Prüfbericht-Nr.: *Test report no.*:	**CN24YUWU 001**	**Auftrags-Nr.:** *Order no.*:	168486965	**Page 1 of 25** *Seite 1 von 25*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2024-06-03	

Auftraggeber: *Client*:	Harman International Industries, Incorporated 8500 Balboa Blvd, Northridge, California, 91329, United States
Prüfgegenstand: *Test item*:	BLUETOOTH HEADSET
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	JUNIOR 320BT (Trademark: JBL)
Auftrags-Inhalt: *Order content*:	Type test
Prüfgrundlage: *Test specification*:	CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247-Issue 3 August 2023 CFR47 FCC Part 15: Subpart C Section 15.207 RSS-Gen Issue 5 March 2019 CFR47 FCC Part 15: Subpart C Section 15.209

Wareneingangsdatum: *Date of sample receipt*:	2024-06-03
Prüfmuster-Nr.: *Test sample no:*	A003721212-016
Prüfzeitraum: *Testing period*:	2024-06-03 – 2024-06-12
Ort der Prüfung: *Place of testing*:	See Section 2.1
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüfergebnis*: *Test result**:	Pass

Refer to photos document

geprüft von: tested by:	X Signed by: Harry W. C. Wu	**genehmigt von:** *authorized by*:	X Signed by: Alex Lan
Datum: *Date:* 2024-06-28		**Ausstellungsdatum:** *Issue date:* 2024-06-28	
Stellung / Position:	Project Manager	**Stellung** / Position:	Reviewer

Sonstiges / *Other*: FCC ID: APIJR320BT
IC: 6132A-JR320BT HVIN: JUNIOR 320BT

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt
Condition of the test item at delivery: *Test item complete and undamaged*

* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
** Legend:*	*P(ass) = passed a.m. test specification(s)*	*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

Remarks
Anmerkungen

1	The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request. *Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.* *Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.*
2	As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. *Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.*
3	Test clauses with remark of * are subcontracted to qualified subcontractors and descripted under the respective test clause in the report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report. *Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.*
4	The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the “Zero Guard Band Rule” and “Simple Acceptance” in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019. *Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnisen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezueglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.*

Test Summary

5.1.1 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 99% BANDWIDTH
RESULT: Pass

5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHZ BANDWIDTH
RESULT: Pass

5.1.5 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.6 20DB BANDWIDTH
RESULT: Pass

5.1.7 CARRIER FREQUENCY SEPARATION
RESULT: Pass

5.1.8 FREQUENCY STABILITY
RESULT: Pass

5.1.9 NUMBER OF HOPPING FREQUENCY
RESULT: Pass

5.1.10 TIME OF OCCUPANCY
RESULT: Pass

5.1.11 CONDUCTED EMISSION ON AC MAINS
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of Classical Bluetooth.

Appendix B: Photographs of the Test Set-up.

2 Test Sites

2.1 Test Facilities

Radio Spectrum Testing and Unwanted Emission Testing were tested in

TÜV Rheinland (Shenzhen) Co., Ltd.
No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China/518110

FCC Registration No.: 694916

IC Registration No.: 25069 and the CAB identifier is CN0078.

Conducted Emission was tested in

Shenzhen Academy of Metrology and Quality Inspection
NETC Building, No. 4 Tongfa Road, Xili, Nanshan District, Shenzhen, Guangdong, 518055, People's Republic of China

FCC Registration No.: 582918

IC Registration No.: 11177A

The test at the test site had been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (TS8997)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
Wireless Connectivity Tester	R&S	CMW270	101375	25.07.2024
Signal Analyzer	R&S	FSV 40	101441	25.07.2024
Vector Signal Generator	R&S	SMBV100A	263301	25.07.2024
Signal Generator	R&S	SMB100A	115186	25.07.2024
OSP	R&S	OSP 150	101017	13.11.2024
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	R&S	WMS32 (V11.00.00)	N/A	N/A
Power Meter	R&S	NRP2	107105	13.11.2024
Power Sensor	R&S	NRP-Z81	105677	25.07.2024
Humid & Temp Programmable Tester	BOST	NTH090-60	19040801	28.02.2025
Shielding Room	Albatross	SR8	APC17151-SR8	22.06.2024
Unwanted Emission Testing (TS9975)				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	25.07.2024
Signal Analyzer	R&S	FSV 40	101439	25.07.2024
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	25.07.2024
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	25.07.2024
Amplifier	R&S	SCU-18F	180070	25.07.2024
Amplifier	R&S	SCU40A	100475	25.07.2024
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	06.08.2024
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	06.08.2024
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	27.08.2024
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	06.08.2024
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	22.06.2024
Conducted Emission on AC Mains				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EMI Test Receiver	R&S	ESCS30	SB3319	2024-10-25
Artificial Mains Network	R&S	ESH3-Z5	SB2604	2025-01-12
EMC32 test software	R&S	EMC32	N/A	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basics using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Parameter	Uncertainty (k=2)
Occupied Channel Bandwidth	± 2.08 %
RF output power, conducted	± 0.99 dB
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
All emissions, radiated	± 4.17 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China/518110 is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

Shenzhen Academy of Metrology and Quality Inspection Test facility located at NETC Building, No. 4 Tongfa Road, Xili, Nanshan District, Shenzhen, Guangdong, 518055, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a Bluetooth Headset, which supports Bluetooth dual mode technology, this Headset has three colors of enclosures (Pink, Blue, Mint Green).

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	**Value**
Kind of Equipment	BLUETOOTH HEADSET
Type Designation	JUNIOR 320BT
Trademark	JBL
FCC ID	APIJR320BT
IC	6132A-JR320BT
HVIN	JUNIOR 320BT
Extreme Temperature Range	0ºC to +45ºC
Operating Voltage	DC 3.7V, 500mAh via built-in lithium-ion battery DC 5V, 1A via Type-C port
Technical Specification of Classical Bluetooth	
Bluetooth Core Version	Bluetooth 5.3
Operating Frequency band	2402 ~ 2480 MHz
Channel Number	79 channels
Channel separation	1MHz
Modulation	GFSK, π/4DQPSK, 8DPSK
Antenna Type	PCB Antenna
Antenna Gain	1.5 dBi (Provided by the Client)
Technical Specification of Bluetooth Low Energy	
Bluetooth Core Version	Bluetooth 5.3
Operating Frequency band	2402 ~ 2480 MHz for 1Mbps 2404 ~ 2478 MHz for 2Mbps
Channel Number	40 channels for 1Mbps 38 channels for 2Mbps
Channel separation	2MHz
Data rate	1Mbps, 2Mbps
Modulation	GFSK
Antenna Type	PCB Antenna
Antenna Gain	1.5 dBi (Provided by the Client)

Table 3: RF Channel and Frequency of Classic Bluetooth

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	**2402.00**	20	2422.00	40	2442.00	60	2462.00
01	2403.00	21	2423.00	41	2443.00	61	2463.00
02	2404.00	22	2424.00	42	2444.00	62	2464.00
03	2405.00	23	2425.00	43	2445.00	63	2465.00
04	2406.00	24	2426.00	44	2446.00	64	2466.00
05	2407.00	25	2427.00	45	2447.00	65	2467.00
06	2408.00	26	2428.00	46	2448.00	66	2468.00
07	2409.00	27	2429.00	47	2449.00	67	2469.00
08	2410.00	28	2430.00	48	2450.00	68	2470.00
09	2411.00	29	2431.00	49	2451.00	69	2471.00
10	2412.00	30	2432.00	50	2452.00	70	2472.00
11	2413.00	31	2433.00	51	2453.00	71	2473.00
12	2414.00	32	2434.00	52	2454.00	72	2474.00
13	2415.00	33	2435.00	53	2455.00	73	2475.00
14	2416.00	34	2436.00	54	2456.00	74	2476.00
15	2417.00	35	2437.00	55	2457.00	75	2477.00
16	2418.00	36	2438.00	56	2458.00	76	2478.00
17	2419.00	37	2439.00	57	2459.00	77	2479.00
18	2420.00	38	2440.00	58	2460.00	**78**	**2480.00**
19	2421.00	**39**	**2441.00**	59	2461.00	--	--

Table 4: RF Channel and Frequency of Bluetooth Low Energy

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	**2402.00**	10	2422.00	20	2442.00	30	2462.00
01	2404.00	11	2424.00	21	2444.00	31	2464.00
02	2406.00	12	2426.00	22	2446.00	32	2466.00
03	2408.00	13	2428.00	23	2448.00	33	2468.00
04	2410.00	14	2430.00	24	2450.00	34	2470.00
05	2412.00	15	2432.00	25	2452.00	35	2472.00
06	2414.00	16	2434.00	26	2454.00	36	2474.00
07	2416.00	17	2436.00	27	2456.00	37	2476.00
08	2418.00	18	2438.00	28	2458.00	38	2478.00
09	2420.00	**19**	**2440.00**	29	2460.00	**39**	**2480.00**

3.3 Independent Operation Modes

The basic operation modes are:

A. On
   1. Bluetooth transmitting mode (BR & EDR mode)
      a) Low Channel
      b) Middle Channel
      c) High Channel

B. On, Transmitting on Hopping channel

C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Block Diagram
- Schematics
- Technical Description
- FCC/IC Label and Location Info
- Photo Document
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.10: 2013.
According to clause 3.1, all test items were applied on model JUNIOR 320BT with pink color of enclosure.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N or Rating
Laptop	Lenovo	T480	PF-16A6N8
AC/DC Adapter	HUAWEI	HW-200440C00	Input: 100-240V, 50/60Hz, 2.4A Output: DC 5V, 3A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

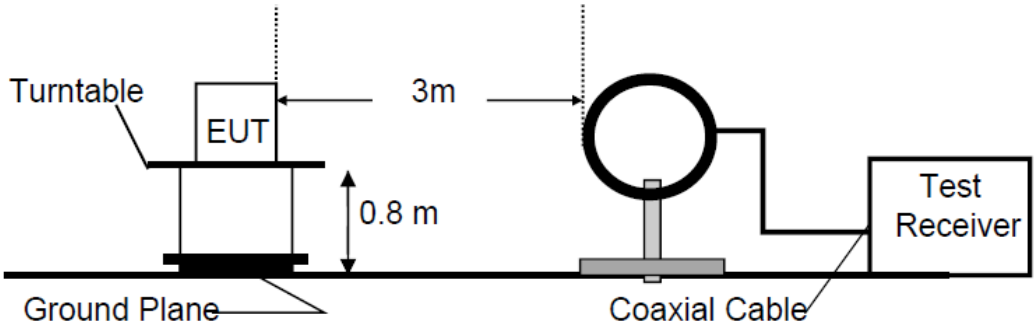


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

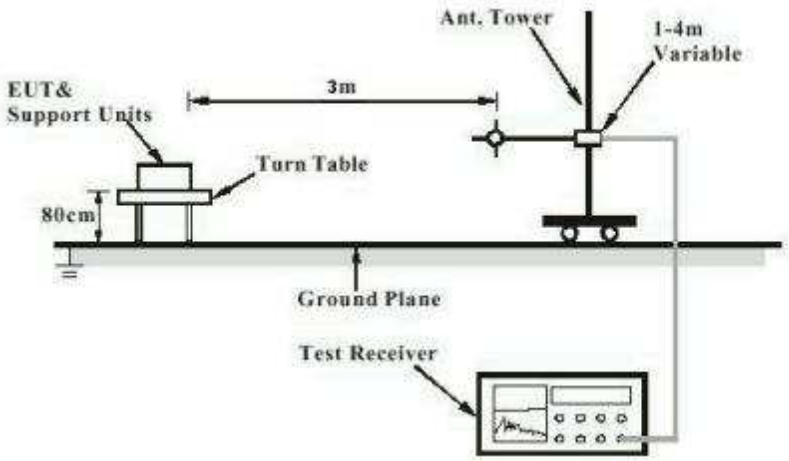


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

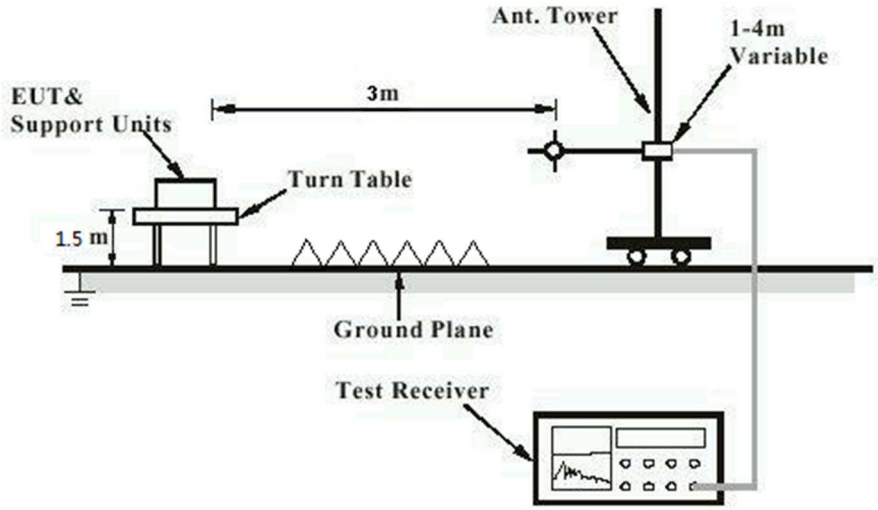


Diagram of Measurement Configuration for Conducted Transmitter Measurement

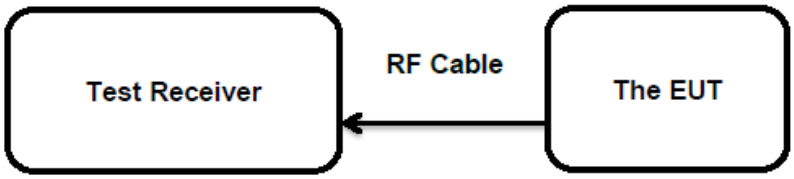
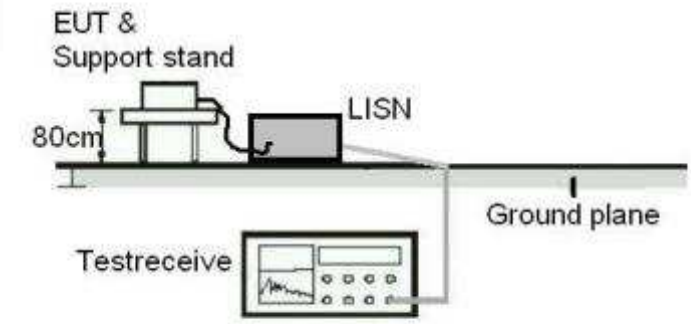


Diagram of Measurement Configuration for Mains Conduction Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT: **Pass**

Test Specification

Test standard : FCC Part 15.247(b)(4) and Part 15.203
RSS-Gen Clause 8.3

According to the manufacturer declared, the EUT has one PCB antenna , the directional gain of antennas is 1.5 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Conducted Output Power

RESULT: **Pass**

Test Specification

Test standard	FCC Part 15.247(b)(1) RSS-247 Clause 5.4(b)
Basic standard	ANSI C63.10: 2013
Limits	FHSS<0.125W(Maximum peak conducted output power) < 4 W (e.i.r.p.)
Kind of test site	Shielded Room

Test Setup

Date of testing	2024-06-03 to 2024-06-12
Input voltage	DC 3.7V
Operation mode	A.1
Test channel	Low / Middle / High
Ambient temperature	23.8 ℃
Relative humidity	50.2 %
Atmospheric pressure	101 kPa

Table 6: Test Result of Maximum Conducted Output Power

Test Mode	Channel Frequency (MHz)	Measured Peak Output Power		Limit (W)
		(dBm)	(W)	
BR	2402	6.1	0.00407	< 0.125
	2441	6.2	0.00417	
	2480	6.2	0.00417	
EDR	2402	5.9	0.00389	< 0.125
	2441	5.9	0.00389	
	2480	6.0	0.00398	

Note: The cable loss is taken into account in results and the maximum e.i.r.p. is 7.7 dBm less than 4W(36dBm).

5.1.3 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	RSS-Gen Clause 6.7
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	A.1
Test channel	:	Low / Middle / High
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A

Table 7: Test Result of 99% Bandwidth

Test Mode	Channel Frequency (MHz)	Measured 99% Bandwidth (MHz)	Limit
BR	2402	0.875	/
	2441	0.875	
	2480	0.875	
EDR	2402	1.150	/
	2441	1.150	
	2480	1.150	

Note: The fundamental emissions stay within the allocated band 2400-2483.5MHz.

5.1.4 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power);
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	A.1
Test channel	:	Low / Middle / High
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to following test plot, and compliance is achieved as well.

For the measurement records, refer to the appendix A

5.1.5 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 6 & Table 7
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	A.1
Test channel	:	Low / Middle / High
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics.

