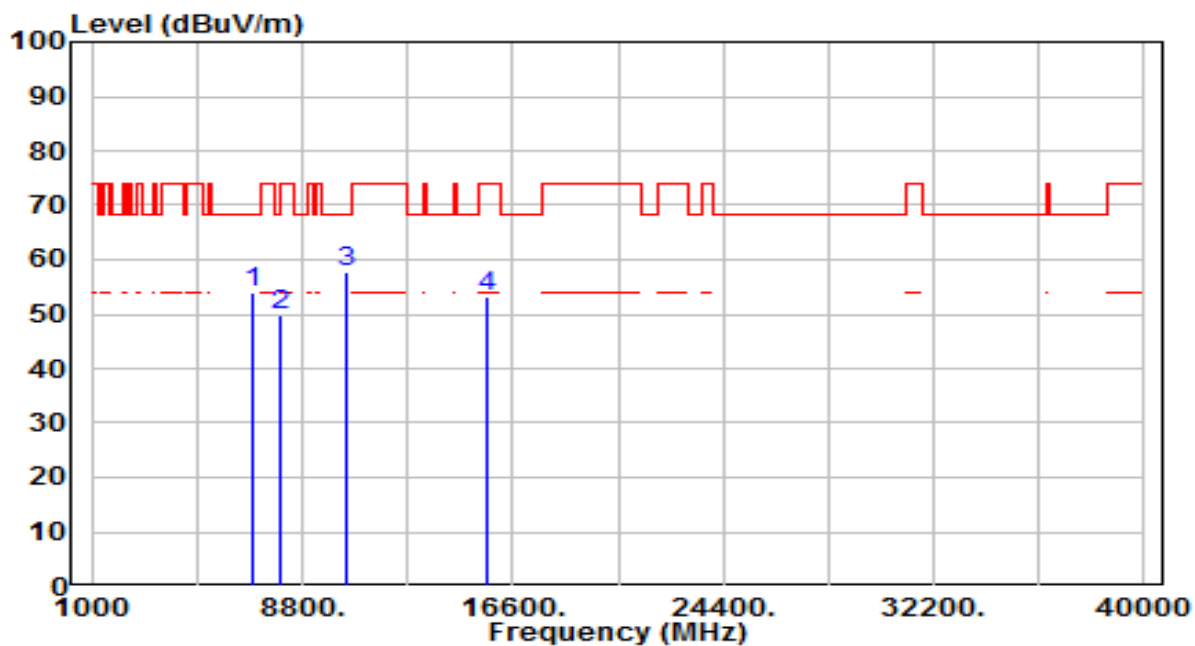


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6972.844	35.00	10.98	45.98	-22.22	68.20	200	268	Peak
2	7709.156	35.30	13.13	48.43	-25.57	74.00	200	219	Peak
3	* 10380.000	33.22	18.04	51.26	-16.94	68.20	200	279	Peak
4	15570.000	31.67	21.12	52.79	-21.21	74.00	200	308	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 46_ANT 0+1	Test Voltage	AC 120V/60Hz

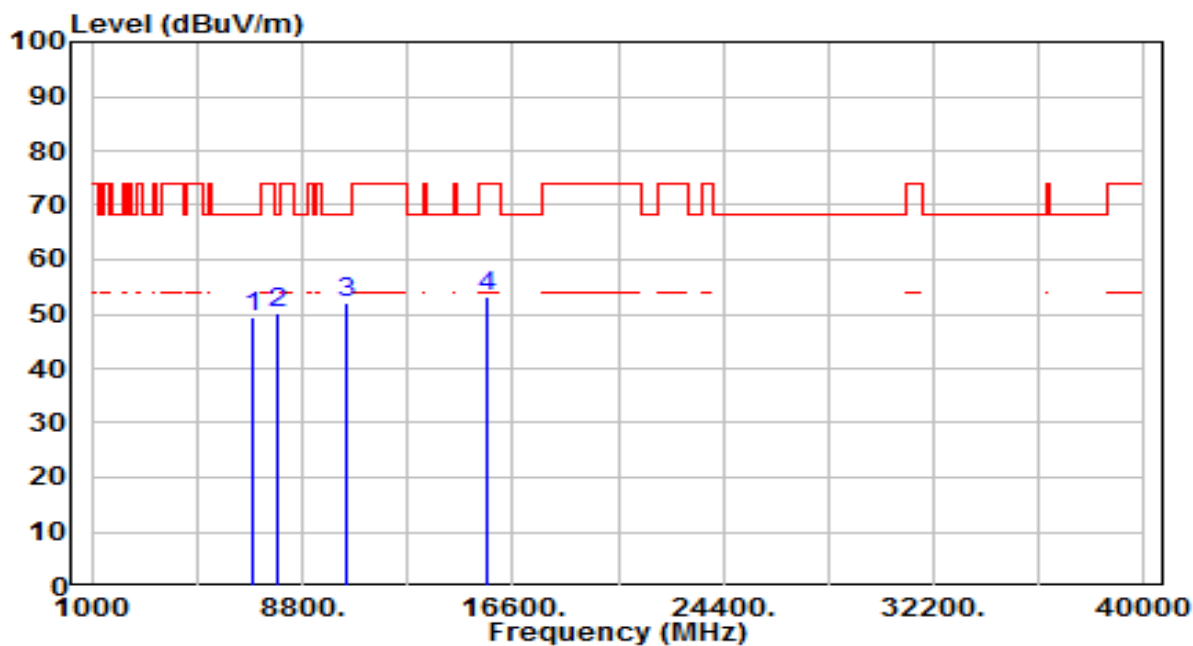


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6973.375	42.87	10.99	53.86	-14.34	68.20	200	146	Peak
2	7999.750	36.39	13.50	49.89	-18.31	68.20	200	146	Peak
3	* 10460.000	39.27	18.35	57.62	-10.58	68.20	200	121	Peak
4	15690.000	32.25	20.79	53.04	-20.96	74.00	200	281	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 46_ANT 0+1	Test Voltage	AC 120V/60Hz

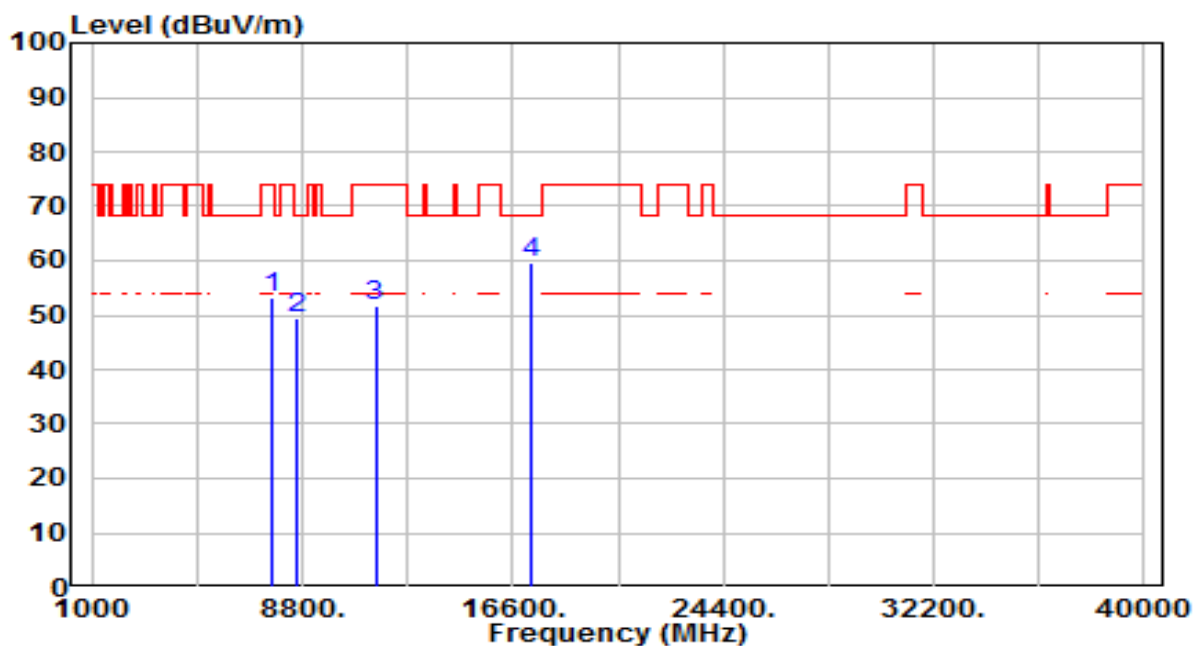


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6973.375	38.62	10.99	49.61	-18.59	68.20	200	221	Peak
2	7839.844	36.85	13.30	50.15	-18.05	68.20	200	221	Peak
3	* 10460.000	33.61	18.35	51.97	-16.23	68.20	200	182	Peak
4	15690.000	32.42	20.79	53.21	-20.79	74.00	200	285	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

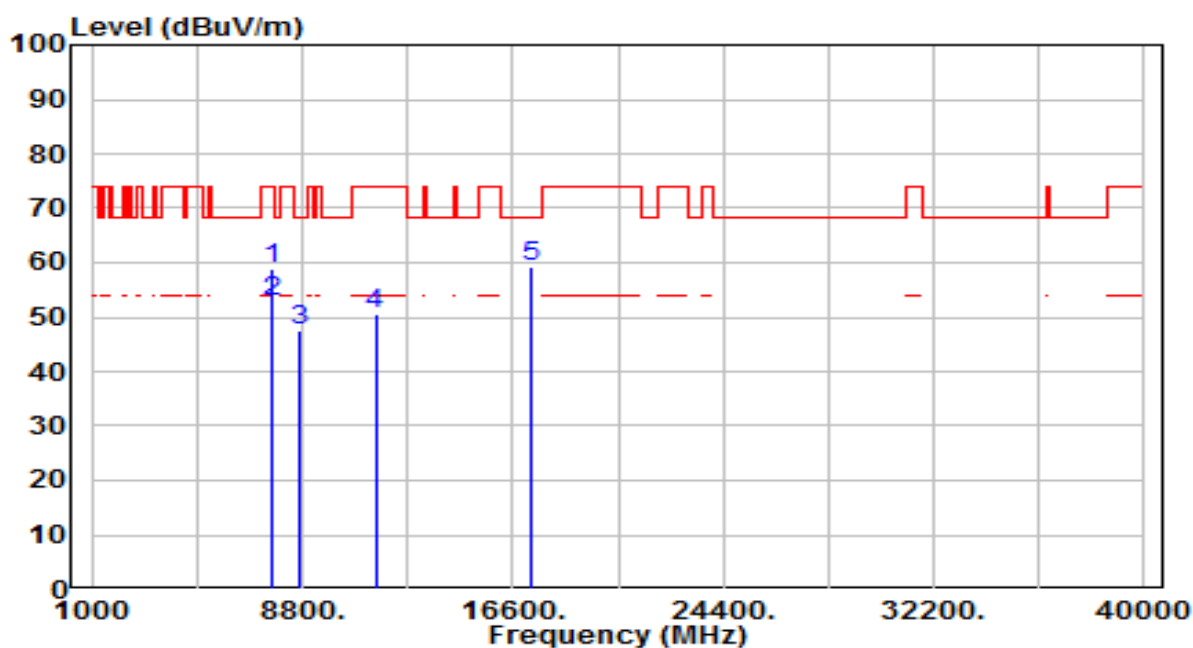


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7673.031	40.23	13.08	53.32	-20.68	74.00	200	139	Peak
2	8642.563	35.19	14.21	49.40	-18.80	68.20	200	211	Peak
3	11510.000	31.82	19.82	51.65	-22.35	74.00	200	193	Peak
4	* 17265.000	33.76	25.89	59.65	-8.55	68.20	200	91	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

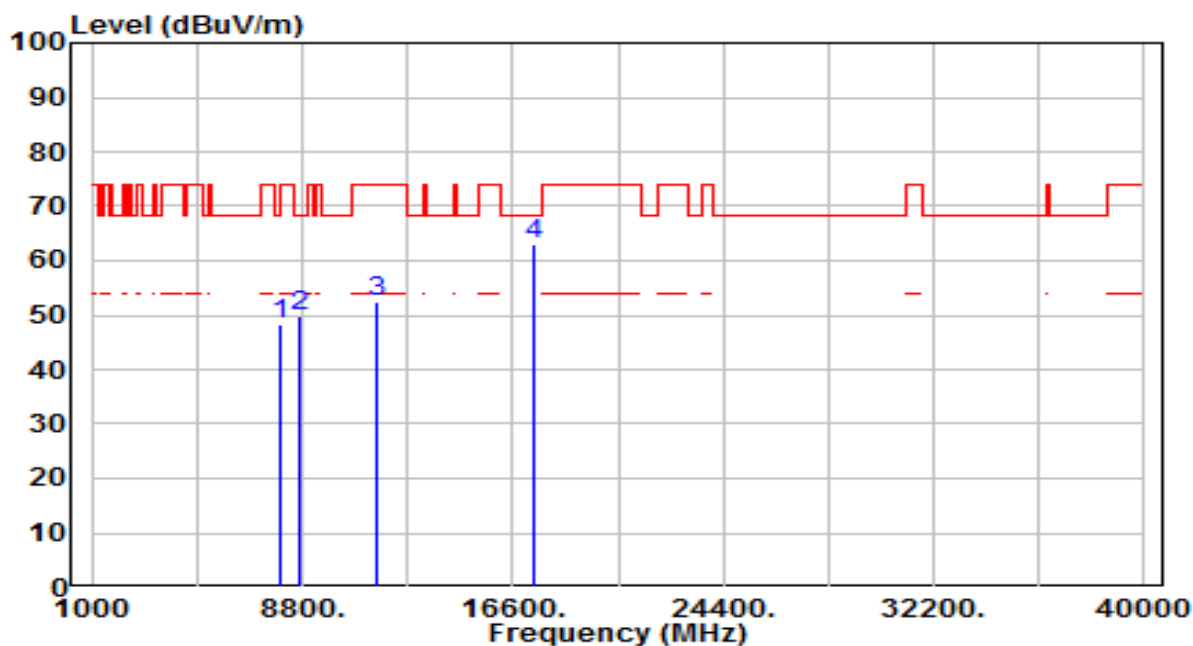


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7673.563	45.90	13.09	58.99	-15.01	74.00	184	215	Peak
2	* 7673.563	39.65	13.09	52.74	-1.26	54.00	184	215	Average
3	8663.281	33.11	14.26	47.37	-20.83	68.20	200	95	Peak
4	11510.000	30.68	19.82	50.50	-23.50	74.00	200	277	Peak
5	* 17265.000	33.38	25.89	59.27	-8.93	68.20	200	9	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

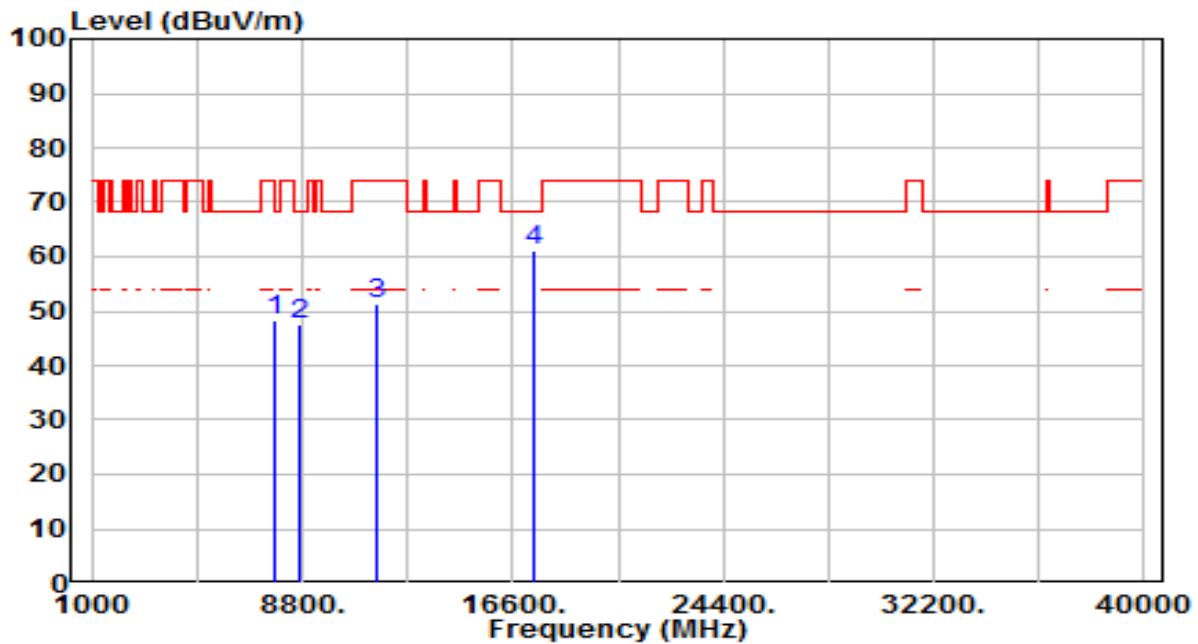


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7997.625	34.69	13.50	48.19	-20.01	68.20	200	217	Peak
2	8687.188	35.55	14.32	49.87	-18.33	68.20	200	163	Peak
3	11590.000	32.69	19.69	52.38	-21.62	74.00	200	191	Peak
4	* 17385.000	36.32	26.80	63.12	-5.08	68.20	200	311	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

