Prüfbericht - Produkte
Test Report - Products

Prüfbericht-Nr.: *Test report no.:*	**CN26WVFV 001**	**Auftrags-Nr.:** *Order no.:*	27234069	Seite 1 von 16 *Page 1 of 16*
Kunden-Referenz-Nr.: *Client reference no.:*	N/A	**Auftragsdatum:** *Order date:*	2025-12-22	
Auftraggeber: *Client:*	**CompanyDeep Ltd** St John's Innovation Centre, Cowley Road, Cambridge, CB4 0WS, United Kingdom			
Prüfgegenstand: *Test item:*	IDC7 Bluetooth Module			
Bezeichnung / Typ-Nr.: *Identification / Type no.:*	IDC777, IDC767 (Trademark: IOT747)			
Auftrags-Inhalt: *Order content:*	FCC & IC approval			
Prüfgrundlage: *Test specification:*	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207		RSS-247 Issue 4, July 2025 RSS-Gen Issue 5 February 2021	

Wareneingangsdatum: *Date of sample receipt:*	2026-05-29
Prüfmuster-Nr.: *Test sample no.:*	A004293324
Prüfzeitraum: *Testing period:*	2026-06-01 – 2026-06-18
Ort der Prüfung: *Place of testing:*	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.
Prüfergebnis*: *Test result*:*	Pass

Please refer to photo documents

geprüft von: *tested by:*	x Signed by: Harry W. C. Wu	**genehmigt von:** *authorized by:*	x Signed by: Alex Lan
Datum: *Date:* 2026-07-29		**Ausstellungsdatum:** *Issue date:* 2026-07-29	
Stellung / Position	Project Manager	**Stellung** / Position	Authorizer

Sonstiges / *Other*:
FCC ID: 2A3WYIDC777
IC: 30237-IDC777 HVIN: IDC777, IDC767 Host Model: A50 Signature
This test report is based on above original grant for below changes:
1. Adding alternative antenna connection type, and add new HVIN due to connection type changed
2. re-assessment radiated spurious emissions with host

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*

Anmerkungen
Remarks

1	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. *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.*
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3	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. *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.*
4	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. *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.*

Test Summary

5.1.1 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.2 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: Photographs of the Test Set-up.

Appendix B: Test Result of BT.

Appendix C: Test Result of BLE.

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.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Unwanted Emission Testing				
Equipment	**Manufacturer**	**Model No.**	**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

Conduct Emissions Testing				
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. until**
EMI Test Receiver	R&S	ESR3	102680	2027-02-03
Artificial Mains Network	R&S	ENV216	102333	2027-07-20
Artificial Mains Network	R&S	ENV216	101445	2027-02-03
EMC32 Test Software	R&S	EMC32(Ver.10.60.20)	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.

Item		**Extended Uncertainty**
Conducted Emission		± 2.74 dB
Radiated Emission (30-1000MHz)	Field strength (dBμV/m)	4.27dB
Radiated Emission (above 1000MHz)	Field strength (dBμV/m)	4.46dB
Radio Spectrum		± 1.5 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 EUT is an IDC7 Bluetooth Module, it supports and Bluetooth dual mode wireless technology.

This test report is based on original grant for below changes:

Changes	Description
Adding alternative antenna type and new HVIN IDC767	module IDC777 use a chip antenna and the host use a IPEX connector, due to the antenna connection type changed the HVIN change to IDC767
re-assessment radiated spurious emissions with host	Bluetooth Module: FCC ID: 2A3WYIDC777, IC: 30237-IDC777 Accommodate the above module into the Host system with model: A50 Signature

Based on above changes, re-assessment radiated spurious emissions with host.

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	IDC7 Bluetooth Module
Type Designation	IDC777, IDC767
Trade Mark	IOT747
FCC ID	2A3WYIDC777
IC	30237-IDC777
HVIN	IDC777
Operating Voltage (Host)	DC 3.3V-4.7V for Bluetooth Module AC 100-120V / 220-240V, 50/60Hz, 800W Max. for Host A50 Signature
Testing Voltage (Host)	AC 120V/60Hz for Host A50 Signature

Technical Specification of Classical Bluetooth	
Operating Frequency band	2402 ~ 2480 MHz
Channel Number	79 channels
Channel separation	1MHz
Modulation	GFSK, π/4DQPSK, 8DPSK
Antenna Type	Chip Antenna
Antenna Gain	0 dBi (Provided by the Client)
Technical Specification of Bluetooth Low Energy	
Operating Frequency	2402 – 2480 MHz
Channel Number	40 channels
Channel separation	2MHz
Data rate	1Mbps, 2Mbps
Modulation	GFSK
Antenna Type	Chip Antenna
Antenna Gain	0 dBi (Provided by the Client)

Table 3: RF Channel and Frequency of Bluetooth (BDR & EDR)

