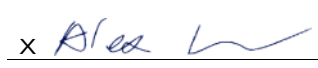


Prüfbericht-Nr.: Test report no.:	CN26L8MF 001	Auftrags-Nr.: Order no.:	27250745	Page 1 of 25 Seite 1 von 25
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2026-08-10	
Auftraggeber: Client:	Harman International Industries, Incorporated 8500 Balboa Blvd, Northridge, CA 91325, USA			
Prüfgegenstand: Test item:	BLUETOOTH HEADSET			
Bezeichnung / Typ-Nr.: Identification / Type no.:	LIVE BUDS 4 (Trademark: JBL)			
Auftrags-Inhalt: Order content:	Type test			
Prüfgrundlage: Test specification:	CFR Title 47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 4 July 2025 RSS-Gen Issue 6 July 2026			
Wareneingangsdatum: Date of sample receipt:	2026-08-05	Refer to photos document		
Prüfmuster-Nr.: Test sample no.:	A004355370			
Prüfzeitraum: Testing period:	2026-08-05 – 2026-08-30			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	 X _____ Signed by: Harry W. C. Wu		genehmigt von: authorized by:	 X _____ Signed by: Alex Lan
Datum: Date:	2026-09-09		Ausstellungsdatum: Issue date:	2026-09-09
Stellung / Position:	Project Manager		Stellung / Position:	Authorizer
Sonstiges / Other:	This test report is for Classic Bluetooth function of LIVE BUDS 4. FCC ID: APILIVEBUDS4 IC: 6132A-LIVEBUDS4 HVIN: LIVE BUDS 4			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt 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
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				

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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. <i>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.</i> <i>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</i>
2	As contractually agreed, this document has been signed digitally only. TÜV 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, TÜV 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. <i>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.</i>
3	Test clauses with remark of * are subcontracted to qualified subcontractors and described 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. <i>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.</i>
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. <i>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen 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 bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</i>

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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

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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: Photographs of the Test Set-up

Appendix B: Test Results of Classic Bluetooth_Left Earbud.

Appendix C: Test Results of Classic Bluetooth_Right Earbud.

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China

FCC Registration No.: CN1260

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

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2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	22.09.2026
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	22.09.2026
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	22.09.2026
DC Power Supply	Keysight	E3642A	MY61276100	22.09.2026
Wireless Connectivity Tester	R&S	CMW270	102505	22.09.2026
Power Control Unit	Tonscend	JS0806-4ADC	N/A	22.09.2026
Automation Control Unit	Tonscend	JS0806-2	21C8060396	22.09.2026
Humid & Temp Programmable Tester	BOST	NTH090-60	19040801	22.09.2026
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A
Shielding Room	Albatross	SR1	APC17151-SR1	13.09.2027
Unwanted Emission Testing				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	21.09.2026
Signal Analyzer	R&S	FSV 40	101439	21.09.2026
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	21.09.2026
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	21.09.2026
Amplifier	R&S	SCU-18F	180070	21.09.2026
Amplifier	R&S	SCU40A	100475	21.09.2026
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	27.09.2026
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	27.09.2026
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	27.09.2026
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	27.09.2026
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	13.09.2027

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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 basis 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	$\pm 2.08 \%$
RF output power, conducted	$\pm 0.99 \text{ dB}$
RF power density, conducted	$\pm 0.99 \text{ dB}$
Unwanted Emissions, conducted	$\pm 0.89 \text{ dB}$
All emissions, radiated	$\pm 4.17 \text{ dB}$

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 2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, 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 product is a Bluetooth Headset, which supports Bluetooth dual mode technology.
There is no difference except the PCB layout of left and right earbuds.

The Classical Bluetooth and Bluetooth low energy can't transmit at the same time.

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	LIVE BUDS 4
Trademark	JBL
FCC ID	APILIVEBUDS4
IC	6132A-LIVEBUDS4
HVIN	LIVE BUDS 4
Extreme Temperature Range	0°C to +45°C
Operating Voltage	5Vdc;1A, Li-ion battery: 3.87Vdc, 57mAh
Technical Specification of Classical Bluetooth	
Operating Frequency band	2402 ~ 2480 MHz
Channel Number	79 channels
Channel separation	1MHz
Modulation	GFSK, $\pi/4$ DQPSK
Antenna Type	Integral antenna
Antenna Gain	-1.69 dBi for left earbud, -1.62 dBi for right earbud (Provided by the Client)
Technical Specification of Bluetooth Low Energy	
Operating Frequency band	2402 – 2480 MHz for data rate 1Mbps 2404 – 2478 MHz for data rate 2Mbps
Channel Number	40 channels for data rate 1Mbps 37 channels for data rate 2Mbps Note: 2402MHz/2426MHz/2480MHz will be disable via software for data rate 2Mbps.
Channel separation	2MHz
Data rate	1Mbps, 2Mbps
Modulation	GFSK
Antenna Type	Integral antenna
Antenna Gain	-1.69 dBi for left earbud, -1.62 dBi for right earbud (Provided by the Client)

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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

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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 C63.10-2020, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024.

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

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)

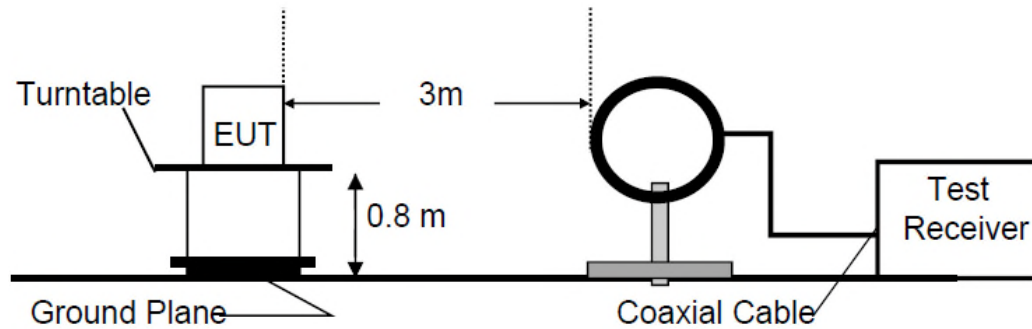


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

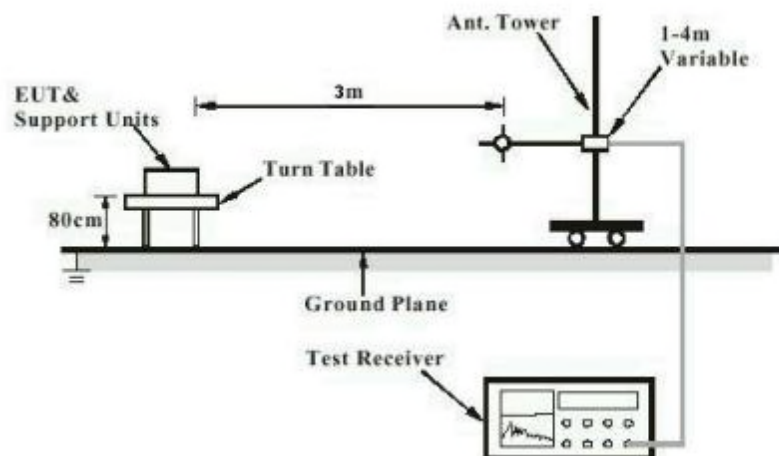


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

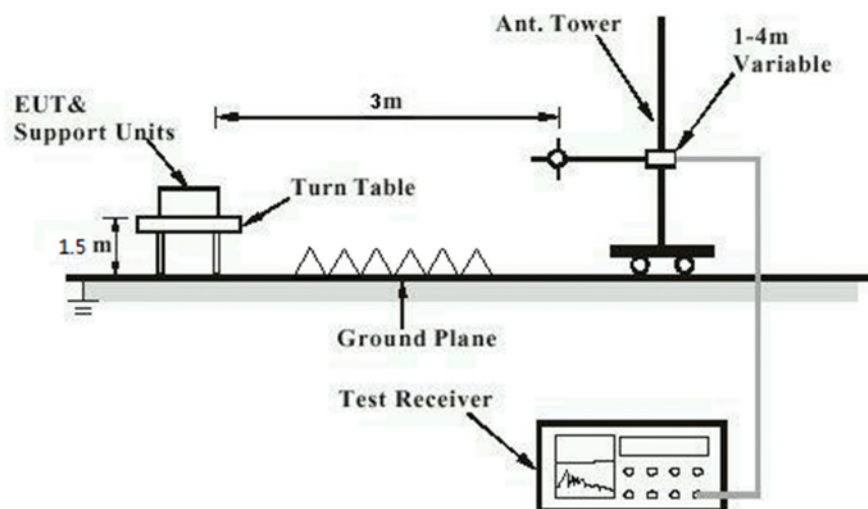


Diagram of Measurement Configuration for Mains Conduction Measurement

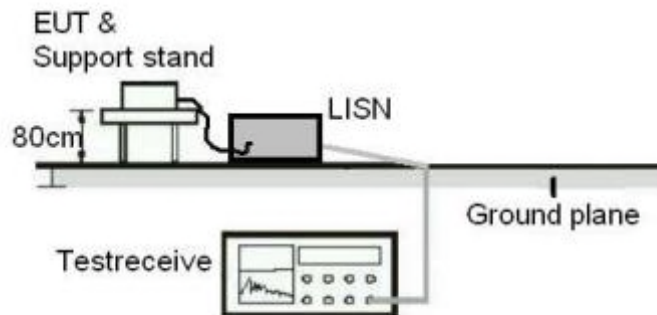
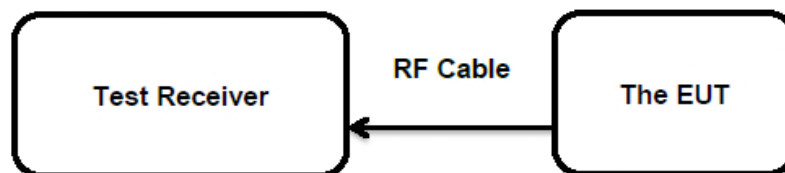


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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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 two Integral antennas, the directional gain of antennas is -1.69 dBi for left earbud, -1.62 dBi for right earbud, 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.

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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 C63.10-2020, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024
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	2026-08-05 to 2026-08-30
Input voltage	DC 3.87V
Operation mode	A.1
Test channel	Low / Middle / High
Ambient temperature	25.4 °C
Relative humidity	50.2 %
Atmospheric pressure	101 kPa

Table 6: Test Result of Maximum Conducted Output Power

Left earbud:

Test Mode	Channel Frequency (MHz)	Measured Peak Output Power		Limit (W)
		(dBm)	(W)	
BR	2402	11.70	0.01479	< 0.125
	2441	11.45	0.01396	
	2480	11.60	0.01445	
EDR	2402	13.26	0.02118	
	2441	12.93	0.01963	
	2480	13.26	0.02118	
Maximum Measured Value		13.26	0.02118	

Note: The cable loss is taken into account in results and the maximum e.i.r.p. is 11.57dBm less than 4W(36dBm).

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Right earbud:

Test Mode	Channel Frequency (MHz)	Measured Peak Output Power		Limit (W)
		(dBm)	(W)	
BR	2402	11.81	0.01517	< 0.125
	2441	11.4	0.01380	
	2480	11.52	0.01419	
EDR	2402	13.48	0.02228	
	2441	12.99	0.01991	
	2480	13.35	0.02163	
Maximum Measured Value		13.48	0.02228	

Note: The cable loss is taken into account in results and the maximum e.i.r.p. is 11.86dBm less than 4W(36dBm).

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5.1.3 99% Bandwidth

RESULT:

Pass

Test Specification

Test standard : RSS-Gen Clause 6.7
Basic standard : ANSI C63.10-2020, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024
Kind of test site : Shielded Room

Test Setup

Date of testing : 2026-08-05 to 2026-08-30
Input voltage : DC 3.87V
Operation mode : A.1
Test channel : Low / Middle / High
Ambient temperature : 25.4 °C
Relative humidity : 50.2 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix B & C

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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 C63.10-2020, ANSI C63.10-2020+Cor. 1- 2023+C63.10a-2024
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	: 2026-08-05 to 2026-08-30
Input voltage	: DC 3.87V
Operation mode	: A.1
Test channel	: Low / Middle / High
Ambient temperature	: 25.4 °C
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 B & C

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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 C63.10-2020, ANSI C63.10-2020+Cor. 1- 2023+C63.10a-2024
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	: 2026-08-05 to 2026-08-30
Input voltage	: DC 3.87V
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:

During the pretest the EUT was rotated through three orthogonal axes to determine the attitude that maximizes the emissions. After that the EUT was manually handled to find the orientation that has the maximum emission, which is the orientation shown in the test set-up photos.

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

For the measurement records, refer to the appendix B & C

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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 C63.10-2020, ANSI C63.10-2020+Cor. 1-
2023+C63.10a-2024
Kind of test site : Shielded Room

Test Setup

Date of testing : 2026-08-05 to 2026-08-30
Input voltage : DC 3.87V
Operation mode : A.1
Test channel : Low / Middle / High
Ambient temperature : 25.4 °C
Relative humidity : 50.2 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix B & C

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Test report no.:

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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 C63.10-2020, ANSI C63.10-2020+Cor. 1- 2023+C63.10a-2024
Limits	: $\geq 25\text{kHz}$ or 2/3 of 20dB bandwidth, whichever is greater
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-08-05 to 2026-08-30
Input voltage	: DC 3.87V
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 25.4 °C
Relative humidity	: 50.2 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B & C

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Test report no.:

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5.1.8 Frequency stability

RESULT:

Pass

Test Specification

Test standard	: RSS-Gen Clause 8.11
Basic standard	: ANSI C63.10-2020, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024
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	: 2026-08-05 to 2026-08-30
Input voltage	: DC 3.87V
Operation mode	: B
Ambient temperature	: 25.4 °C
Relative humidity	: 50.2 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B & C

Prüfbericht-Nr.: CN26L8MF 001
Test report no.:Seite 23 von 25
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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 C63.10-2020, ANSI C63.10-2020+Cor. 1- 2023+C63.10a-2024
Limits	: ≥ 15 non-overlapping channels
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-08-05 to 2026-08-30
Input voltage	: DC 3.87V
Operation mode	: B
Ambient temperature	: 25.4 °C
Relative humidity	: 50.2 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B & C .

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Test report no.:Seite 24 von 25
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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 C63.10-2020, ANSI C63.10-2020+Cor. 1- 2023+C63.10a-2024
Limits	: < 0.4s
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2026-08-05 to 2026-08-30
Input voltage	: DC 3.87V
Operation mode	: B
Test channel	: Low / Middle / High
Ambient temperature	: 25.4 °C
Relative humidity	: 50.2 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B & C .

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6 Photographs of the Test Set-Up

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

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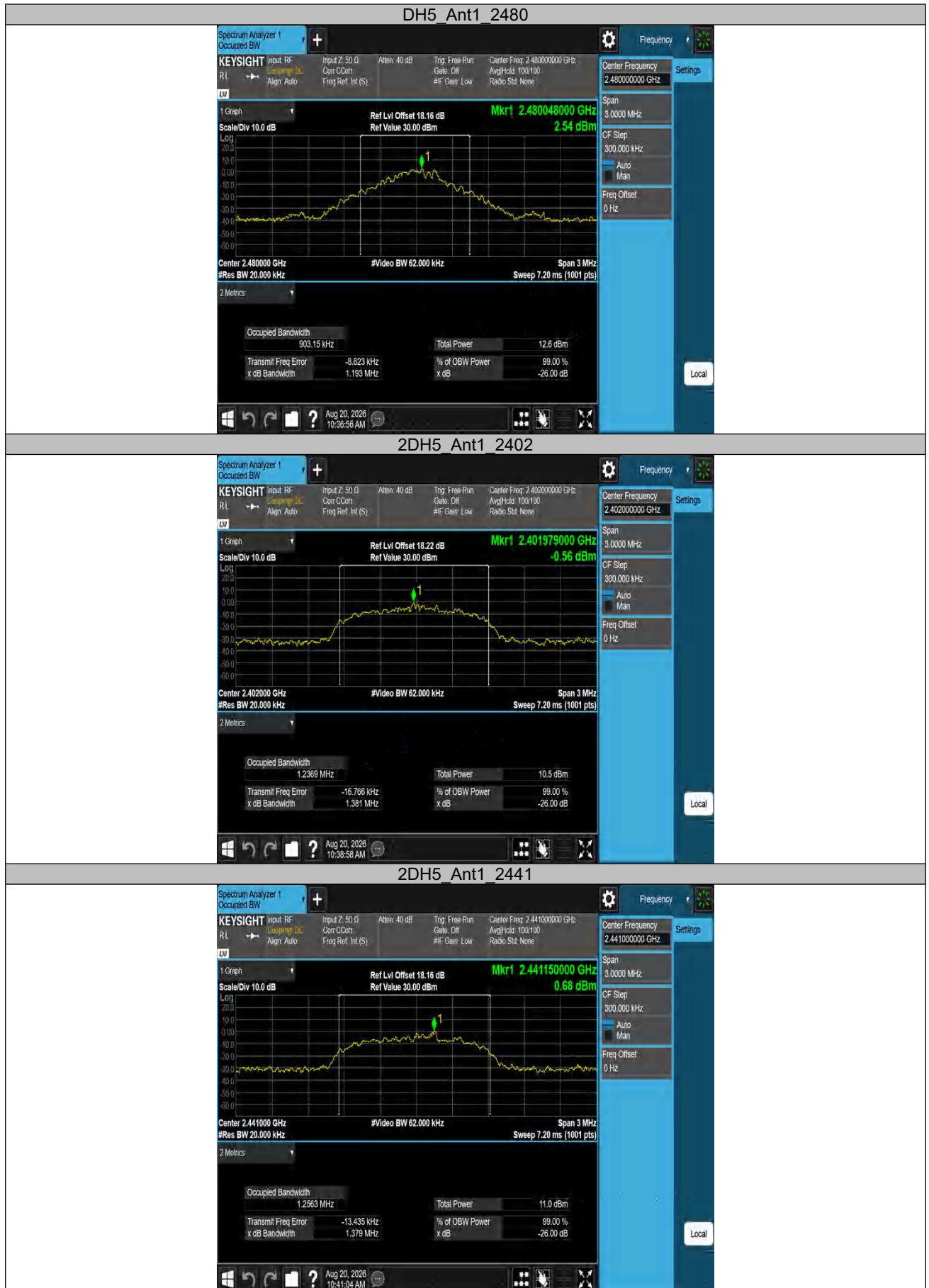
Appendix B: Test Results of Classical Bluetooth_Left Earbud

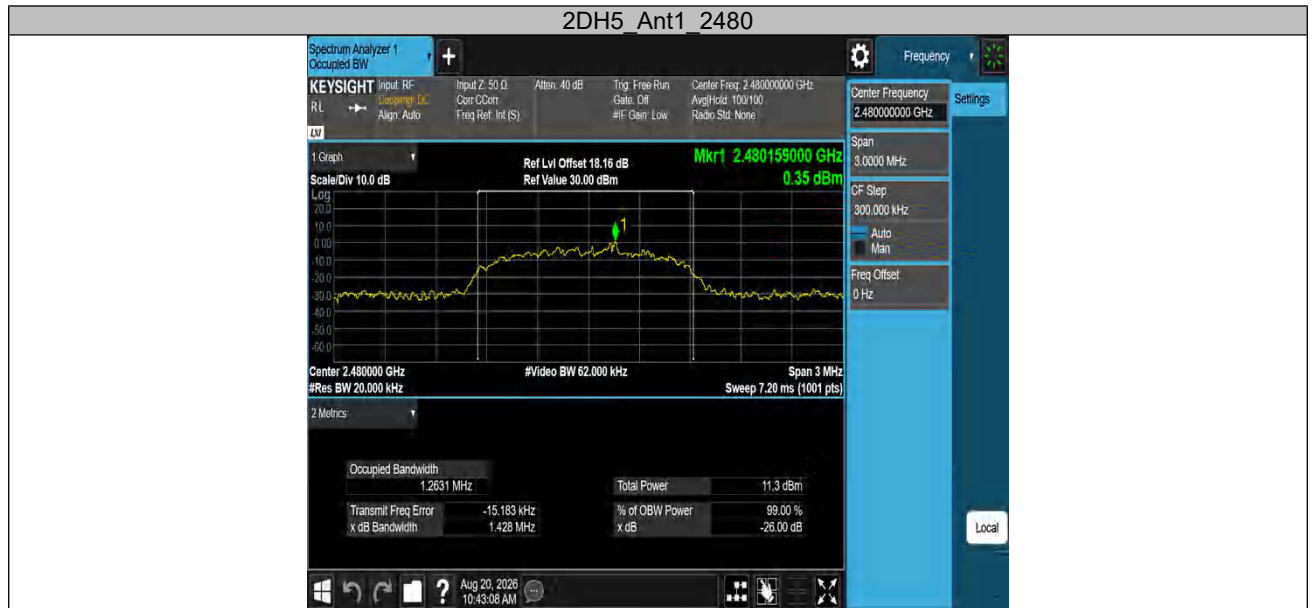
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Appendix B.1: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.90113	2401.5441	2402.4452	---	---
		2441	0.90130	2440.5411	2441.4424	---	---
		2480	0.90315	2479.5398	2480.4430	---	---
2DH5	Ant1	2402	1.2369	2401.3648	2402.6017	---	---
		2441	1.2563	2440.3584	2441.6147	---	---
		2480	1.2631	2479.3533	2480.6164	---	---







Appendix B.2: Test Results of 20dB Bandwidth

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.532	2402.477	---	---
		2441	0.945	2440.532	2441.477	---	---
		2480	0.948	2479.529	2480.477	---	---
2DH5	Ant1	2402	1.278	2401.340	2402.618	---	---
		2441	1.296	2440.340	2441.636	---	---
		2480	1.317	2479.334	2480.651	---	---