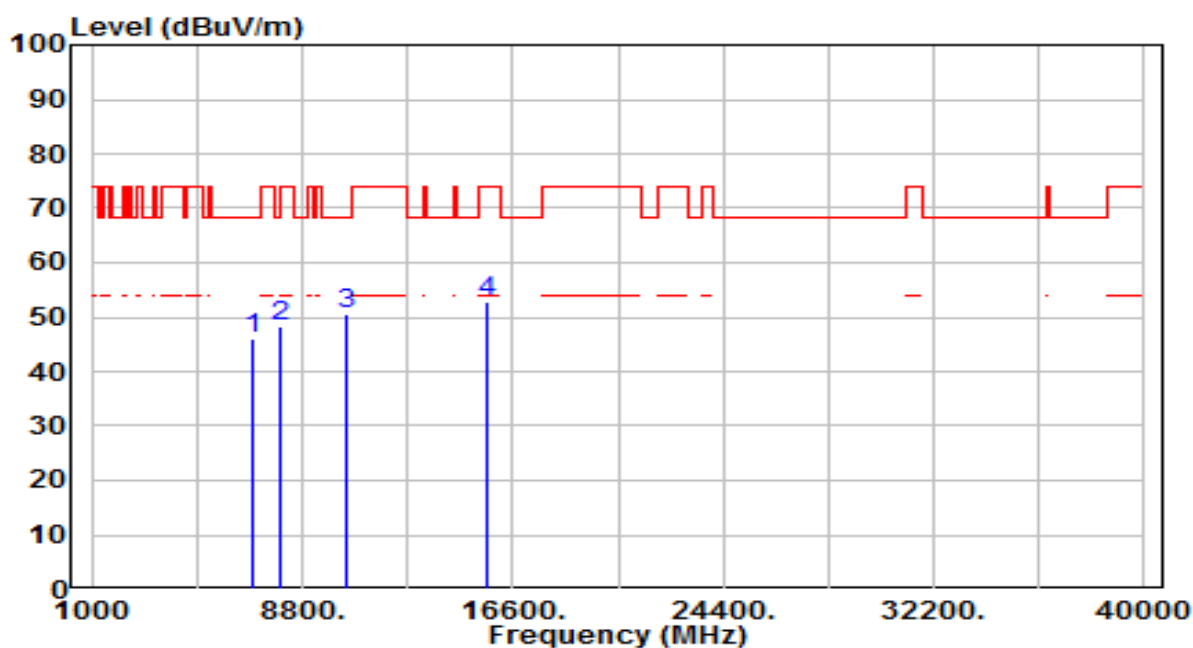


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7740.500	35.03	13.17	48.20	-25.80	74.00	200	220	Peak
2	8697.813	33.24	14.34	47.58	-20.62	68.20	200	138	Peak
3	11590.000	31.62	19.69	51.31	-22.69	74.00	200	267	Peak
4	* 17385.000	34.23	26.80	61.03	-7.17	68.20	200	73	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

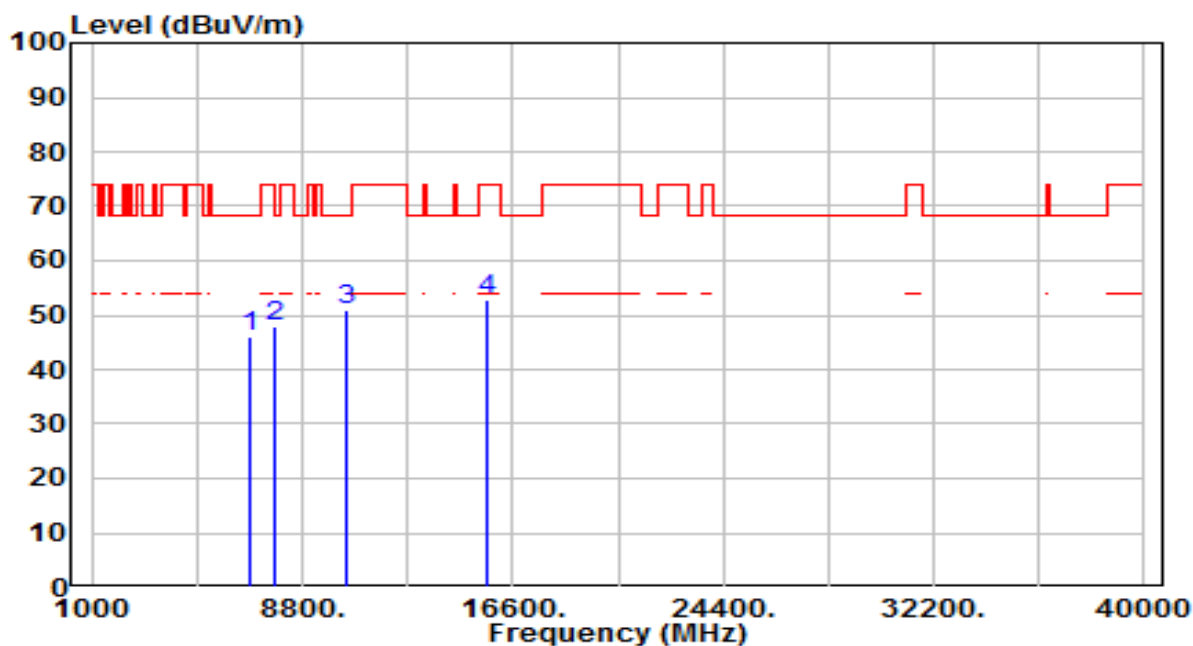


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6972.844	34.98	10.98	45.97	-22.23	68.20	200	204	Peak
2	7998.156	34.70	13.50	48.20	-20.00	68.20	200	83	Peak
3	* 10420.000	32.29	18.20	50.49	-17.71	68.20	200	276	Peak
4	15630.000	31.94	20.95	52.89	-21.11	74.00	200	144	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

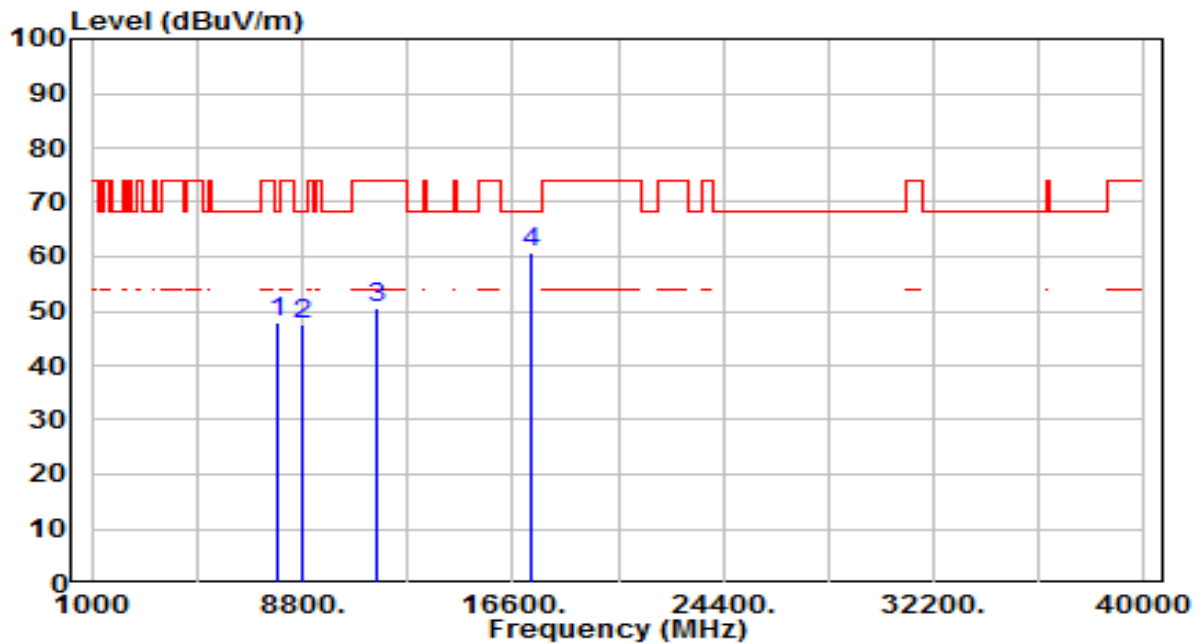


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	6815.063	35.82	10.25	46.07	-22.13	68.20	200	195	Peak
2	7763.875	34.79	13.20	47.99	-20.21	68.20	200	358	Peak
3	* 10420.000	32.74	18.20	50.93	-17.27	68.20	200	277	Peak
4	15630.000	31.94	20.95	52.89	-21.11	74.00	200	34	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band4_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz

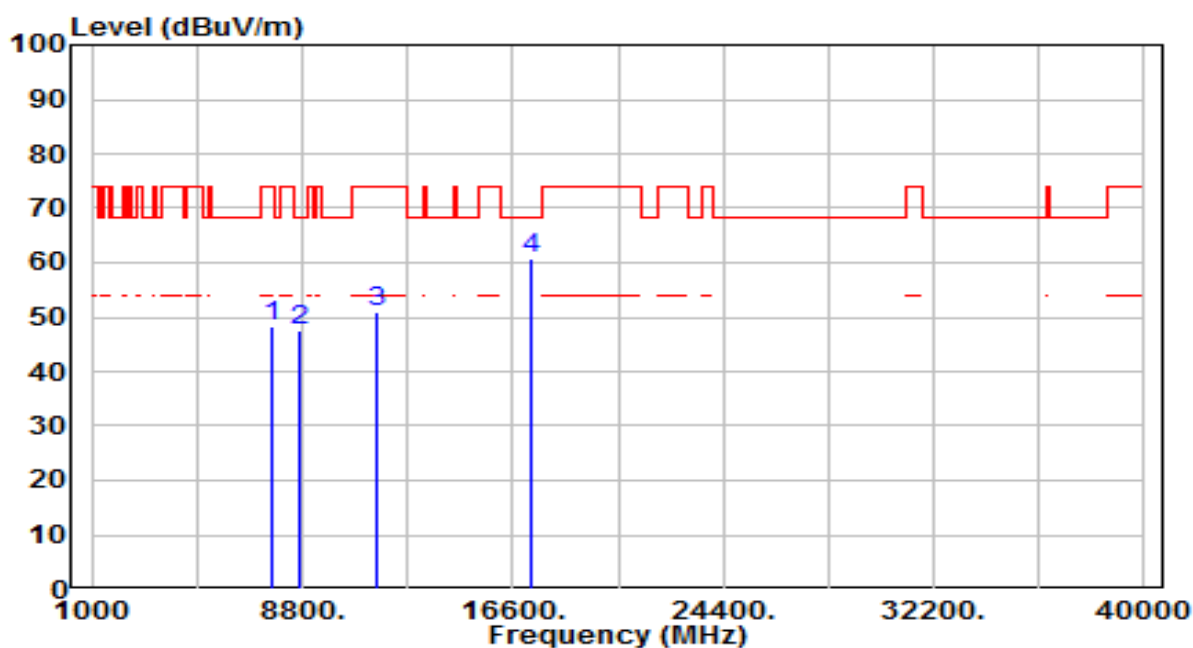


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7838.250	34.60	13.29	47.90	-20.30	68.20	200	69	Peak
2	8772.719	32.89	14.53	47.42	-20.78	68.20	200	187	Peak
3	11550.000	30.78	19.76	50.54	-23.46	74.00	200	201	Peak
4	* 17325.000	34.25	26.35	60.59	-7.61	68.20	200	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D & BBHA 9170	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band4_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz

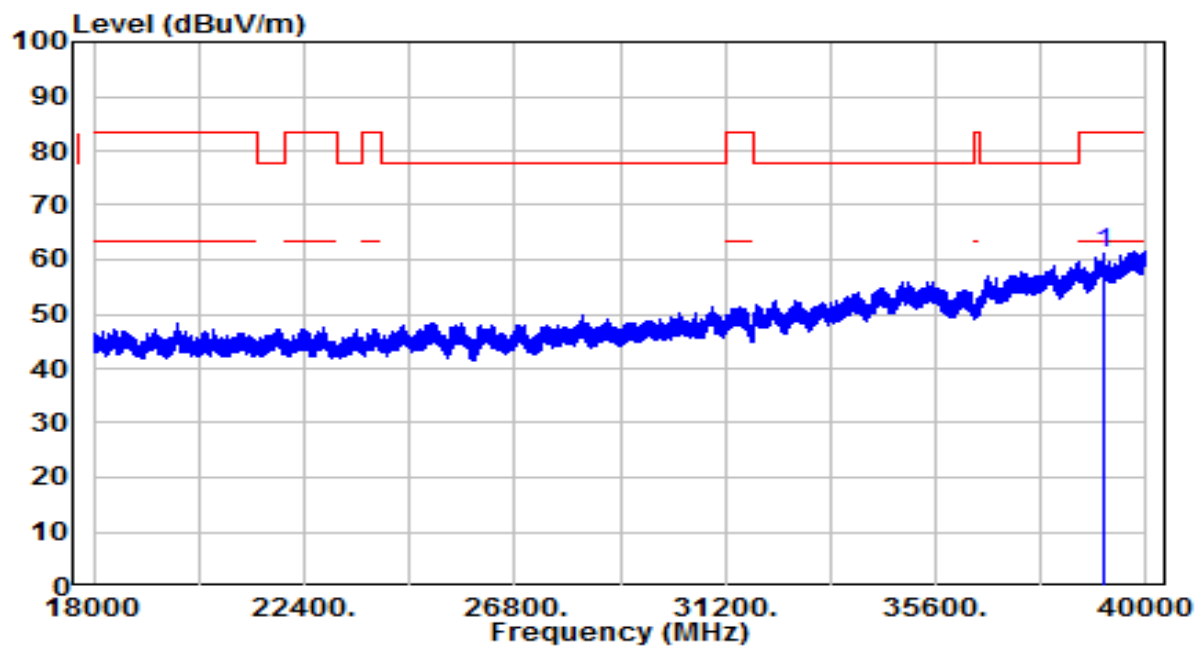


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	7700.656	35.28	13.12	48.40	-25.60	74.00	200	127	Peak
2	8674.969	33.07	14.29	47.36	-20.84	68.20	200	138	Peak
3	11550.000	31.19	19.76	50.95	-23.05	74.00	200	279	Peak
4	* 17325.000	34.38	26.35	60.73	-7.47	68.20	200	78	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	Intercom	Date of Test	2023-12-14
Factor	BBHA 9170	Temp. / Humidity	25°C /61%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

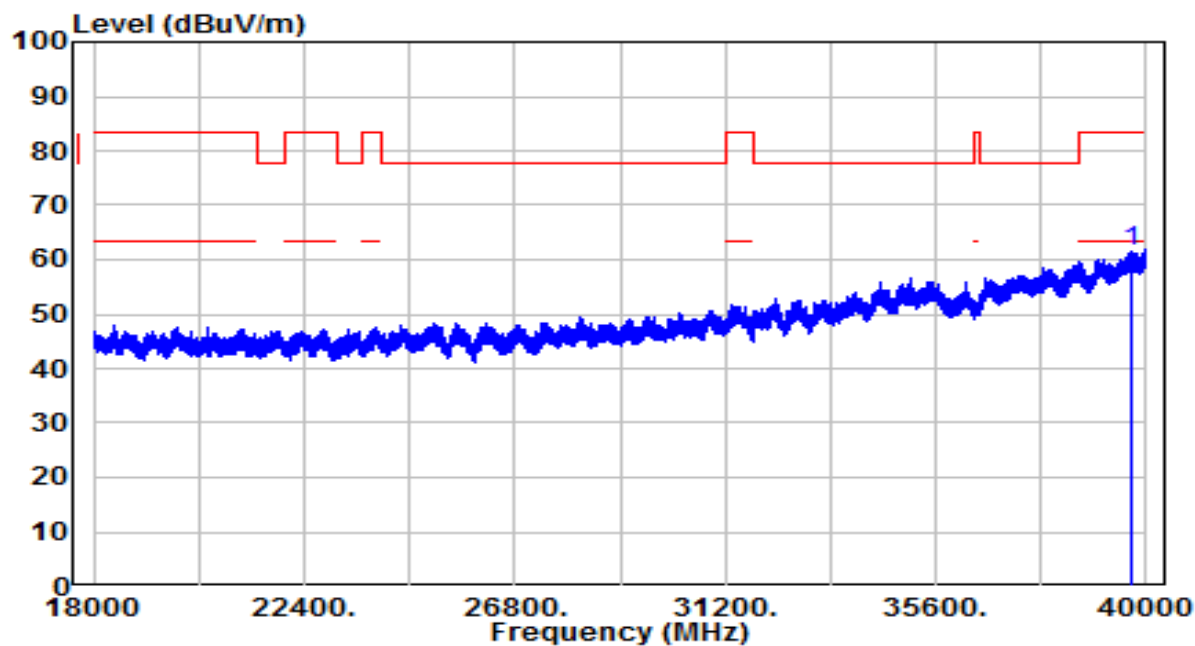


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	35.74	25.25	60.99	-22.51	83.50	200	159	Peak

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	Intercom	Date of Test	2023-12-14
Factor	BBHA 9170	Temp. / Humidity	25°C /61%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_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	*	39718.130	35.15	26.40	61.55	-21.95	83.50	200	220	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.