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	**2402.00**	20	2422.00	40	2442.00	60	2462.00
1	2403.00	21	2423.00	41	2443.00	61	2463.00
2	2404.00	22	2424.00	42	2444.00	62	2464.00
3	2405.00	23	2425.00	43	2445.00	63	2465.00
4	2406.00	24	2426.00	44	2446.00	64	2466.00
5	2407.00	25	2427.00	45	2447.00	65	2467.00
6	2408.00	26	2428.00	46	2448.00	66	2468.00
7	2409.00	27	2429.00	47	2449.00	67	2469.00
8	2410.00	28	2430.00	48	2450.00	68	2470.00
9	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, Classical Bluetooth wireless transmitting
   1. Low channel
   2. Middle channel
   3. High channel

B. On, Bluetooth Low Energy wireless transmitting
   4. Low channel
   5. Middle channel
   6. High 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
- FCC/IC Label and Location Info
- Operation Description
- Photo Document
- Schematics
- 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 C63.10-2020, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024.
According to clause 3.1, the Radiated Spurious Emissions and conducted Emissions on AC mains were arranged retest with host A50 Signature.

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Notebook	Lenovo	ThinkPad X260	N/A

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)

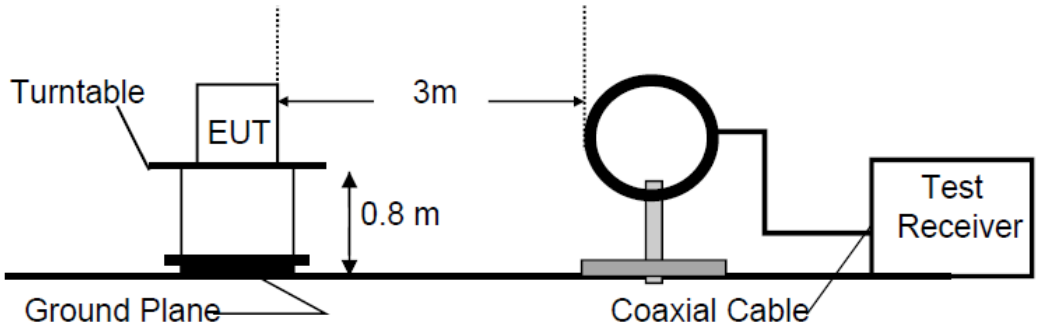


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

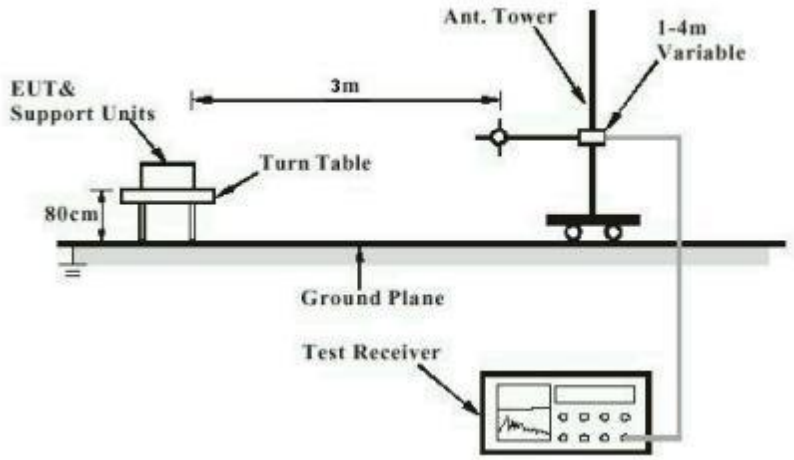


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

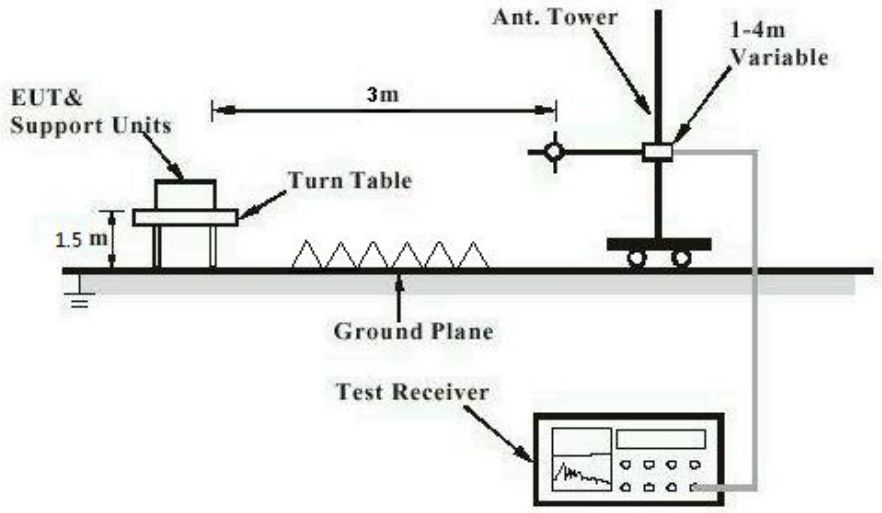
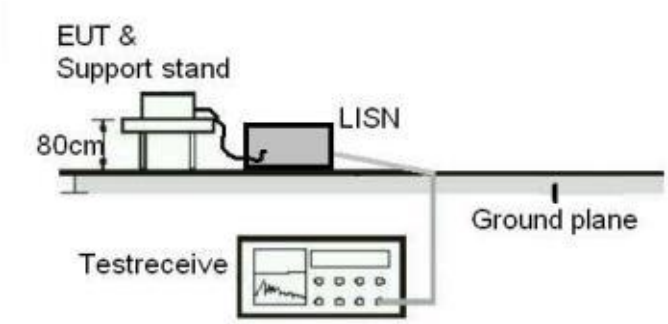