DH5 Ant1 2402



DH5 Ant1 2441



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DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441





Appendix B.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 3.87V	2402.000	0	0.00	10
DC 3.48V	2402.000	0	0.00	
DC 4.26V	2402.000	0	0.00	

Test result of frequency tolerance of temperature variation

Temperature (°C)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2402.005	5	2.08	10
-20	2402.003	3	1.25	
-10	2402.002	2	0.83	
0	2402.001	1	0.42	
10	2402.000	0	0.00	
20	2402.000	0	0.00	
30	2402.000	0	0.00	
40	2402.000	0	0.00	
50	2402.001	1	0.42	
55	2402.001	1	0.42	

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 3.87V	2441.000	0	0.00	10
DC 3.48V	2440.998	-2	-0.82	
DC 4.26V	2440.999	-1	-0.41	

Test result of frequency tolerance of temperature variation

Temperature (°C)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2440.999	-1	-0.41	10
-20	2440.999	-1	-0.41	
-10	2440.998	-2	-0.82	
0	2440.998	-2	-0.82	
10	2440.999	-1	-0.41	
20	2441.000	0	0.00	
30	2441.000	0	0.00	
40	2441.000	0	0.00	
50	2441.000	0	0.00	
55	2440.998	-2	-0.82	

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 3.87V	2480.000	0	0.00	10
DC 3.48V	2480.000	0	0.00	
DC 4.26V	2479.999	-1	-0.40	

Test result of frequency tolerance of temperature variation

Temperature (°C)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2479.998	-2	-0.81	10
-20	2479.999	-1	-0.40	
-10	2479.999	-1	-0.40	
0	2479.999	-1	-0.40	
10	2480.000	0	0.00	
20	2480.000	0	0.00	
30	2480.000	0	0.00	
40	2480.000	0	0.00	
50	2479.999	-1	-0.40	
55	2479.999	-1	-0.40	

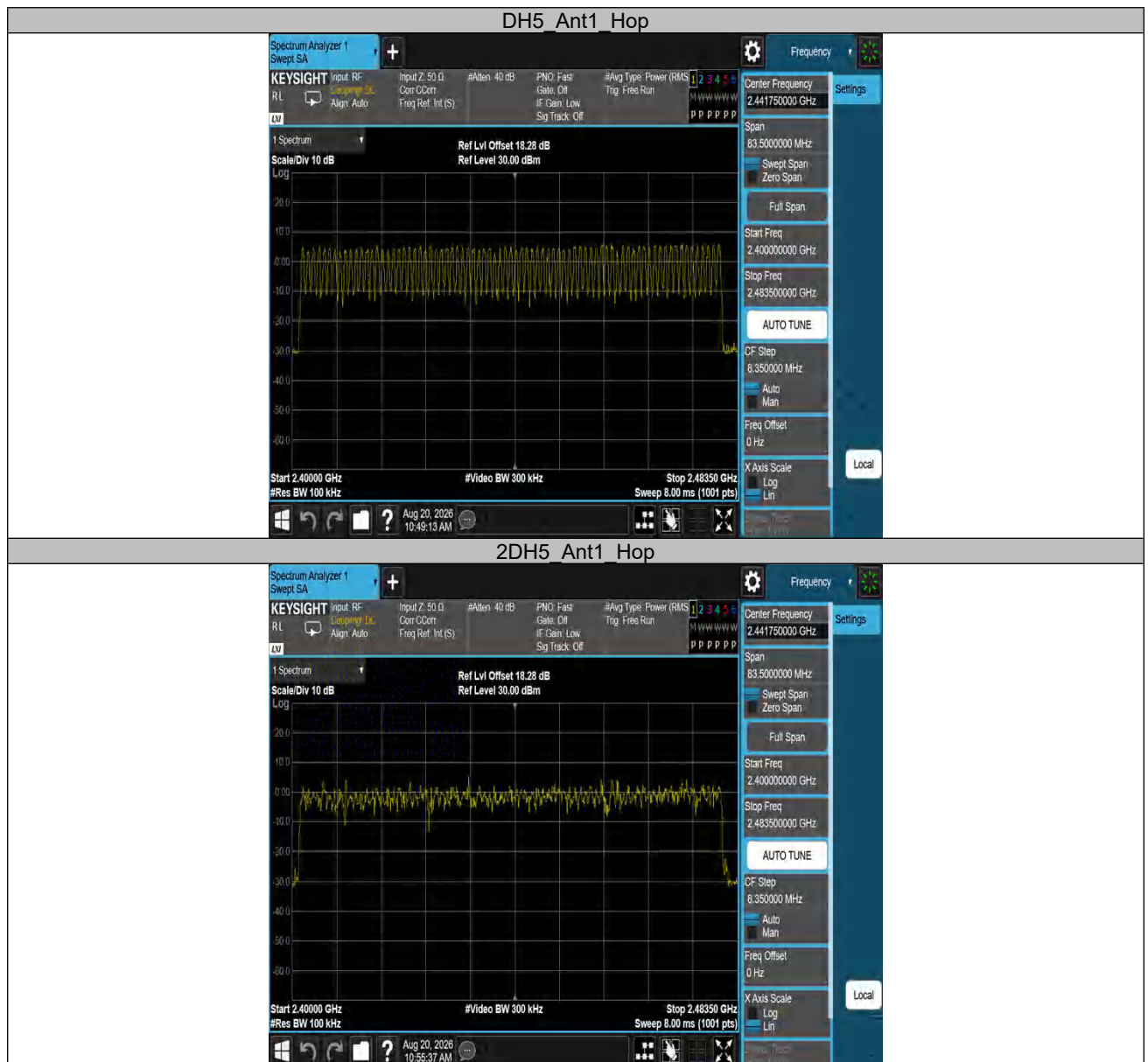
Appendix B.4: Test Results of Carrier Frequency Separation

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.138	≥ 0.948	PASS
2DH5	Ant1	Hop	0.954	≥ 0.878	PASS



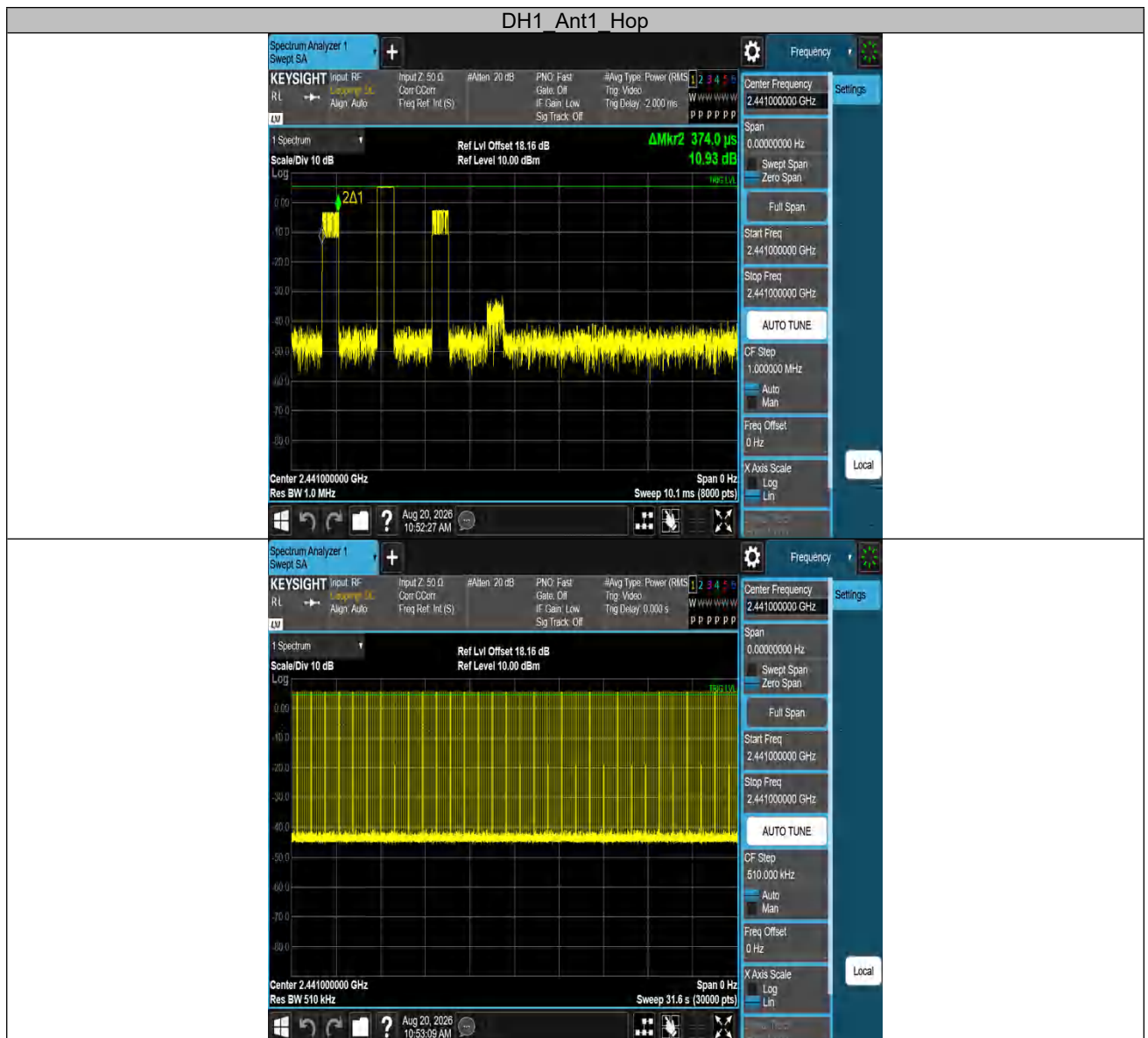
Appendix B.5: Test Results of Number of Hopping Frequency

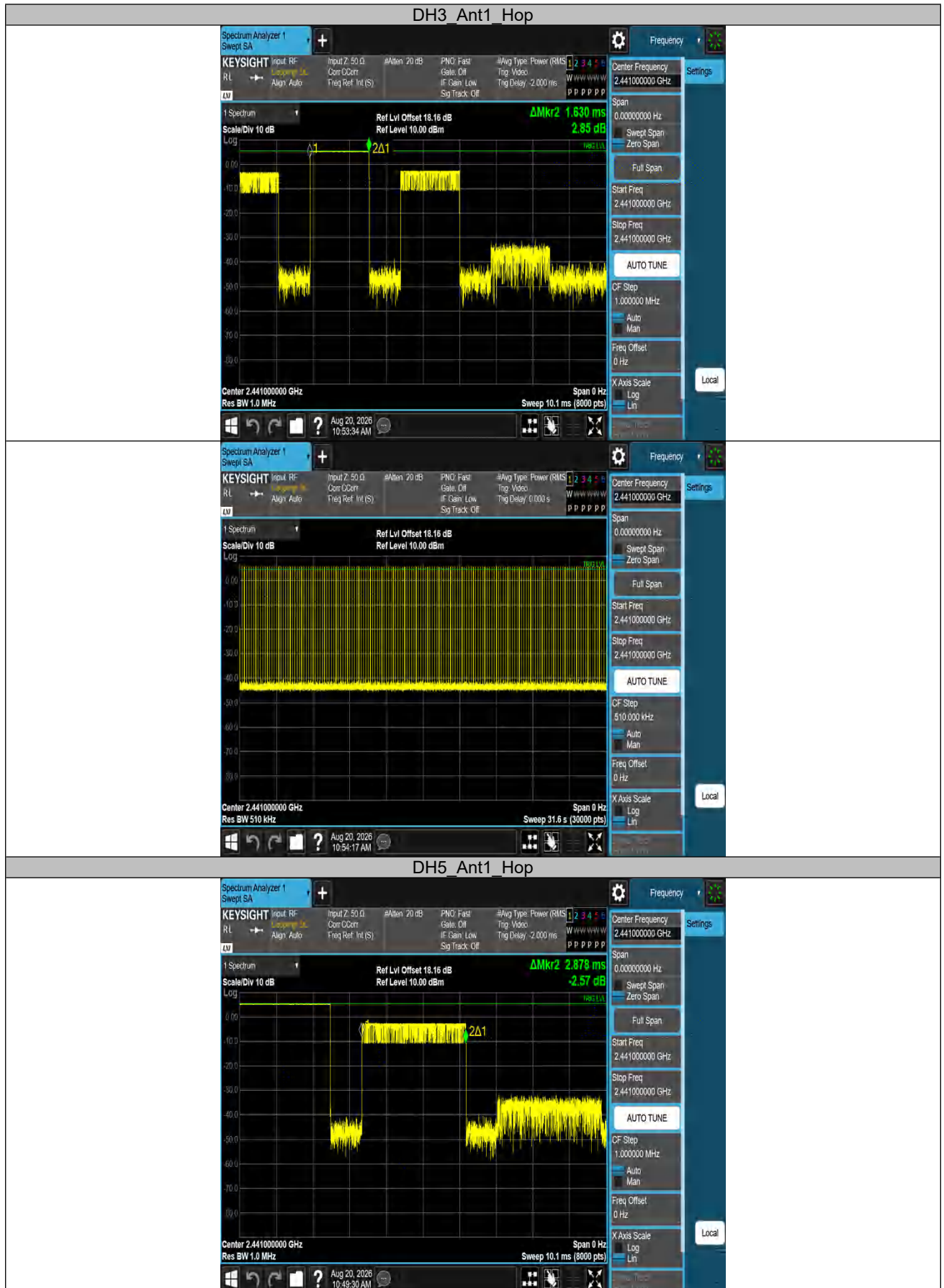
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

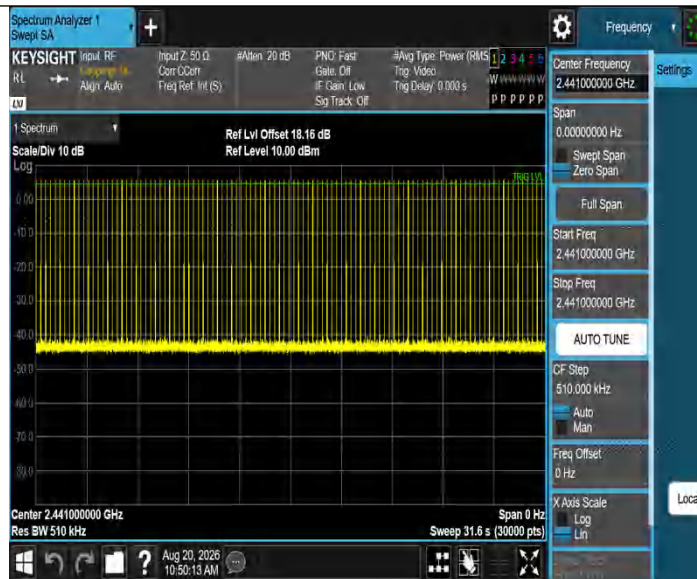


Appendix B.6: Test Results of Time of Occupancy

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.374	319	0.119	≤0.4	PASS
DH3	Ant1	Hop	1.630	159	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.878	107	0.308	≤0.4	PASS
2DH1	Ant1	Hop	0.380	319	0.121	≤0.4	PASS
2DH3	Ant1	Hop	1.631	159	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.882	107	0.308	≤0.4	PASS