7.8. Radiated Restricted Band Edge Measurement

7.8.1. 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

7.8.2. Test Procedure Used

KDB 789033 D02v02r01- Section G

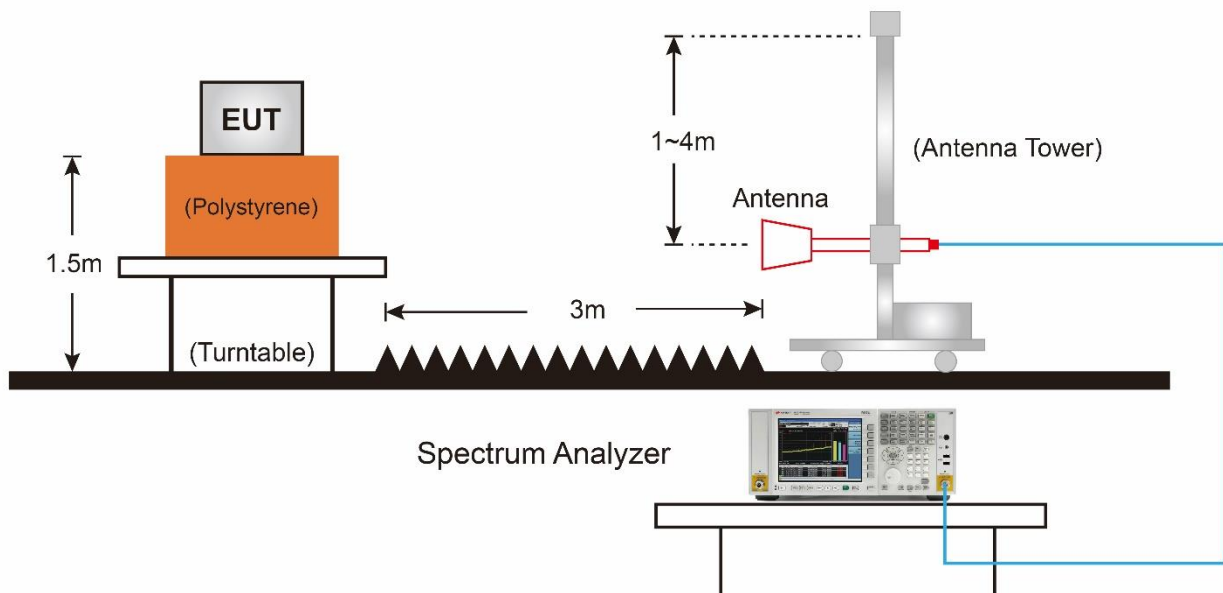
7.8.3. Test Setting**Peak Measurements above 1GHz**

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

Average Measurements above 1GHz (Method VB)

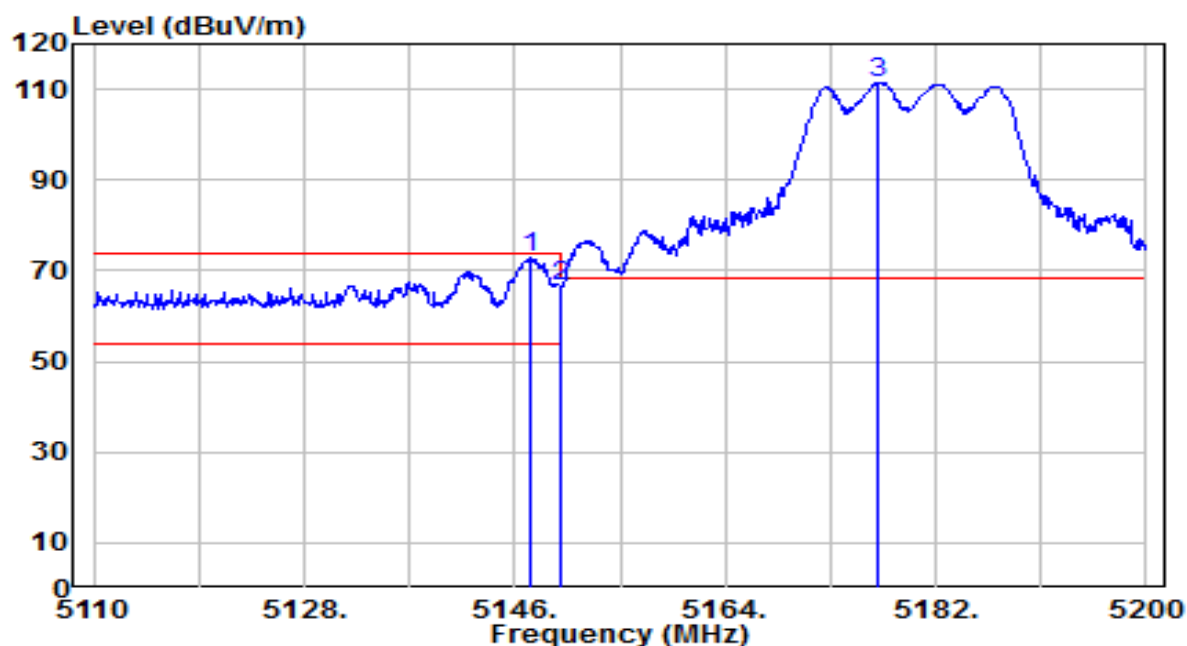
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW If the EUT is configured to transmit with duty cycle $\geq 98\%$, set VBW $\leq \text{RBW}/100$ (i.e., 10 kHz) but not less than 10 Hz. If the EUT duty cycle is $< 98\%$, set VBW $\geq 1/T$.
4. Detector = Peak
5. Sweep time = auto
6. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where x is the duty cycle.

7.8.4. Test Setup



7.8.5. Test Result

EUT	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

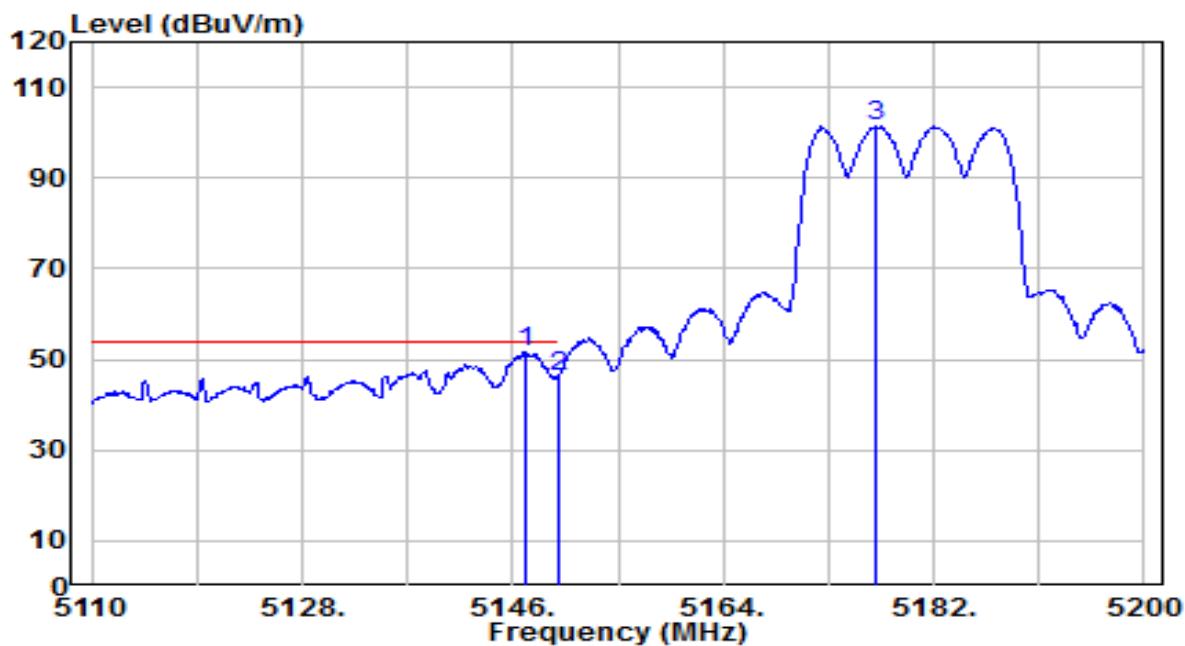


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	* 5147.350	68.31	4.46	72.77	-1.23	74.00	185	195	Peak
2	5150.000	61.92	4.46	66.38	-7.62	74.00	185	195	Peak
3	5176.960	107.03	4.49	111.52	N/A	N/A	185	195	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

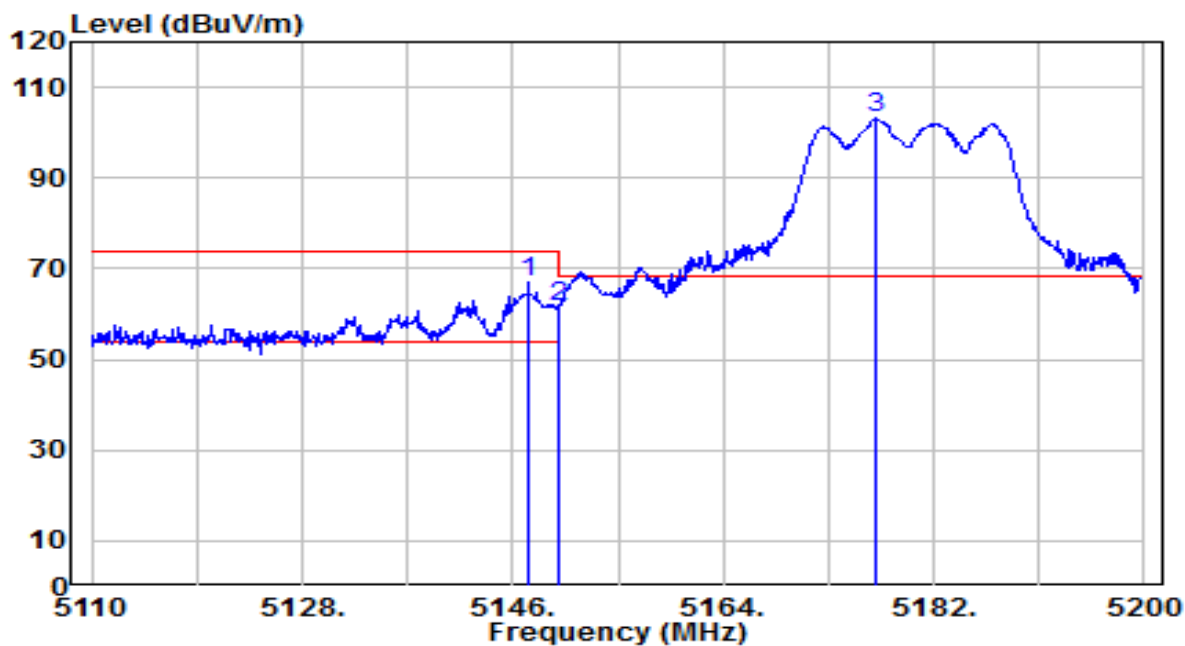


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.170	47.15	4.46	51.61	-2.39	54.00	185	195	Average
2		5150.000	41.89	4.46	46.35	-7.65	54.00	185	195	Average
3		5177.050	96.93	4.49	101.42	N/A	N/A	185	195	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

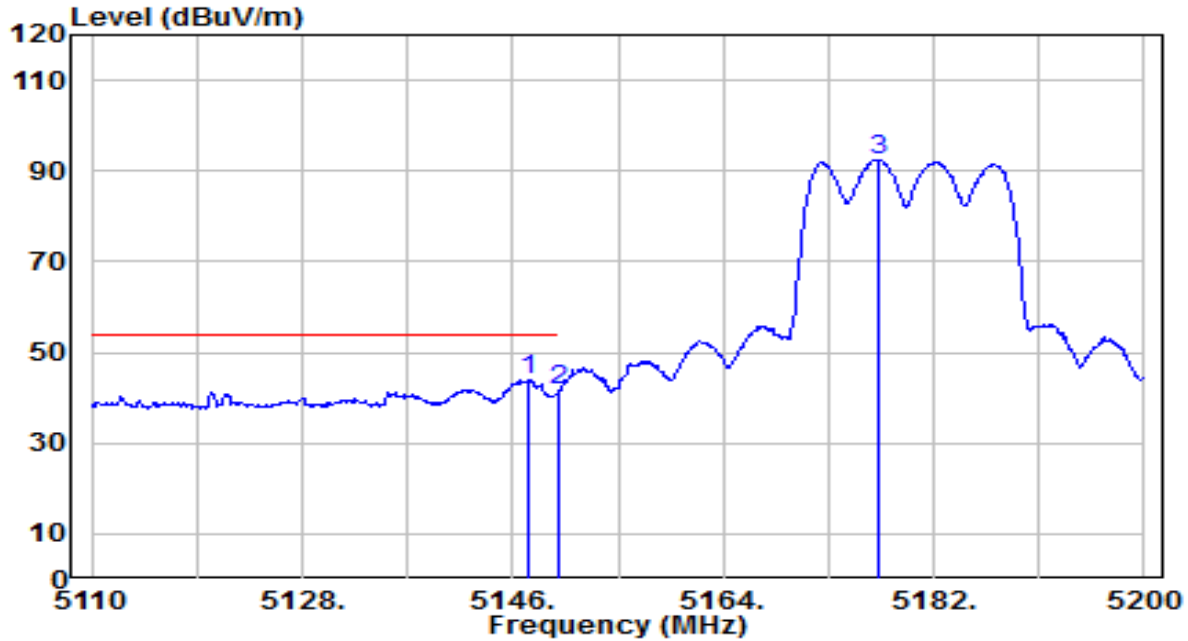


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.350	62.47	4.46	66.93	-7.07	74.00	155	185	Peak
2		5150.000	57.03	4.46	61.49	-12.51	74.00	155	185	Peak
3		5176.960	98.59	4.49	103.08	N/A	N/A	155	185	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

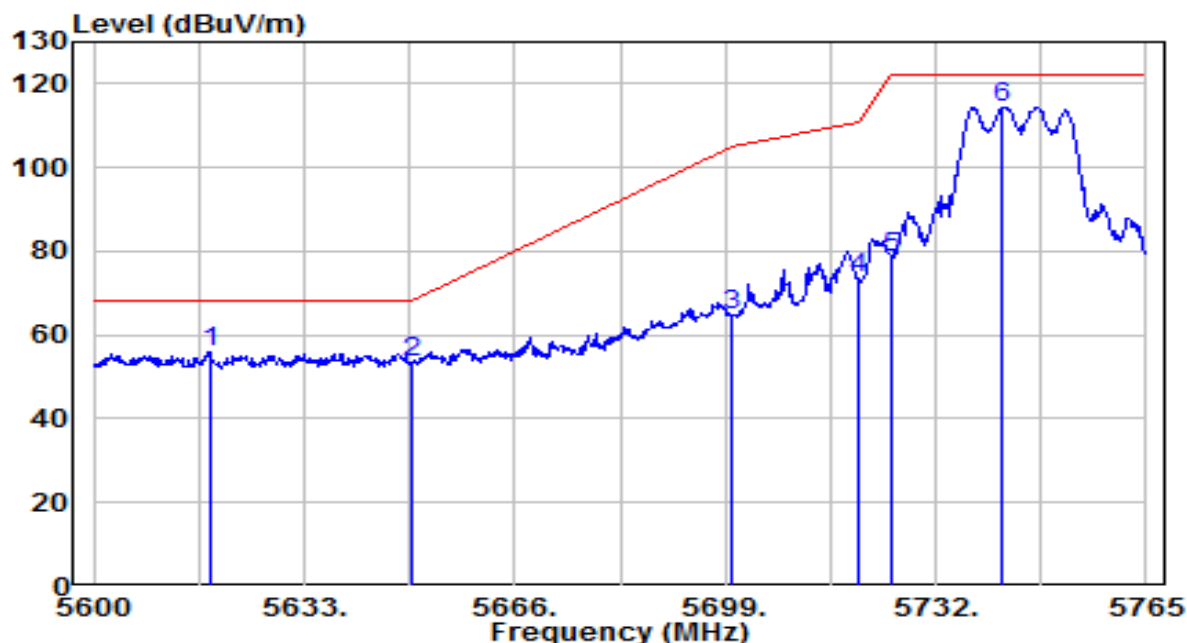


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.350	39.55	4.46	44.01	-9.99	54.00	155	185	Average
2		5150.000	37.14	4.46	41.60	-12.40	54.00	155	185	Average
3		5177.230	88.06	4.49	92.55	N/A	N/A	155	185	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

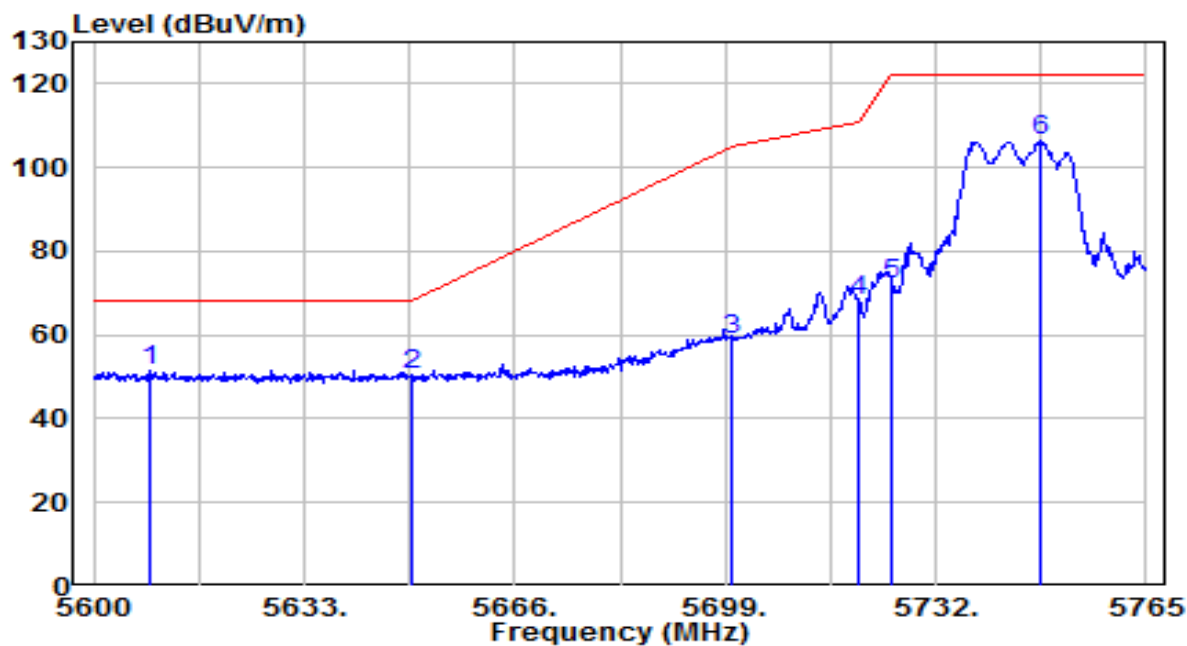


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5618.315	50.62	5.27	55.89	-12.31	68.20	210	175	Peak
2		5650.000	47.99	5.38	53.38	-14.82	68.20	210	175	Peak
3		5700.000	59.20	5.56	64.76	-40.44	105.20	210	175	Peak
4		5720.000	67.72	5.63	73.35	-37.45	110.80	210	175	Peak
5		5725.000	72.77	5.64	78.42	-43.78	122.20	210	175	Peak
6		5742.230	108.76	5.70	114.47	N/A	N/A	210	175	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