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3 & 5.5
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 4 & Table 5
Kind of test site	:	3m Semi-anechoic Chamber

Test Setup

Date of testing	:	2026-06-01 to 2026-06-18
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	23.8℃
Relative humidity	:	57 %
Atmospheric pressure	:	101 kPa

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

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

5.1.2 Conducted Emission on AC Mains

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	:	ANSI C63.10-2020, ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024
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	:	2026-06-01 to 2026-06-18
Input voltage	:	AC 120V/60Hz
Operation mode	:	B
Earthing	:	Not connected
Ambient temperature	:	23.4 ℃
Relative humidity	:	50 %
Atmospheric pressure	:	101 kPa

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

6 Photographs of the Test Set-Up

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

7 List of Tables

Appendix B: Test Results (Classic Bluetooth) of with host

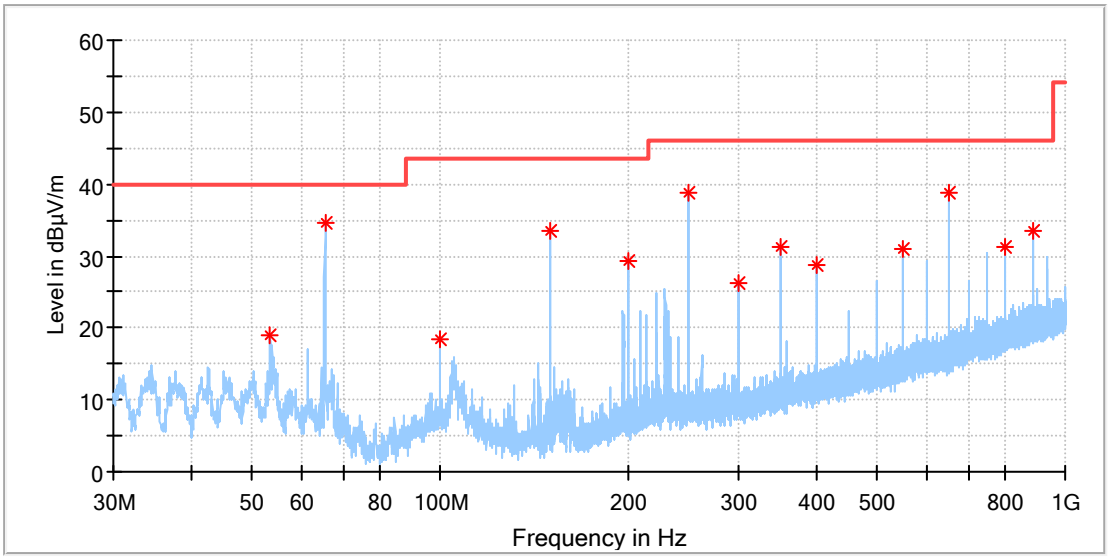
Appendix B.1: Test Results of Radiated Spurious Emissions

Note:
1) This testing was carried out on different modulations, but only the worst case was presented in this report.
2) 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.