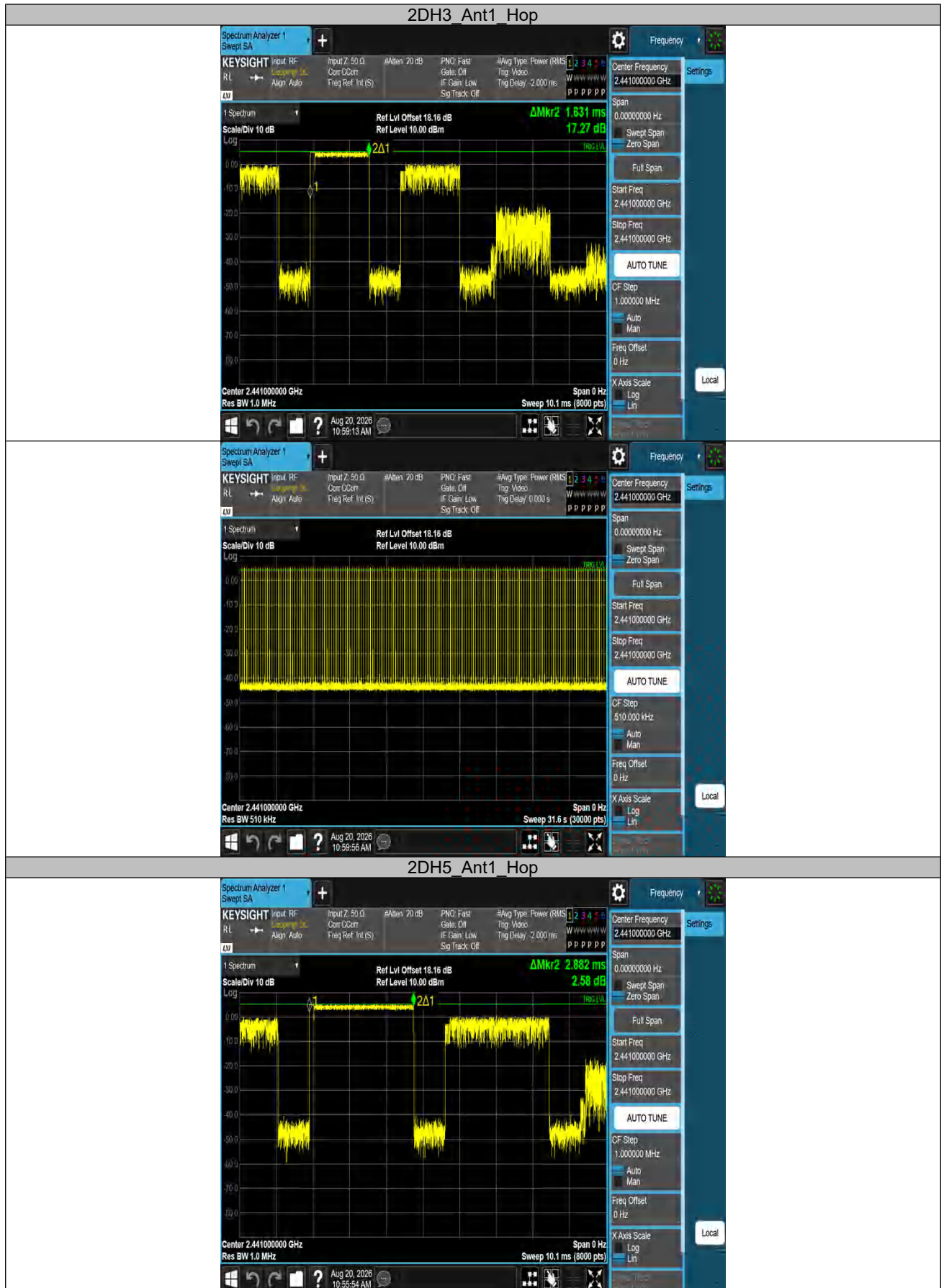


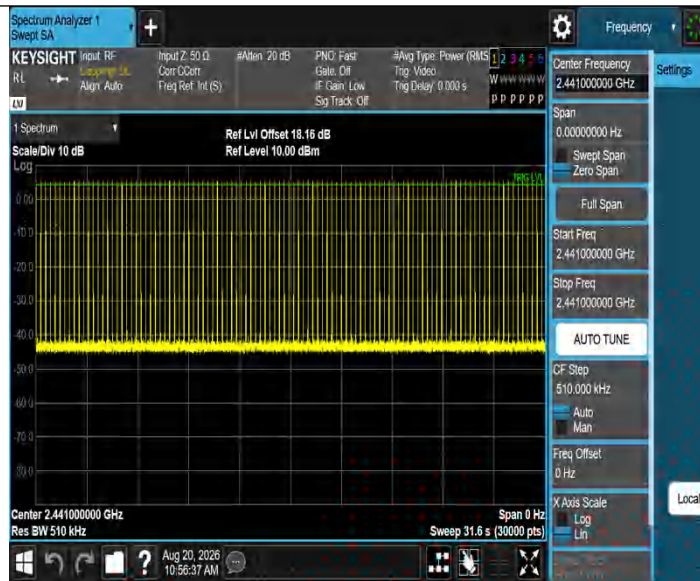




2DH1 Ant1 Hop



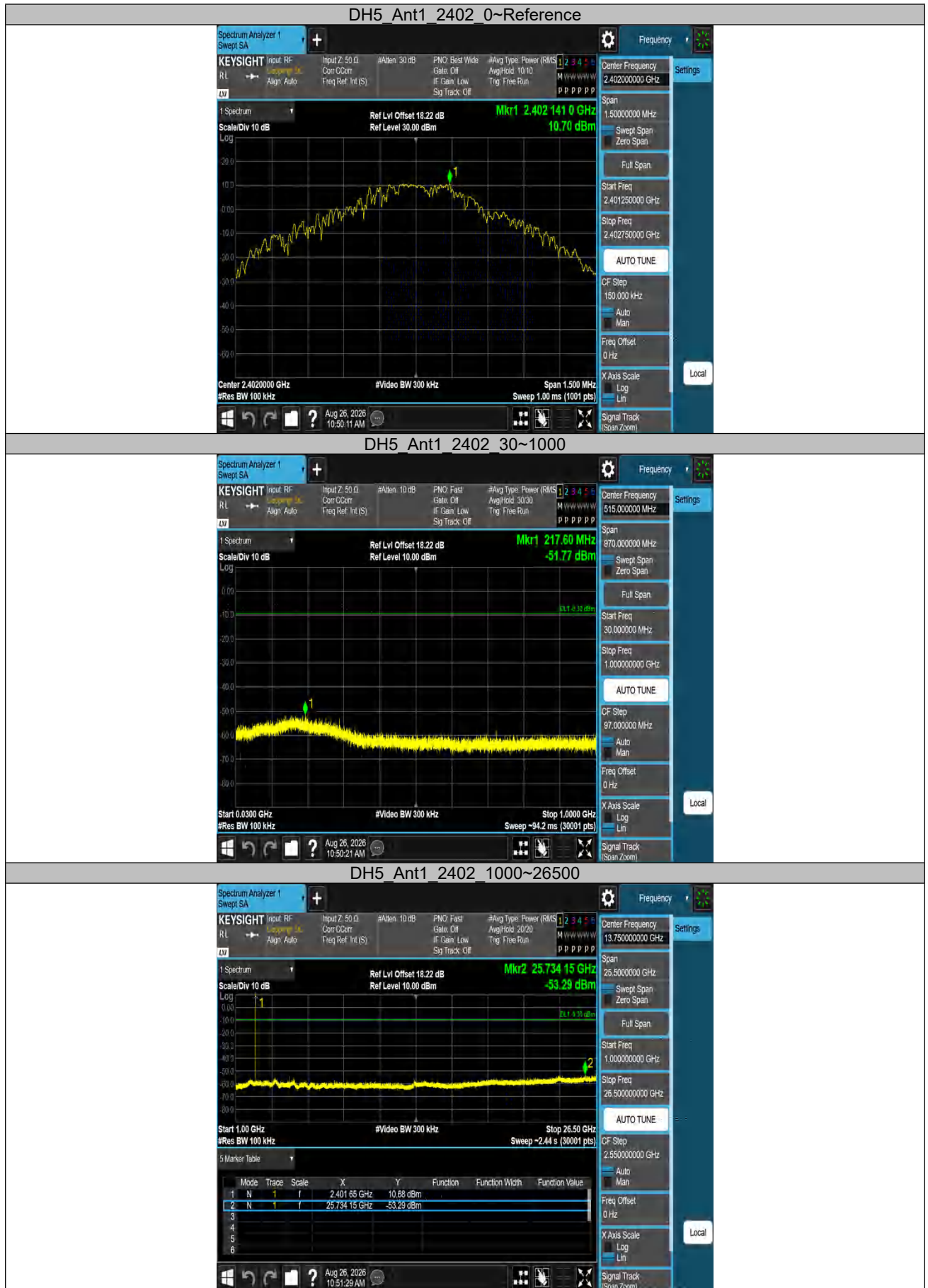


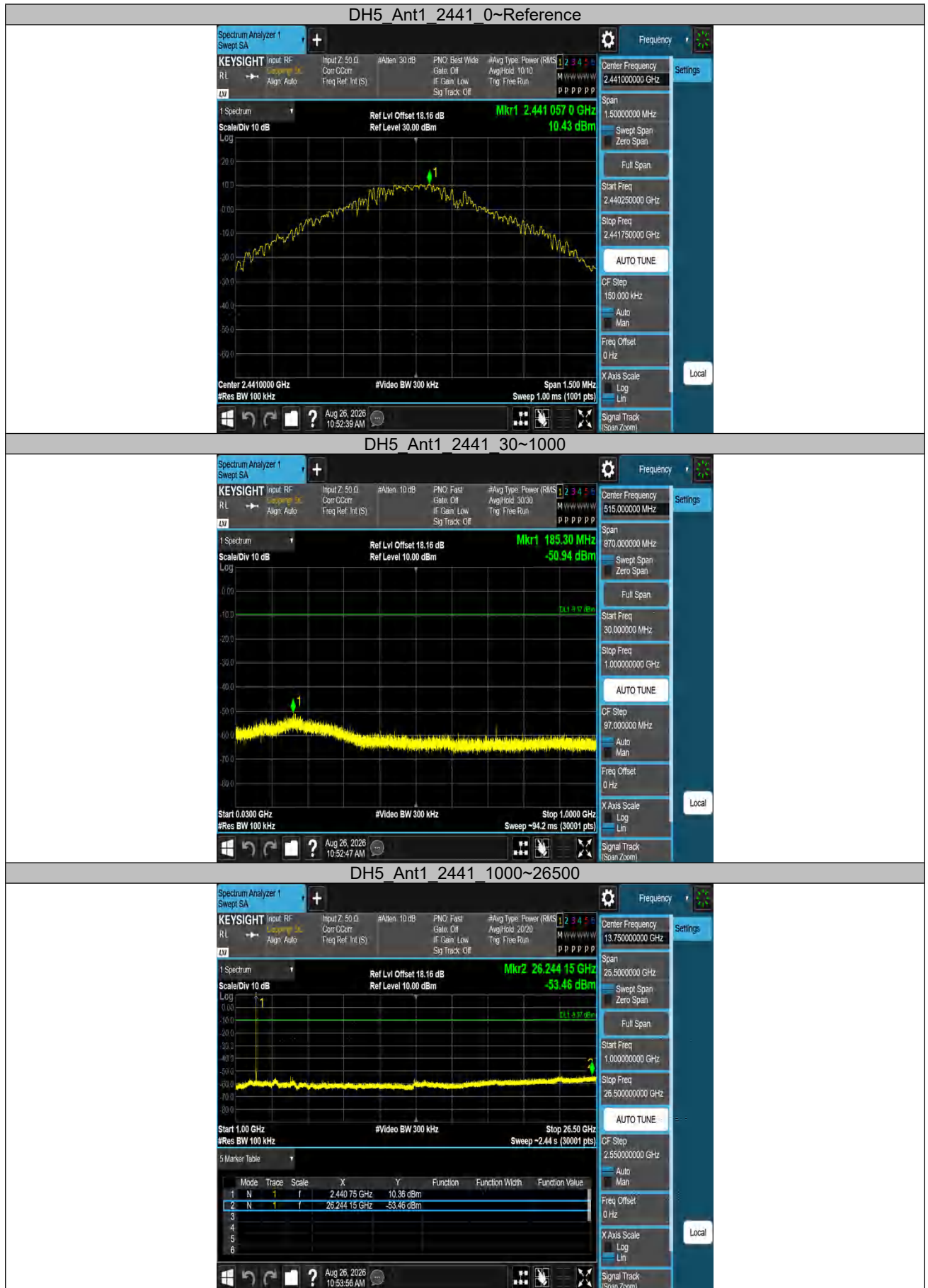


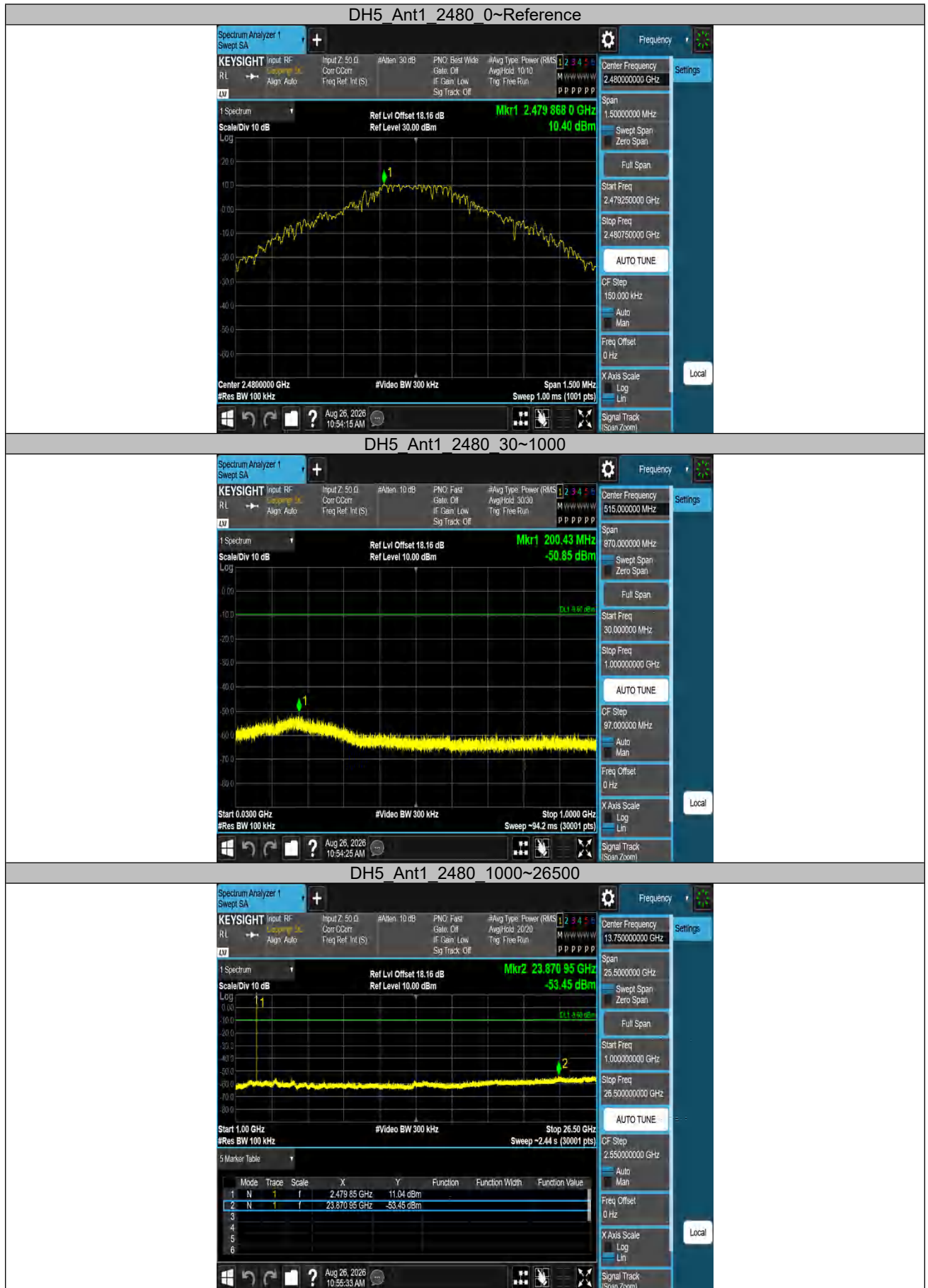
Appendix B.7: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	10.70	10.70	---	PASS
			30~1000	10.70	-51.77	≤-9.3	PASS
			1000~26500	10.70	-53.3	≤-9.3	PASS
		2441	Reference	10.43	10.43	---	PASS
			30~1000	10.43	-50.94	≤-9.57	PASS
			1000~26500	10.43	-53.46	≤-9.57	PASS
		2480	Reference	10.40	10.40	---	PASS
			30~1000	10.40	-50.85	≤-9.6	PASS
			1000~26500	10.40	-53.46	≤-9.6	PASS
2DH5	Ant1	2402	Reference	12.09	12.09	---	PASS
			30~1000	12.09	-50.74	≤-7.91	PASS
			1000~26500	12.09	-53.57	≤-7.91	PASS
		2441	Reference	8.20	8.20	---	PASS
			30~1000	8.20	-50.93	≤-11.8	PASS
			1000~26500	8.20	-53.21	≤-11.8	PASS
		2480	Reference	12.25	12.25	---	PASS
			30~1000	12.25	-51	≤-7.75	PASS
			1000~26500	12.25	-52.84	≤-7.75	PASS













Band edge measurements.

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	11.44	-41.33	≤-8.56	PASS
		High	2480	11.32	-40.98	≤-8.68	PASS
2DH5	Ant1	Low	2402	13.16	-39.83	≤-6.84	PASS
		High	2480	13.09	-42.28	≤-6.91	PASS
DH5	Ant1	Hopping	2402	10.35	-41.58	≤-9.65	PASS
		Hopping	2480	10.22	-41.70	≤-9.78	PASS
2DH5	Ant1	Hopping	2402	8.12	-41.33	≤-11.88	PASS
		Hopping	2480	8.18	-40.50	≤-11.82	PASS



2DH5 Ant1 Low 2402



2DH5 Ant1 High 2480



DH5 Ant1 Hopping 2402







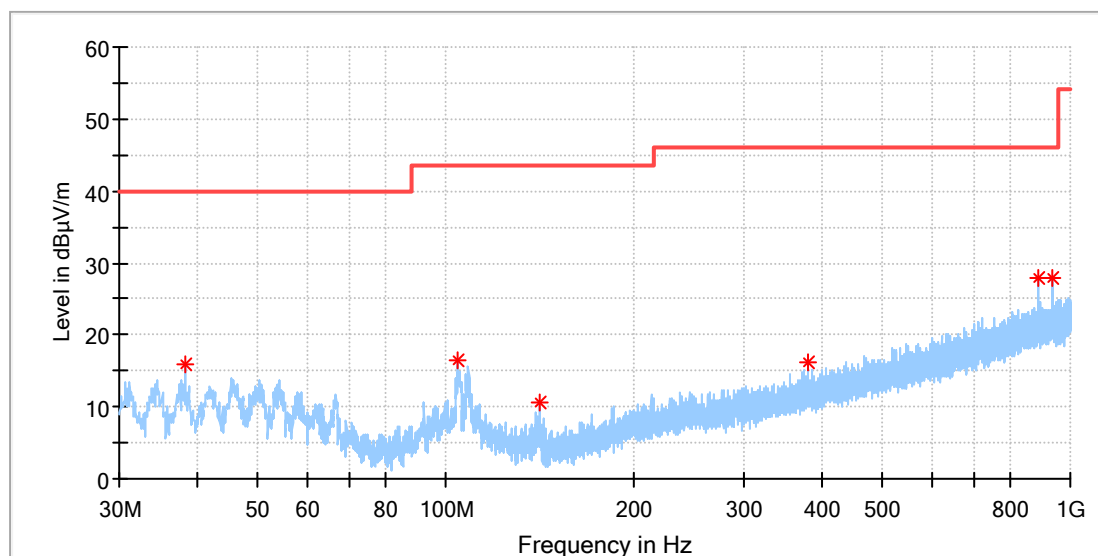
Appendix B.8: Test Results of Radiated Spurious Emissions

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:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

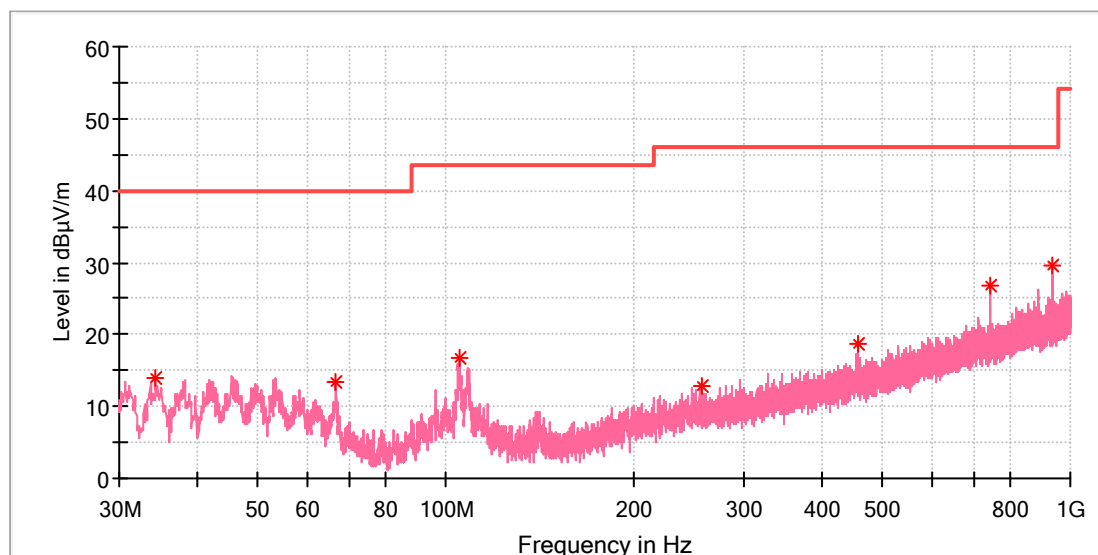
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
38.245000	16.03	40.00	23.97	100.0	H	215.0	-20.7
104.636111	16.47	43.50	27.03	100.0	H	85.0	-18.9
141.172778	10.59	43.50	32.91	100.0	H	215.0	-22.4
380.116111	16.06	46.00	29.94	100.0	H	85.0	-14.2
890.982778	27.77	46.00	18.23	100.0	H	51.0	-4.9
938.458889	28.04	46.00	17.96	100.0	H	286.0	-4.4

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: BLUETOOTH HEADSET
Model: LIVE BUDS 4
Test Mode: BR DH5_Mid channel
Order No/Sample No: A004355370-001
Test Voltage: Battery
Remark: Temp 21.8°C Humi:49%
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)
34.311111	13.90	40.00	26.10	100.0	V	0.0	-22.2
66.752222	13.51	40.00	26.49	100.0	V	220.0	-20.8
105.067222	16.65	43.50	26.85	100.0	V	68.0	-18.9
257.518889	12.70	46.00	33.30	100.0	V	76.0	-17.2
457.554444	18.72	46.00	27.28	100.0	V	189.0	-12.6
742.465000	26.84	46.00	19.16	100.0	V	233.0	-7.2
938.405000	29.59	46.00	16.41	100.0	V	12.0	-4.4

Final Result

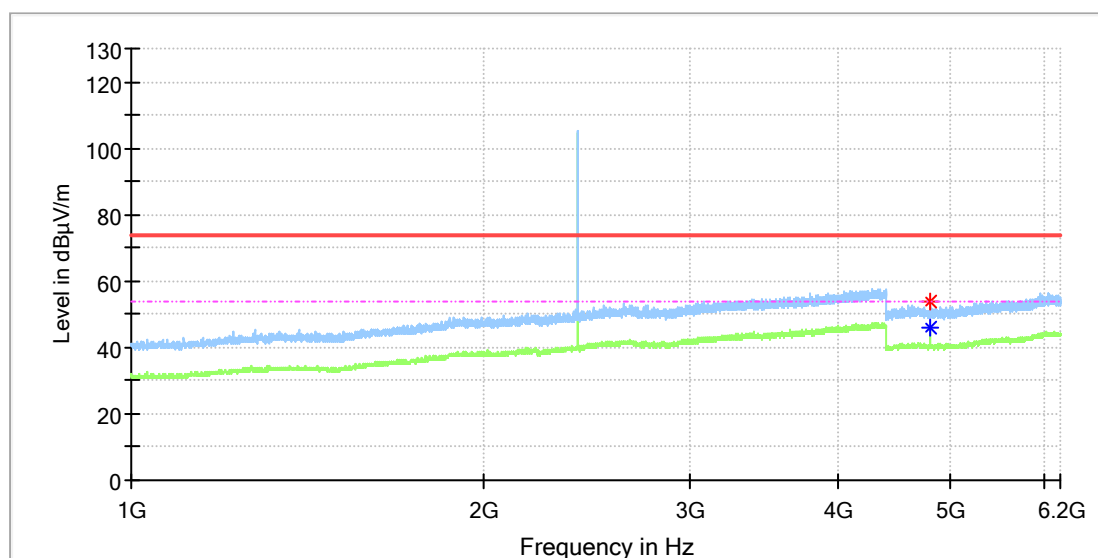
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

1GHz - 18GHz

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

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

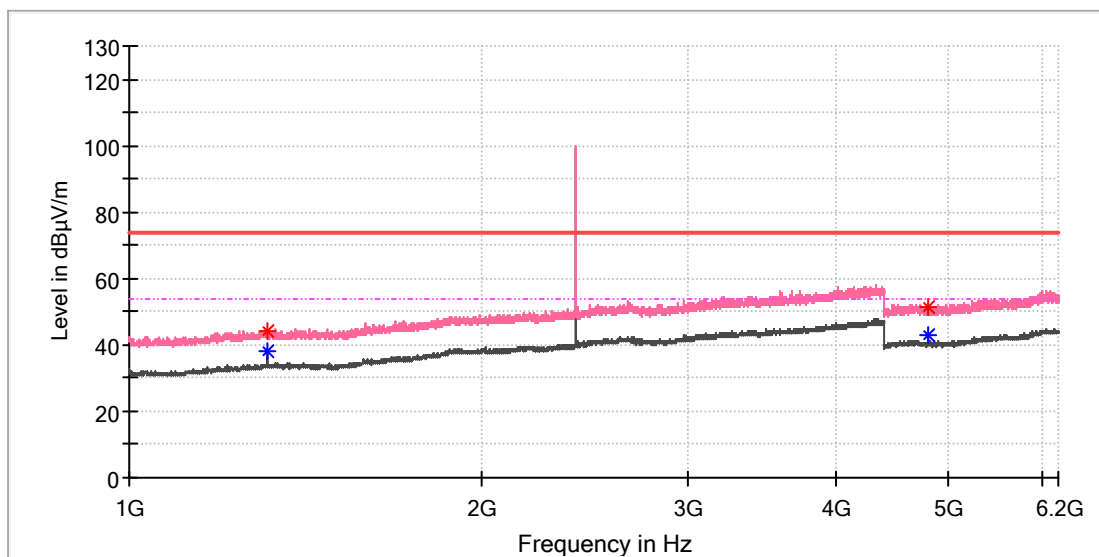
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	53.95	---	74.00	20.05	150.0	H	230.0	13.3
4804.000000	---	45.68	54.00	8.32	150.0	H	230.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