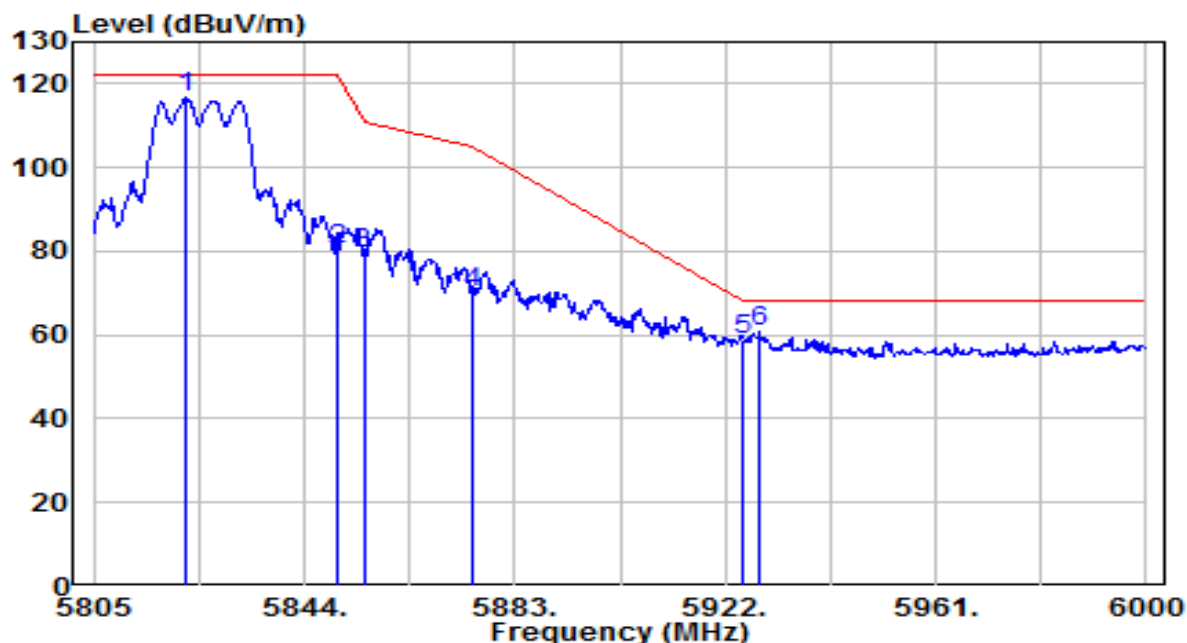


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5608.745	46.44	5.24	51.68	-16.52	68.20	195	220	Peak
2		5650.000	45.37	5.38	50.76	-17.44	68.20	195	220	Peak
3		5700.000	53.42	5.56	58.97	-46.23	105.20	195	220	Peak
4		5720.000	62.58	5.63	68.20	-42.60	110.80	195	220	Peak
5		5725.000	66.49	5.64	72.13	-50.07	122.20	195	220	Peak
6		5748.500	100.56	5.72	106.29	N/A	N/A	195	220	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

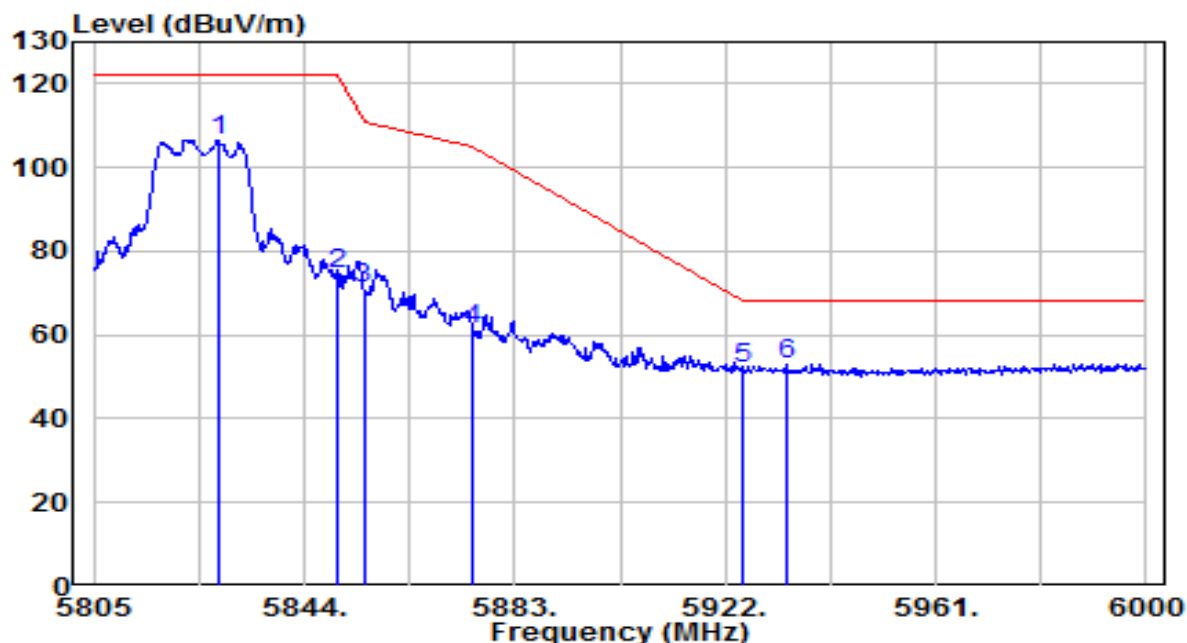


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5821.965	110.55	5.98	116.53	N/A	N/A	215	160	Peak
2	5850.000	74.46	6.08	80.54	-41.66	122.20	215	160	Peak
3	5855.000	73.31	6.10	79.40	-31.40	110.80	215	160	Peak
4	5875.000	63.76	6.17	69.92	-35.28	105.20	215	160	Peak
5	5925.000	52.56	6.34	58.90	-9.30	68.20	215	160	Peak
6	* 5928.240	54.30	6.35	60.65	-7.55	68.20	215	160	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11a_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

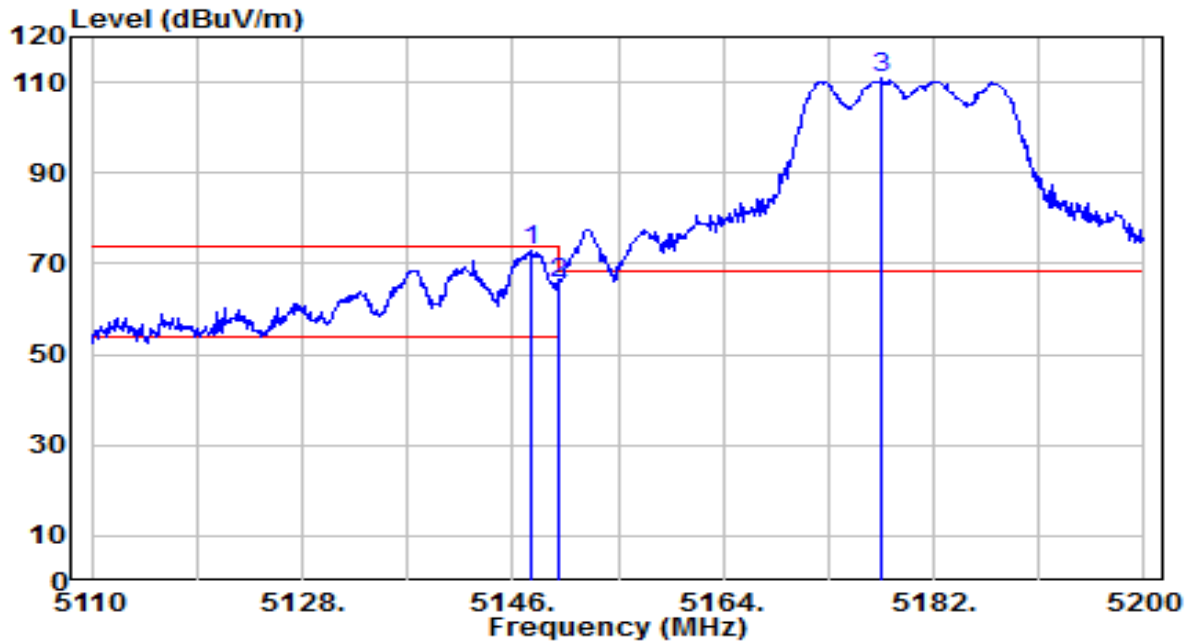


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5828.400	100.65	6.00	106.65	-15.55	122.20	170	195	Peak
2		5850.000	68.53	6.08	74.61	-47.59	122.20	170	195	Peak
3		5855.000	65.28	6.10	71.37	-39.43	110.80	170	195	Peak
4		5875.000	55.05	6.17	61.21	-43.99	105.20	170	195	Peak
5		5925.000	45.42	6.34	51.76	-16.44	68.20	170	195	Peak
6		5933.310	46.74	6.37	53.11	N/A	N/A	170	195	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

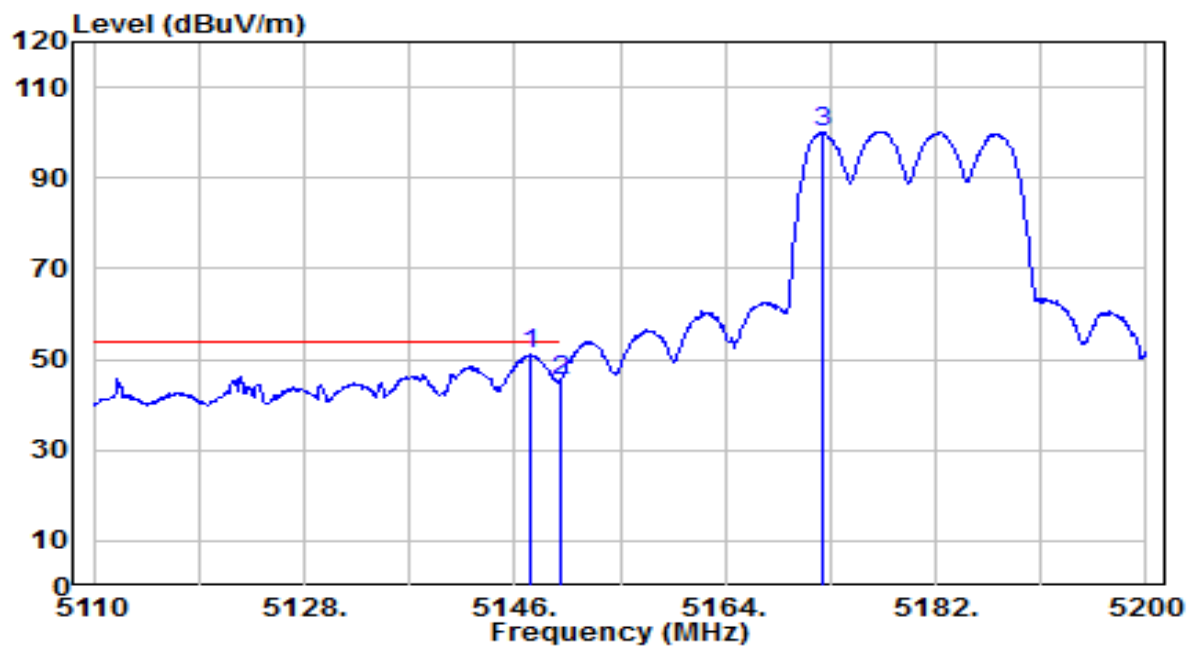


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.530	68.28	4.46	72.74	-1.26	74.00	185	195	Peak
2		5150.000	61.21	4.46	65.67	-8.33	74.00	185	195	Peak
3		5177.590	106.35	4.49	110.85	N/A	N/A	185	195	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

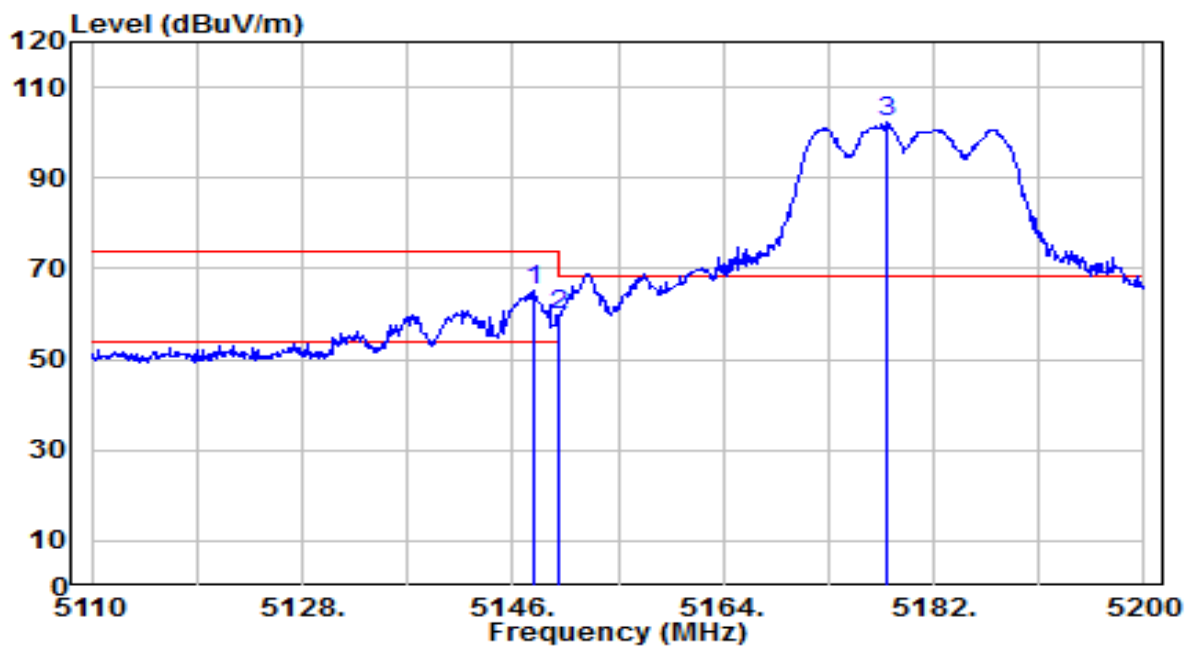


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.440	46.58	4.46	51.04	-2.96	54.00	185	195	Average
2		5150.000	40.99	4.46	45.45	-8.55	54.00	185	195	Average
3		5172.370	95.57	4.49	100.06	N/A	N/A	185	195	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

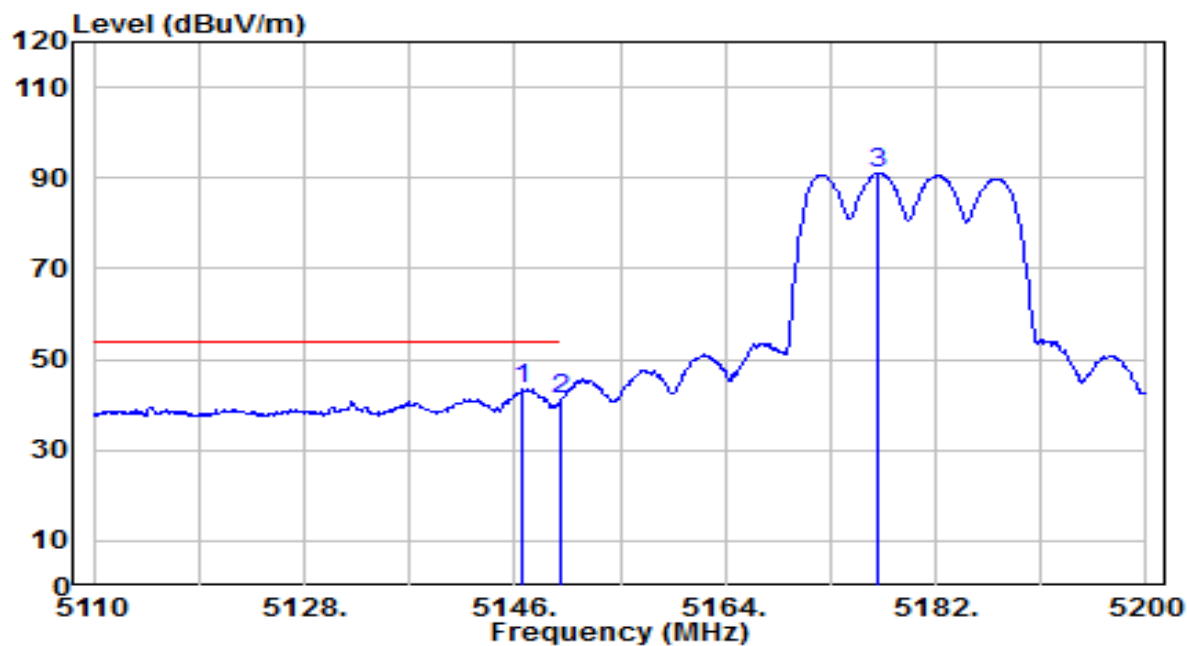


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5147.710	60.79	4.46	65.25	-8.75	74.00	155	185	Peak
2		5150.000	55.19	4.46	59.65	-14.35	74.00	155	185	Peak
3		5178.040	97.64	4.49	102.14	N/A	N/A	155	185	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band1_CH 36_ANT 0+1	Test Voltage	AC 120V/60Hz