For the measurement records, refer to the appendix A

5.1.6 20dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(1) RSS-247 Clause 5.1(a)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	A.1
Test channel	:	Low / Middle / High
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A

Table 8: Test Result of -20dB Bandwidth

Test Mode	Channel Frequency (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
BR	2402	925	616.667	/
	2441	950	633.333	
	2480	950	633.333	
EDR	2402	1195	796.667	/
	2441	1195	796.667	
	2480	1195	796.667	

5.1.7 Carrier Frequency Separation

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(1) RSS-247 Clause 5.1(b)
Basic standard	:	ANSI C63.10: 2013
Limits	:	≥ 25kHz or 2/3 of 20dB bandwidth, whichever is greater
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A

Table 9: Test Result of Carrier Frequency Separation

Test Mode	Channel	Result[MHz]	Limit[MHz]	Verdict
BR-DH5	Hop	1.004	≥0.633	PASS
EDR-3DH5	Hop	1.001	≥0.797	PASS

Note:

The limit is maximum 2/3 of the 20 dB bandwidth: 796.667KHz.

5.1.8 Frequency stability

RESULT: **Pass**

Test Specification

Test standard	:	RSS-247 Clause 8.11
Basic standard	:	ANSI C63.10: 2013
Limits	:	within at least the central 80% of its permitted operating frequency band (2400-2483.5MHz)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	B
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A

5.1.9 Number of Hopping Frequency

RESULT: **Pass**

Test Specification

Test standard	:	FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	≥ 15 non-overlapping channels
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	B
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

Table 10: Test Result of Number of Hopping Frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
2402 to 2480 MHz	79	≥15	Pass

5.1.10 Time of Occupancy

RESULT: **Pass**

Test Specification

Test standard	:	FCC part 15.247(a)(1)(iii) RSS-247 Clause 5.1(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 0.4s
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 3.7V
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	23.8 ℃
Relative humidity	:	50.2 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.11 Conducted Emission on AC Mains

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	:	ANSI C63.10: 2013
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.207(a) RSS-Gen Table 4
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2024-06-03 to 2024-06-12
Input voltage	:	DC 5V via Type-C interface
Operation mode	:	B
Earthing	:	Not connected
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

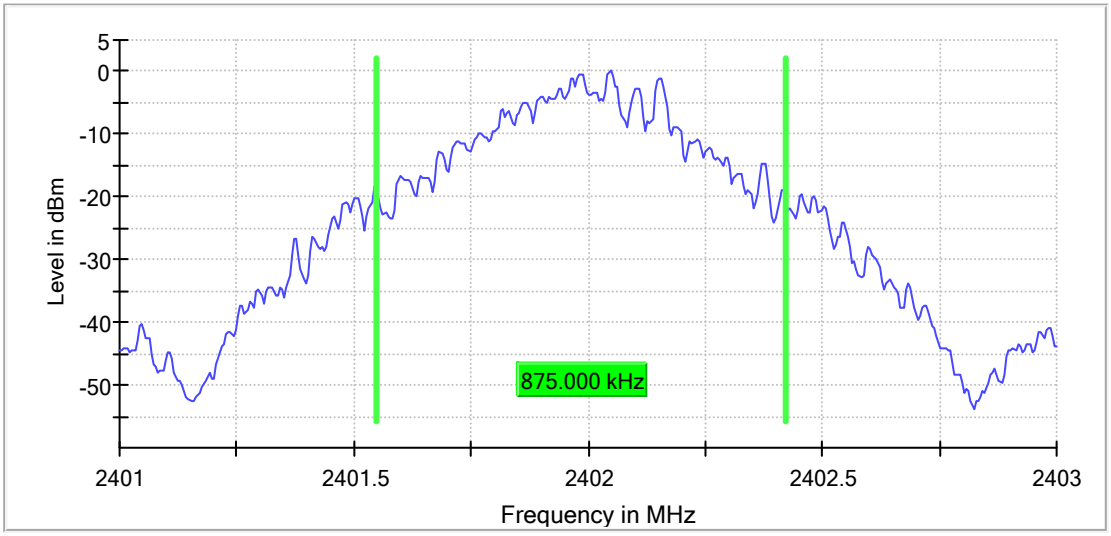
7 List of Tables

Appendix A: Test Results of Classical Bluetooth

Appendix A.1: Test Results of 99% Bandwidth

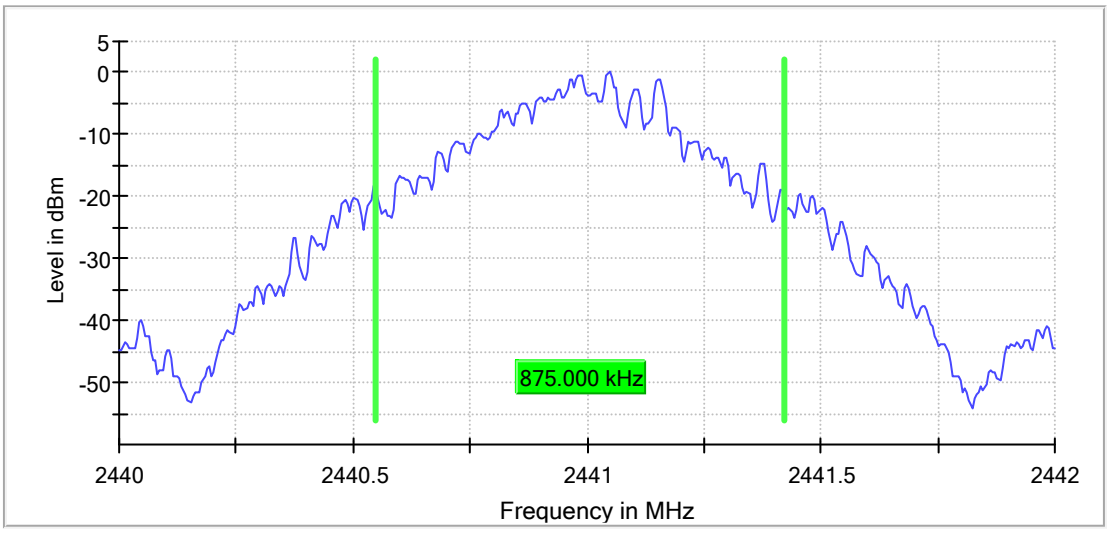
DH5_Ant1_2402

99 % Bandwidth



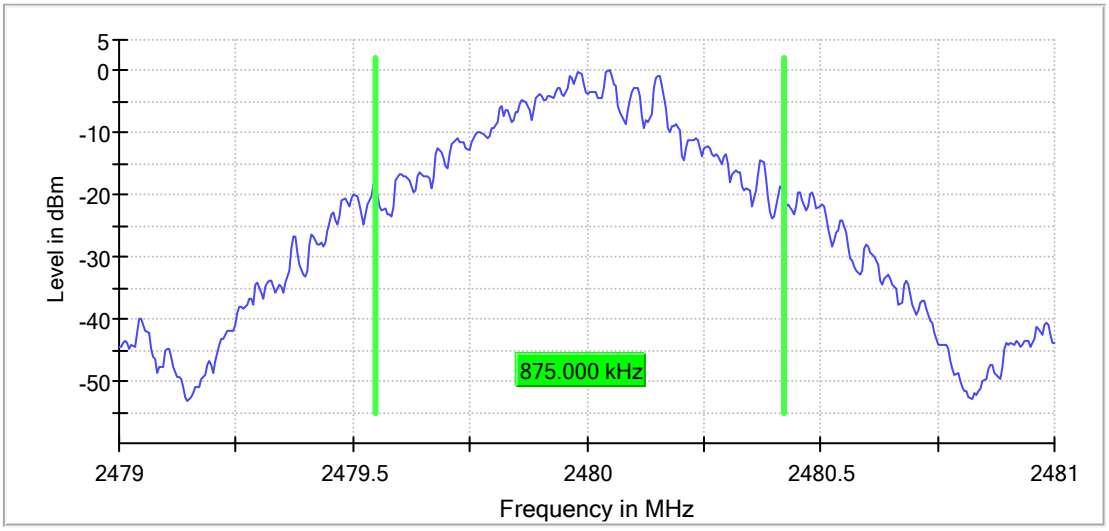
DH5_Ant1_2441

99 % Bandwidth



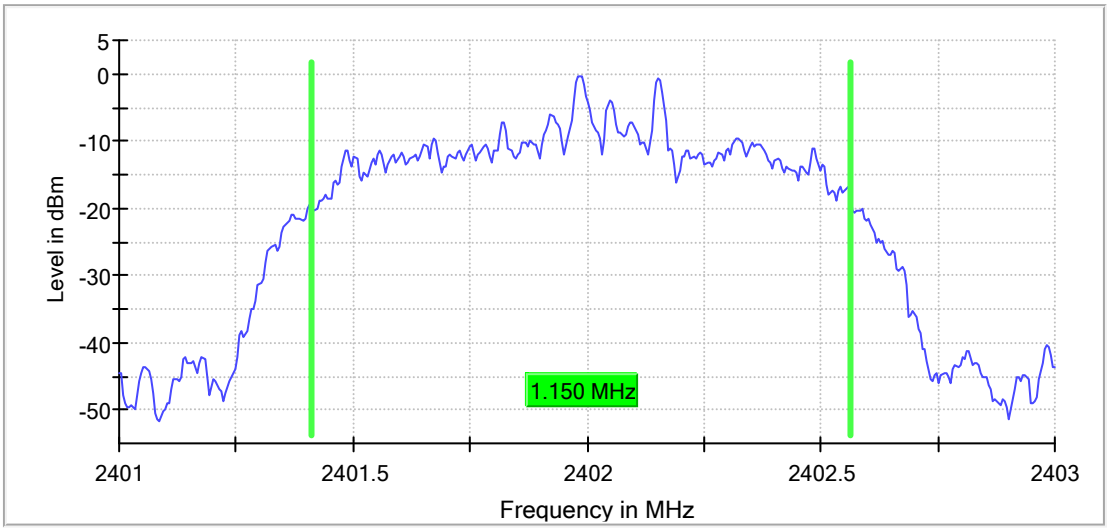
DH5_Ant1_2480

99 % Bandwidth



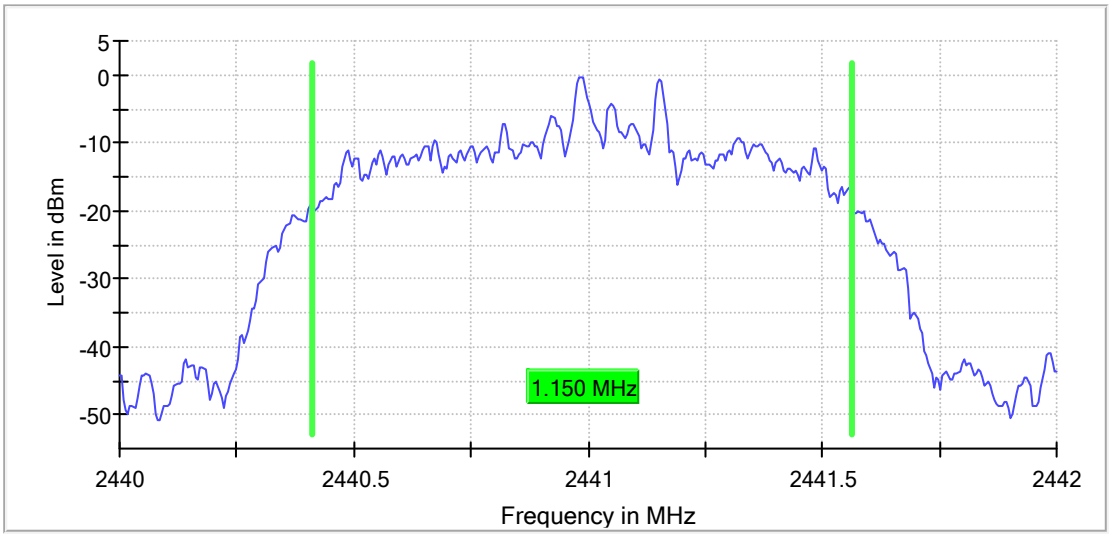
3DH5_Ant1_2402

99 % Bandwidth



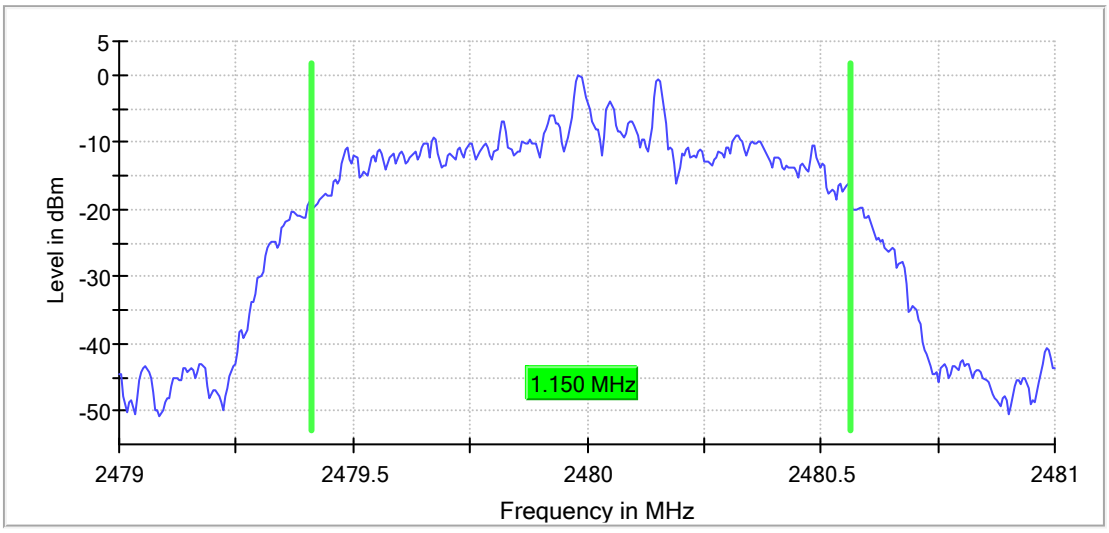
3DH5_Ant1_2441

99 % Bandwidth



3DH5_Ant1_2480

99 % Bandwidth



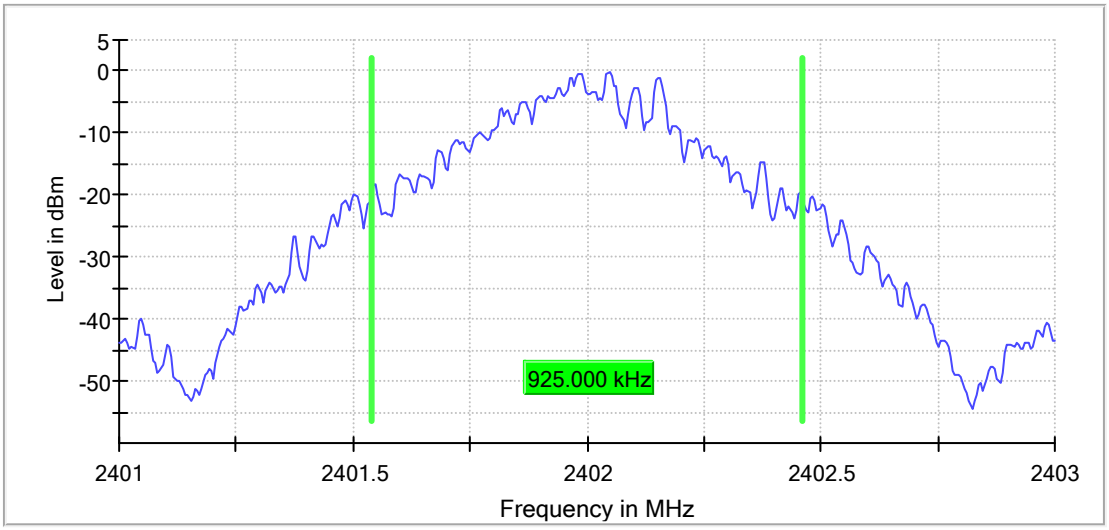
Measurement

Setting	Instrument Value
Span	2.000 MHz
RBW	10.000 kHz
VBW	30.000 kHz
SweepPoints	400
Sweeptime	189.648 µs
Reference Level	0.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	500
Filter	3 dB
Trace Mode	Max Hold