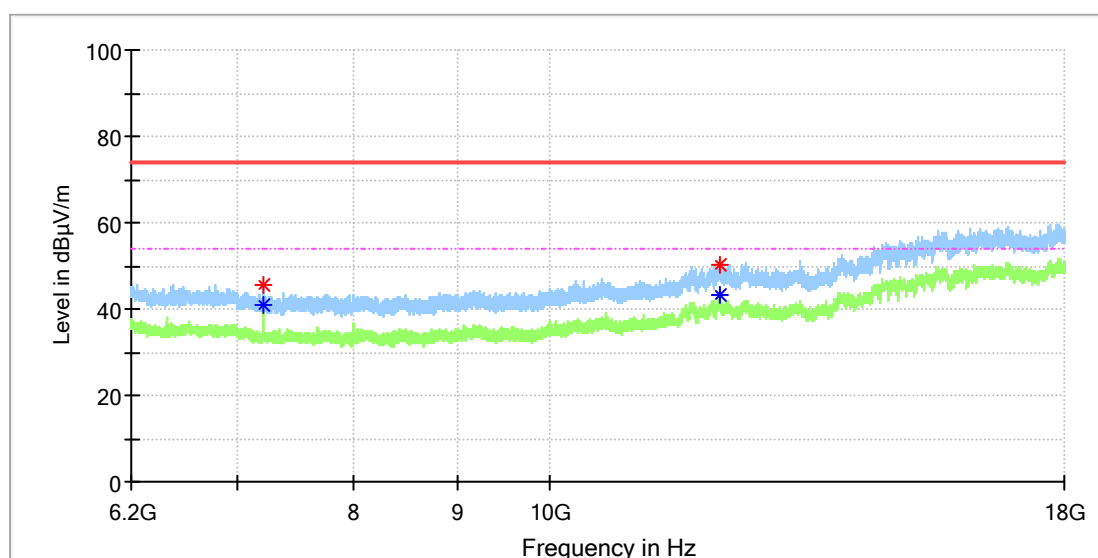
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1310.500000	44.03	---	74.00	29.97	150.0	V	185.0	2.8
1312.500000	---	37.79	54.00	16.21	150.0	V	275.0	2.8
4803.500000	51.66	---	74.00	22.34	150.0	V	144.0	13.3
4804.000000	---	43.08	54.00	10.92	150.0	V	288.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
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Reviewed By:	Terry Yin



Critical Freqs

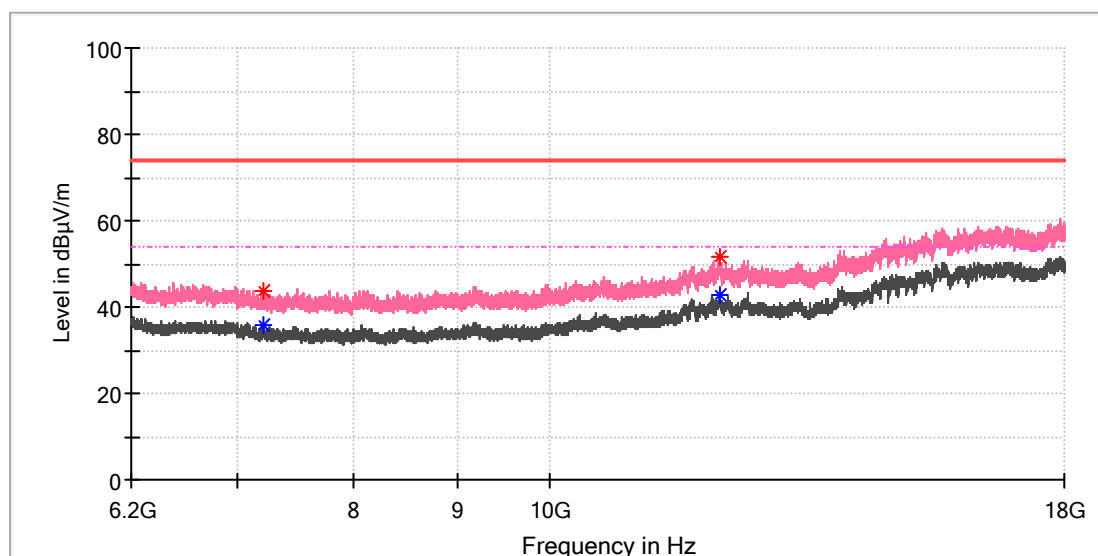
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7205.950000	45.43	---	74.00	28.57	150.0	H	102.0	8.8
7205.950000	---	40.78	54.00	13.22	150.0	H	102.0	8.8
12142.775000	50.40	---	74.00	23.60	150.0	H	102.0	16.5
12157.033333	---	43.20	54.00	10.80	150.0	H	0.0	16.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	100.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

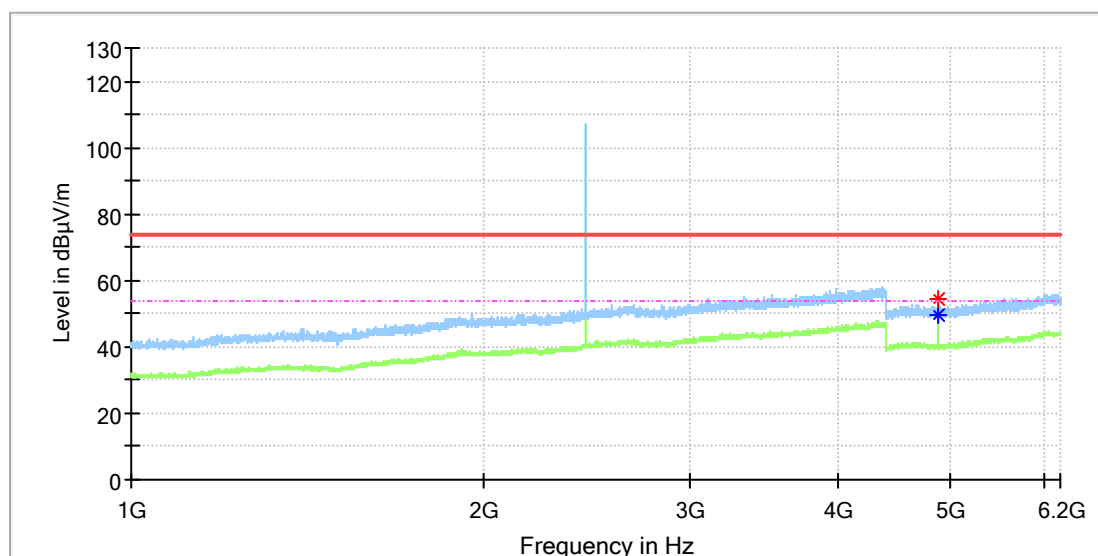
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7214.308333	43.69	---	74.00	30.31	150.0	V	269.0	8.7
7216.766667	---	35.61	54.00	18.39	150.0	V	144.0	8.7
12154.575000	---	42.66	54.00	11.34	150.0	V	235.0	16.5
12158.016667	51.83	---	74.00	22.17	150.0	V	222.0	16.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

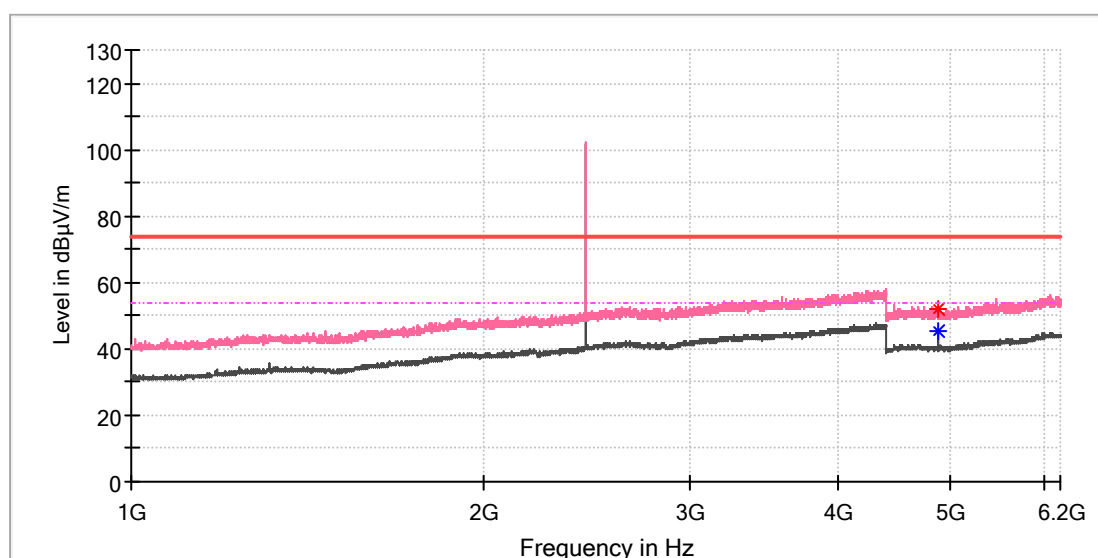
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4881.500000	54.65	---	74.00	19.35	150.0	H	271.0	13.3
4882.000000	---	49.75	54.00	4.25	150.0	H	290.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	118.5	120.0	1.5	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
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)
4882.000000	52.29	---	74.00	21.71	150.0	V	286.0	13.3
4882.000000	---	45.32	54.00	8.68	150.0	V	286.0	13.3

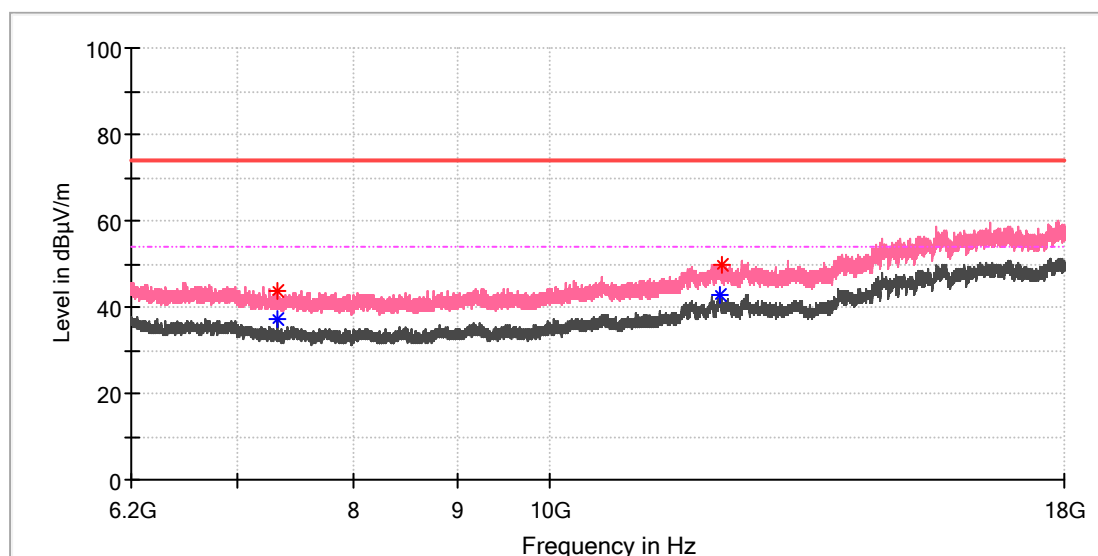
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.750000	120.000000	110.000000	120.000000	0.000000	100.000000	000000	000000	000000

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

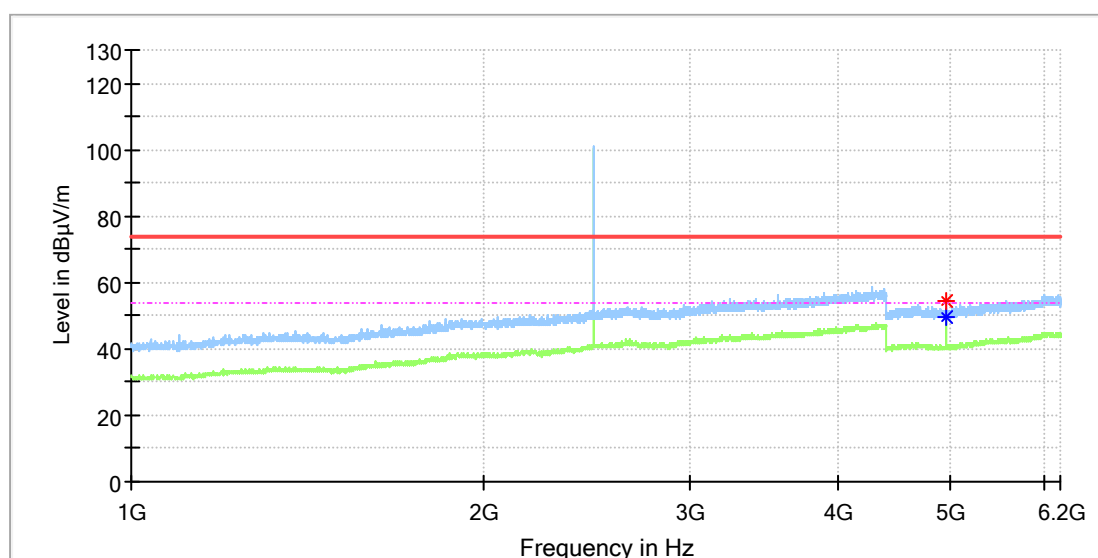
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7323.458333	43.78	---	74.00	30.22	150.0	V	66.0	8.2
7323.458333	---	37.18	54.00	16.82	150.0	V	66.0	8.2
12154.083333	---	42.69	54.00	11.31	150.0	V	109.0	16.5
12163.425000	49.92	---	74.00	24.08	150.0	V	88.0	16.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

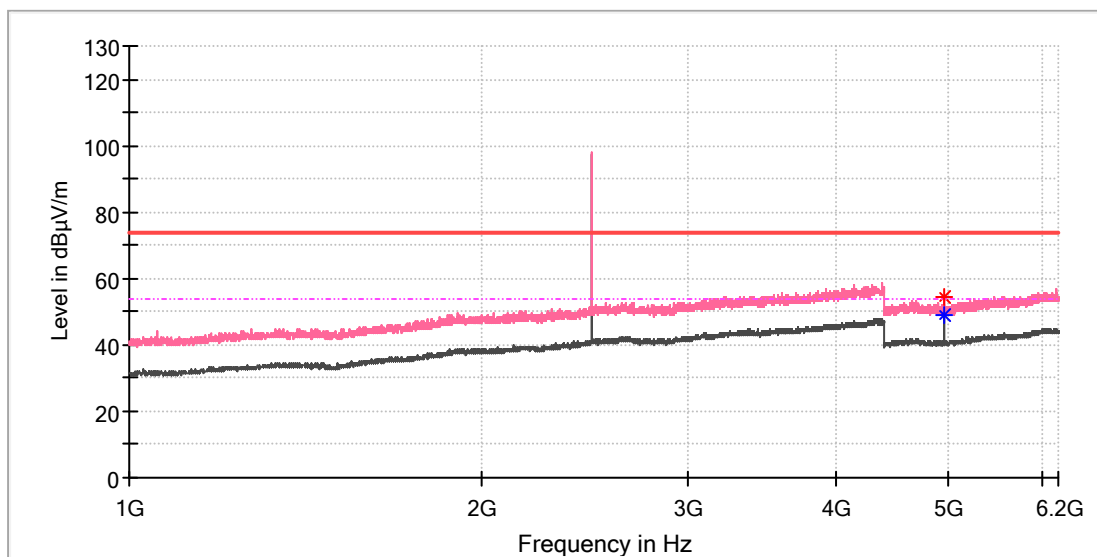
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	54.72	---	74.00	19.28	150.0	H	15.0	13.3
4960.000000	---	49.56	54.00	4.44	150.0	H	15.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.0	118.0	120.0	2.0	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

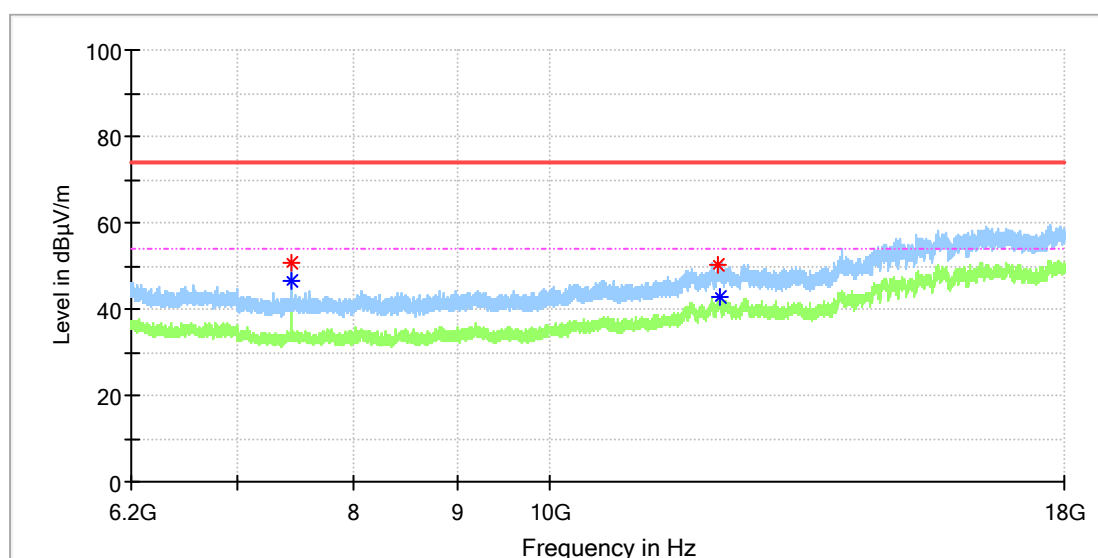
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	54.53	---	74.00	19.47	150.0	V	269.0	13.3
4960.000000	---	48.78	54.00	5.22	150.0	V	276.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

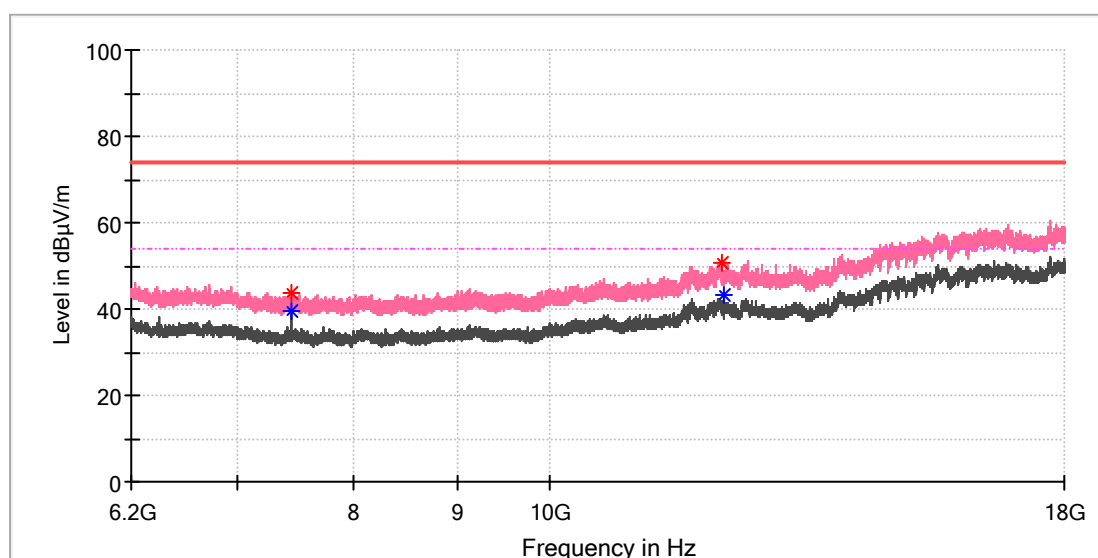
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7439.491667	50.64	---	74.00	23.36	150.0	H	66.0	8.4
7439.491667	---	46.37	54.00	7.63	150.0	H	66.0	8.4
12114.258333	50.46	---	74.00	23.54	150.0	H	320.0	15.8
12134.416667	---	42.81	54.00	11.19	150.0	H	0.0	16.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
----	----	----	----	----	----		----	----

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
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)
7439.491667	43.59	---	74.00	30.41	150.0	V	115.0	8.4
7439.491667	---	39.38	54.00	14.62	150.0	V	115.0	8.4
12160.475000	50.75	---	74.00	23.25	150.0	V	0.0	16.2
12201.283333	---	43.45	54.00	10.55	150.0	V	295.0	15.7

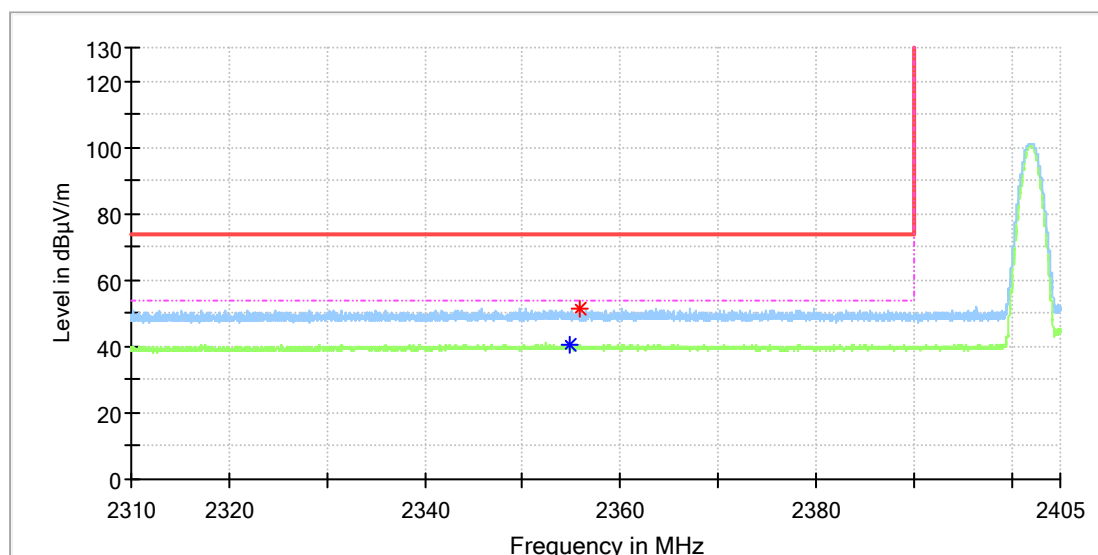
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