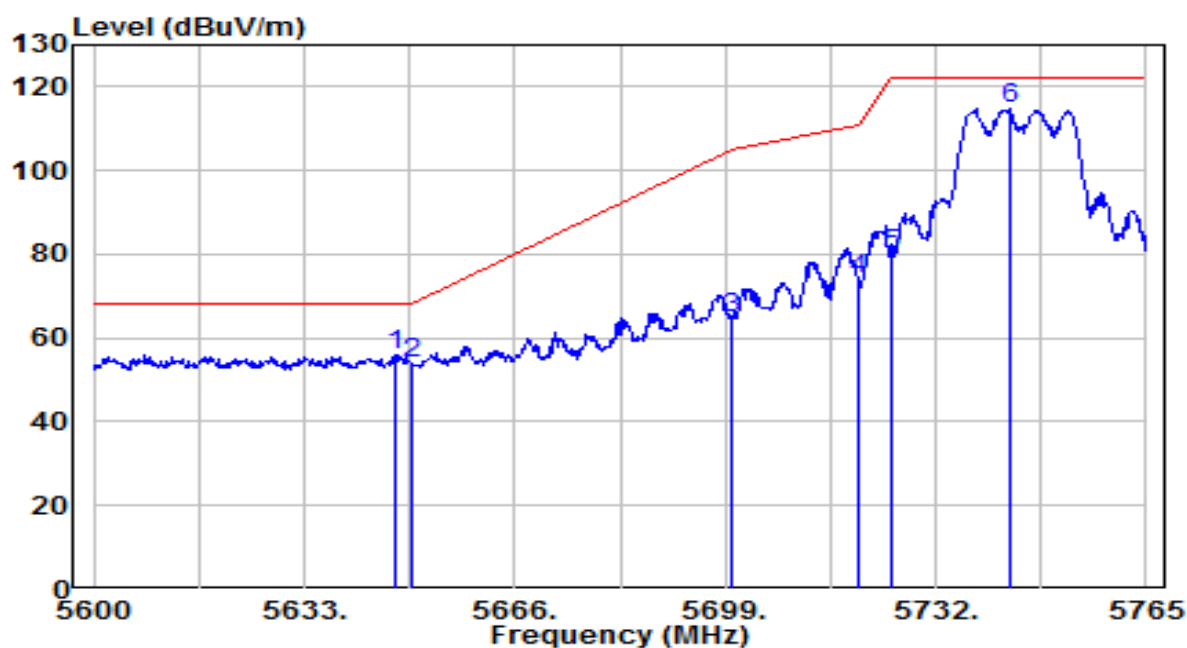


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5146.720	39.15	4.46	43.61	-10.39	54.00	155	185	Average
2		5150.000	36.80	4.46	41.26	-12.74	54.00	155	185	Average
3		5177.050	86.56	4.49	91.05	N/A	N/A	155	185	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

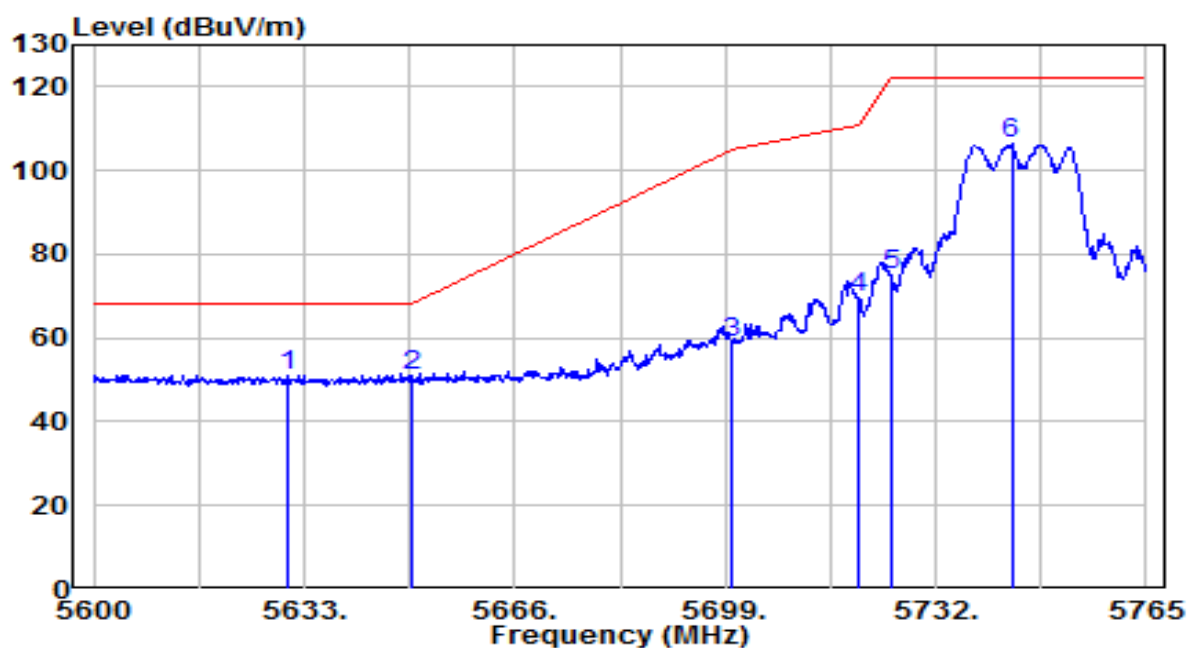


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5647.355	50.50	5.37	55.87	-12.33	68.20	210	175	Peak
2		5650.000	48.59	5.38	53.98	-14.22	68.20	210	175	Peak
3		5700.000	59.03	5.56	64.59	-40.61	105.20	210	175	Peak
4		5720.000	68.41	5.63	74.03	-36.77	110.80	210	175	Peak
5		5725.000	74.51	5.64	80.15	-42.05	122.20	210	175	Peak
6		5743.550	109.06	5.71	114.77	N/A	N/A	210	175	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 149_ANT 0+1	Test Voltage	AC 120V/60Hz

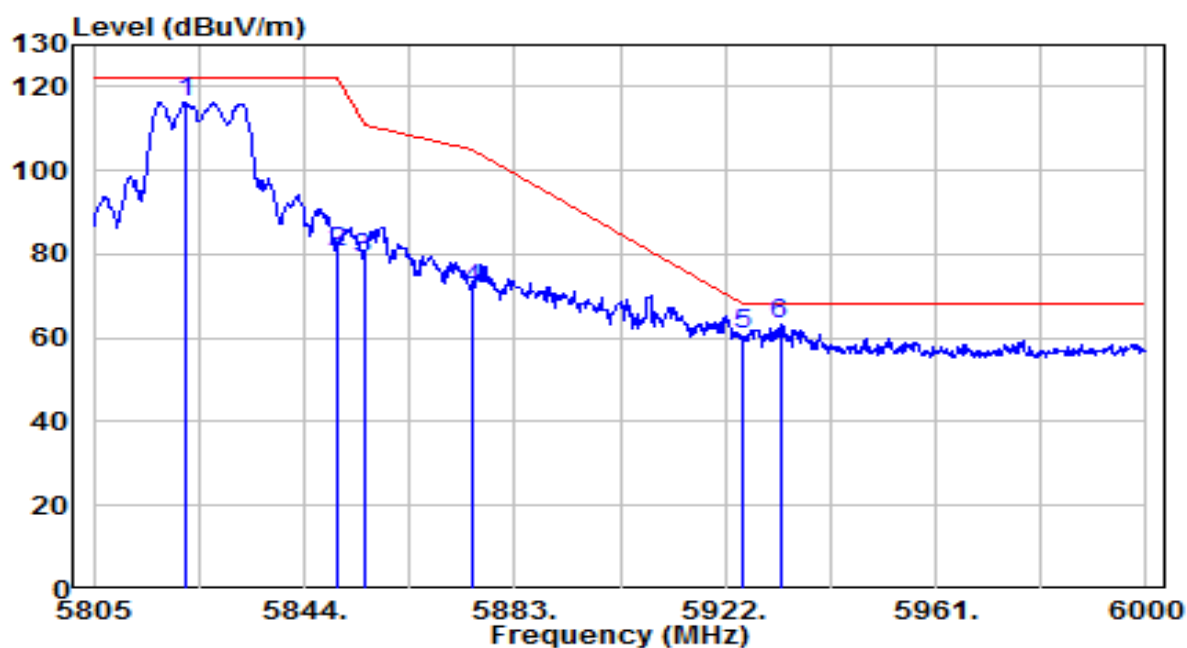


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5630.525	45.93	5.31	51.24	-16.96	68.20	195	220	Peak
2		5650.000	45.66	5.38	51.04	-17.16	68.20	195	220	Peak
3		5700.000	53.15	5.56	58.71	-46.49	105.20	195	220	Peak
4		5720.000	63.80	5.63	69.42	-41.38	110.80	195	220	Peak
5		5725.000	69.35	5.64	75.00	-47.20	122.20	195	220	Peak
6		5743.880	100.73	5.71	106.44	N/A	N/A	195	220	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

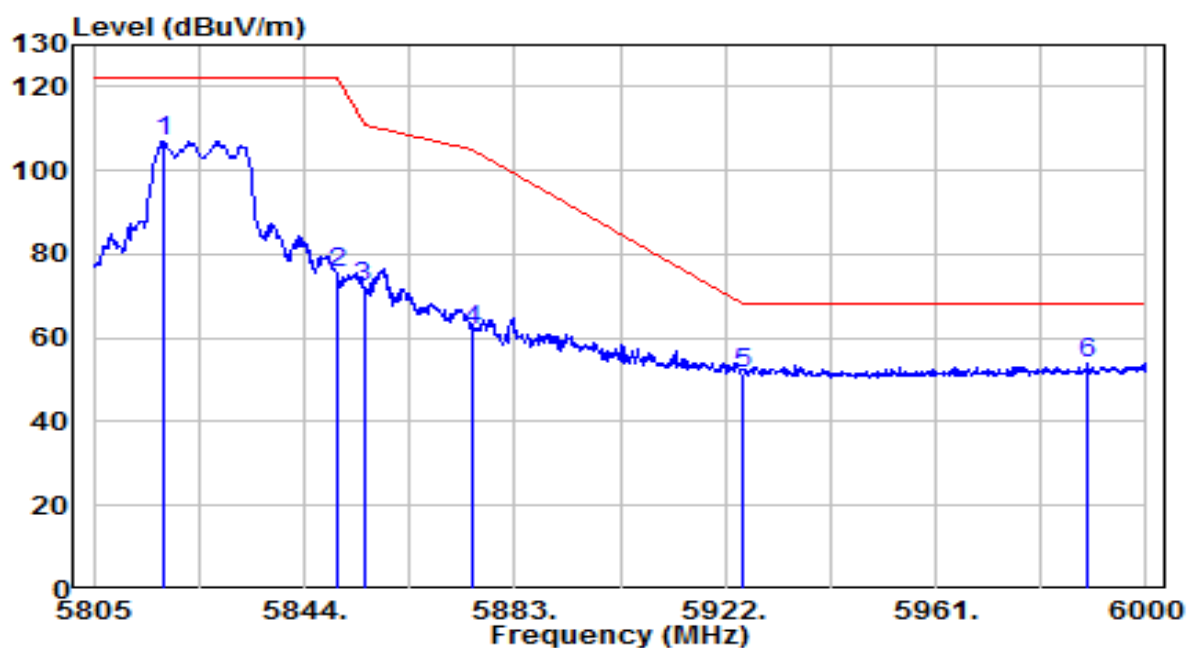


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5822.160	110.16	5.98	116.14	N/A	N/A	215	160	Peak
2	5850.000	74.55	6.08	80.62	-41.58	122.20	215	160	Peak
3	5855.000	72.85	6.10	78.94	-31.86	110.80	215	160	Peak
4	5875.000	65.57	6.17	71.73	-33.47	105.20	215	160	Peak
5	5925.000	54.37	6.34	60.71	-7.49	68.20	215	160	Peak
6	* 5932.140	56.99	6.36	63.36	-4.84	68.20	215	160	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-20MHz_TX_Band4_CH 165_ANT 0+1	Test Voltage	AC 120V/60Hz

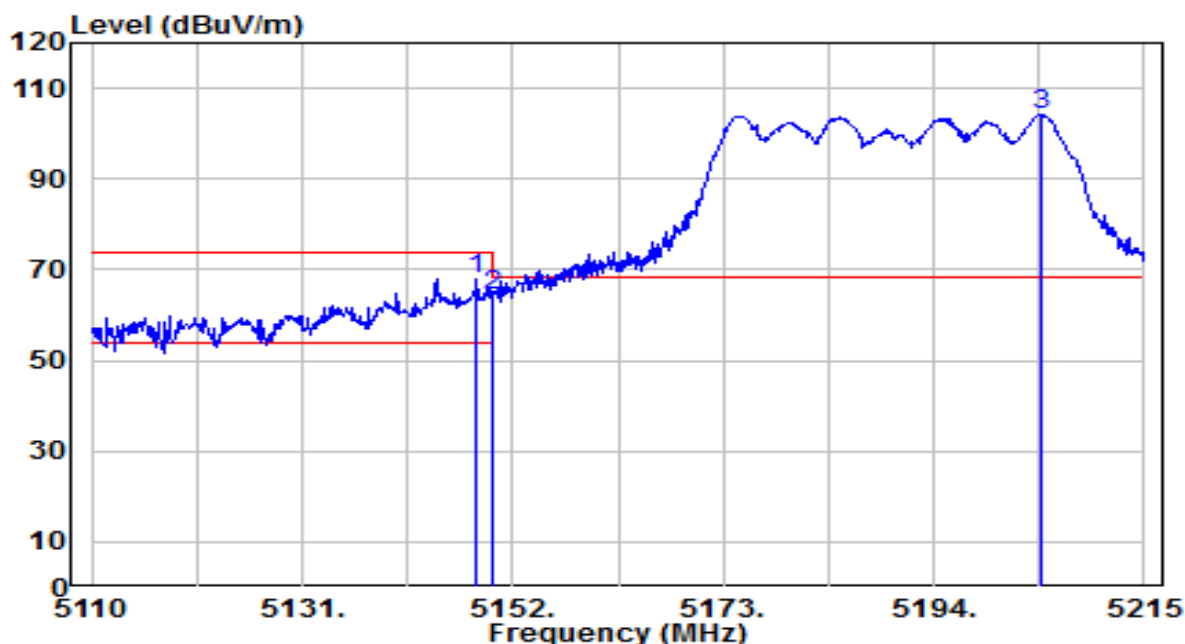


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5818.065	101.07	5.97	107.03	N/A	N/A	170	195	Peak
2	5850.000	69.46	6.08	75.54	-46.66	122.20	170	195	Peak
3	5855.000	65.97	6.10	72.07	-38.73	110.80	170	195	Peak
4	5875.000	55.53	6.17	61.69	-43.51	105.20	170	195	Peak
5	5925.000	45.36	6.34	51.70	-16.50	68.20	170	195	Peak
6	* 5989.275	47.18	6.56	53.74	-14.46	68.20	170	195	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

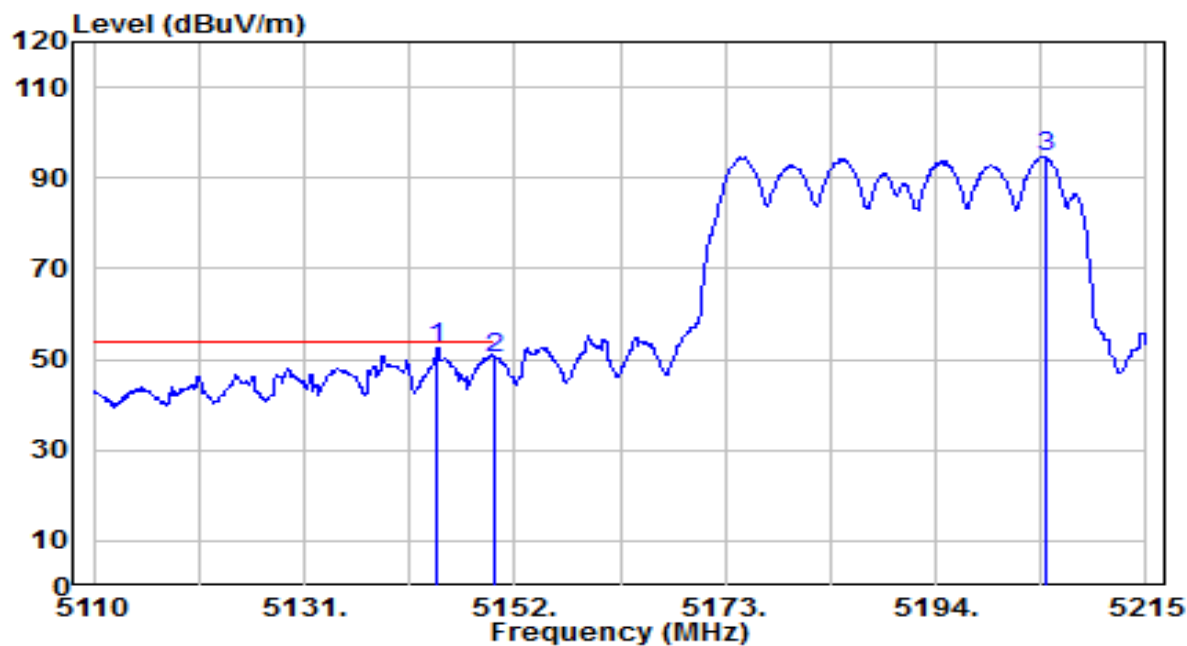


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5148.430	63.58	4.46	68.04	-5.96	74.00	185	195	Peak
2		5150.000	59.93	4.46	64.39	-9.61	74.00	185	195	Peak
3		5204.710	99.68	4.52	104.21	N/A	N/A	185	195	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