Appendix A.2: Test Results of 20dB Bandwidth

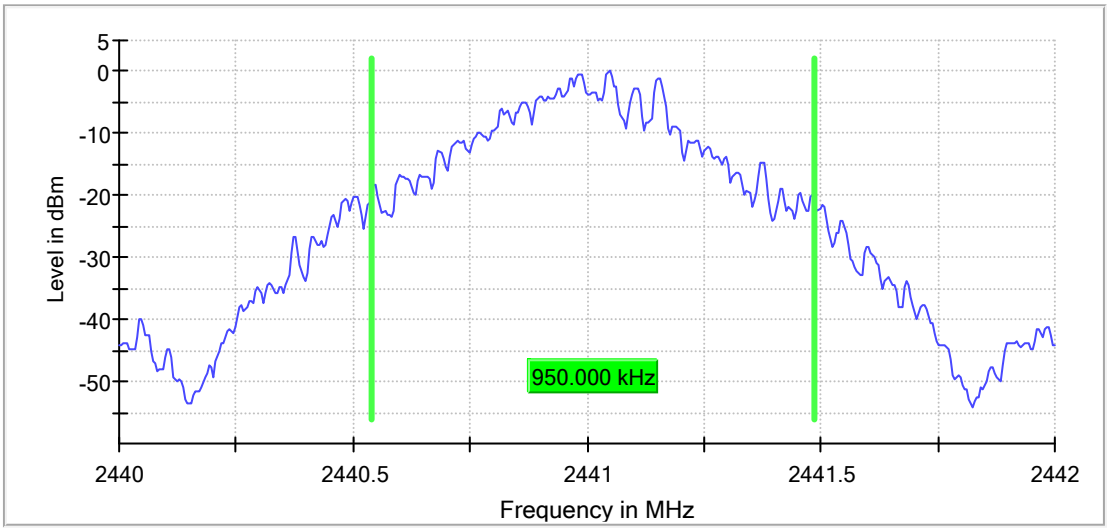
DH5_Ant1_2402

20 dB Bandwidth



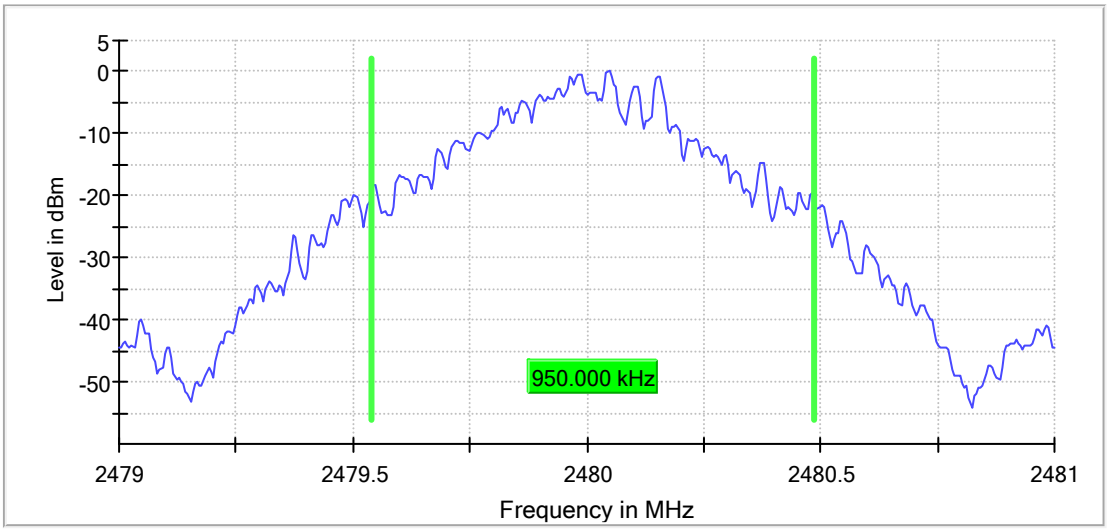
DH5_Ant1_2441

20 dB Bandwidth



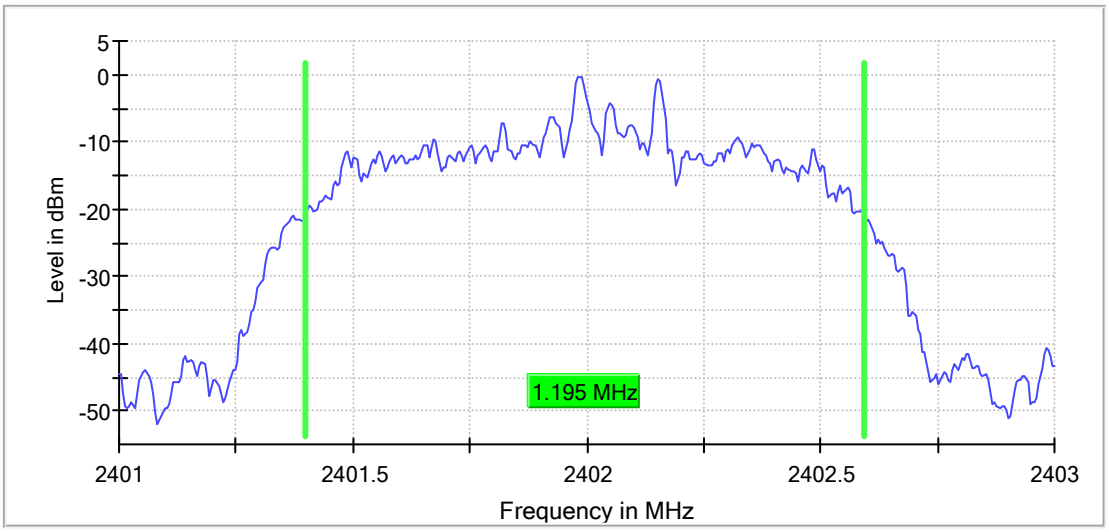
DH5_Ant1_2480

20 dB Bandwidth



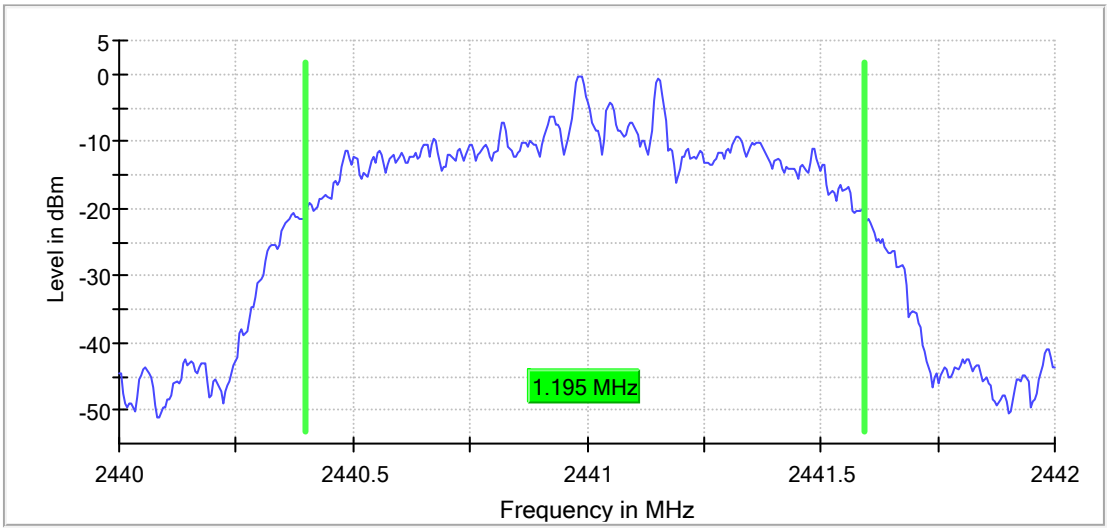
3DH5_Ant1_2402

20 dB Bandwidth



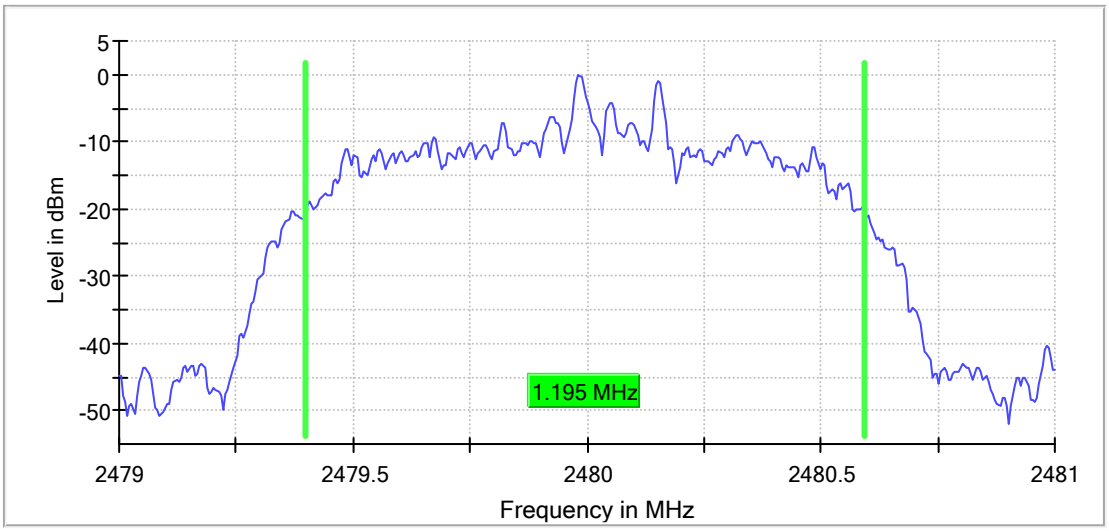
3DH5_Ant1_2441

20 dB Bandwidth



3DH5_Ant1_2480

20 dB Bandwidth



Measurement

Setting	Instrument Value
Span	2.000 MHz
RBW	10.000 kHz
VBW	30.000 kHz
SweepPoints	400
Sweeptime	189.648 µs
Reference Level	0.000 dBm
Attenuation	20.000 dB
Detector	MaxPeak
SweepCount	200
Filter	3 dB
Trace Mode	Max Hold
Sweeptype	FFT

Appendix A.3: Test Results of Frequency stability

Test Channel (MHz)	2402

Test result of frequency tolerance of voltage variation

Voltage	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
DC 3.7V	2401.980	-20	-8.33	10
DC 3.3V	2401.981	-19	-7.91	
DC 4.07V	2401.980	-20	-8.33	

Test result of frequency tolerance of temperature variation

Temperature (℃)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2401.982	-18	-7.49	10
-20	2401.981	-19	-7.91	
-10	2401.980	-20	-8.33	
0	2401.980	-20	-8.33	
10	2401.980	-20	-8.33	
20	2401.980	-20	-8.33	
30	2401.980	-20	-8.33	
40	2401.981	-19	-7.91	
50	2401.982	-18	-7.49	
55	2401.981	-19	-7.91	

Test Channel (MHz)	2441

Test result of frequency tolerance of voltage variation

Voltage	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
DC 3.7V	2440.980	-20	-8.19	10
DC 3.3V	2440.980	-20	-8.19	
DC 4.07V	2440.980	-20	-8.19	

Test result of frequency tolerance of temperature variation

Temperature (℃)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2440.983	-17	-6.96	10
-20	2440.982	-18	-7.37	
-10	2440.981	-19	-7.78	
0	2440.980	-20	-8.19	
10	2440.980	-20	-8.19	
20	2440.980	-20	-8.19	
30	2440.980	-20	-8.19	
40	2440.981	-19	-7.78	
50	2440.980	-20	-8.19	
55	2440.981	-19	-7.78	

Test Channel (MHz)	2480

Test result of frequency tolerance of voltage variation

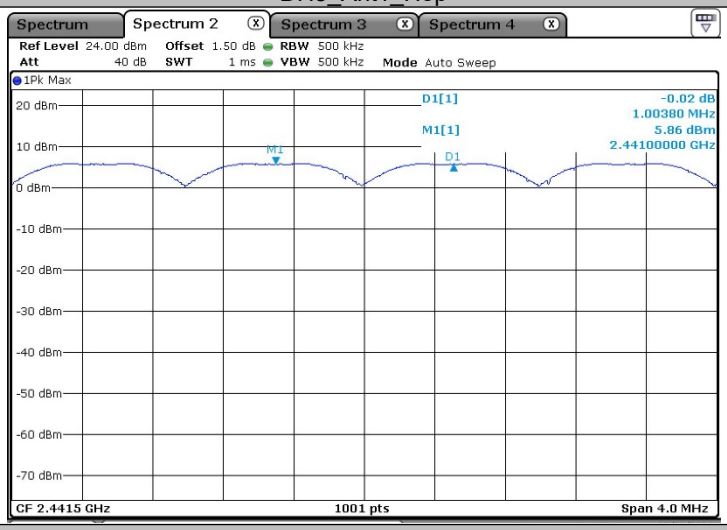
Voltage	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
DC 3.7V	2479.989	-11	-4.44	10
DC 3.3V	2479.989	-11	-4.44	
DC 4.07V	2479.989	-11	-4.44	

Test result of frequency tolerance of temperature variation

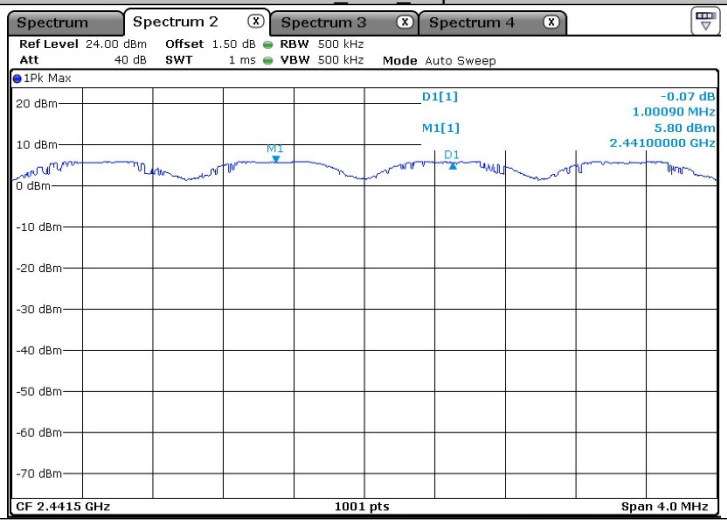
Temperature (℃)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2479.987	-13	-5.24	10
-20	2479.987	-13	-5.24	
-10	2479.988	-12	-4.84	
0	2479.988	-12	-4.84	
10	2479.988	-12	-4.84	
20	2479.989	-11	-4.44	
30	2479.989	-11	-4.44	
40	2479.989	-11	-4.44	
50	2479.988	-12	-4.84	
55	2479.990	-10	-4.03	