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

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

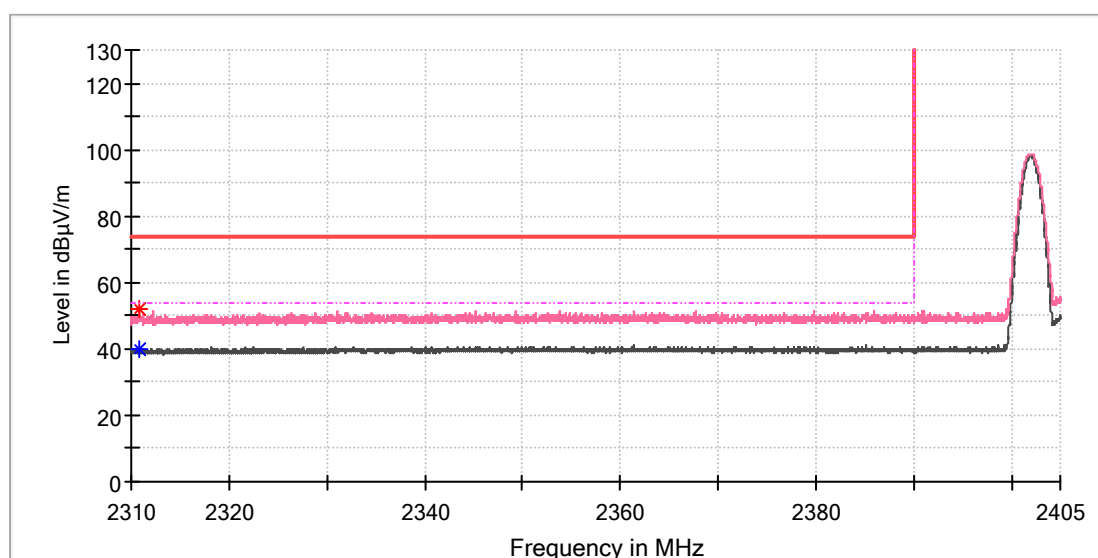
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2354.849412	---	40.54	54.00	13.46	150.0	H	156.0	8.5
2355.944706	51.54	---	74.00	22.46	150.0	H	156.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

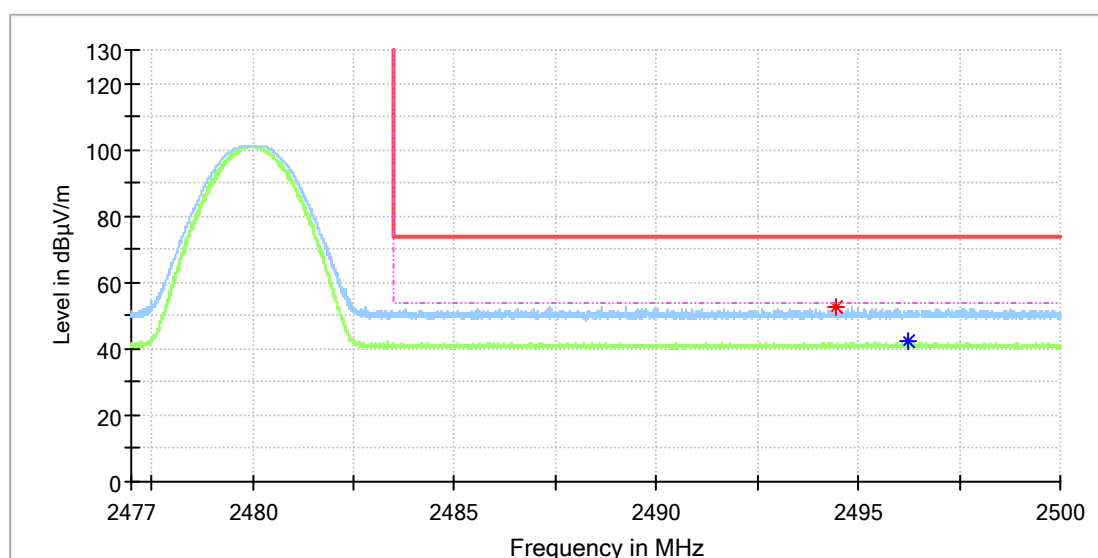
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2310.749412	---	39.97	54.00	14.03	150.0	V	244.0	8.1
2310.864706	52.00	---	74.00	22.00	150.0	V	346.0	8.1

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.0	118.0	120.0	2.0	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

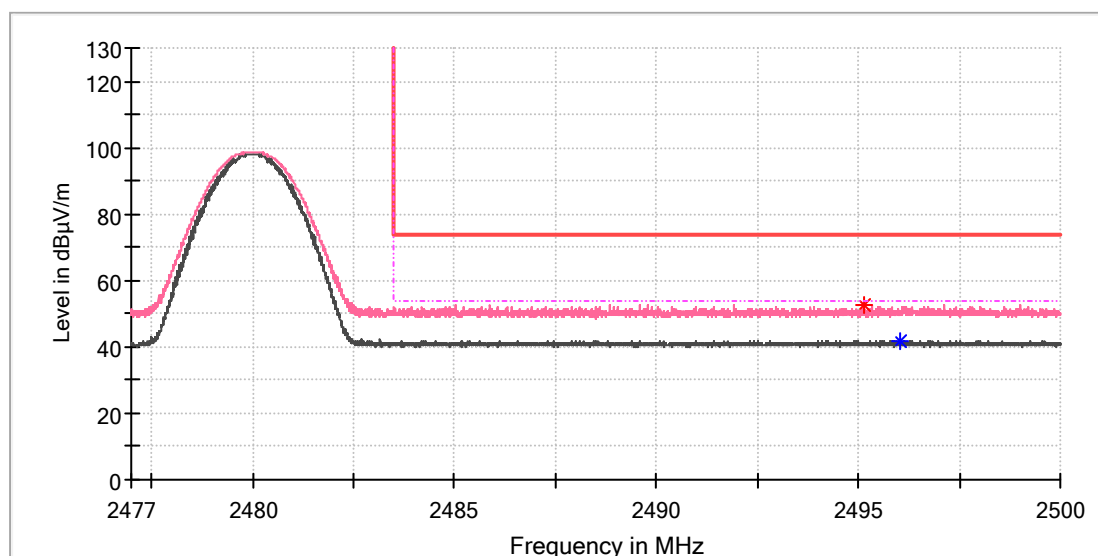
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2494.449412	52.81	---	74.00	21.19	150.0	H	60.0	9.0
2496.240588	---	42.07	54.00	11.93	150.0	H	167.0	9.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	118.5	120.0	1.5	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
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)
2495.125000	52.80	---	74.00	21.21	150.0	V	357.0	9.0
2496.055882	---	41.87	54.00	12.13	150.0	V	136.0	9.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	122.5	122.5	0.0	100	V	135	0.0

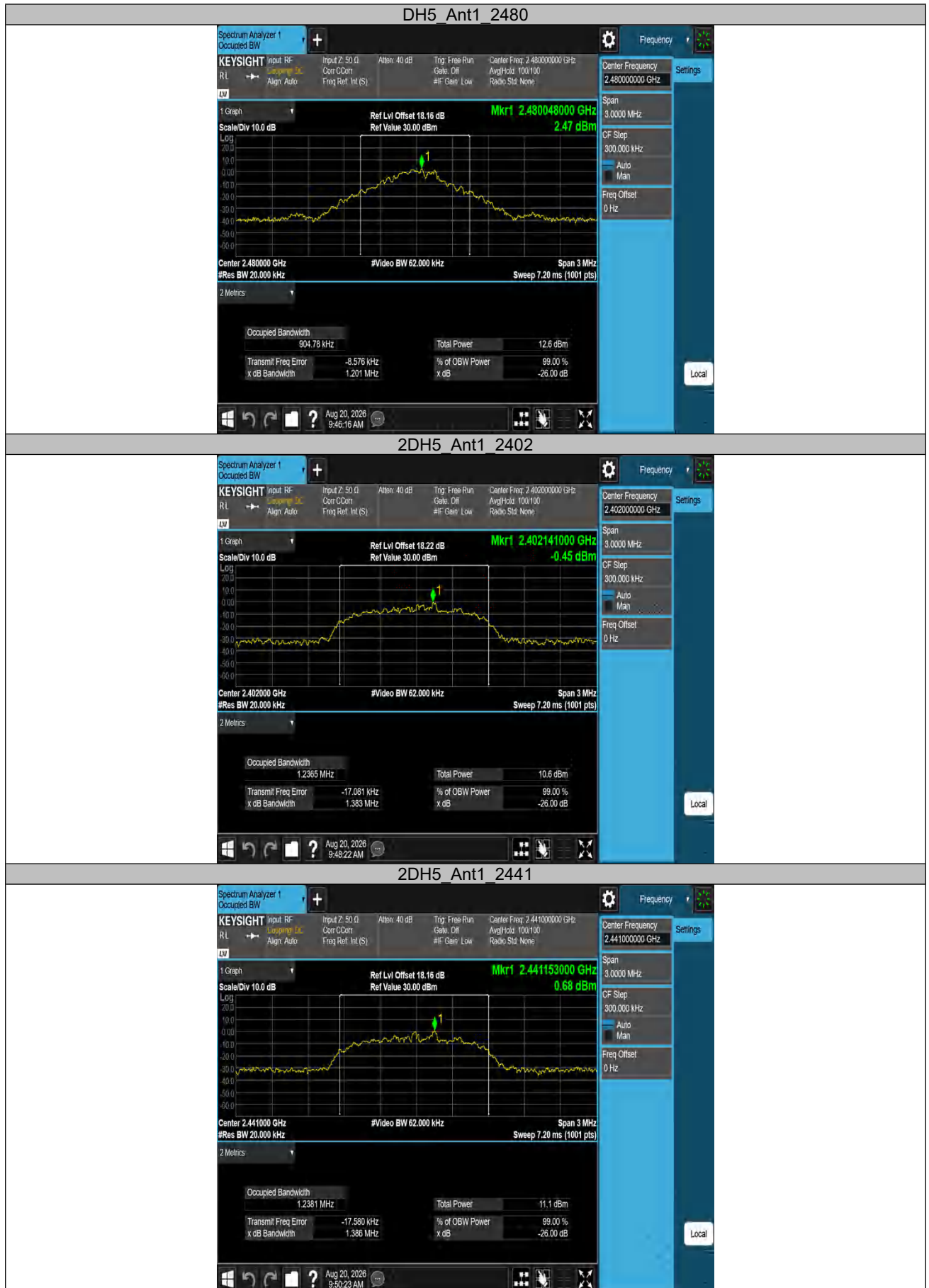
Appendix C: Test Results of Classical Bluetooth_Right Earbud

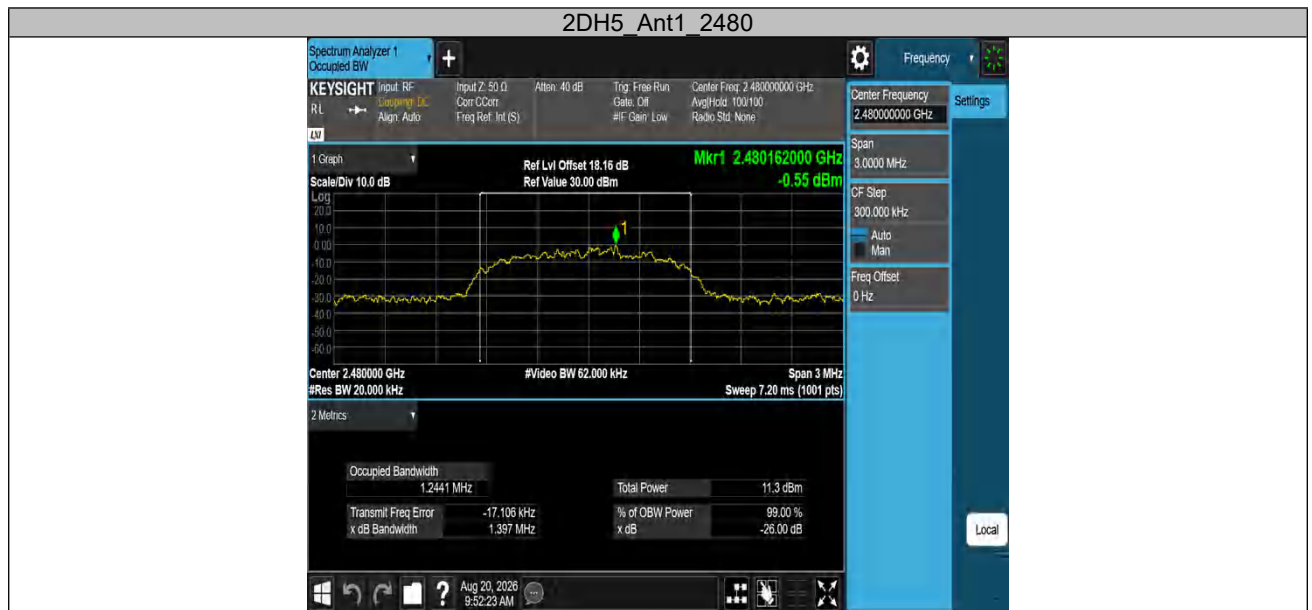
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Appendix C.1: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.90898	2401.5392	2402.4482	---	---
		2441	0.91057	2440.5372	2441.4478	---	---
		2480	0.90478	2479.5390	2480.4438	---	---
2DH5	Ant1	2402	1.2365	2401.3647	2402.6012	---	---
		2441	1.2381	2440.3634	2441.6015	---	---
		2480	1.2441	2479.3608	2480.6049	---	---







Appendix C.2: Test Results of 20dB Bandwidth

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.529	2402.477	---	---
		2441	0.945	2440.529	2441.474	---	---
		2480	0.948	2479.526	2480.474	---	---
2DH5	Ant1	2402	1.281	2401.337	2402.618	---	---
		2441	1.305	2440.337	2441.642	---	---
		2480	1.305	2479.337	2480.642	---	---

DH5 Ant1 2402



DH5 Ant1 2441



Appendix C CN26L8MF 001



Prüfbericht - Produkte
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DH5_Ant1_2480

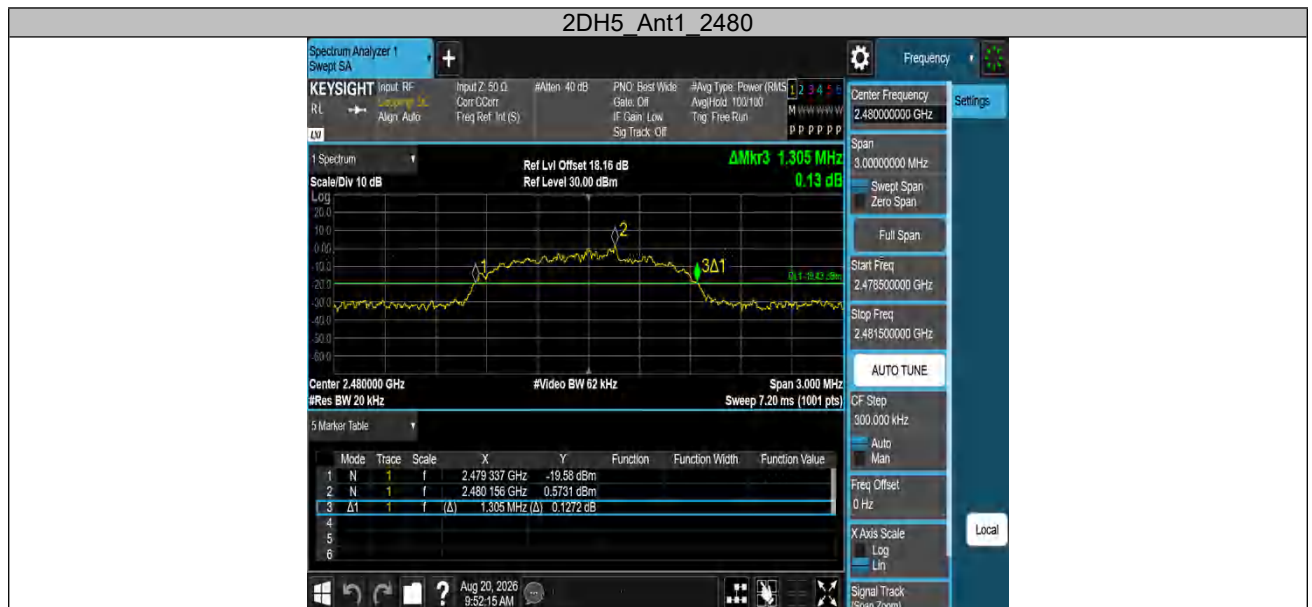


2DH5_Ant1_2402



2DH5_Ant1_2441





Appendix C.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 3.87V	2402.000	0	0.00	10
DC 3.48V	2402.000	0	0.00	
DC 4.26V	2402.000	0	0.00	

Test result of frequency tolerance of temperature variation

Temperature (°C)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2402.004	4	1.67	10
-20	2402.002	2	0.83	
-10	2402.002	2	0.83	
0	2402.001	1	0.42	
10	2402.000	0	0.00	
20	2402.000	0	0.00	
30	2402.000	0	0.00	
40	2402.000	0	0.00	
50	2402.002	2	0.83	
55	2402.002	2	0.83	

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 3.87V	2441.000	0	0.00	10
DC 3.48V	2441.000	0	0.00	
DC 4.26V	2441.000	0	0.00	

Test result of frequency tolerance of temperature variation

Temperature (°C)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2441.003	3	1.23	10
-20	2441.003	3	1.23	
-10	2441.003	3	1.23	
0	2441.001	1	0.41	
10	2441.000	0	0.00	
20	2441.000	0	0.00	
30	2441.000	0	0.00	
40	2441.000	0	0.00	
50	2441.000	0	0.00	
55	2441.001	1	0.41	

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 3.87V	2480.000	0	0.00	10
DC 3.48V	2480.000	0	0.00	
DC 4.26V	2480.000	0	0.00	

Test result of frequency tolerance of temperature variation

Temperature (°C)	Test result (MHz)	Deviation Frequency (KHz)	Test result (ppm)	Limit (ppm)
-30	2480.003	3	1.21	10
-20	2480.003	3	1.21	
-10	2480.003	3	1.21	
0	2480.000	0	0.00	
10	2480.000	0	0.00	
20	2480.000	0	0.00	
30	2480.000	0	0.00	
40	2480.000	0	0.00	
50	2480.002	2	0.81	
55	2480.002	2	0.81	

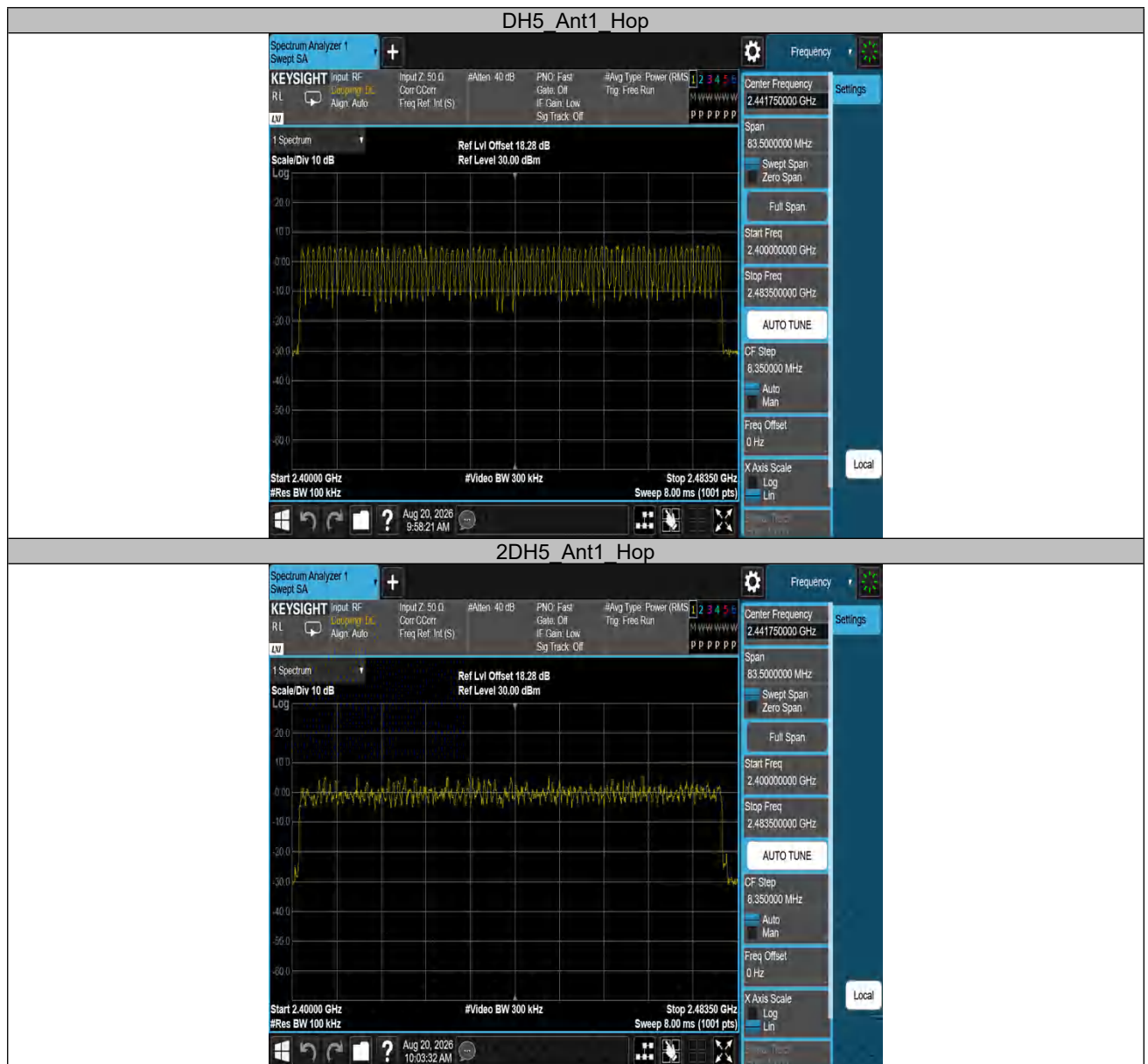
Appendix C.4: Test Results of Carrier Frequency Separation