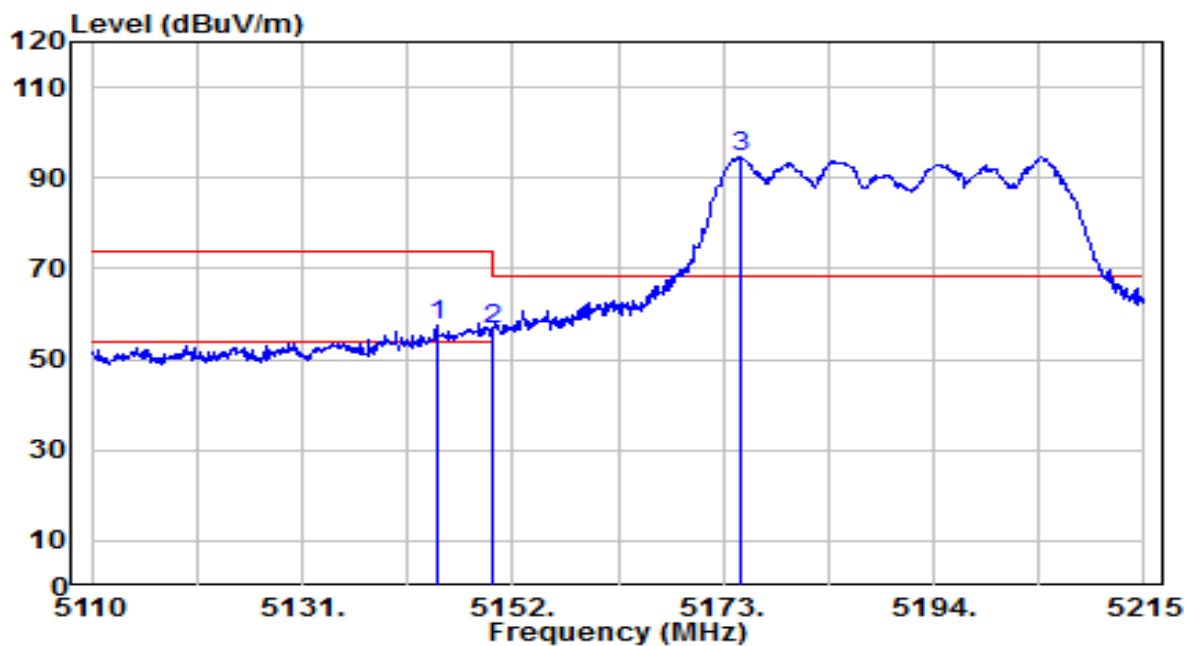


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.335	48.27	4.45	52.73	-1.27	54.00	185	195	Average
2		5150.000	46.01	4.46	50.47	-3.53	54.00	185	195	Average
3		5204.920	90.34	4.52	94.87	N/A	N/A	185	195	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

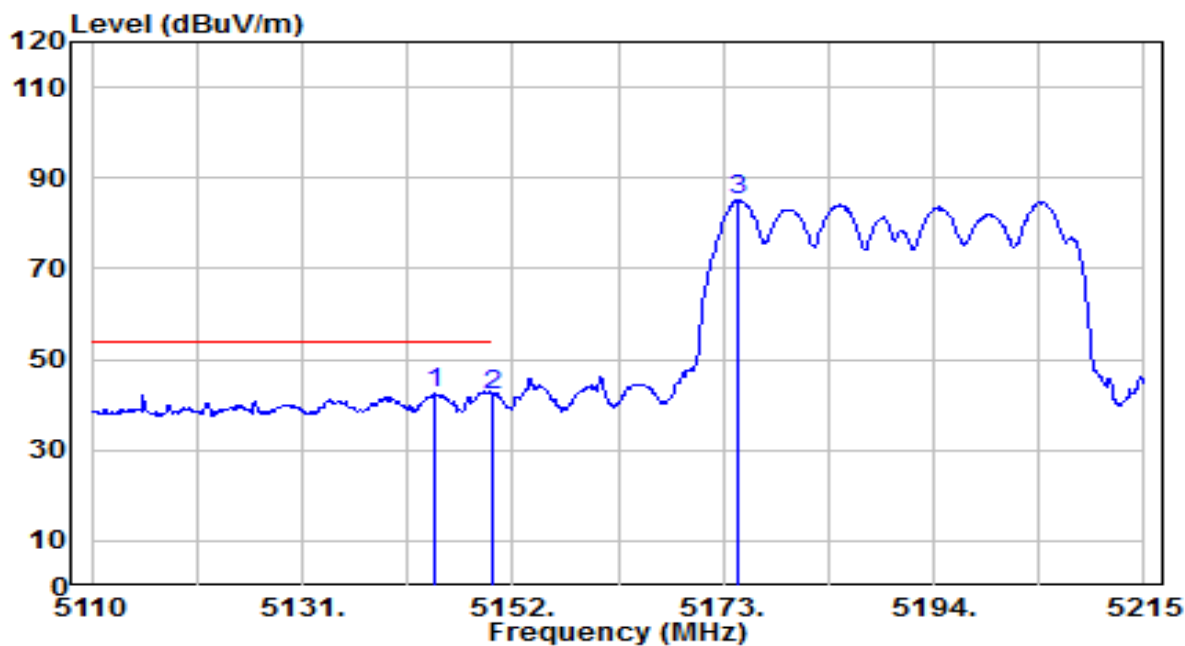


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.440	52.91	4.45	57.36	-16.64	74.00	155	185	Peak
2		5150.000	52.30	4.46	56.76	-17.24	74.00	155	185	Peak
3		5174.680	90.09	4.49	94.58	N/A	N/A	155	185	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band1_CH 38_ANT 0+1	Test Voltage	AC 120V/60Hz

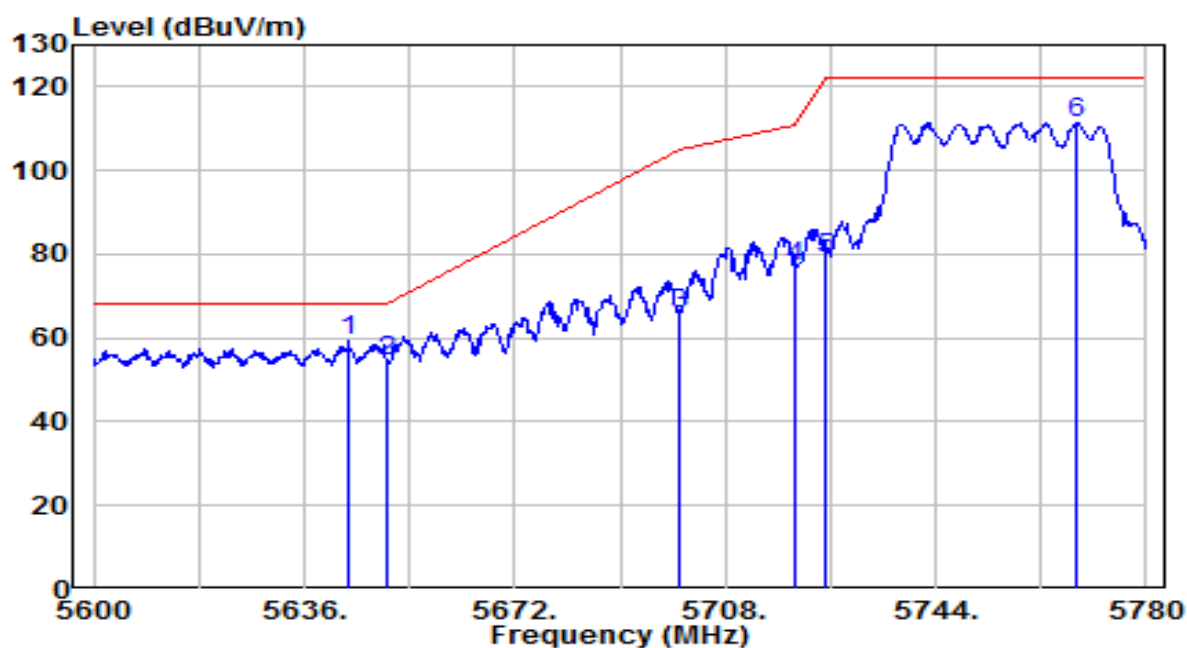


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.125	38.09	4.45	42.54	-11.46	54.00	155	185	Average
2		5150.000	37.70	4.46	42.17	-11.83	54.00	155	185	Average
3		5174.365	80.71	4.49	85.20	N/A	N/A	155	185	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

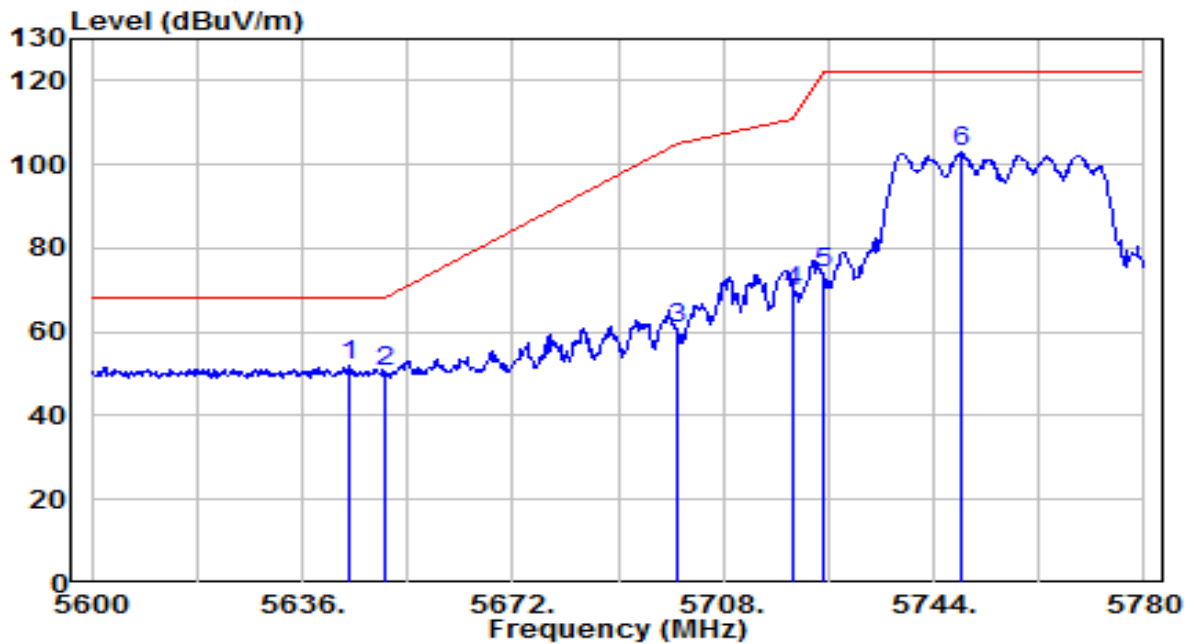


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5643.560	53.78	5.36	59.14	-9.06	68.20	210	175	Peak
2		5650.000	48.98	5.38	54.36	-13.84	68.20	210	175	Peak
3		5700.000	59.97	5.56	65.53	-39.67	105.20	210	175	Peak
4		5720.000	71.32	5.63	76.95	-33.85	110.80	210	175	Peak
5		5725.000	73.45	5.64	79.09	-43.11	122.20	210	175	Peak
6		5767.940	105.70	5.79	111.49	N/A	N/A	210	175	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 151_ANT 0+1	Test Voltage	AC 120V/60Hz

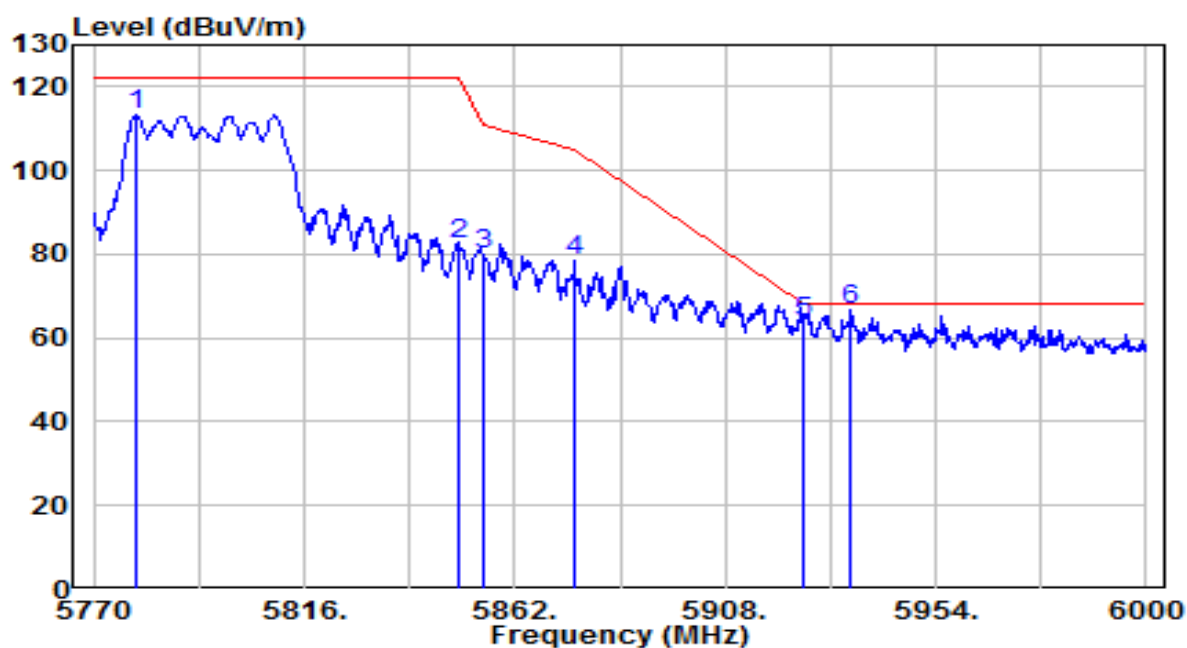


No		Frequency (MHz)	Reading (dBUV)	C.F (dB/m)	Measurement (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5644.100	46.61	5.36	51.97	-16.23	68.20	195	220	Peak
2		5650.000	45.29	5.38	50.68	-17.52	68.20	195	220	Peak
3		5700.000	55.11	5.56	60.67	-44.53	105.20	195	220	Peak
4		5720.000	64.08	5.63	69.70	-41.10	110.80	195	220	Peak
5		5725.000	68.20	5.64	73.85	-48.35	122.20	195	220	Peak
6		5748.680	97.49	5.73	103.21	N/A	N/A	195	220	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

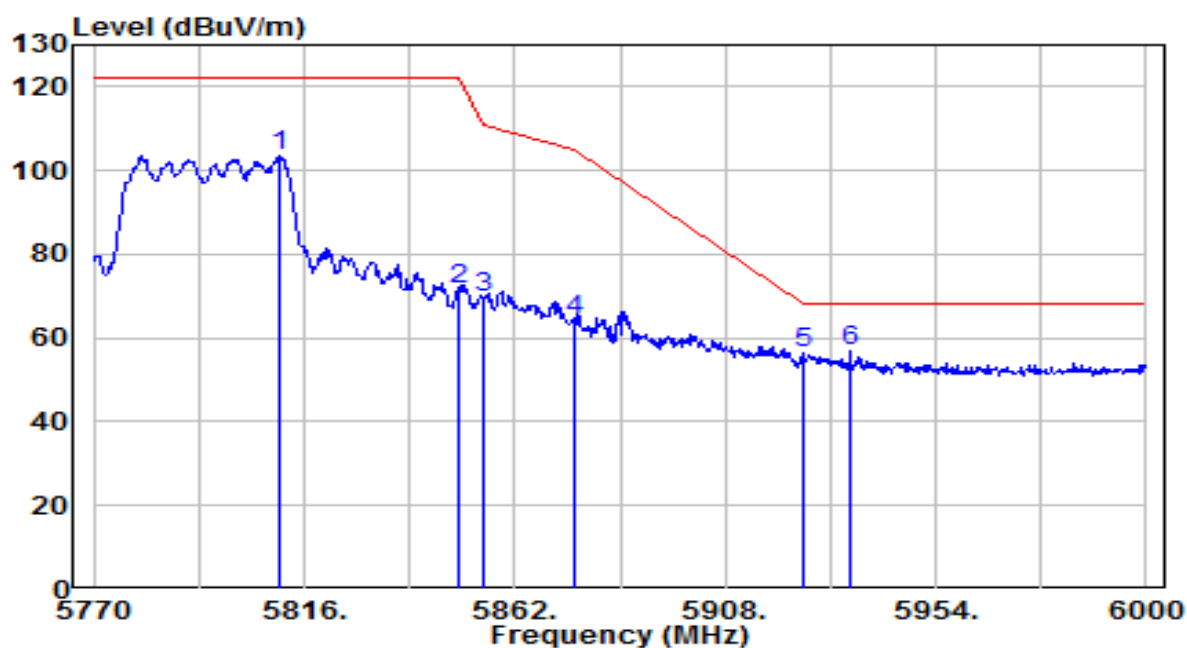


No	Frequency (MHz)	Reading (dBUV)	C.F (dB/m)	Measurement (dBUV/m)	Margin (dB)	Limit (dBUV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5779.200	107.37	5.83	113.20	N/A	N/A	215	160	Peak
2	5850.000	76.10	6.08	82.18	-40.02	122.20	215	160	Peak
3	5855.000	73.72	6.10	79.81	-30.99	110.80	215	160	Peak
4	5875.000	72.56	6.17	78.72	-26.48	105.20	215	160	Peak
5	5925.000	57.51	6.34	63.85	-4.35	68.20	215	160	Peak
6	* 5935.600	60.14	6.38	66.52	-1.68	68.20	215	160	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11n-40MHz_TX_Band4_CH 159_ANT 0+1	Test Voltage	AC 120V/60Hz