Appendix A.4: Test Results of Carrier Frequency Separation

DH5_Ant1_Hop



3DH5_Ant1_Hop

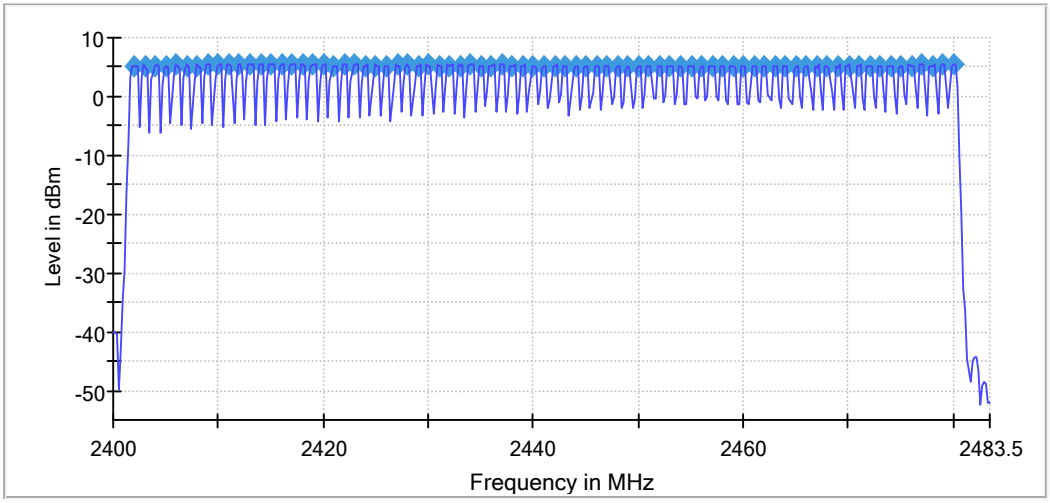


Appendix A.5: Test Results of Number of Hopping Frequency

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

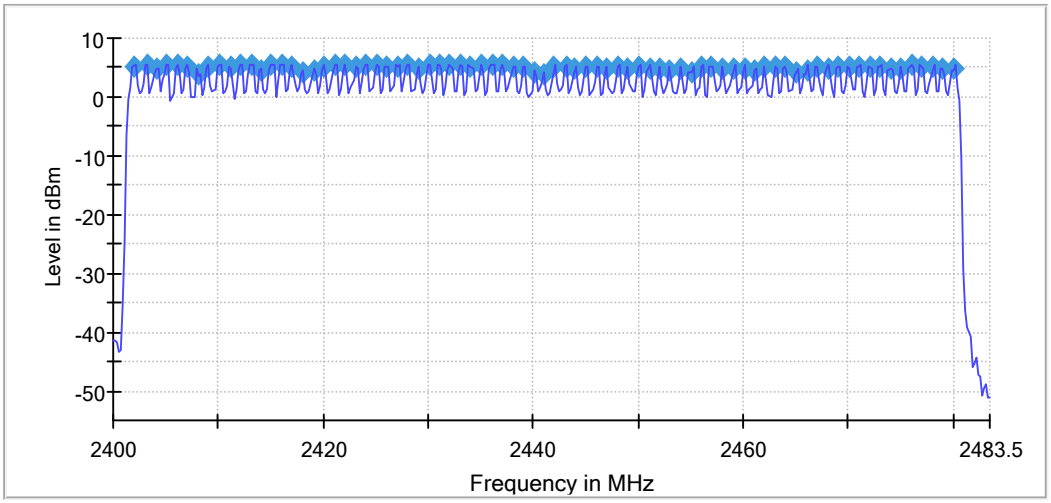
DH5_Ant1_Hop

Sequence



3DH5_Ant1_Hop

Sequence

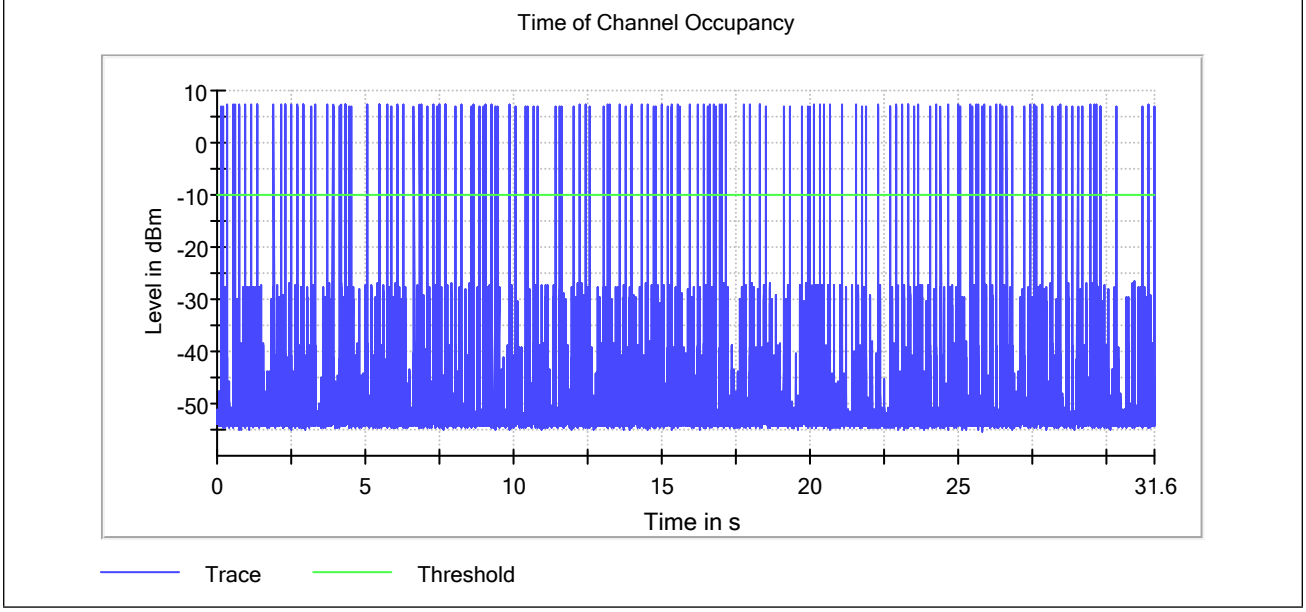


Setting	Instrument Value
Start Frequency	**2.40000 GHz**
Stop Frequency	**2.48350 GHz**
Span	**83.500 MHz**
RBW	**200.000 kHz**
VBW	**200.000 kHz**
SweepPoints	**418**
Sweeptime	**1.060 ms**
Reference Level	**0.000 dBm**
Attenuation	**20.000 dB**
Detector	**MaxPeak**

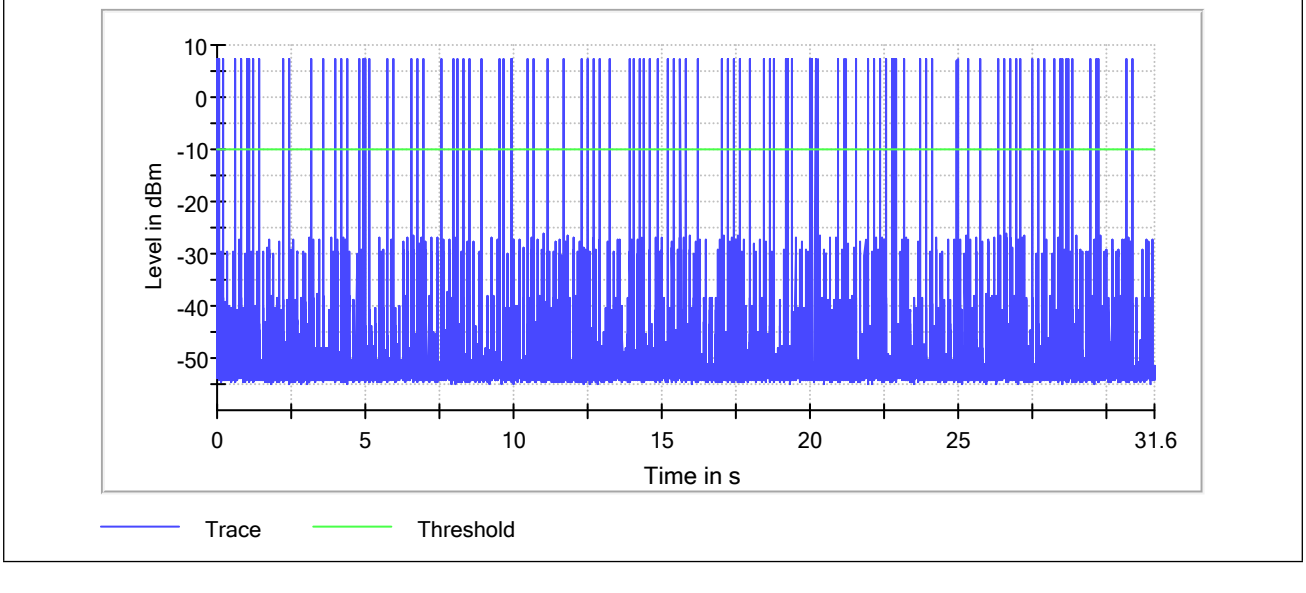
Appendix A.6: Test Results of Time of Occupancy

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.394	166	0.065	≤0.4	PASS
DH3	Ant1	Hop	1.647	105	0.173	≤0.4	PASS
DH5	Ant1	Hop	2.895	83	0.240	≤0.4	PASS
3DH1	Ant1	Hop	0.399	149	0.060	≤0.4	PASS
3DH3	Ant1	Hop	1.643	102	0.168	≤0.4	PASS
3DH5	Ant1	Hop	2.892	93	0.269	≤0.4	PASS

DH1_Ant1_Hop

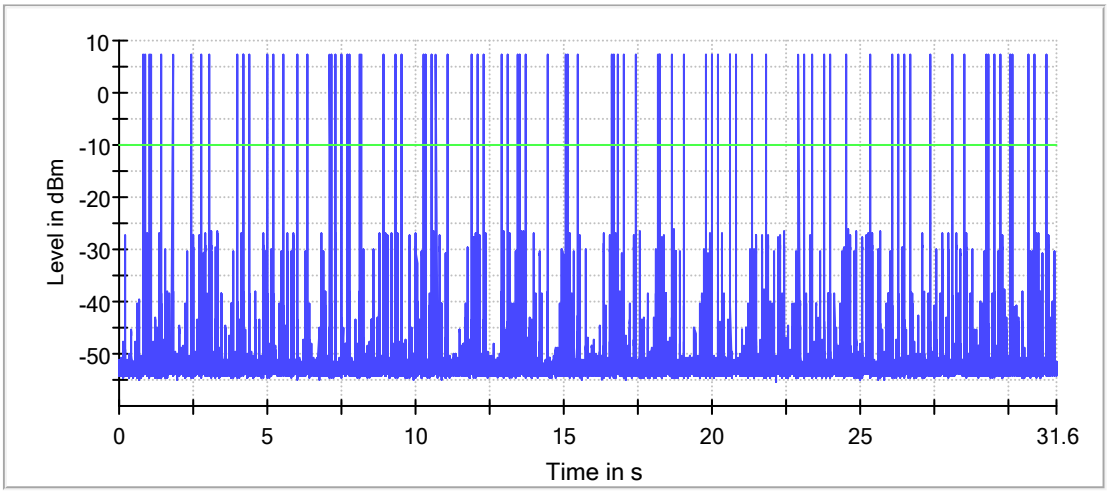


DH3_Ant1_Hop



DH5_Ant1_Hop

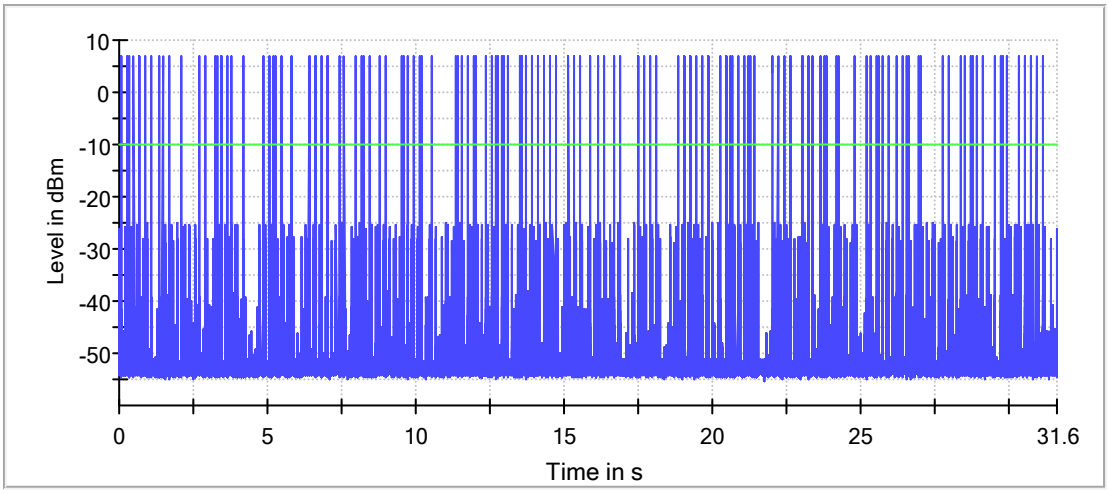
Time of Channel Occupancy(3)



Trace Threshold

3DH1_Ant1_Hop

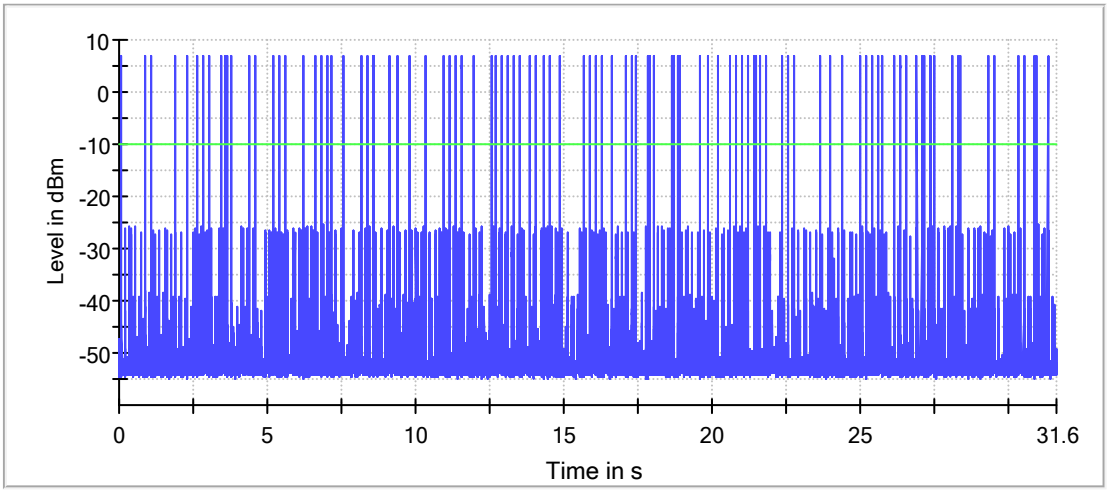
Time of Channel Occupancy



Trace Threshold

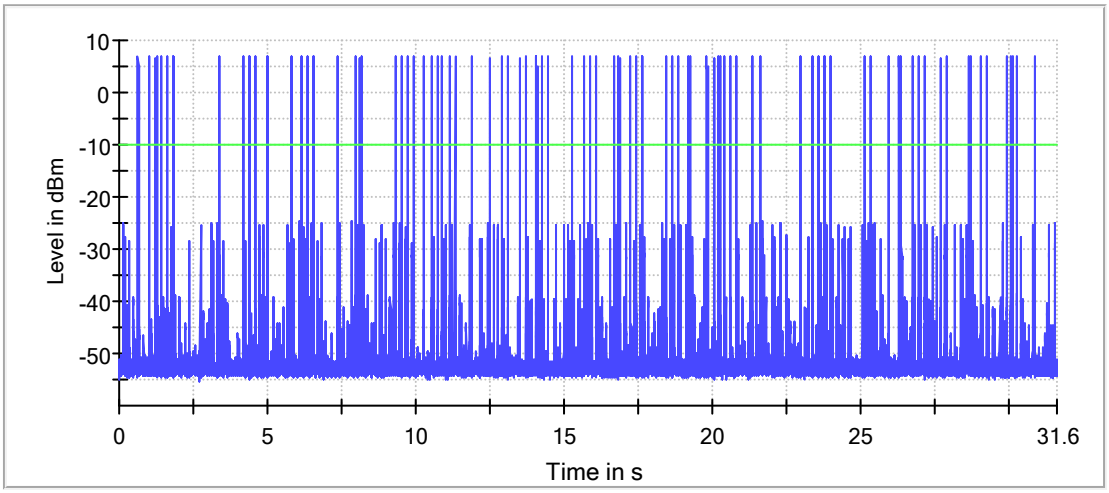
3DH3_Ant1_Hop

Time of Channel Occupancy(2)



3DH5_Ant1_Hop

Time of Channel Occupancy(3)



Measurement

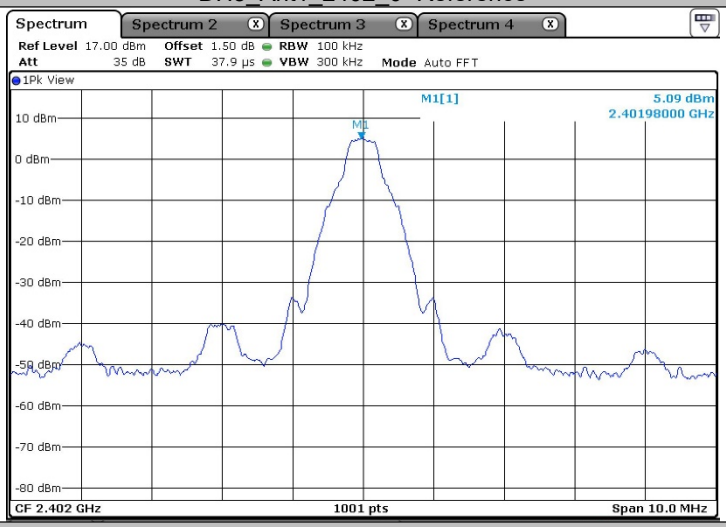
Setting	Instrument Value
Center Frequency	2.44100 GHz
Span	ZeroSpan
RBW	500.000 kHz
VBW	1.000 MHz
SweepPoints	30001
Sweeptime	31.600 s
Reference Level	-10.000 dBm
Attenuation	0.000 dB
Detector	MaxPeak

Appendix A.7: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

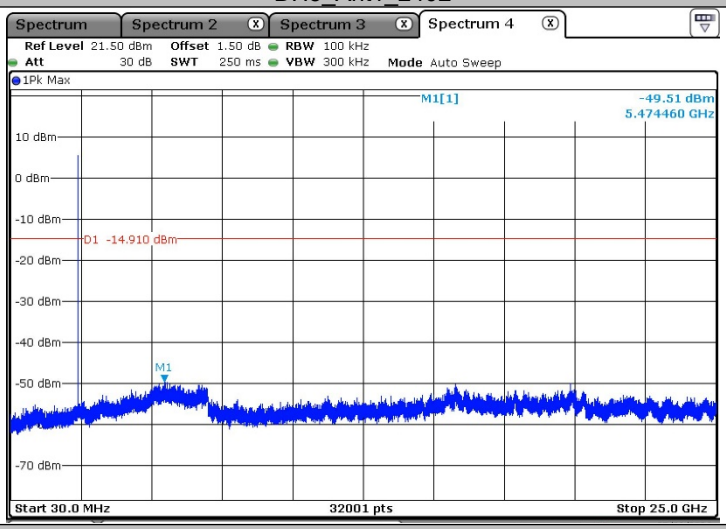
Conducted measurements

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	5.09	5.09	---	PASS
			30~25000	5.09	-49.51	≤-14.91	PASS
		2441	Reference	5.43	5.43	---	PASS
			30~25000	5.43	-50.05	≤-14.57	PASS
		2480	Reference	5.46	5.46	---	PASS
			30~25000	5.46	-49.57	≤-14.54	PASS
3DH5	Ant1	2402	Reference	4.94	4.94	---	PASS
			30~25000	4.94	-48.41	≤-15.06	PASS
		2441	Reference	5.13	5.13	---	PASS
			30~25000	5.13	-49.61	≤-14.87	PASS
		2480	Reference	5.36	5.36	---	PASS
			30~25000	5.36	-49.21	≤-14.64	PASS