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.076	≥ 0.948	PASS
2DH5	Ant1	Hop	1.068	≥ 0.870	PASS



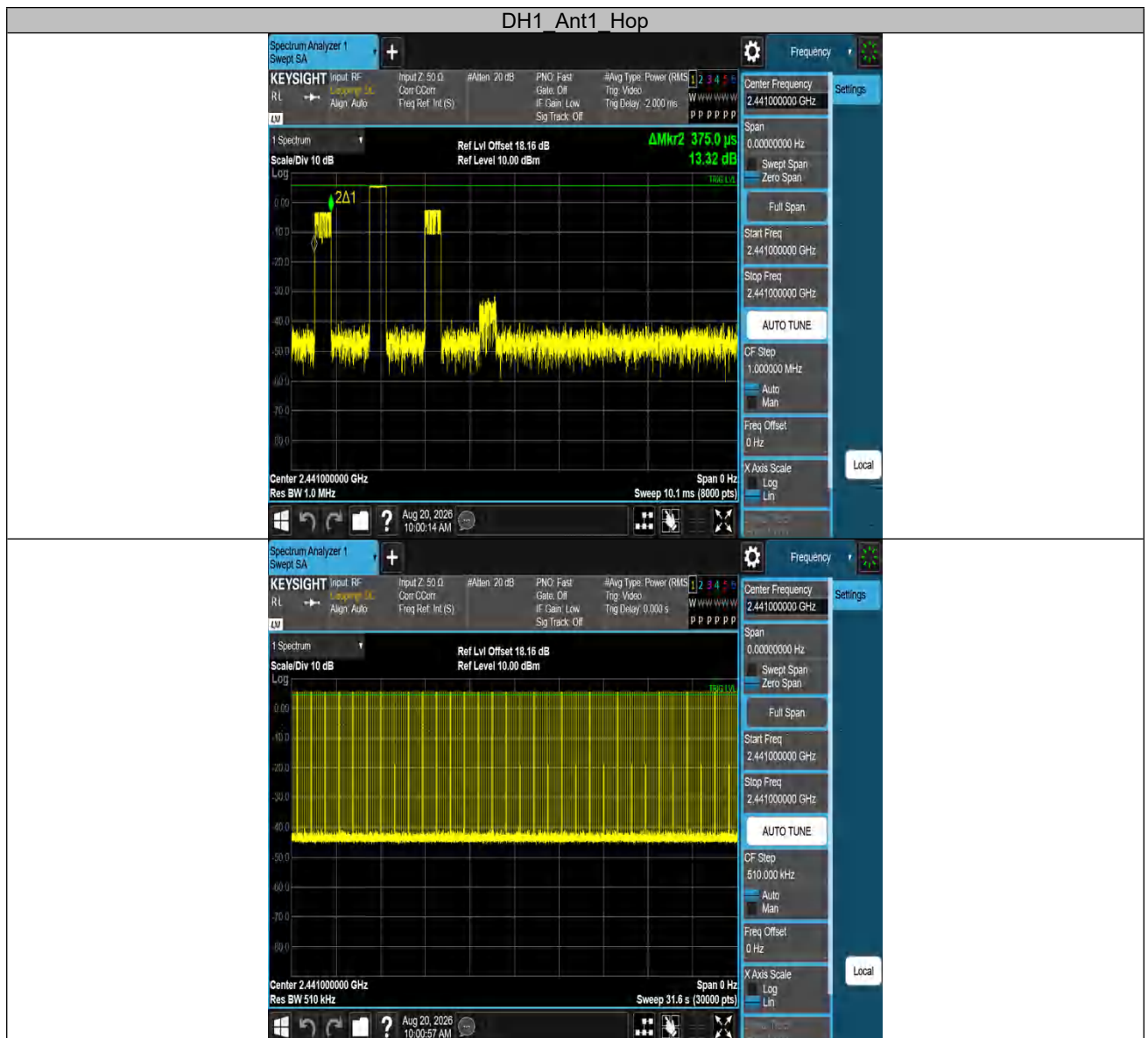
Appendix C.5: Test Results of Number of Hopping Frequency

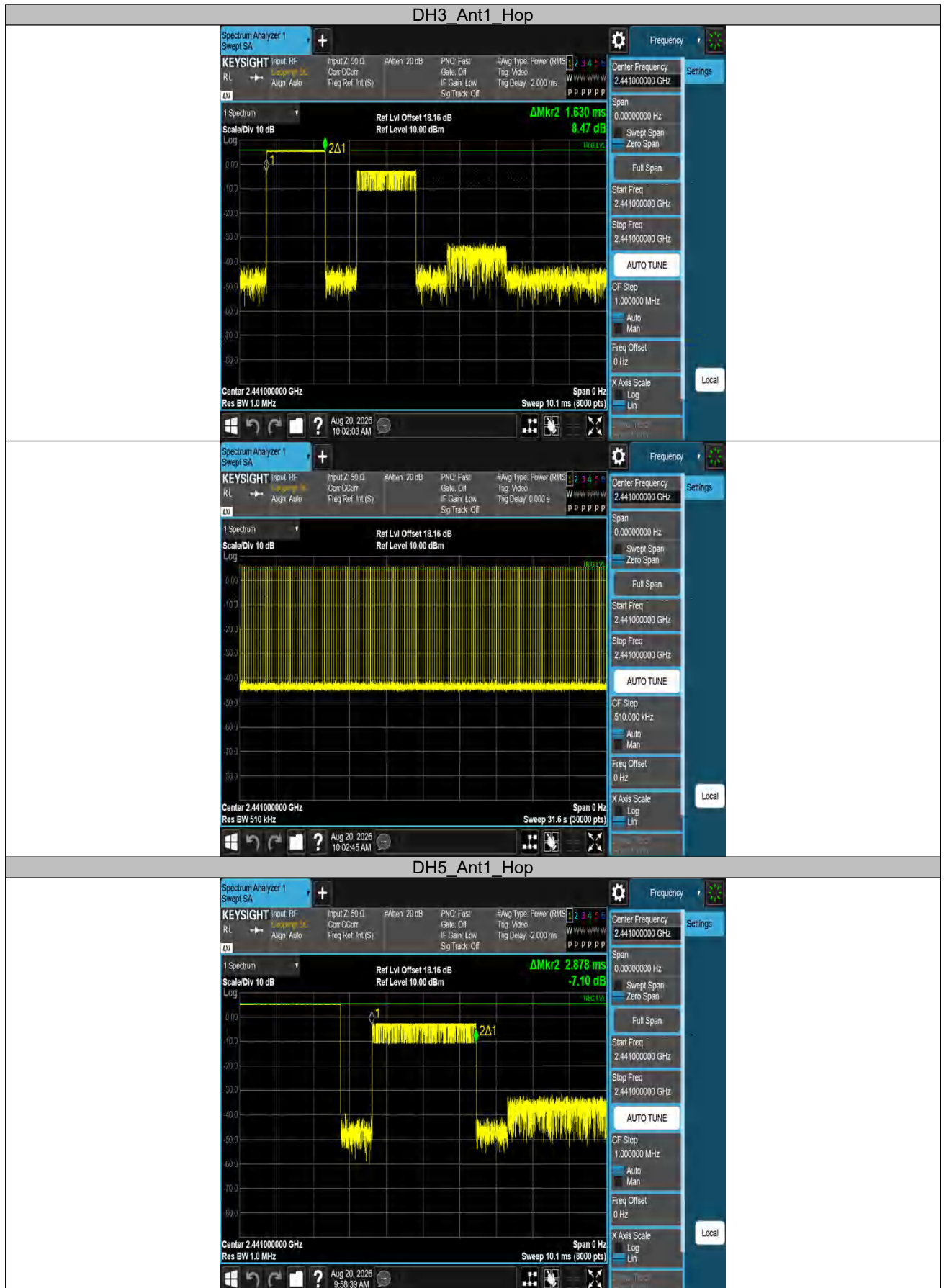
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS

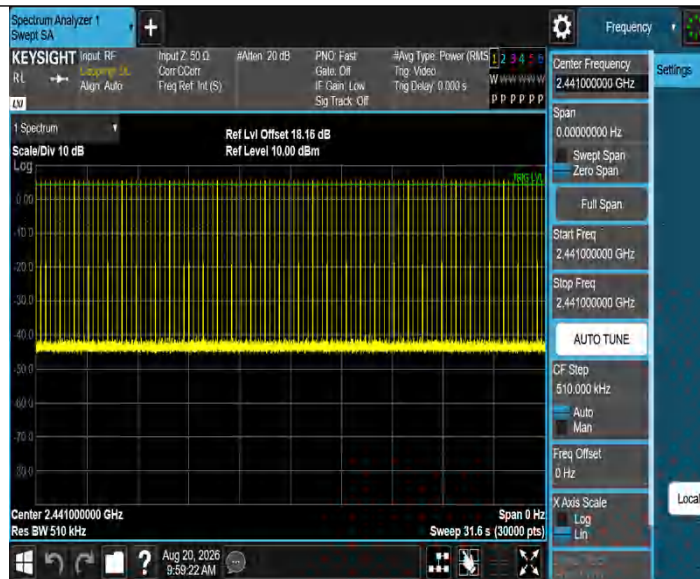


Appendix C.6: Test Results of Time of Occupancy

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.375	319	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.630	159	0.259	≤0.4	PASS
DH5	Ant1	Hop	2.878	107	0.308	≤0.4	PASS
2DH1	Ant1	Hop	0.379	319	0.121	≤0.4	PASS
2DH3	Ant1	Hop	1.630	159	0.259	≤0.4	PASS
2DH5	Ant1	Hop	2.882	107	0.308	≤0.4	PASS

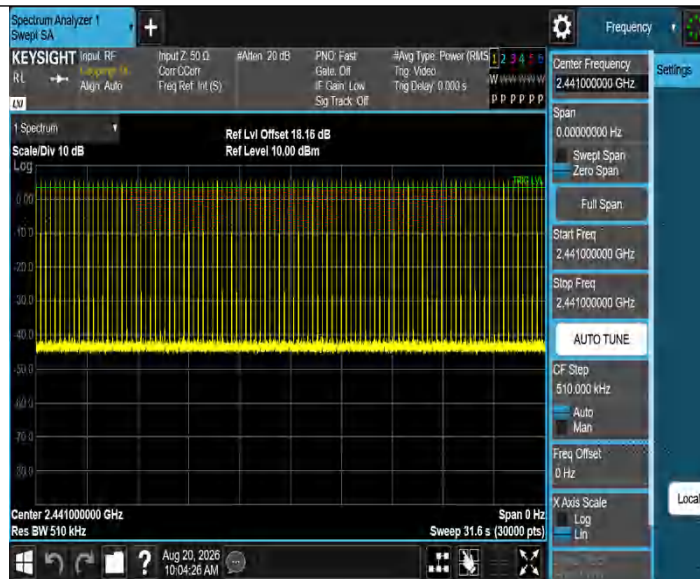






2DH1 Ant1 Hop

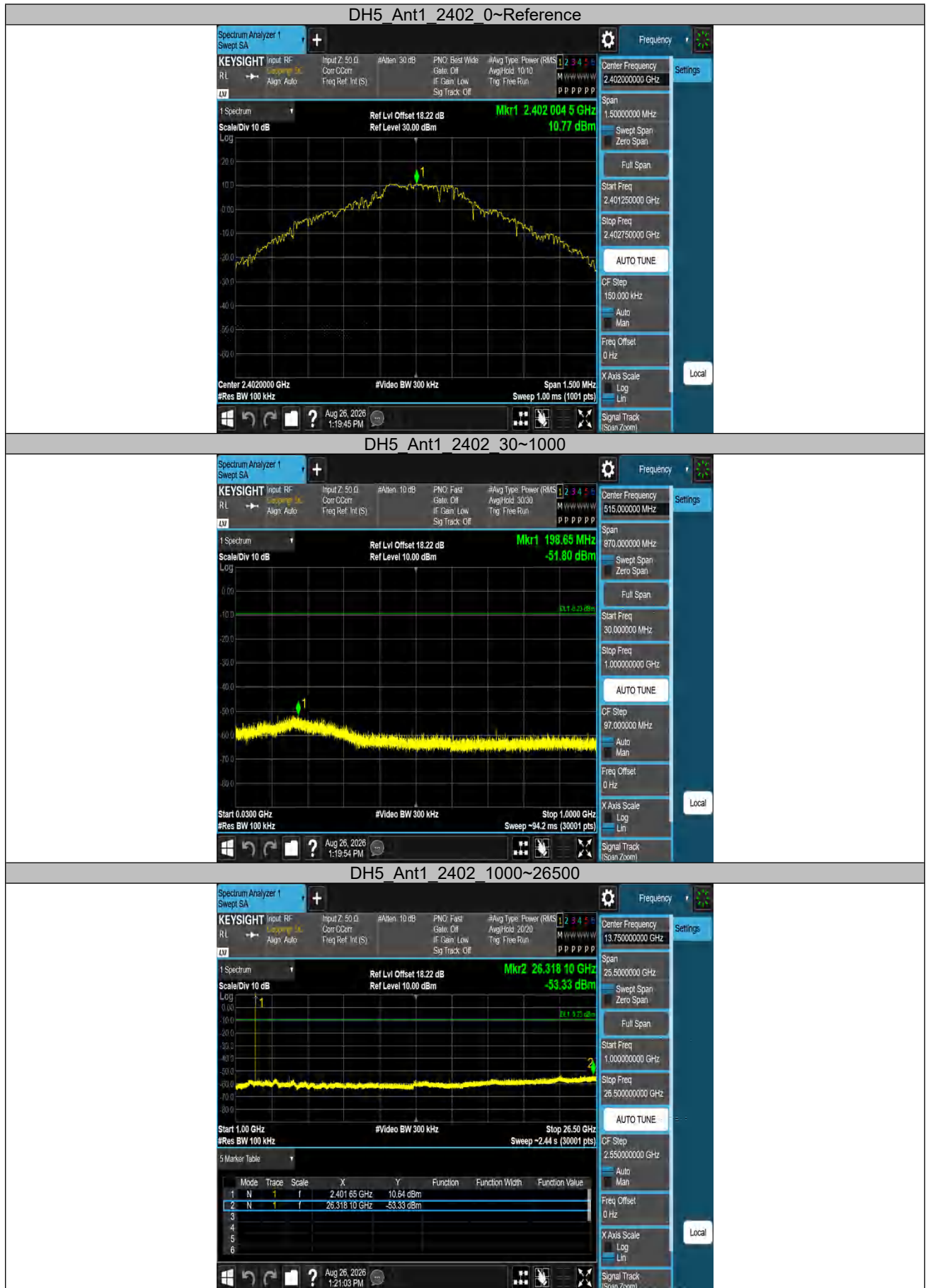


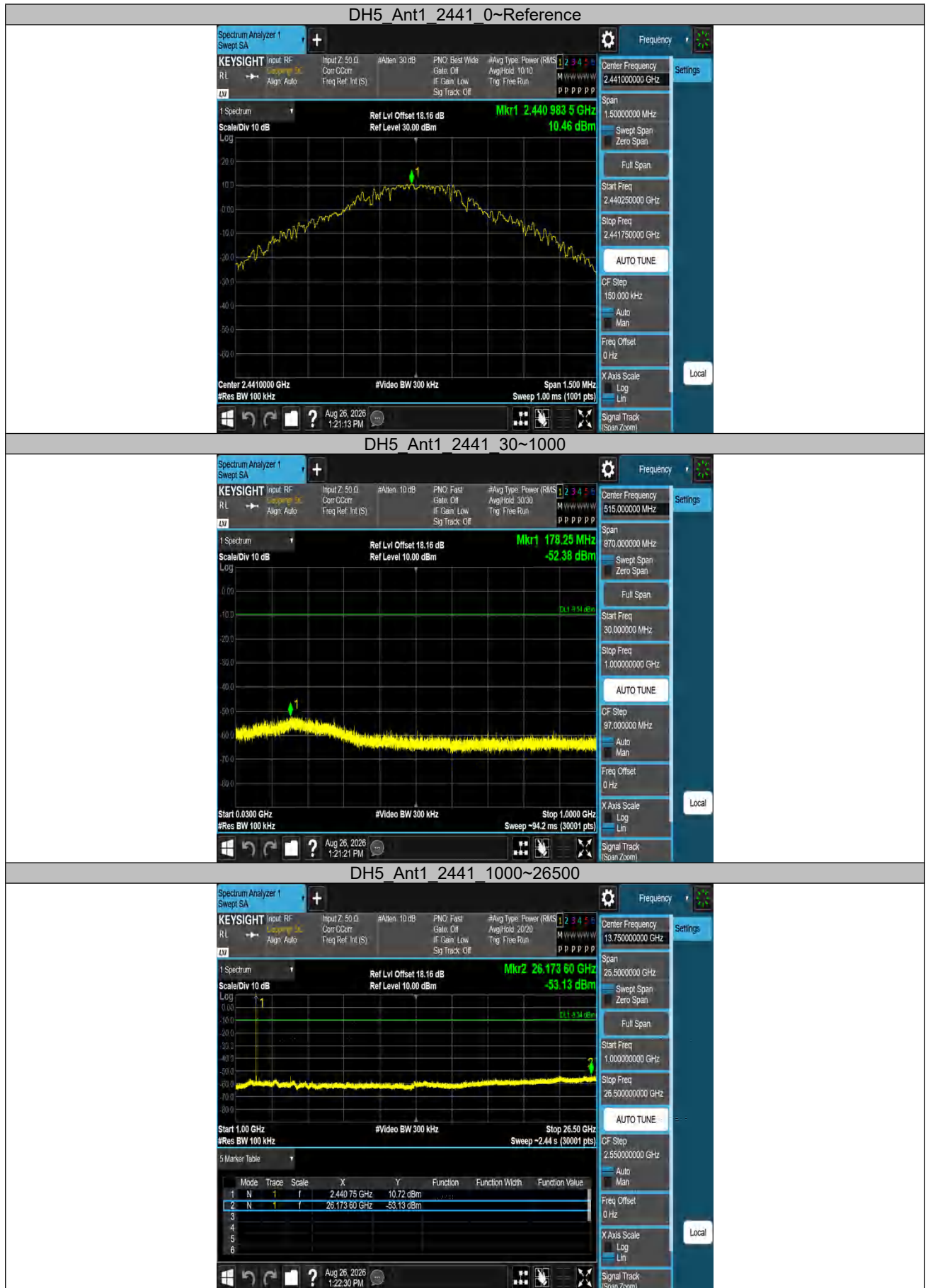


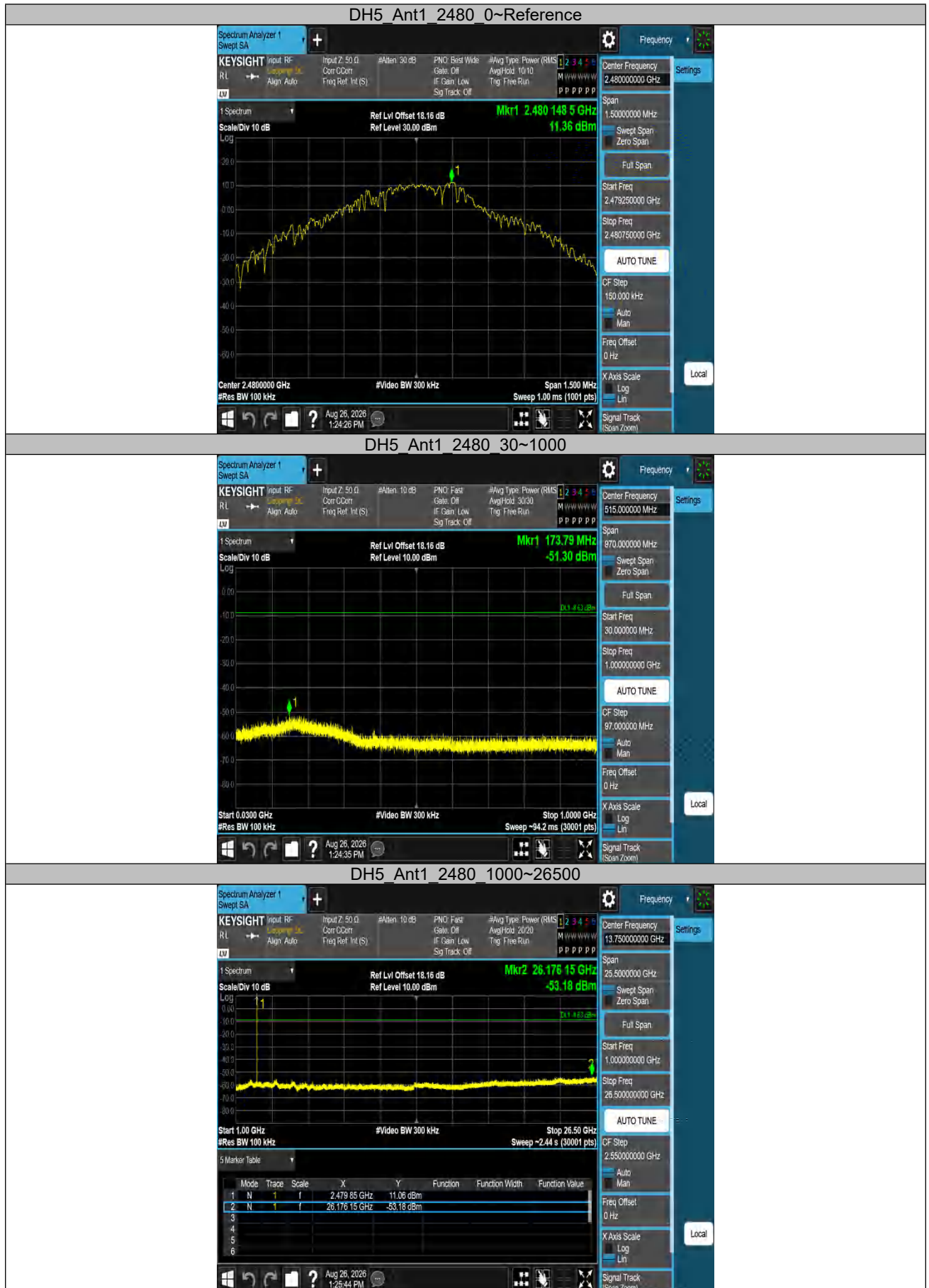
Appendix C.7: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	10.77	10.77	---	PASS
			30~1000	10.77	-51.8	≤-9.23	PASS
			1000~26500	10.77	-53.33	≤-9.23	PASS
		2441	Reference	10.46	10.46	---	PASS
			30~1000	10.46	-52.38	≤-9.54	PASS
			1000~26500	10.46	-53.13	≤-9.54	PASS
		2480	Reference	11.37	11.37	---	PASS
			30~1000	11.37	-51.3	≤-8.63	PASS
			1000~26500	11.37	-53.18	≤-8.63	PASS
2DH5	Ant1	2402	Reference	9.75	9.75	---	PASS
			30~1000	9.75	-51.47	≤-10.25	PASS
			1000~26500	9.75	-52.57	≤-10.25	PASS
		2441	Reference	12.43	12.43	---	PASS
			30~1000	12.43	-51.05	≤-7.57	PASS
			1000~26500	12.43	-51.71	≤-7.57	PASS
		2480	Reference	8.90	8.90	---	PASS
			30~1000	8.90	-50.92	≤-11.1	PASS
			1000~26500	8.90	-53.45	≤-11.1	PASS













Band edge measurements.