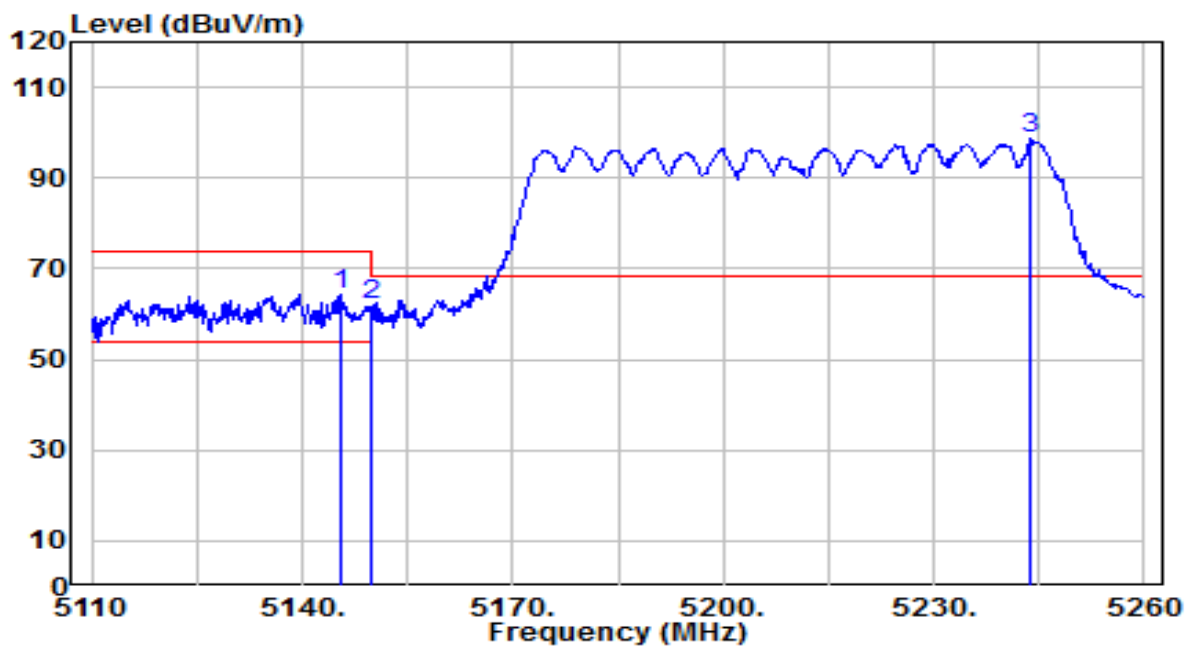


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5810.710	97.47	5.94	103.41	N/A	N/A	170	195	Peak
2	5850.000	65.73	6.08	71.81	-50.39	122.20	170	195	Peak
3	5855.000	63.39	6.10	69.49	-41.31	110.80	170	195	Peak
4	5875.000	58.26	6.17	64.42	-40.78	105.20	170	195	Peak
5	5925.000	49.94	6.34	56.28	-11.92	68.20	170	195	Peak
6	* 5935.370	50.53	6.38	56.90	-11.30	68.20	170	195	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

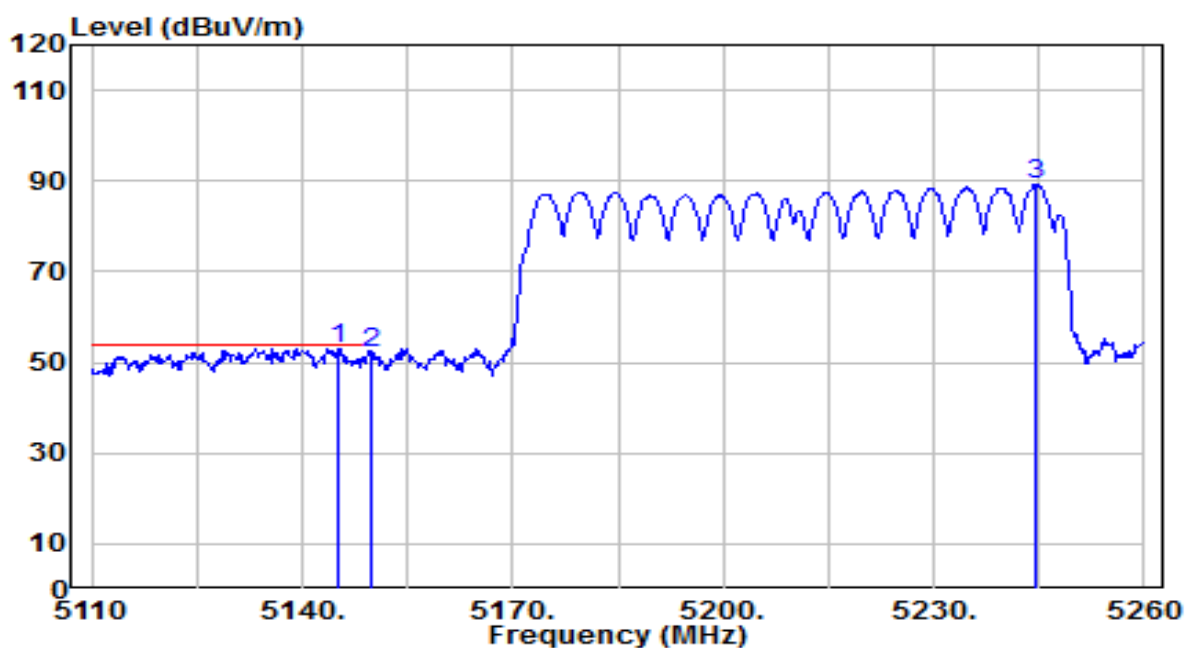


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5145.550	59.94	4.46	64.40	-9.60	74.00	185	195	Peak
2		5150.000	57.64	4.46	62.10	-11.90	74.00	185	195	Peak
3		5243.800	94.04	4.57	98.60	N/A	N/A	185	195	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

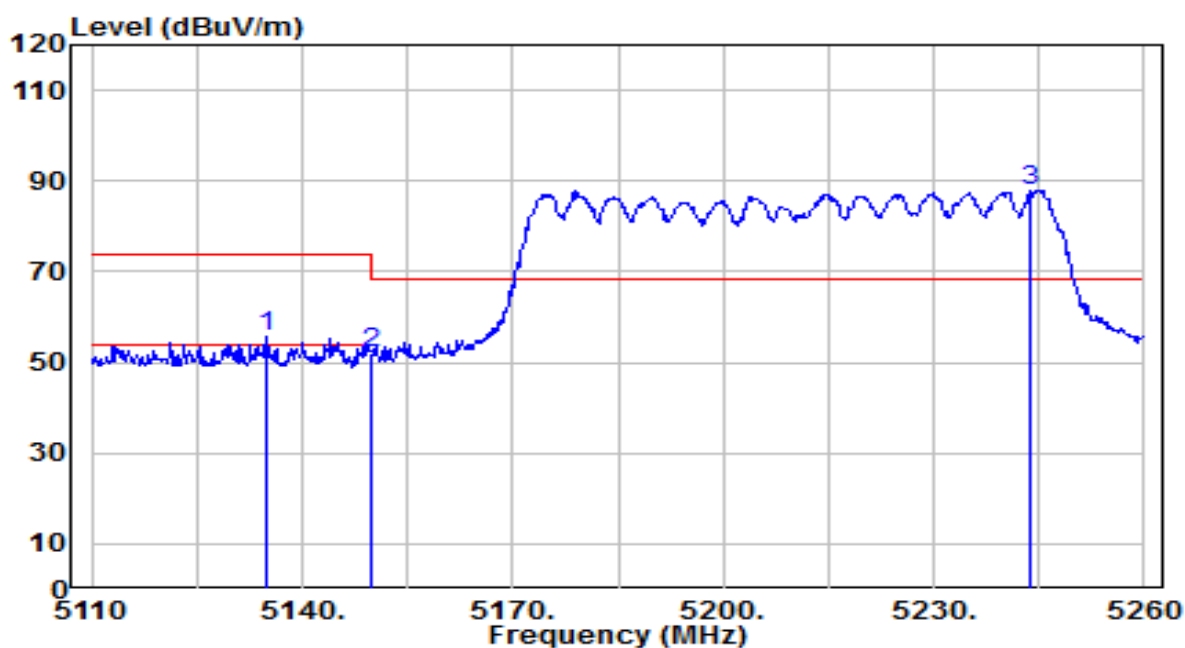


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5144.950	48.50	4.46	52.96	-1.04	54.00	185	195	Average
2		5150.000	47.56	4.46	52.02	-1.98	54.00	185	195	Average
3		5244.700	84.50	4.57	89.07	N/A	N/A	185	195	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

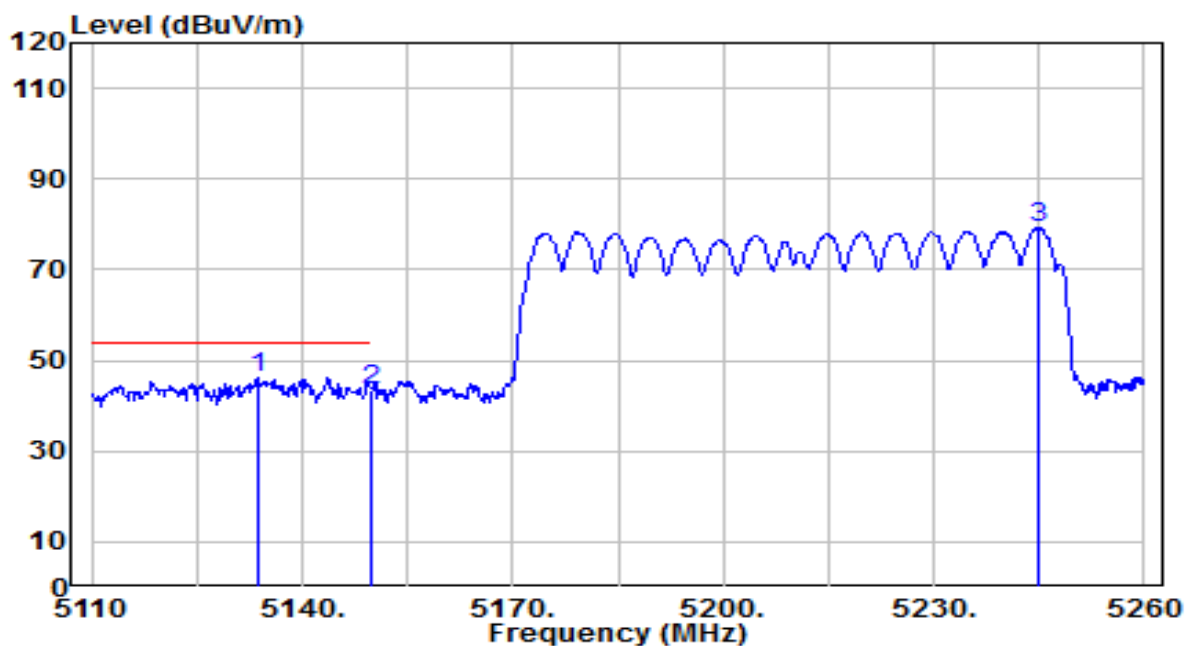


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5134.750	51.08	4.44	55.52	-18.48	74.00	155	185	Peak
2		5150.000	47.40	4.46	51.86	-22.14	74.00	155	185	Peak
3		5243.800	83.40	4.57	87.97	N/A	N/A	155	185	Peak

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band1_CH 42_ANT 0+1	Test Voltage	AC 120V/60Hz

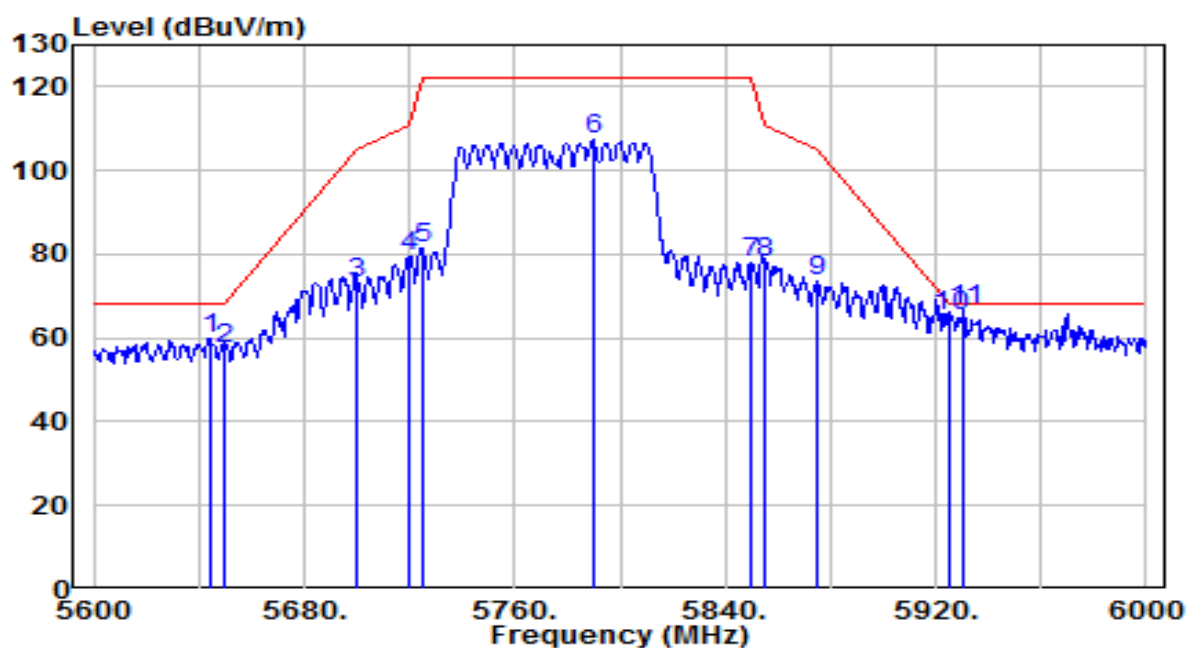


No		Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	*	5133.550	41.61	4.44	46.06	-7.94	54.00	155	185	Average
2		5150.000	39.22	4.46	43.68	-10.32	54.00	155	185	Average
3		5245.000	74.70	4.57	79.27	N/A	N/A	155	185	Average

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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Horizontal	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band4_CH 155_ANT 0+1	Test Voltage	AC 120V/60Hz

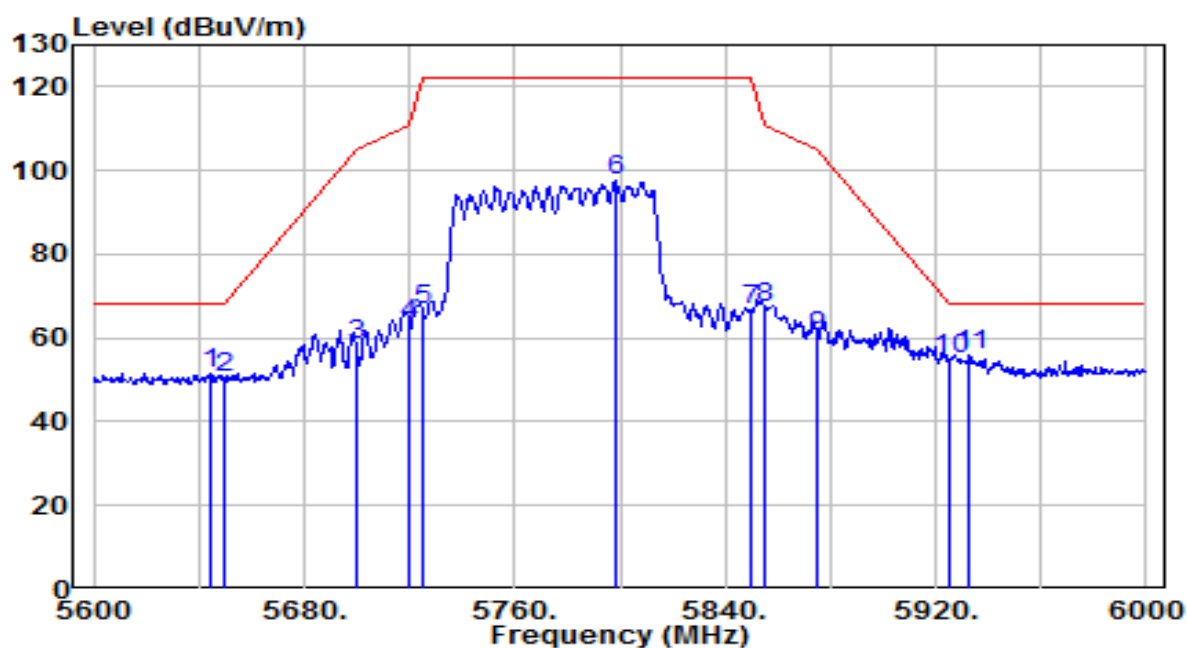


No	Frequency (MHz)	Reading (dBuV)	C.F (dB/m)	Measurement (dBuV/m)	Margin (dB)	Limit (dBuV/m)	Height (cm)	Angle (deg)	Remark (QP/PK/AV)
1	5644.000	54.51	5.36	59.87	-8.33	68.20	215	160	Peak
2	5650.000	52.07	5.38	57.45	-10.75	68.20	215	160	Peak
3	5700.000	67.42	5.56	72.98	-32.22	105.20	215	160	Peak
4	5720.000	73.65	5.63	79.28	-31.52	110.80	215	160	Peak
5	5725.000	75.61	5.64	81.25	-40.95	122.20	215	160	Peak
6	5789.600	101.45	5.87	107.32	N/A	N/A	215	160	Peak
7	5850.000	72.01	6.08	78.08	-44.12	122.20	215	160	Peak
8	5855.000	72.02	6.10	78.11	-32.69	110.80	215	160	Peak
9	5875.000	67.29	6.17	73.46	-31.74	105.20	215	160	Peak
10	5925.000	58.73	6.34	65.07	-3.13	68.20	215	160	Peak
11	* 5930.800	60.53	6.36	66.89	-1.31	68.20	215	160	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	Intercom	Date of Test	2023-12-15
Factor	BBHA 9120D	Temp. / Humidity	23°C /63%
Polarity	Vertical	Site / Test Engineer	AC1 / Todd
Test Mode	802.11ac-80MHz_TX_Band4_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	5644.000	46.11	5.36	51.47	-16.73	68.20	170	195	Peak
2	5650.000	45.13	5.38	50.51	-17.69	68.20	170	195	Peak
3	5700.000	52.93	5.56	58.48	-46.72	105.20	170	195	Peak
4	5720.000	57.79	5.63	63.41	-47.39	110.80	170	195	Peak
5	5725.000	60.98	5.64	66.62	-55.58	122.20	170	195	Peak
6	5798.000	91.62	5.90	97.52	N/A	N/A	170	195	Peak
7	5850.000	60.74	6.08	66.82	-55.38	122.20	170	195	Peak
8	5855.000	61.07	6.10	67.16	-43.64	110.80	170	195	Peak
9	5875.000	54.20	6.17	60.36	-44.84	105.20	170	195	Peak
10	5925.000	48.73	6.34	55.07	-13.13	68.20	170	195	Peak
11	* 5932.800	49.68	6.37	56.04	-12.16	68.20	170	195	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.