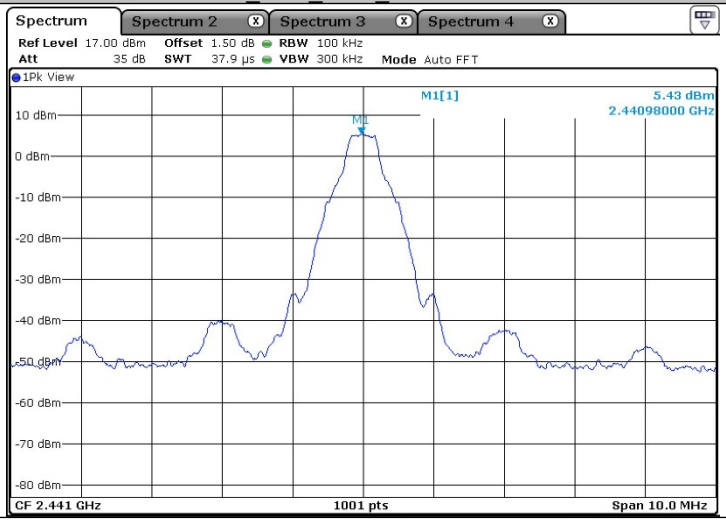
DH5_Ant1_2402_0~Reference



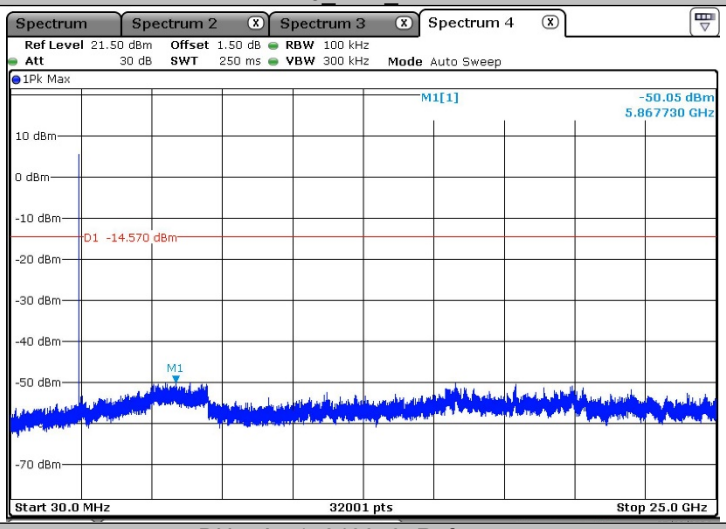
DH5_Ant1_2402



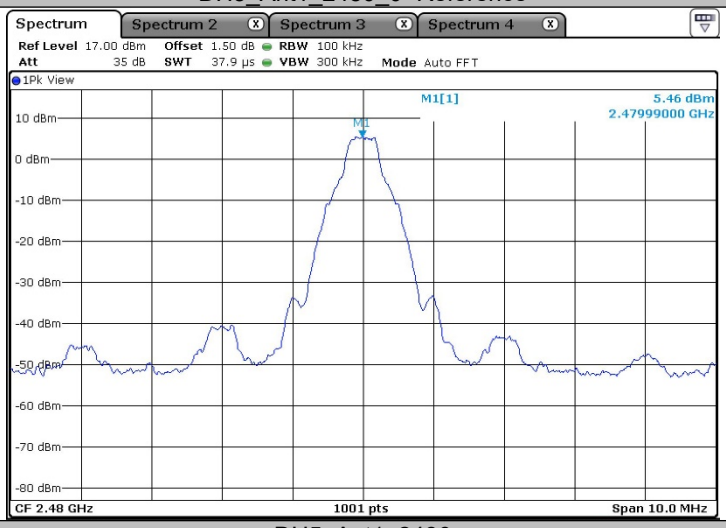
DH5_Ant1_2441_0~Reference



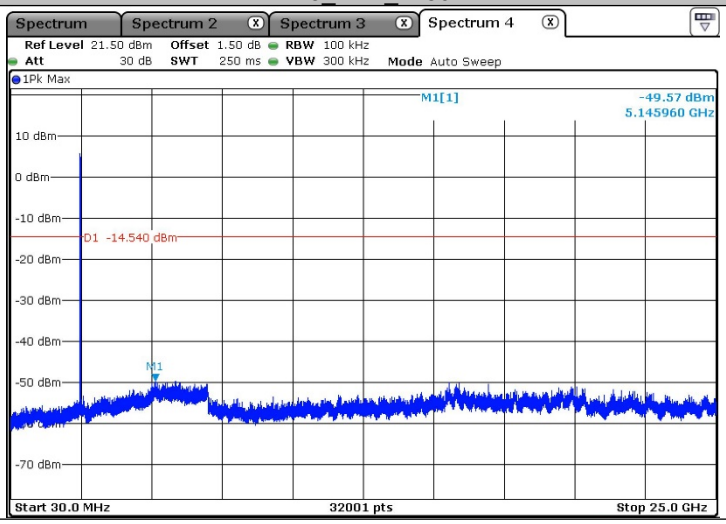
DH5_Ant1_2441



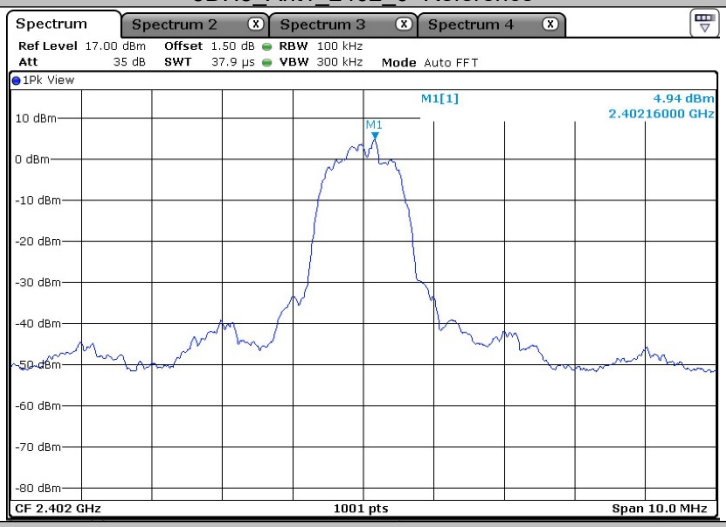
DH5_Ant1_2480_0~Reference



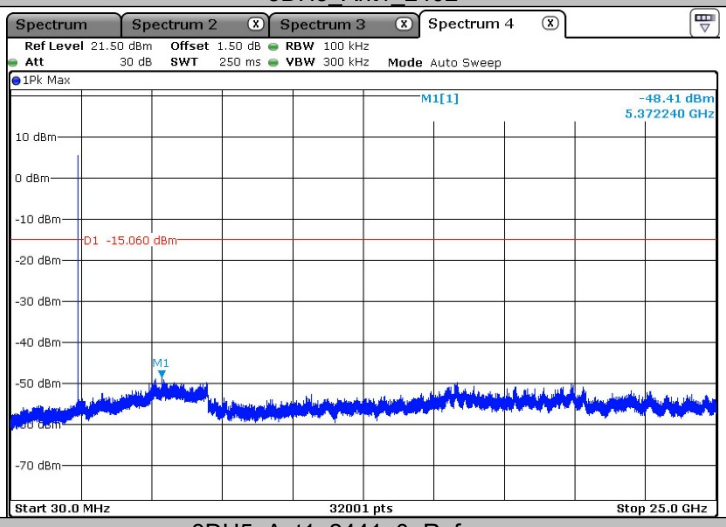
DH5_Ant1_2480



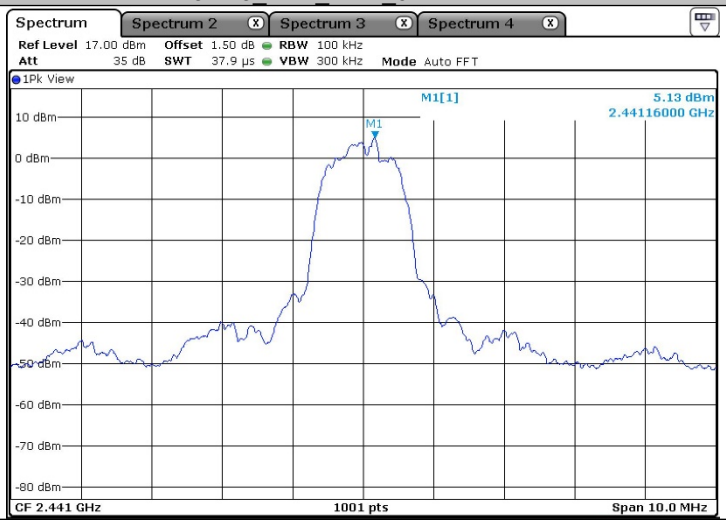
3DH5_Ant1_2402_0~Reference



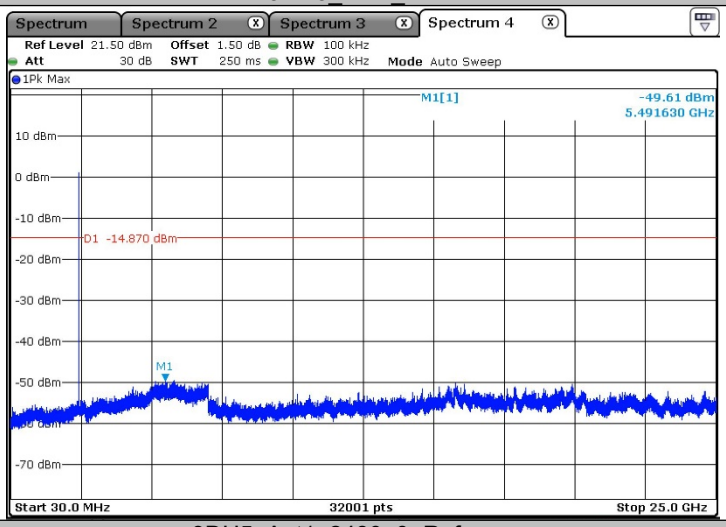
3DH5_Ant1_2402



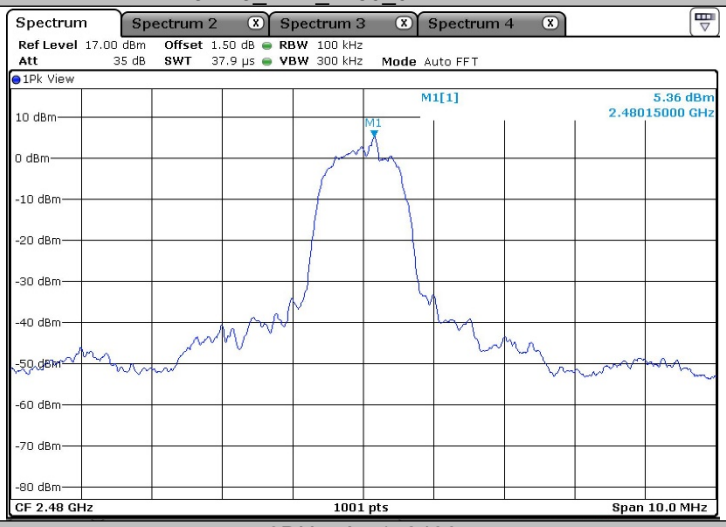
3DH5_Ant1_2441_0~Reference



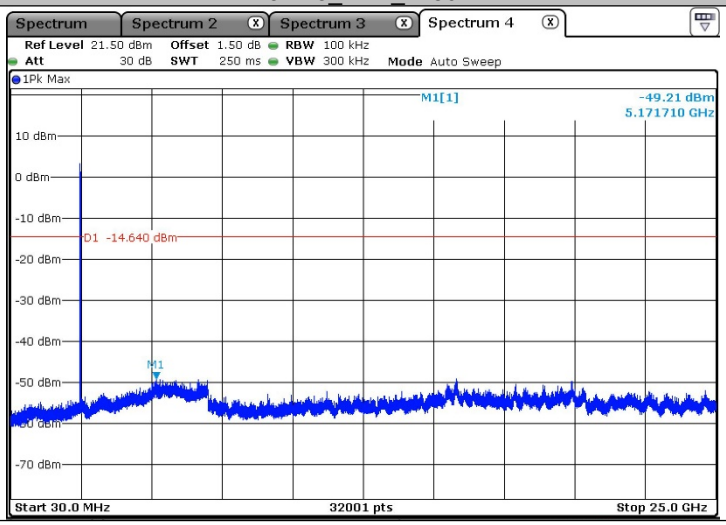
3DH5_Ant1_2441



3DH5_Ant1_2480_0~Reference



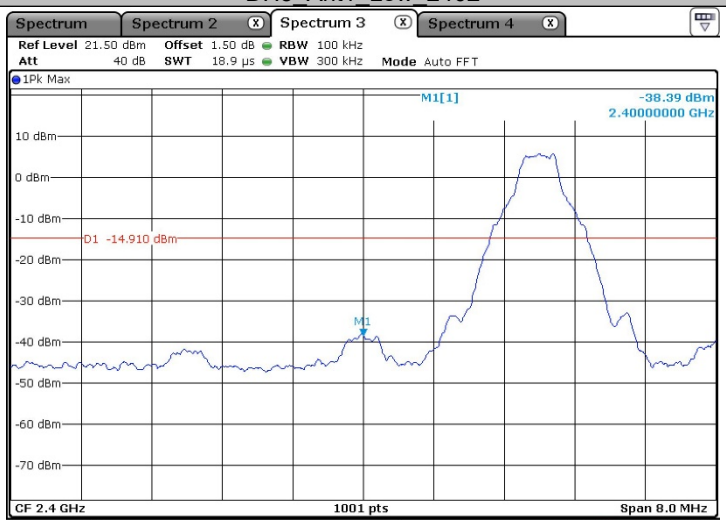
3DH5_Ant1_2480



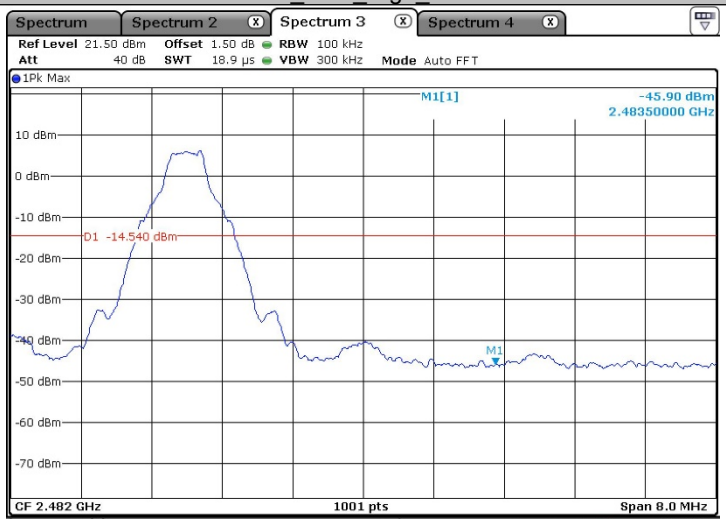
Band edge measurements

TestMode	Antenna	ChName	Channel	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-38.39	≤-14.91	PASS
		High	2480	-45.90	≤-14.54	PASS
3DH5	Ant1	Low	2402	-39.12	≤-15.06	PASS
		High	2480	-45.43	≤-14.64	PASS
DH5	Ant1	Hopping	2402	-42.82	≤-14.10	PASS
		Hopping	2480	-48.22	≤-14.10	PASS
3DH5	Ant1	Hopping	2402	-47.24	≤-13.90	PASS
		Hopping	2480	-45.29	≤-13.90	PASS