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	11.12	-41.42	≤-8.88	PASS
		High	2480	11.22	-40.28	≤-8.78	PASS
2DH5	Ant1	Low	2402	12.90	-41.86	≤-7.10	PASS
		High	2480	13.20	-42.05	≤-6.80	PASS
DH5	Ant1	Hopping	2402	10.68	-40.43	≤-9.32	PASS
		Hopping	2480	10.37	-41.56	≤-9.63	PASS
2DH5	Ant1	Hopping	2402	7.96	-42.26	≤-12.04	PASS
		Hopping	2480	12.01	-41.36	≤-7.99	PASS



2DH5 Ant1 Low 2402



2DH5 Ant1 High 2480



DH5 Ant1 Hopping 2402



DH5 Ant1 Hopping 2480



2DH5 Ant1 Hopping 2402



2DH5 Ant1 Hopping 2480



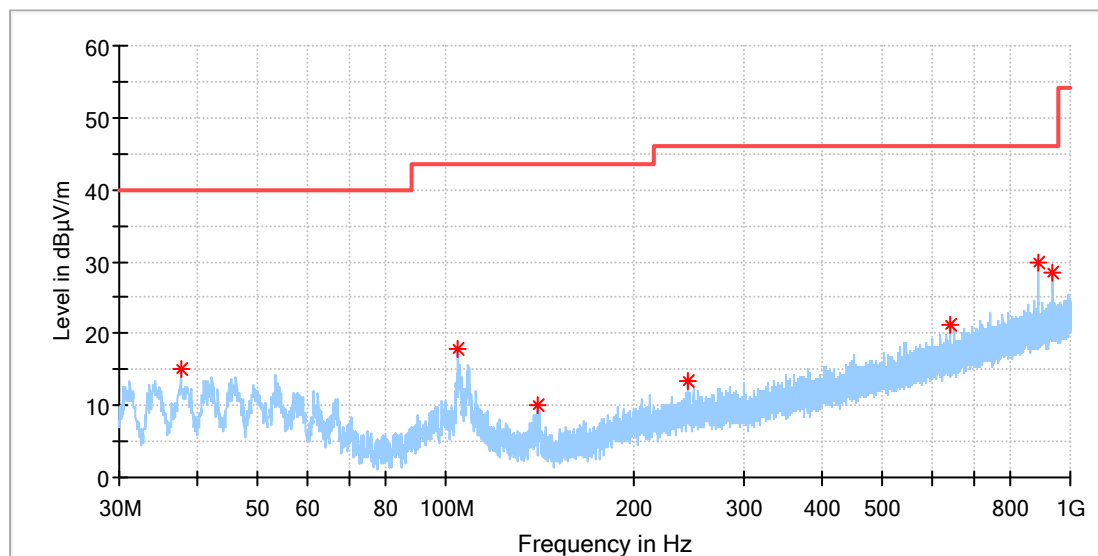
Appendix C.8: Test Results of Radiated Spurious Emissions

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:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

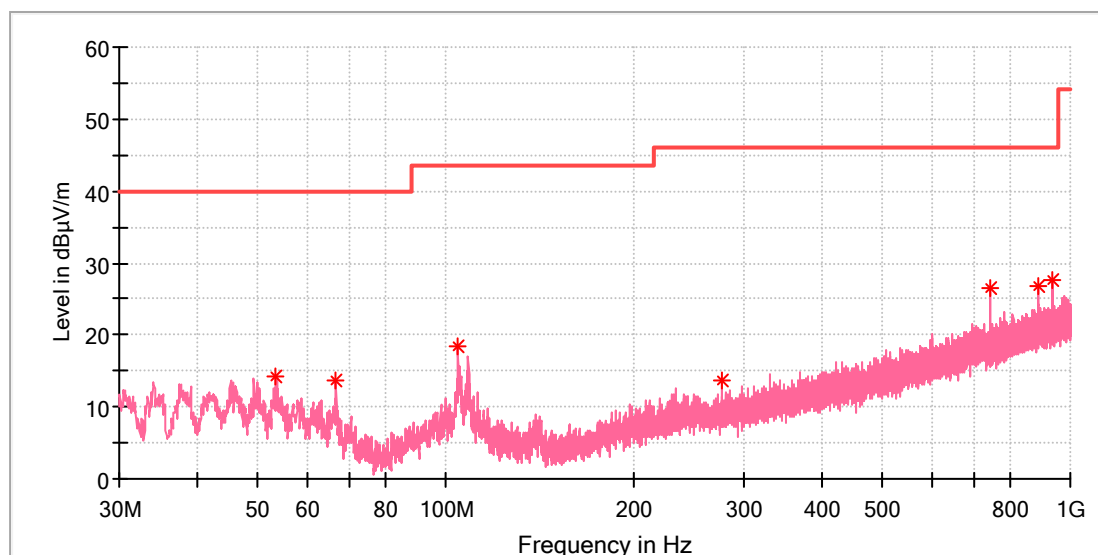
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.652222	15.19	40.00	24.81	100.0	H	71.0	-20.9
104.743889	17.83	43.50	25.67	100.0	H	39.0	-18.9
140.580000	9.98	43.50	33.52	100.0	H	151.0	-22.4
244.531667	13.30	46.00	32.70	100.0	H	358.0	-17.5
641.423333	21.16	46.00	24.84	100.0	H	71.0	-9.0
890.982778	29.99	46.00	16.01	100.0	H	96.0	-4.9
936.950000	28.45	46.00	17.55	100.0	H	206.0	-4.4

Final_Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
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)
53.549444	14.10	40.00	25.90	100.0	V	225.0	-18.5
66.806111	13.81	40.00	26.19	100.0	V	263.0	-20.9
104.690000	18.35	43.50	25.15	100.0	V	21.0	-18.9
276.326111	13.81	46.00	32.19	100.0	V	54.0	-16.8
742.465000	26.64	46.00	19.36	100.0	V	318.0	-7.2
890.982778	26.81	46.00	19.19	100.0	V	54.0	-4.9
938.405000	27.71	46.00	18.29	100.0	V	28.0	-4.4

Final_Result

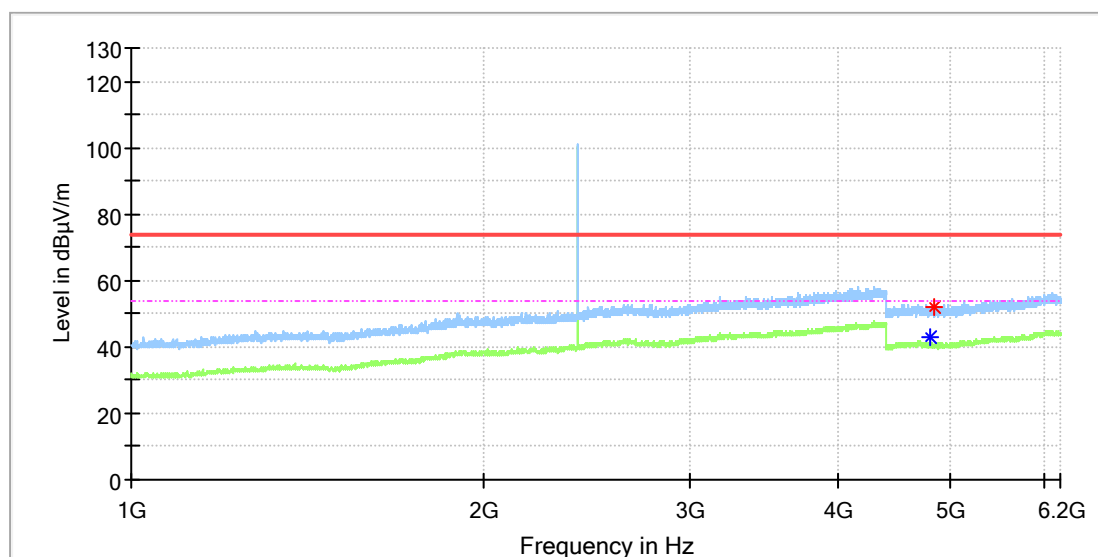
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

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

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

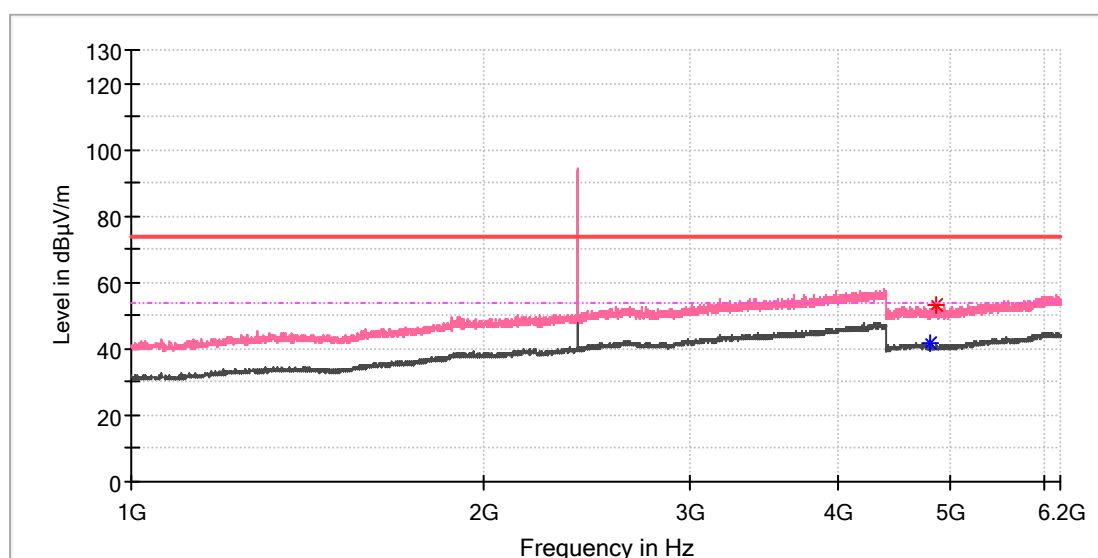
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	---	42.86	54.00	11.14	150.0	H	28.0	13.3
4849.000000	52.24	---	74.00	21.76	150.0	H	22.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

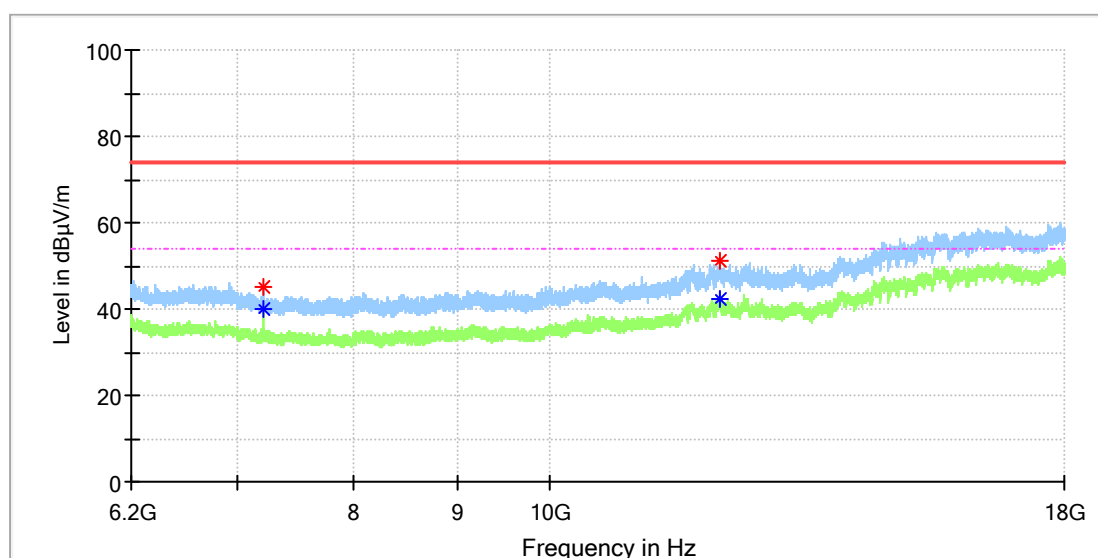
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4809.500000	---	41.64	54.00	12.36	150.0	V	127.0	13.3
4854.500000	52.96	---	74.00	21.04	150.0	V	254.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.750000	120.000000	110.000000	120.000000	0.000000	100.000000	000000	000000	000000

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

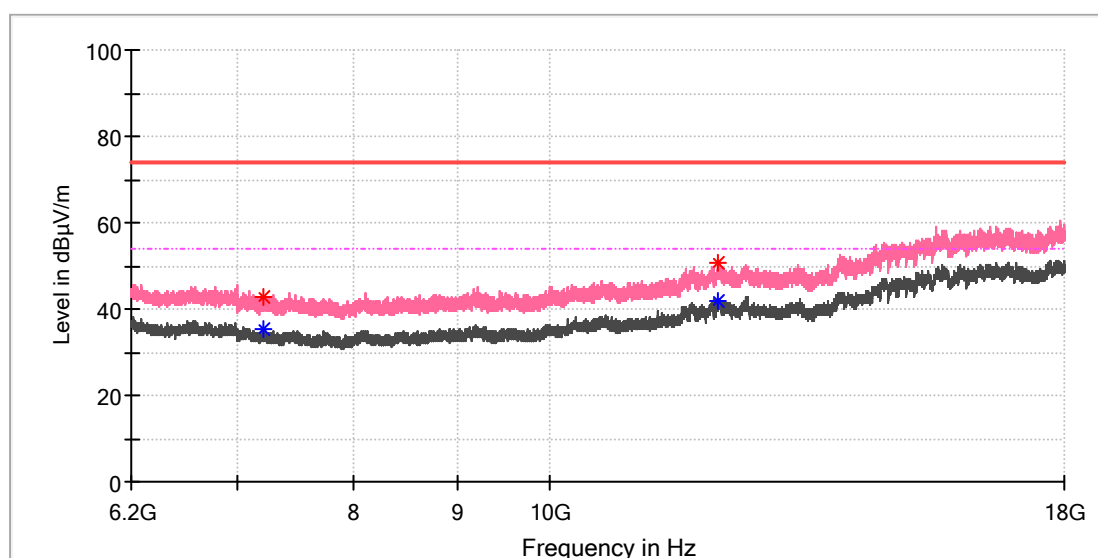
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7205.950000	45.03	---	74.00	28.97	150.0	H	161.0	8.8
7205.950000	---	39.94	54.00	14.06	150.0	H	161.0	8.8
12151.625000	51.21	---	74.00	22.79	150.0	H	305.0	16.6
12153.591667	---	42.35	54.00	11.65	150.0	H	339.0	16.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

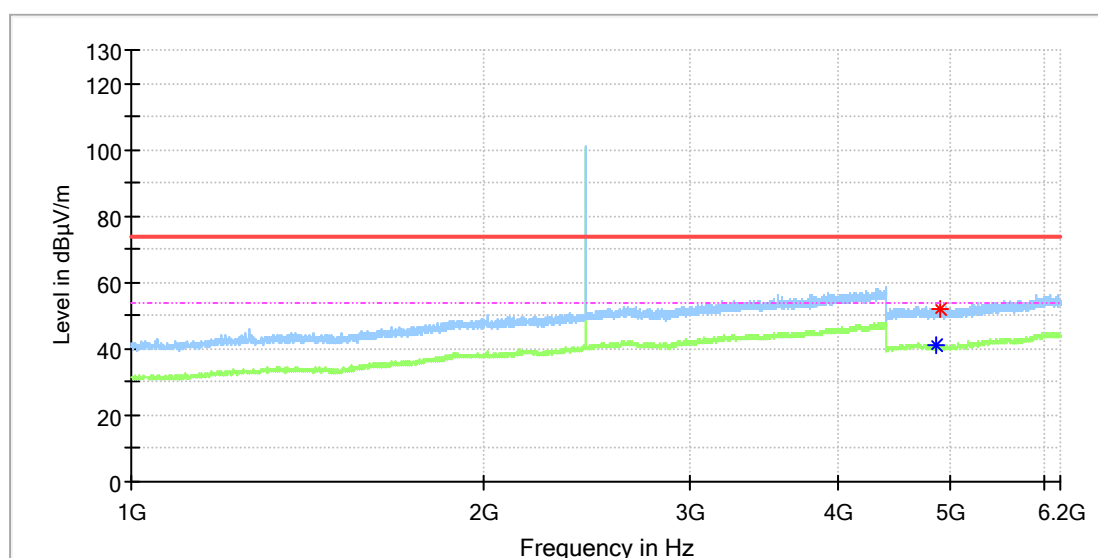
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7209.883333	---	35.44	54.00	18.56	150.0	V	295.0	8.7
7210.375000	42.65	---	74.00	31.35	150.0	V	62.0	8.7
12130.975000	---	42.08	54.00	11.92	150.0	V	118.0	16.2
12131.466667	50.83	---	74.00	23.17	150.0	V	62.0	16.2

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

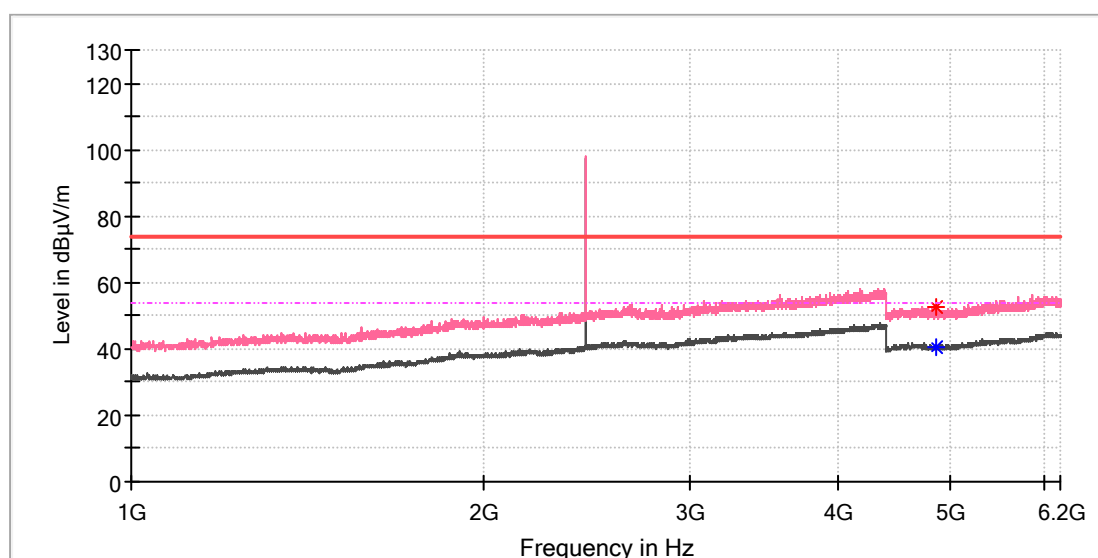
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4862.000000	---	40.86	54.00	13.14	150.0	H	152.0	13.3
4897.000000	51.78	---	74.00	22.22	150.0	H	95.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.0	118.0	120.0	2.0	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