7.9. AC Conducted Emissions Measurement

7.9.1. 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.

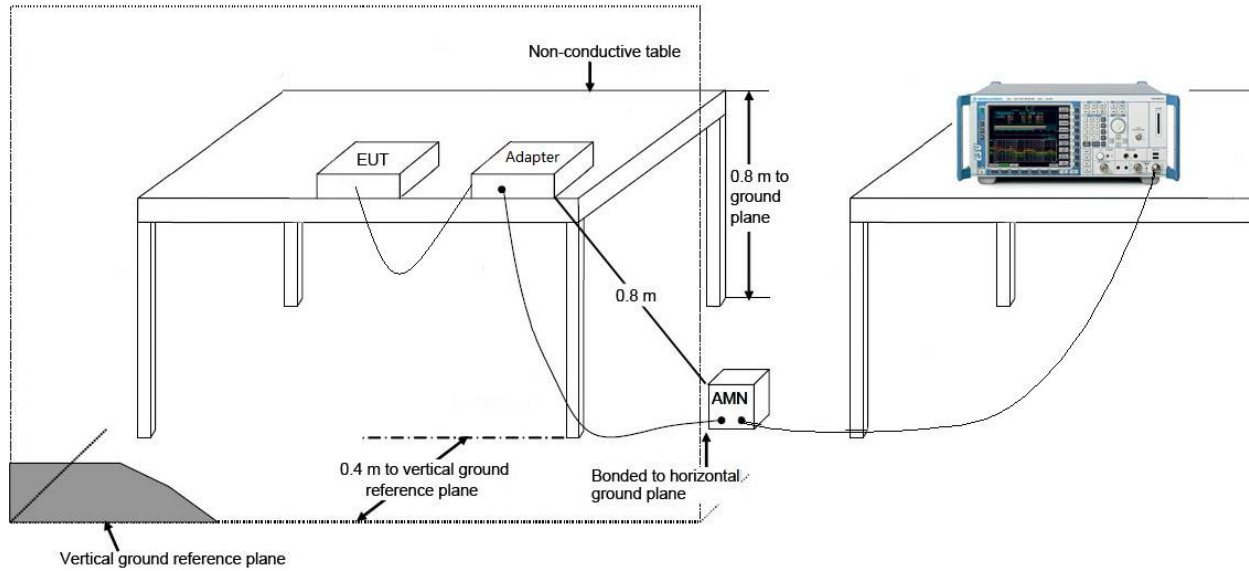
7.9.2. Test Procedure

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.

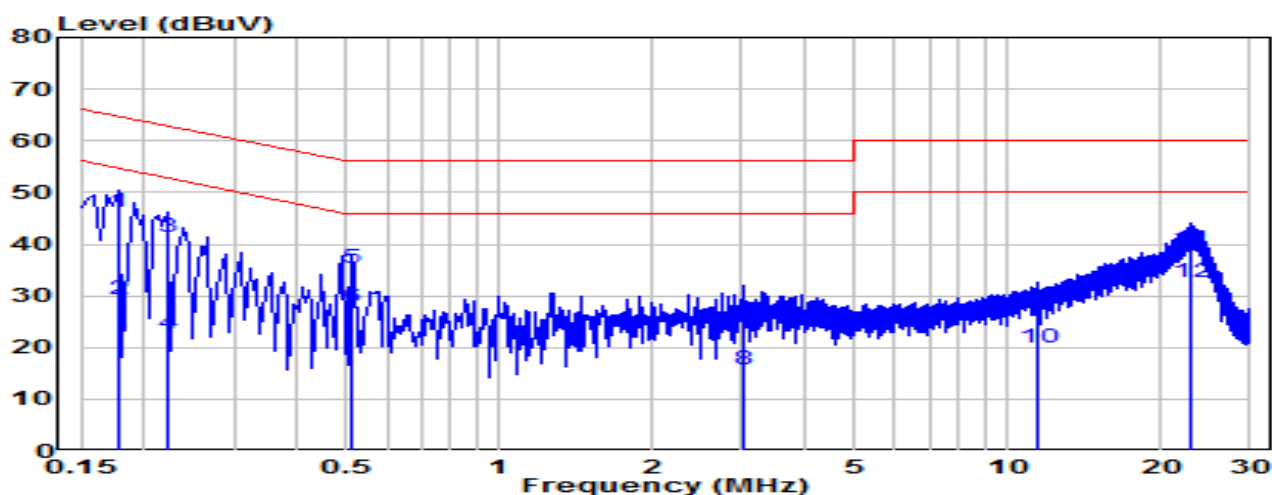
Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

7.9.3. Test Setup



7.9.4. Test Result

EUT	Intercom	Date of Test	2023-12-06
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	22.2°C /56%
Polarity	Line1	Site / Test Engineer	SR2 / Bob
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

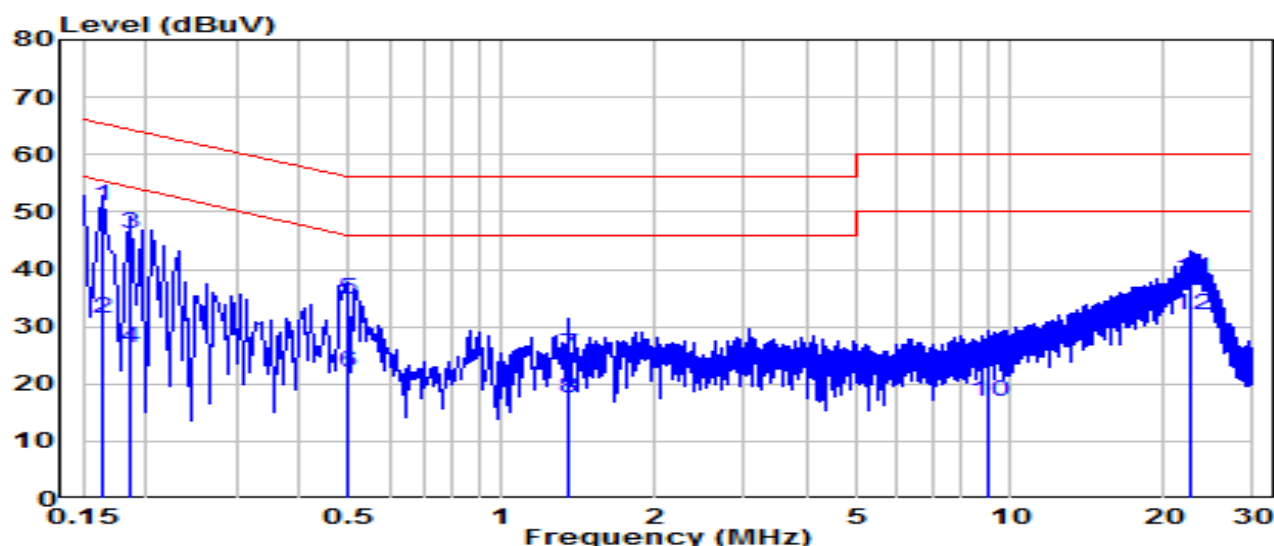


No		Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV)	Margin (dB)	Limit (dBUV)	Remark (QP/PK/AV)
1		0.177	36.48	9.62	46.10	-18.53	64.63	QP
2		0.177	19.58	9.62	29.21	-25.42	54.63	Average
3		0.222	31.78	9.62	41.40	-21.34	62.74	QP
4		0.222	12.95	9.62	22.58	-30.17	52.74	Average
5		0.514	25.67	9.64	35.32	-20.68	56.00	QP
6		0.514	18.07	9.64	27.71	-18.29	46.00	Average
7		3.034	14.68	9.71	24.39	-31.61	56.00	QP
8		3.034	6.09	9.71	15.80	-30.20	46.00	Average
9		11.502	17.29	9.87	27.16	-32.84	60.00	QP
10		11.502	9.96	9.87	19.83	-30.17	50.00	Average
11	*	22.859	29.07	9.92	38.98	-21.02	60.00	QP
12	*	22.859	22.55	9.92	32.47	-17.53	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	Intercom	Date of Test	2023-12-06
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	22.2°C /56%
Polarity	Neutral	Site / Test Engineer	SR2 / Bob
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 120V/60Hz

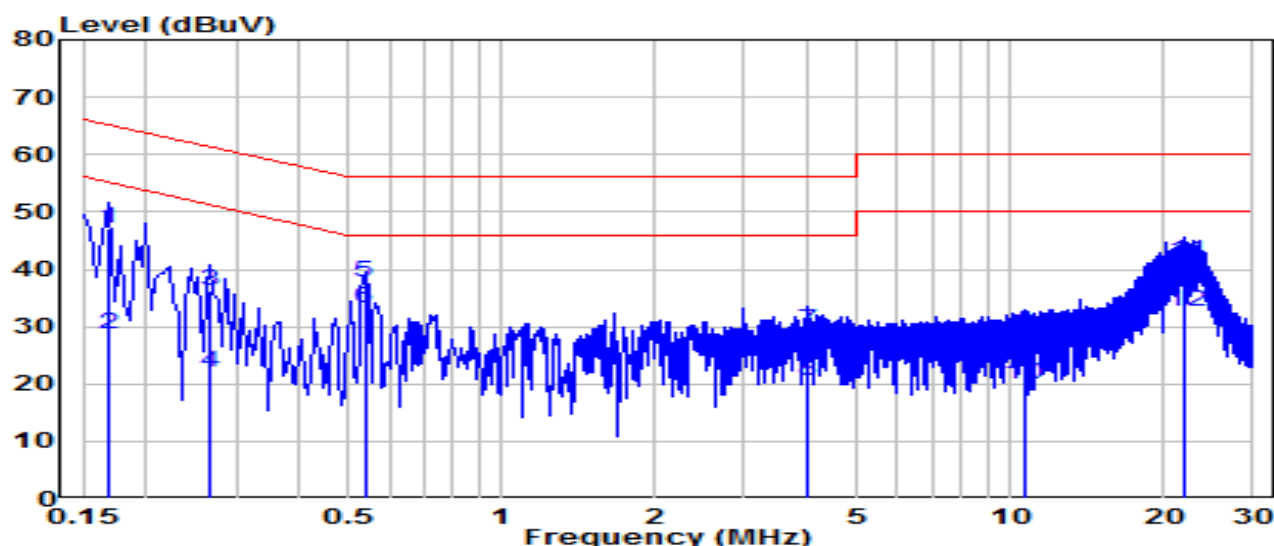


No		Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV)	Margin (dB)	Limit (dBUV)	Remark (QP/PK/AV)
1	*	0.163	41.44	9.62	51.06	-14.22	65.28	QP
2	*	0.163	21.69	9.62	31.31	-23.97	55.28	Average
3		0.186	36.71	9.62	46.33	-17.88	64.21	QP
4		0.186	16.70	9.62	26.33	-27.89	54.21	Average
5		0.496	25.17	9.64	34.81	-21.25	56.06	QP
6		0.496	12.43	9.64	22.08	-23.98	46.06	Average
7		1.347	15.28	9.68	24.96	-31.04	56.00	QP
8		1.347	7.94	9.68	17.61	-28.39	46.00	Average
9		9.019	14.01	9.85	23.86	-36.14	60.00	QP
10		9.019	7.02	9.85	16.86	-33.14	50.00	Average
11		22.684	28.32	10.01	38.33	-21.67	60.00	QP
12		22.684	21.90	10.01	31.90	-18.10	50.00	Average

Note:

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

EUT	Intercom	Date of Test	2023-12-06
Factor	CE_ENV216-L1 (Filter ON)	Temp. / Humidity	22.2°C /56%
Polarity	Line1	Site / Test Engineer	SR2 / Bob
Test Mode	802.11ac-20MHz_TX_Band1_CH 44_ANT 0+1	Test Voltage	AC 240V/60Hz

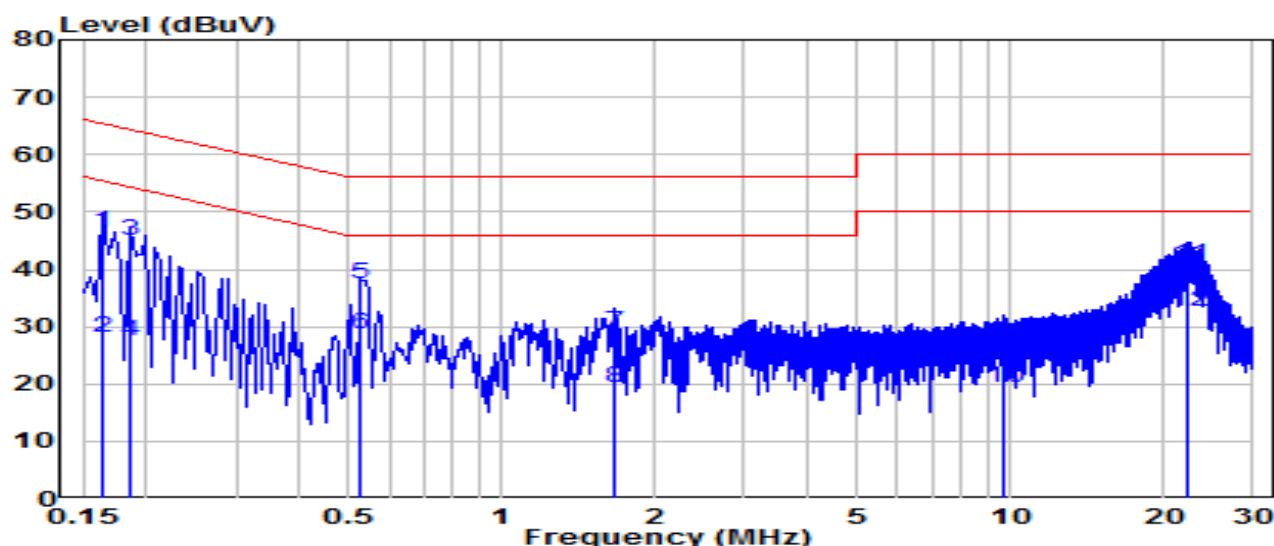


No		Frequency (MHz)	Reading (dBUV)	C.F (dB)	Measurement (dBUV)	Margin (dB)	Limit (dBUV)	Remark (QP/PK/AV)
1		0.168	37.51	9.62	47.13	-17.93	65.06	QP
2		0.168	19.14	9.62	28.76	-26.30	55.06	Average
3		0.267	26.67	9.63	36.30	-24.92	61.21	QP
4		0.267	12.47	9.63	22.10	-29.11	51.21	Average
5	*	0.537	28.09	9.64	37.74	-18.26	56.00	QP
6	*	0.537	23.70	9.64	33.34	-12.66	46.00	Average
7		4.011	19.63	9.73	29.36	-26.64	56.00	QP
8		4.011	10.74	9.73	20.47	-25.53	46.00	Average
9		10.625	18.89	9.86	28.76	-31.24	60.00	QP
10		10.625	10.15	9.86	20.02	-29.98	50.00	Average
11		22.067	31.57	9.92	41.49	-18.51	60.00	QP
12		22.067	22.67	9.92	32.59	-17.41	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	Intercom	Date of Test	2023-12-06
Factor	CE_ENV216-N (Filter ON)	Temp. / Humidity	22.2°C /56%
Polarity	Neutral	Site / Test Engineer	SR2 / Bob
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	36.84	9.62	46.46	-18.83	65.28	QP
2		0.163	18.45	9.62	28.07	-27.21	55.28	Average
3		0.186	35.35	9.62	44.97	-19.24	64.21	QP
4		0.186	17.74	9.62	27.36	-26.85	54.21	Average
5	*	0.528	27.77	9.64	37.41	-18.59	56.00	QP
6	*	0.528	19.11	9.64	28.75	-17.25	46.00	Average
7		1.666	19.27	9.68	28.96	-27.04	56.00	QP
8		1.666	9.74	9.68	19.43	-26.57	46.00	Average
9		9.653	17.35	9.86	27.21	-32.79	60.00	QP
10		9.653	9.51	9.86	19.37	-30.63	50.00	Average
11		22.405	30.66	10.01	40.67	-19.33	60.00	QP
12		22.405	22.60	10.01	32.61	-17.39	50.00	Average

Note:

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

8. CONCLUSION

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

XBG-BA1GMNRCH8 & IC: 21285-BA1GMNRCH8 is in compliance with Part 15E & RSS-247 of the FCC & IC Rules.

Appendix A : Test Photograph

Refer to “2401TWN801-UT” file.

Appendix B : External Photograph

Refer to “2401TWN801-UE” file.

Appendix C : Internal Photograph

Refer to “2401TWN801-UI” file.

_____ The End _____