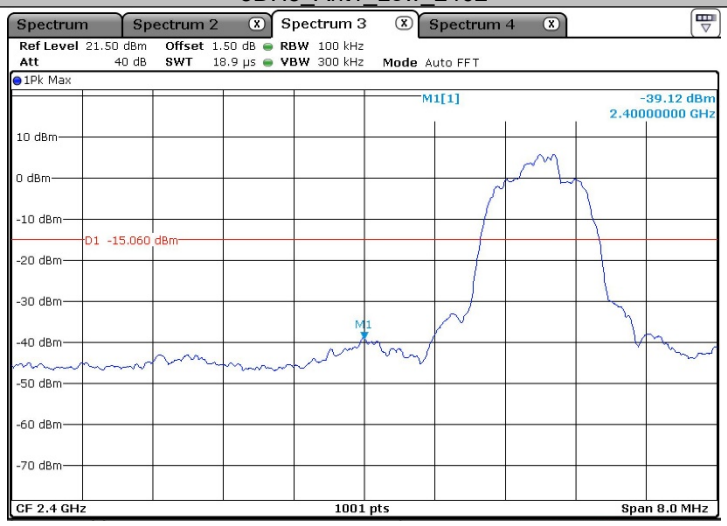
DH5_Ant1_Low_2402



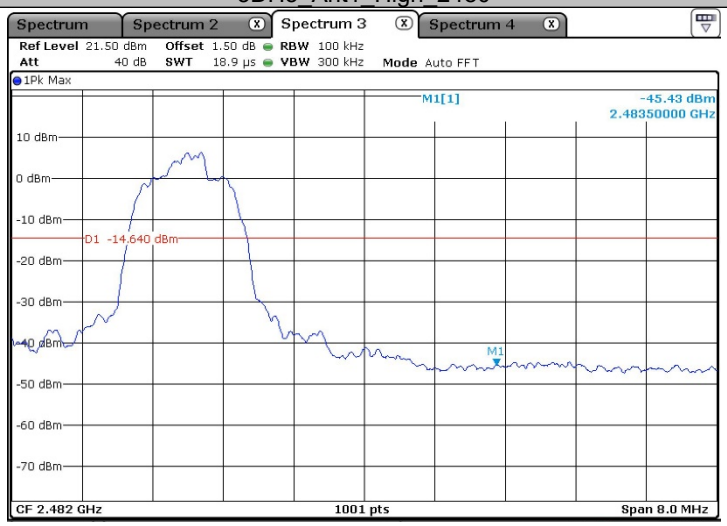
DH5_Ant1_High_2480



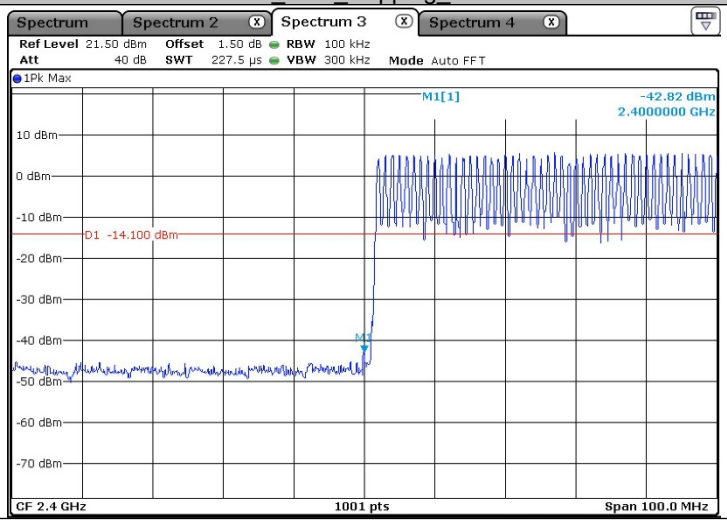
3DH5_Ant1_Low_2402



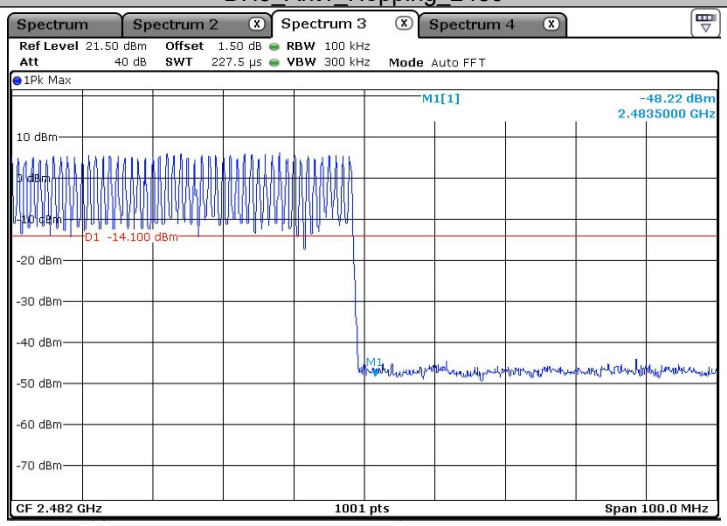
3DH5_Ant1_High_2480



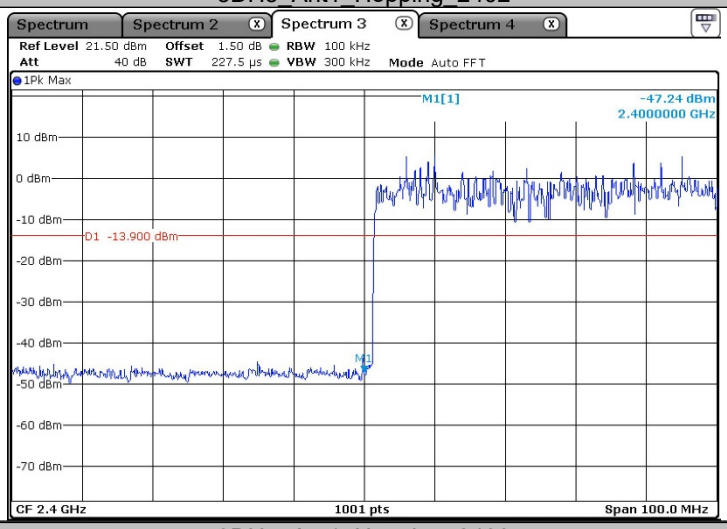
DH5_Ant1_Hopping_2402



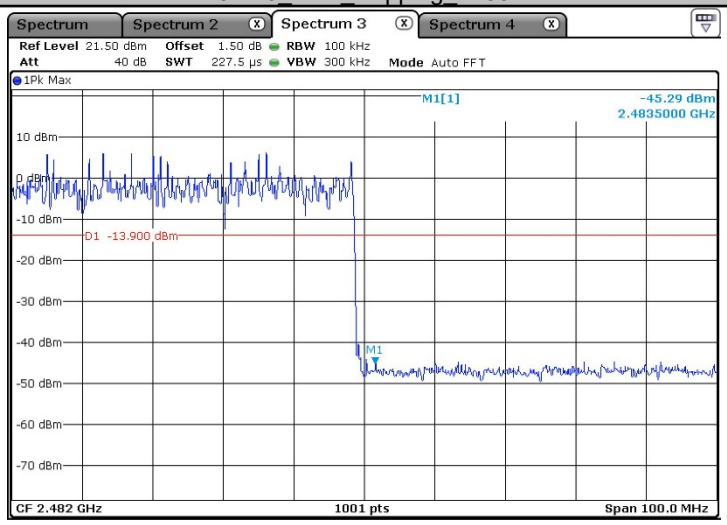
DH5_Ant1_Hopping_2480



3DH5_Ant1_Hopping_2402



3DH5_Ant1_Hopping_2480



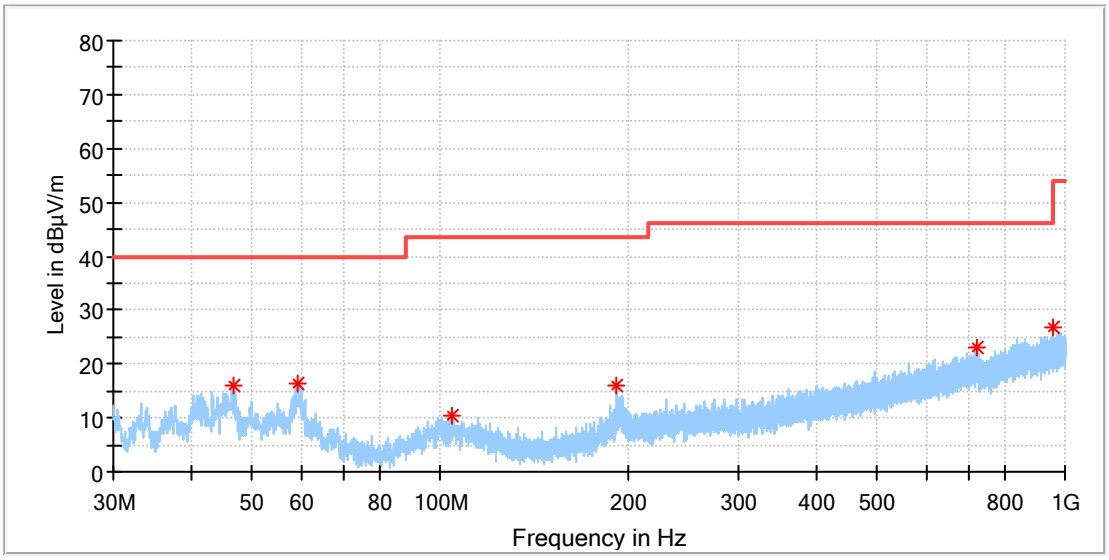
Appendix A.8: Test Results of Radiated Spurious Emissions

Note: 1. Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported. 2. This testing was carried out on different modulations, but only the worst case (GFSK) was presented in this report.

30MHz - 1GHz

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

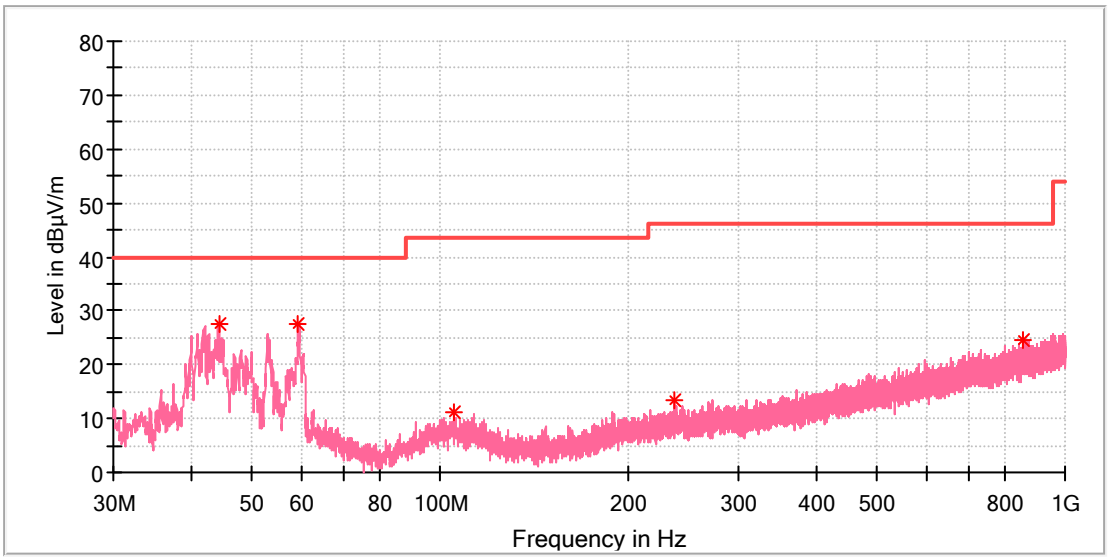


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
46.863077	15.94	40.00	24.06	100.0	H	177.0	-18.9
59.025385	16.34	40.00	23.66	100.0	H	67.0	-19.2
104.167692	10.24	43.50	33.26	100.0	H	160.0	-19.1
191.990000	16.08	43.50	27.42	100.0	H	9.0	-19.7
722.841154	23.01	46.00	22.99	100.0	H	286.0	-8.0
959.856923	26.97	46.00	19.03	100.0	H	186.0	-4.7

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

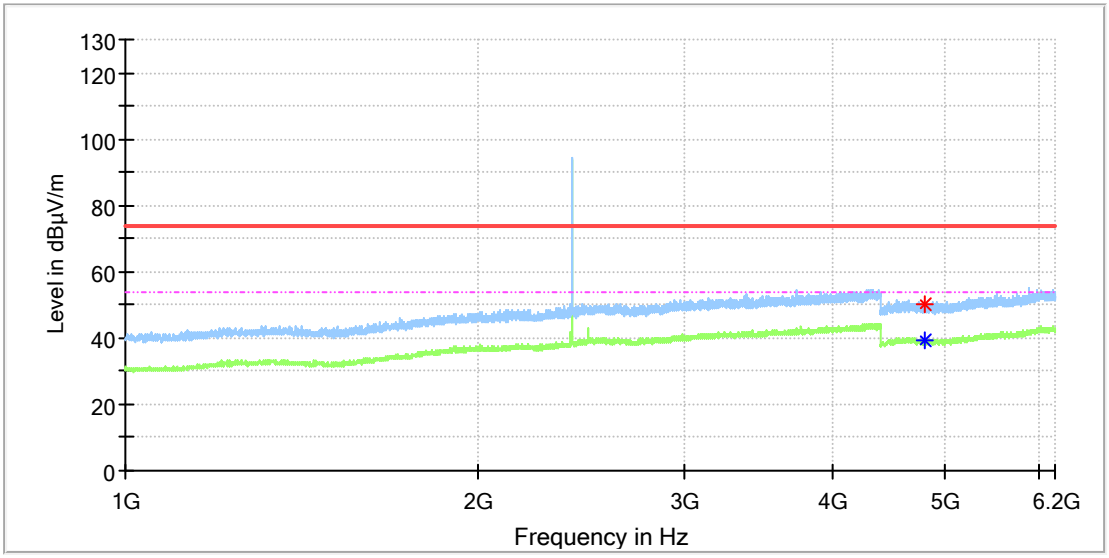
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.251539	27.52	40.00	12.48	100.0	V	182.0	-19.3
59.361154	27.67	40.00	12.33	100.0	V	76.0	-19.2
105.137692	11.03	43.50	32.47	100.0	V	109.0	-19.1
237.580000	13.22	46.00	32.78	100.0	V	109.0	-18.1
855.246154	24.54	46.00	21.46	100.0	V	276.0	-5.8

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

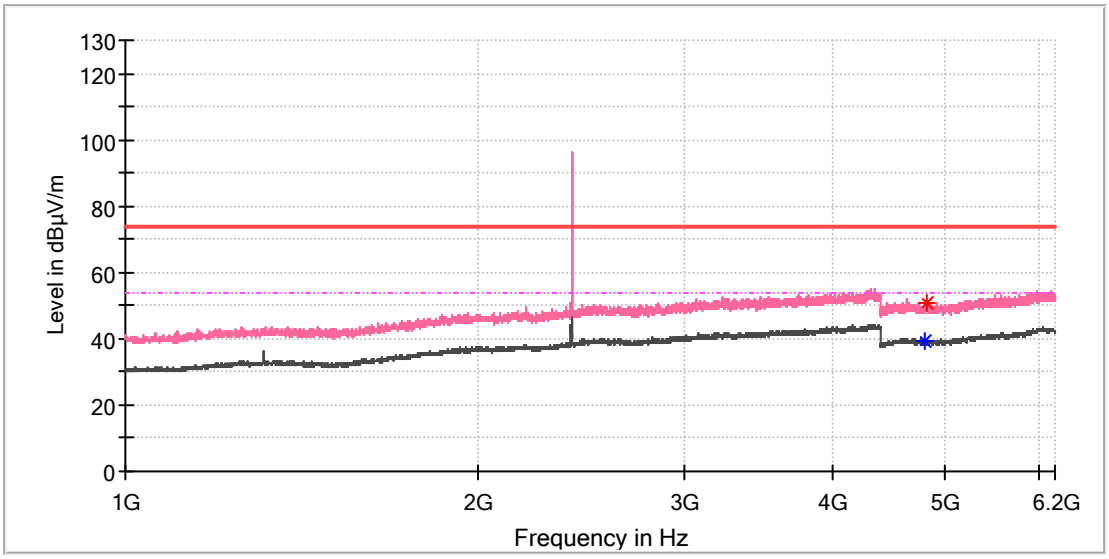


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	50.45	---	74.00	23.55	150.0	H	18.0	11.8
4807.000000	---	39.31	54.00	14.69	150.0	H	48.0	11.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

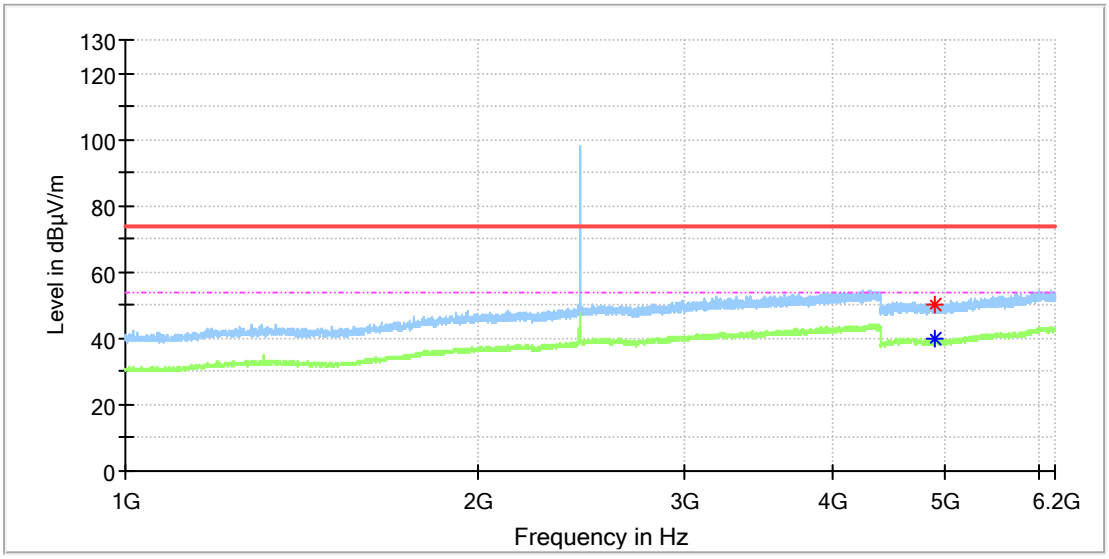


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4809.500000	---	39.36	54.00	14.64	150.0	V	10.0	11.8
4812.500000	50.57	---	74.00	23.43	150.0	V	215.0	11.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