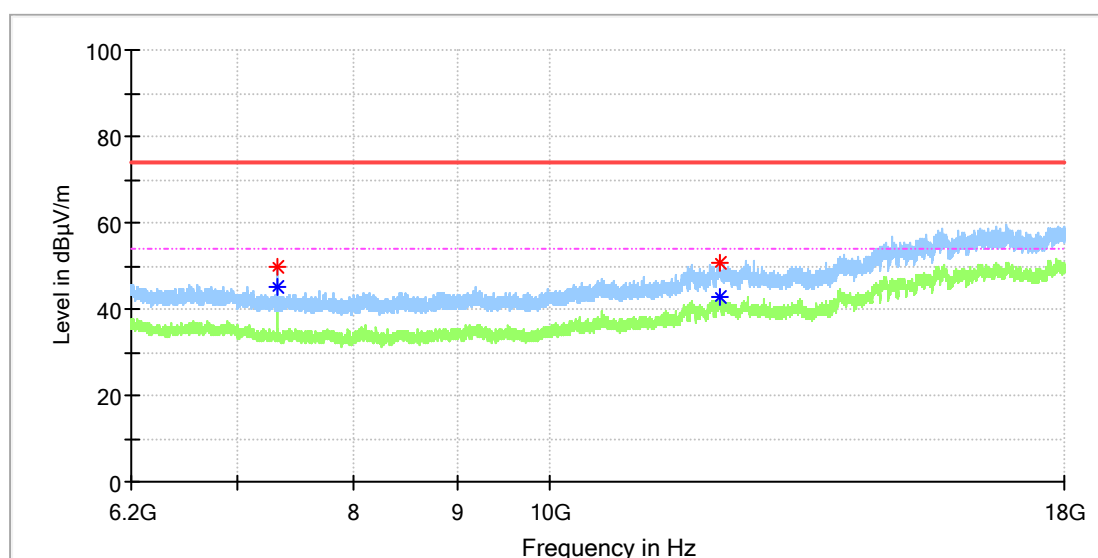
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4852.500000	52.47	---	74.00	21.53	150.0	V	230.0	13.3
4861.000000	---	40.80	54.00	13.20	150.0	V	48.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	118.5	120.0	1.5	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

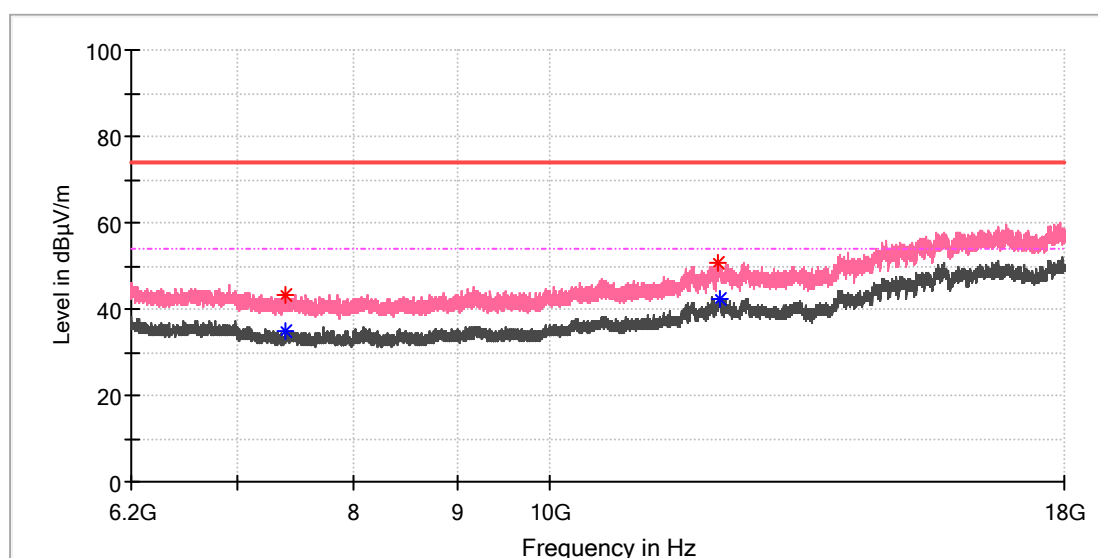
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7322.475000	---	45.10	54.00	8.90	150.0	H	112.0	8.2
7322.475000	49.99	---	74.00	24.01	150.0	H	112.0	8.2
12139.825000	---	42.75	54.00	11.25	150.0	H	41.0	16.5
12153.591667	50.91	---	74.00	23.09	150.0	H	101.0	16.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

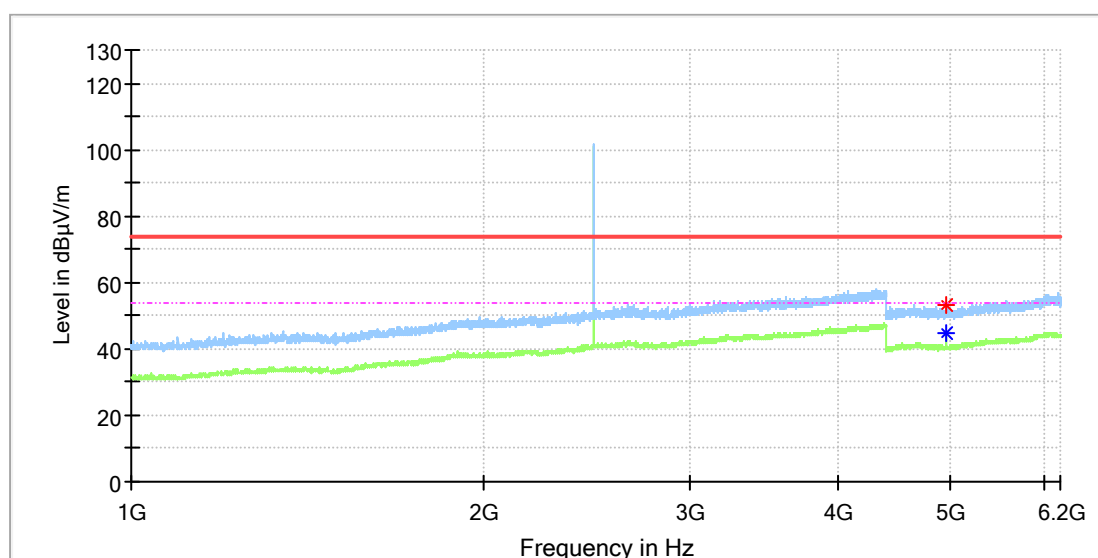
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7400.158333	43.25	---	74.00	30.75	150.0	V	150.0	8.3
7401.141667	---	34.92	54.00	19.08	150.0	V	356.0	8.3
12127.533333	50.83	---	74.00	23.17	150.0	V	258.0	16.1
12142.283333	---	42.51	54.00	11.49	150.0	V	258.0	16.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

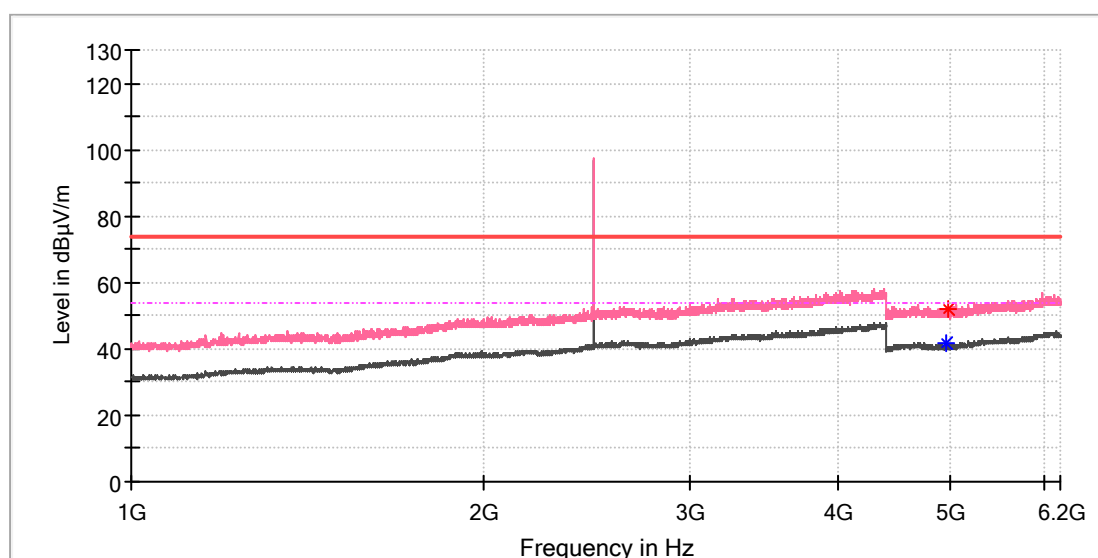
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4947.500000	53.41	---	74.00	20.59	150.0	H	289.0	13.3
4960.000000	---	44.53	54.00	9.47	150.0	H	144.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	118.5	120.0	1.5	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

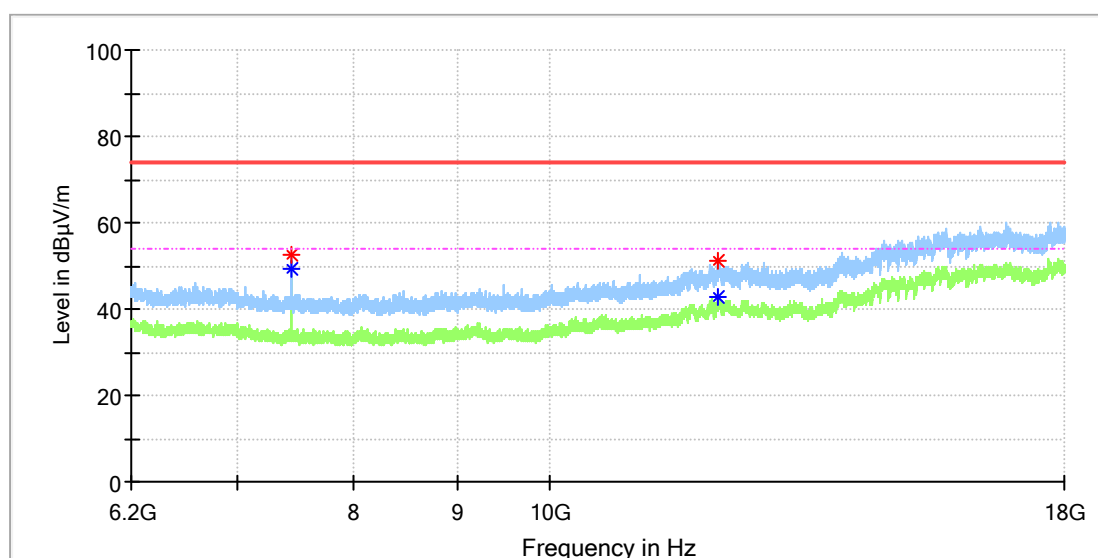
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	---	41.99	54.00	12.01	150.0	V	207.0	13.3
4967.500000	52.18	---	74.00	21.82	150.0	V	81.0	13.3

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	118.5	120.0	1.5	100	V	135	0.0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

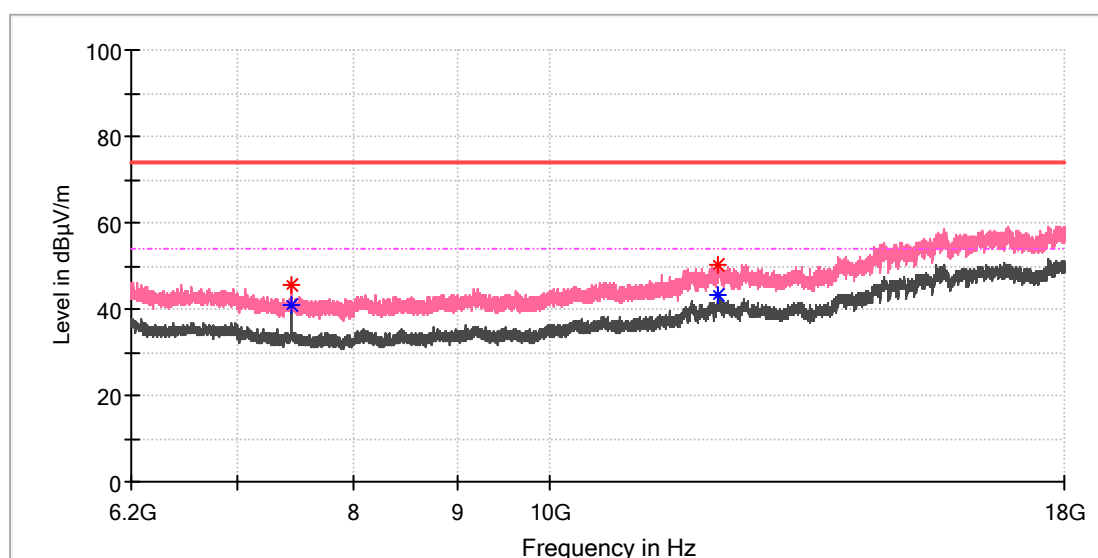
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	PoI	Azimuth (deg)	Corr. (dB/m)
7439.983333	---	49.53	54.00	4.47	150.0	H	64.0	8.4
7439.983333	52.60	---	74.00	21.40	150.0	H	64.0	8.4
12110.325000	51.17	---	74.00	22.83	150.0	H	261.0	15.7
12127.041667	---	42.79	54.00	11.21	150.0	H	126.0	16.1

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
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)	PoI	Azimuth (deg)	Corr. (dB/m)
7439.983333	45.57	---	74.00	28.43	150.0	V	251.0	8.4
7440.475000	---	41.10	54.00	12.90	150.0	V	240.0	8.4
12108.850000	---	43.08	54.00	10.92	150.0	V	189.0	15.7
12129.008333	50.45	---	74.00	23.55	150.0	V	0.0	16.2

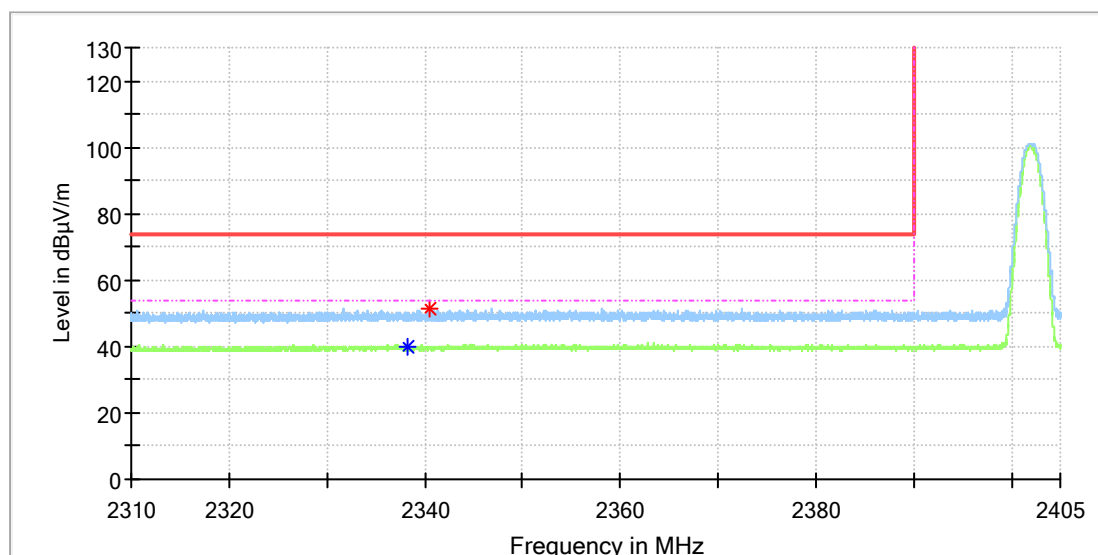
Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
100.0	100.0	100.0	100.0	100.0	100.0		100.0	

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

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

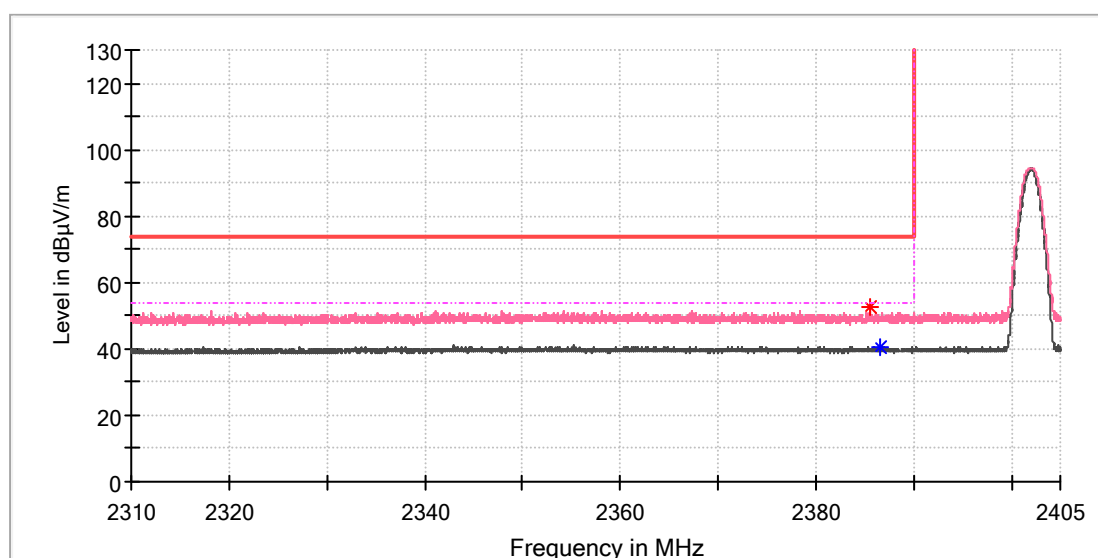
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2338.261471	---	40.14	54.00	13.86	150.0	H	277.0	8.4
2340.538530	51.25	---	74.00	22.75	150.0	H	1.0	8.4

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---		---	---

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

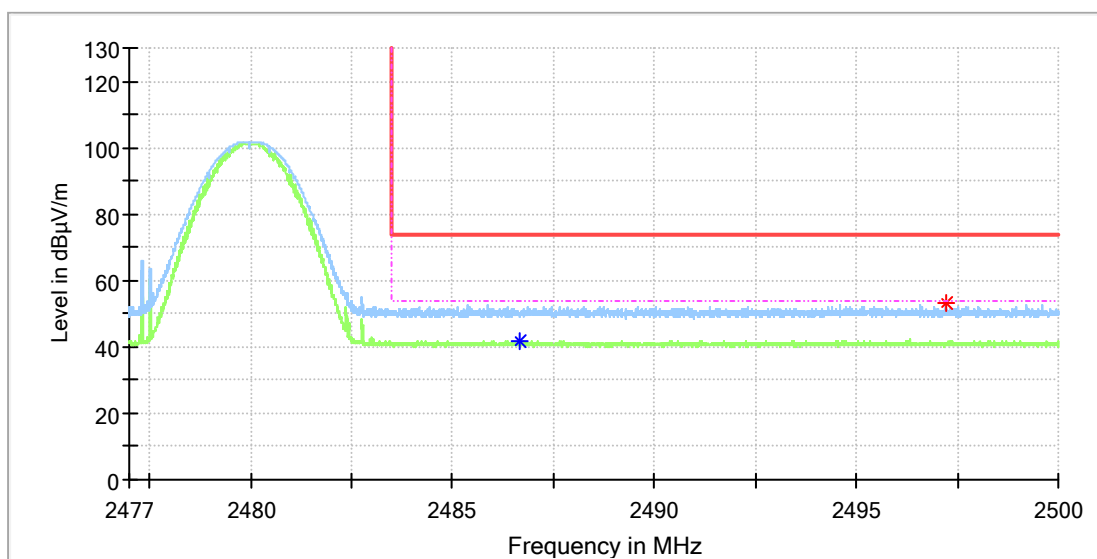
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2385.503235	52.35	---	74.00	21.65	150.0	V	144.0	8.5
2386.612941	---	40.37	54.00	13.63	150.0	V	340.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr (dB/m)
93.75	122.5	122.5	122.5	0	100	0	0	0

EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

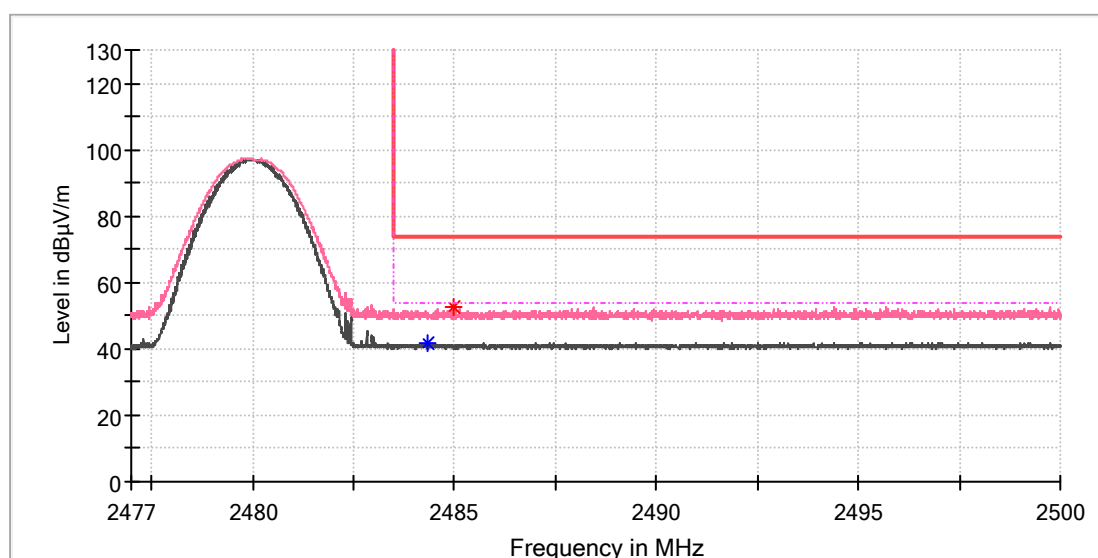
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2486.683530	---	41.84	54.00	12.16	150.0	H	289.0	9.0
2497.200000	53.45	---	74.00	20.55	150.0	H	28.0	9.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name:	BLUETOOTH HEADSET
Model:	LIVE BUDS 4
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004355370-001
Test Voltage:	Battery
Remark:	Temp 21.8°C Humi:49%
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)
2484.338235	---	41.62	54.00	12.38	150.0	V	359.0	9.0
2484.973530	52.77	---	74.00	21.23	150.0	V	340.0	9.0

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
93.7	122.5	118.5	120.0	1.5	100	V	135	0.0