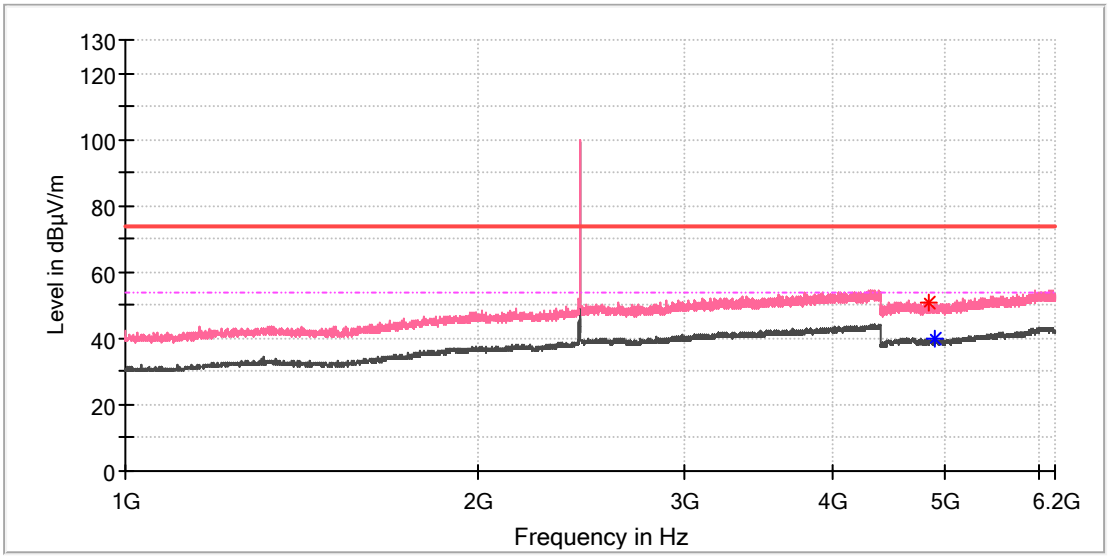


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4903.000000	50.15	---	74.00	23.85	150.0	H	6.0	11.8
4904.000000	---	40.12	54.00	13.88	150.0	H	18.0	11.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

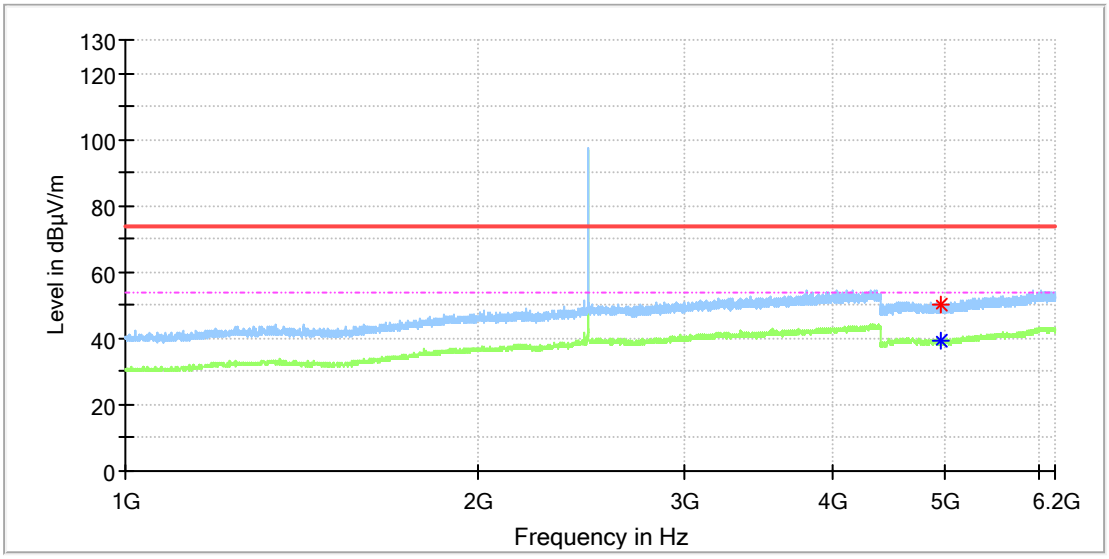


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4841.500000	50.70	---	74.00	23.30	150.0	V	17.0	11.8
4891.500000	---	39.85	54.00	14.15	150.0	V	164.0	11.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_High channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

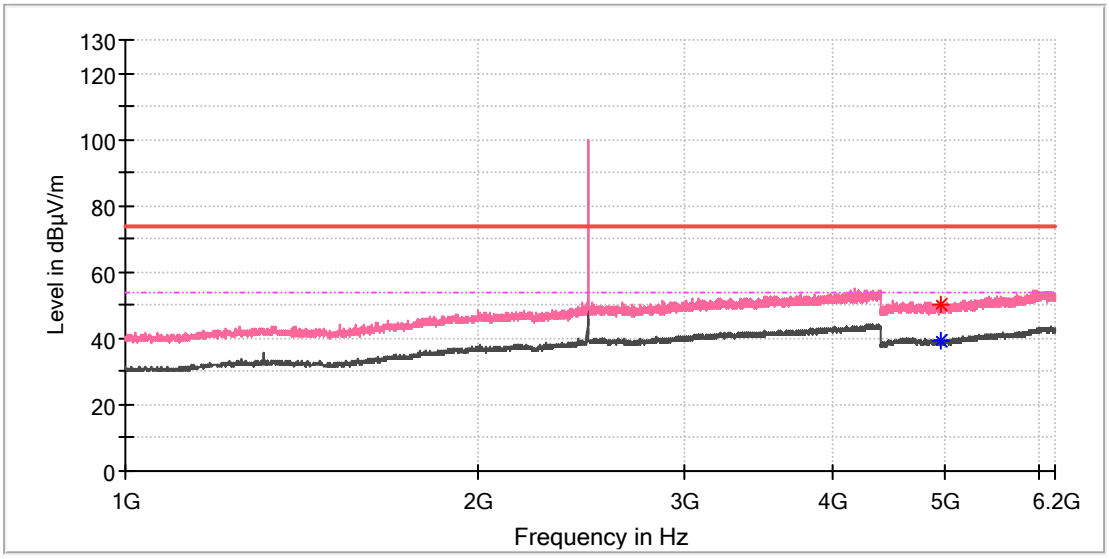


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.500000	50.32	---	74.00	23.68	150.0	H	138.0	11.8
4964.000000	---	39.35	54.00	14.65	150.0	H	212.0	11.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_High channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

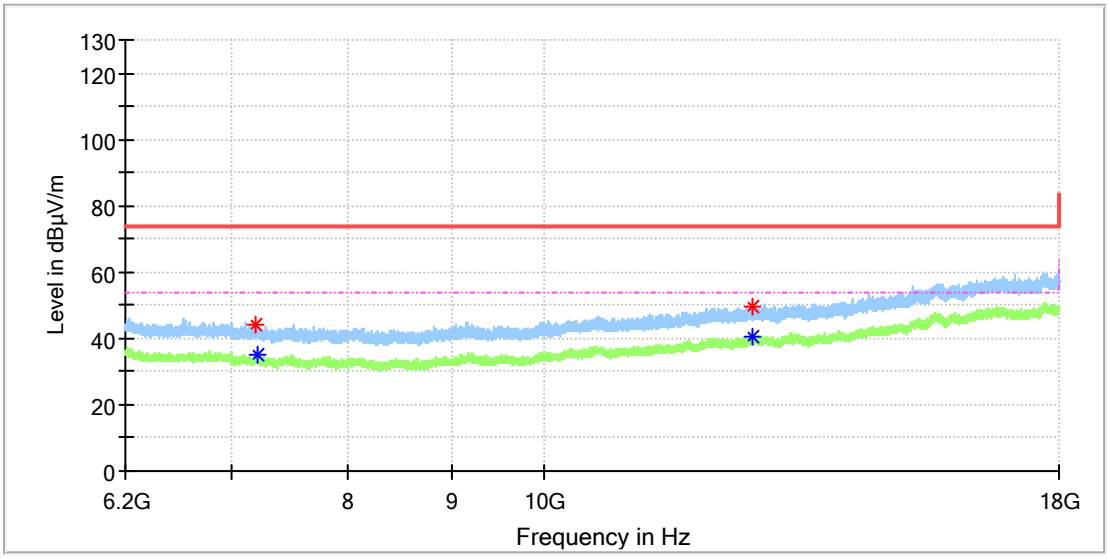


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4949.500000	50.43	---	74.00	23.57	150.0	V	44.0	11.8
4956.000000	---	39.38	54.00	14.62	150.0	V	273.0	11.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

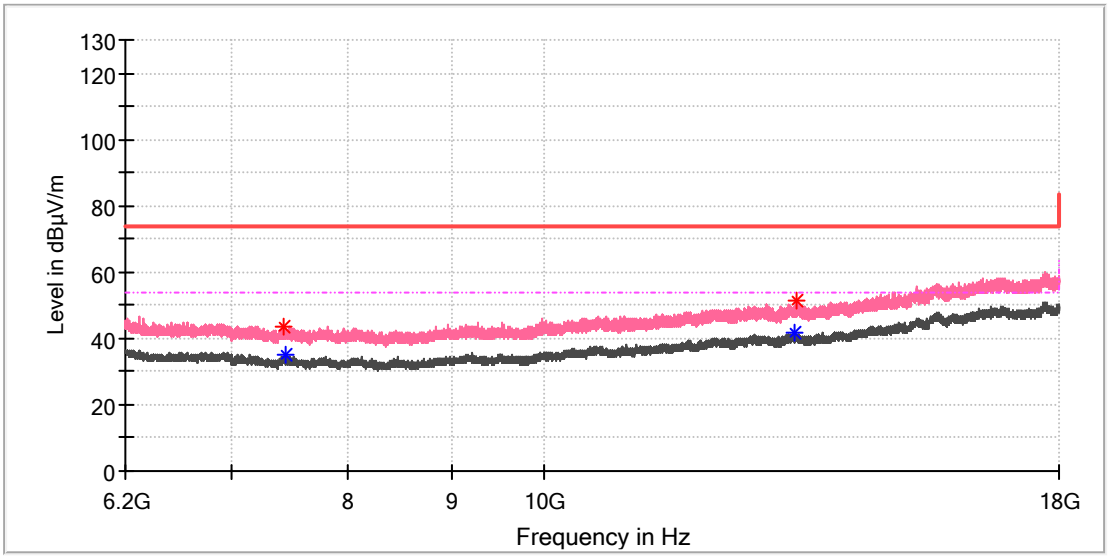


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7198.083333	43.94	---	74.00	30.06	150.0	H	63.0	8.8
7214.800000	---	34.92	54.00	19.08	150.0	H	337.0	8.7
12680.658333	---	40.72	54.00	13.28	150.0	H	352.0	15.1
12682.625000	49.62	---	74.00	24.38	150.0	H	134.0	15.1

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

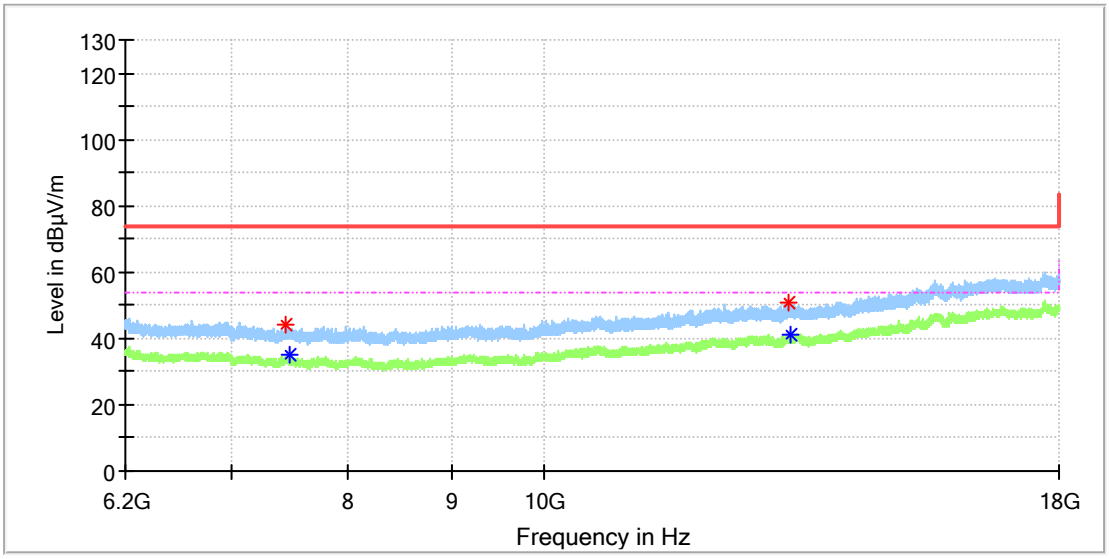


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7429.658333	43.36	---	74.00	30.64	150.0	V	118.0	8.4
7438.016667	---	34.91	54.00	19.09	150.0	V	45.0	8.4
13299.175000	---	41.68	54.00	12.32	150.0	V	350.0	15.5
13346.375000	51.28	---	74.00	22.72	150.0	V	178.0	15.5

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

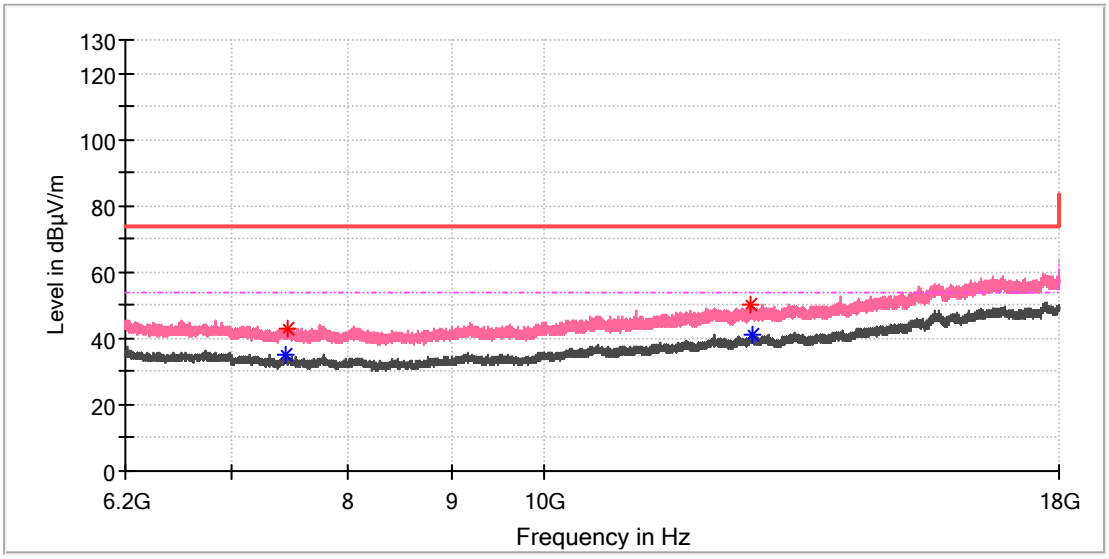


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7442.933333	43.87	---	74.00	30.13	150.0	H	33.0	8.4
7482.266667	---	34.95	54.00	19.05	150.0	H	95.0	8.7
13217.066667	50.91	---	74.00	23.09	150.0	H	0.0	15.5
13256.891667	---	41.16	54.00	12.84	150.0	H	33.0	15.5

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

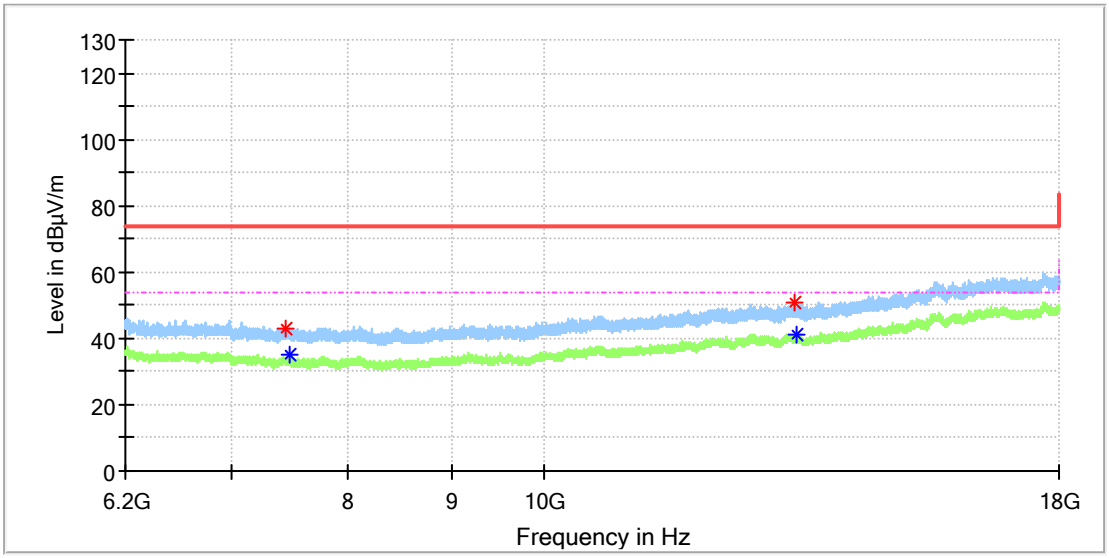


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7448.833333	---	34.88	54.00	19.12	150.0	V	350.0	8.5
7463.583333	42.85	---	74.00	31.15	150.0	V	35.0	8.6
12658.041667	49.93	---	74.00	24.07	150.0	V	21.0	15.0
12680.658333	---	40.93	54.00	13.07	150.0	V	279.0	15.1

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_High channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

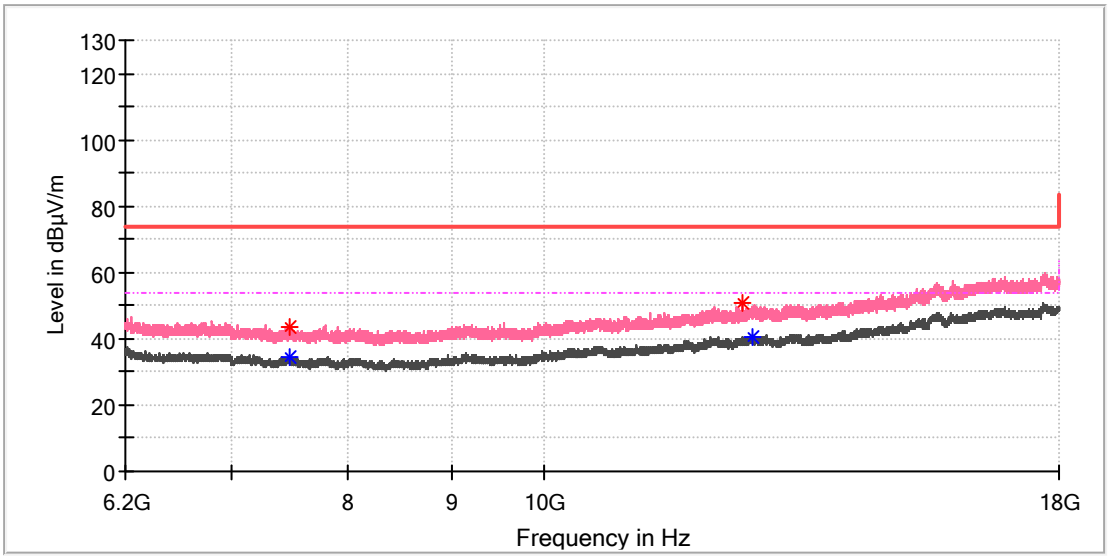


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7447.358333	43.18	---	74.00	30.82	150.0	H	106.0	8.5
7484.725000	---	35.08	54.00	18.92	150.0	H	332.0	8.7
13317.858333	50.77	---	74.00	23.23	150.0	H	118.0	15.5
13332.608333	---	41.04	54.00	12.96	150.0	H	106.0	15.5

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_High channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



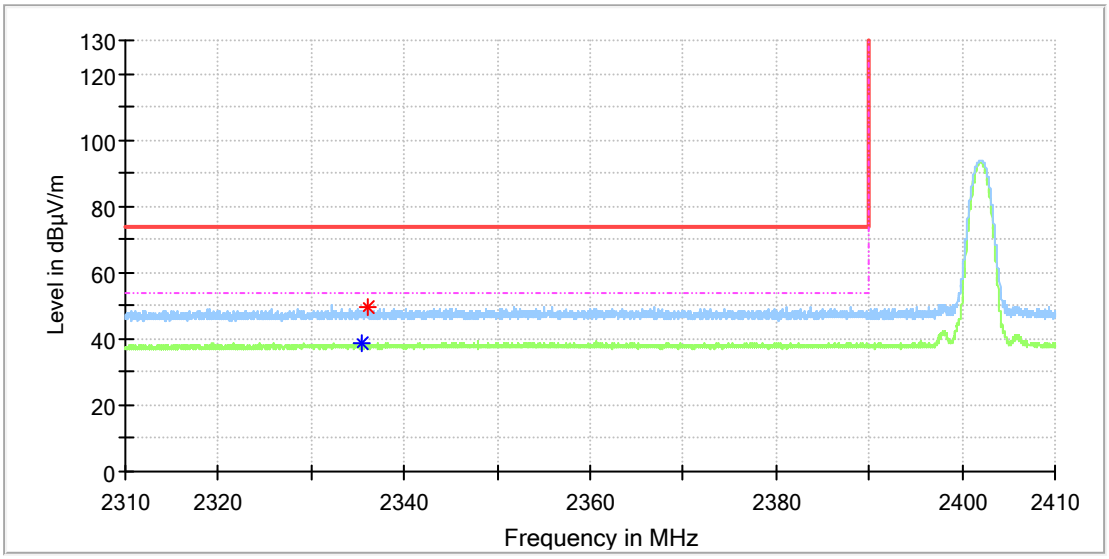
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7470.958333	43.63	---	74.00	30.37	150.0	V	215.0	8.6
7470.958333	---	34.30	54.00	19.70	150.0	V	215.0	8.6
12537.583333	50.80	---	74.00	23.20	150.0	V	2.0	14.7
12698.358333	---	40.69	54.00	13.31	150.0	V	303.0	15.1

Appendix A.9: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

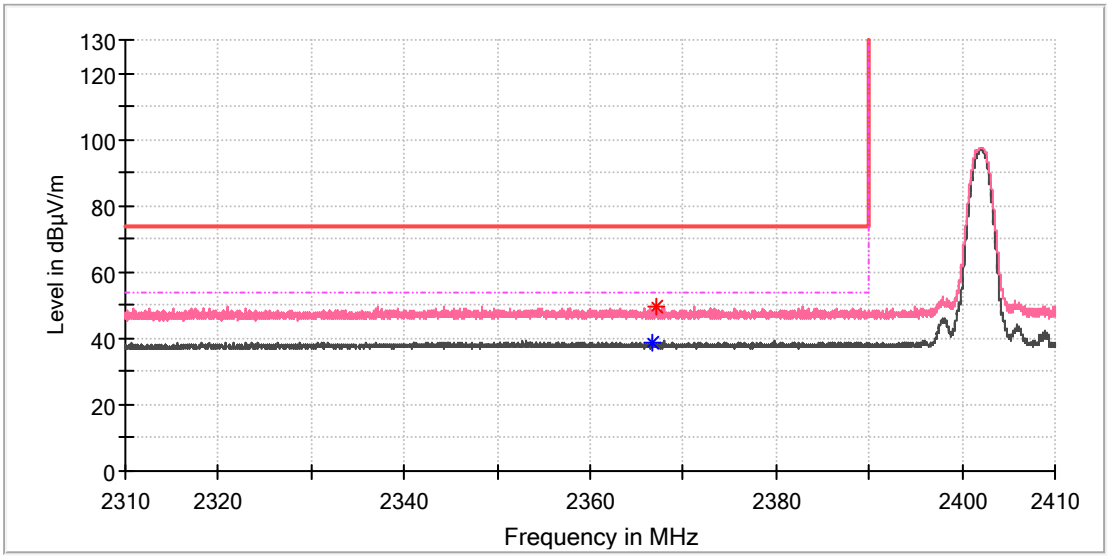


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2335.382353	---	38.50	54.00	15.50	150.0	H	326.0	6.8
2335.985294	49.69	---	74.00	24.31	150.0	H	263.0	6.8

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

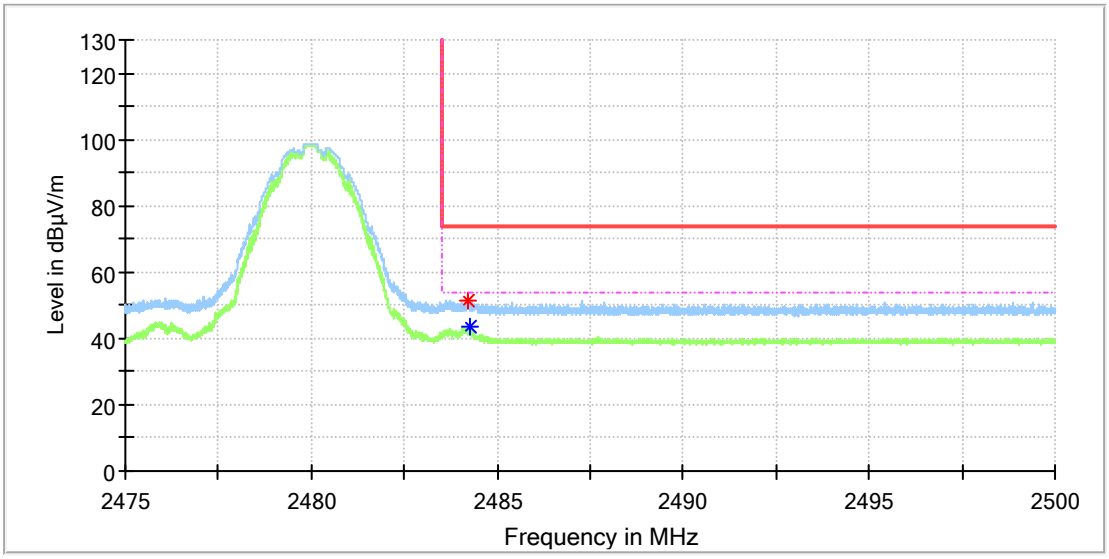


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2366.632353	---	38.93	54.00	15.07	150.0	V	66.0	6.9
2367.029412	49.50	---	74.00	24.50	150.0	V	266.0	6.9

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_High channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

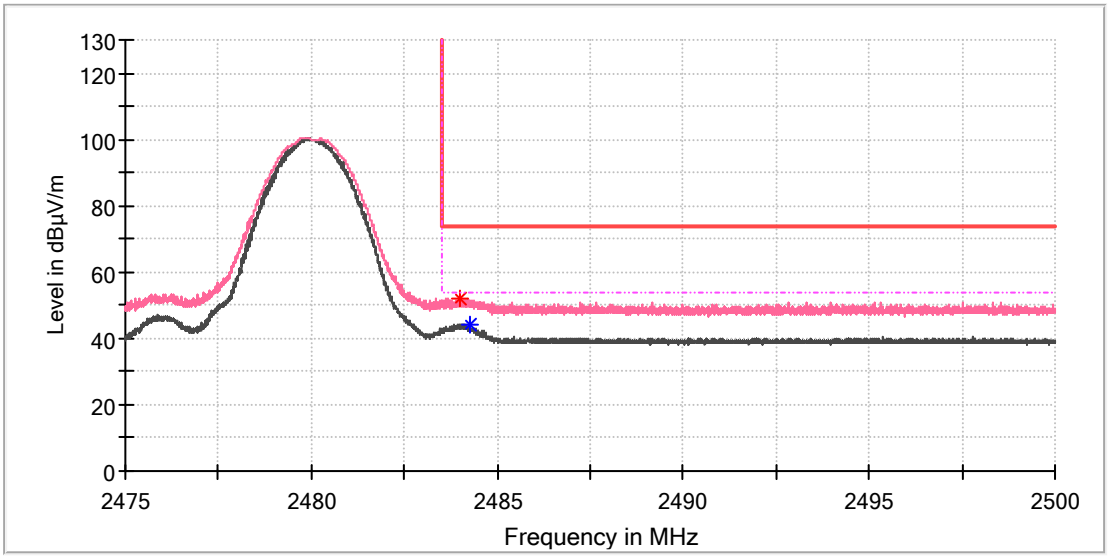


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.216912	51.44	---	74.00	22.56	150.0	H	90.0	7.4
2484.253677	---	43.33	54.00	10.67	150.0	H	266.0	7.4

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	BR_DH5_High channel
Order No/Sample No:	A003721212-016
Test Voltage::	Battery
Remark:	Temp 24 Humi:50%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



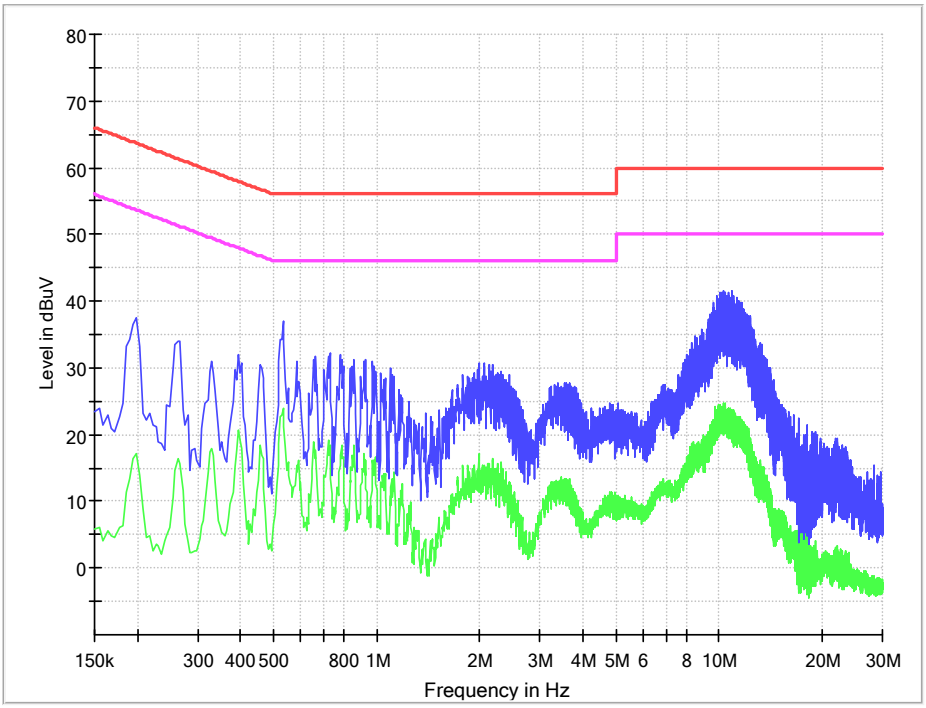
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.981618	51.93	---	74.00	22.07	150.0	V	352.0	7.4
2484.242647	---	44.37	54.00	9.63	150.0	V	76.0	7.4

Appendix A.10: Test Results of Conducted Emissions on AC Mains

EUT Information

EUT Name	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	Bluetooth
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15C
Test By:/Review By:	Yangchang/ Zhouli
Tem./Hum./Pressure:	24.7°C/50.2%/101kPa
Remark:	

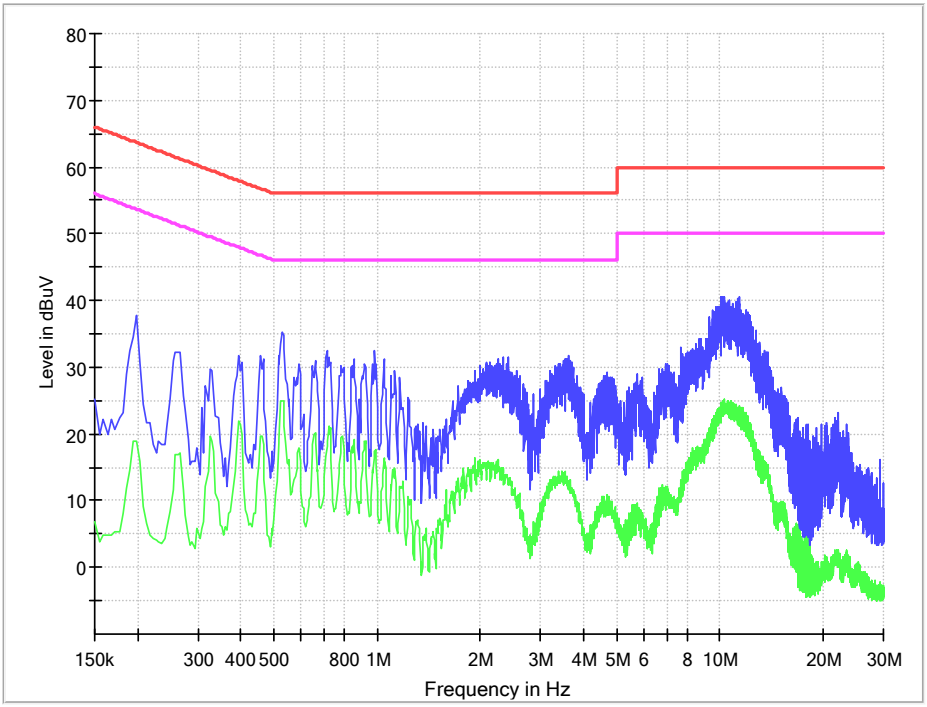


Final_Result

Frequency (MHz)	QPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.532000	32.7	---	56.00	23.3	L1	10.0
0.532000	---	23.5	46.00	22.5	L1	10.0
0.721000	27.8	---	56.00	28.2	L1	10.0
0.721000	---	18.4	46.00	27.6	L1	10.1
10.315000	38.5	---	60.00	21.5	L1	10.2
10.315000	---	23.8	50.00	26.2	L1	10.2

EUT Information

EUT Name	BLUETOOTH HEADSET
Model:	JUNIOR 320BT
Test Mode:	Bluetooth
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15C
Test By:/Review By:	Yangchang/ Zhouli
Tem./Hum./Pressure:	24.7°C/50.2%/101kPa
Remark:	



Final_Result

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.528000	31.4	---	56.00	24.6	N	9.8
0.528000	---	25.1	46.00	20.9	N	9.8
0.712000	28.6	---	56.00	27.6	N	9.8
0.712000	---	19.4	46.00	26.6	N	9.8
10.086000	36.4	---	60.00	23.6	N	9.9
10.086000	---	25.2	50.00	24.8	N	9.9