30 MHz - 1GHz

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

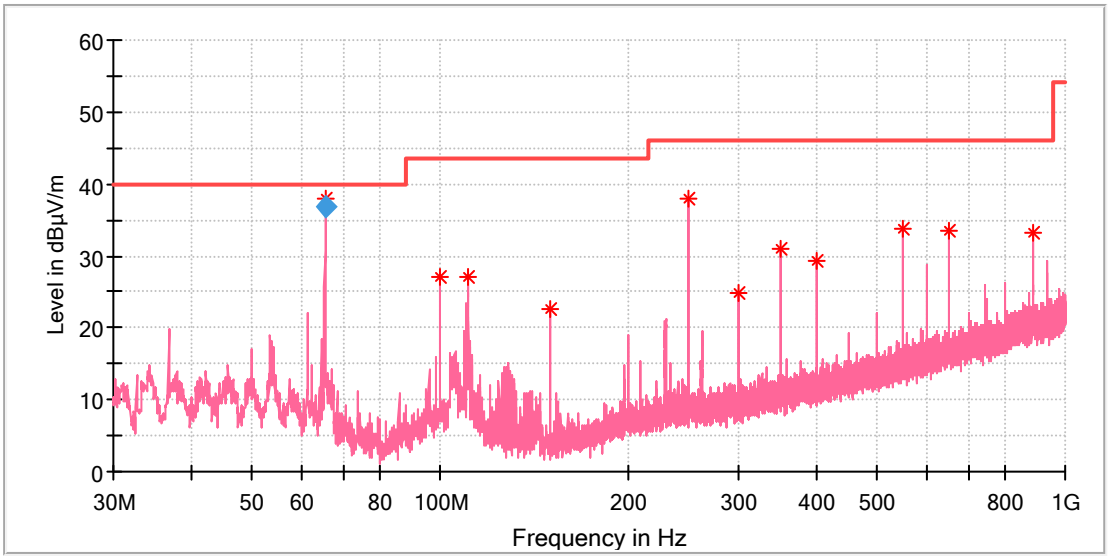


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
53.549444	18.91	40.00	21.09	100.0	H	190.0	-18.5
65.458889	34.60	40.00	5.40	100.0	H	140.0	-20.4
100.001667	18.43	43.50	25.07	100.0	H	6.0	-19.1
149.956667	33.55	43.50	9.95	100.0	H	6.0	-22.3
199.965556	29.40	43.50	14.10	100.0	H	326.0	-19.1
249.974444	38.86	46.00	7.14	100.0	H	336.0	-17.4
299.983333	26.31	46.00	19.69	100.0	H	252.0	-16.3
349.992222	31.18	46.00	14.82	100.0	H	41.0	-14.9
400.001111	28.84	46.00	17.16	100.0	H	252.0	-13.8
549.973889	30.86	46.00	15.14	100.0	H	208.0	-10.8
649.991667	38.83	46.00	7.17	100.0	H	41.0	-8.8
800.018333	31.21	46.00	14.79	100.0	H	105.0	-6.2
890.982778	33.49	46.00	12.51	100.0	H	217.0	-4.9

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



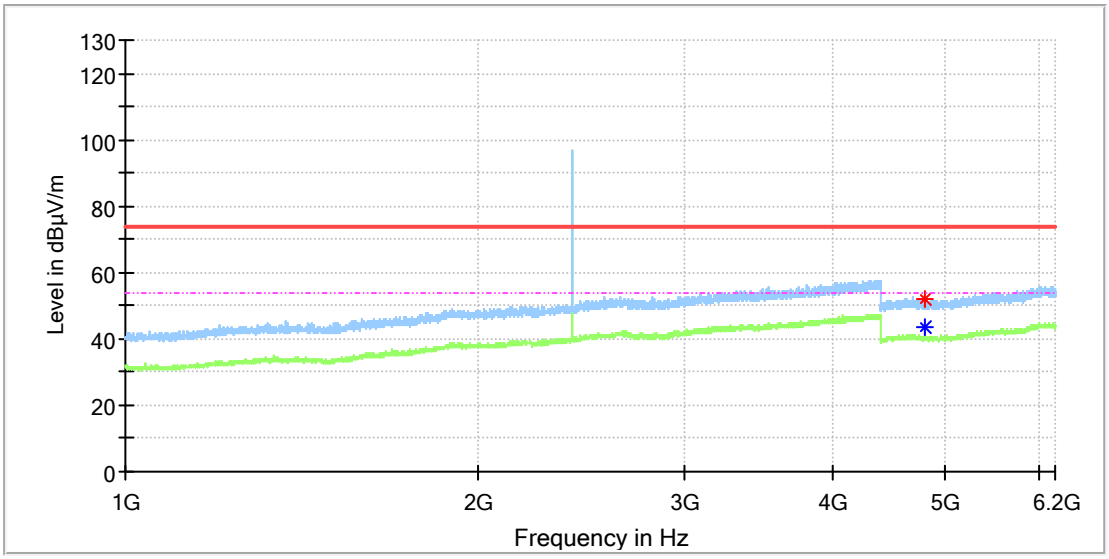
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
65.458889	37.93	40.00	2.07	100.0	V	93.0	-20.4
100.001667	27.16	43.50	16.34	100.0	V	347.0	-19.1
110.833333	26.99	43.50	16.51	100.0	V	283.0	-19.3
149.956667	22.50	43.50	21.00	100.0	V	85.0	-22.3
249.974444	37.91	46.00	8.09	100.0	V	166.0	-17.4
299.983333	24.85	46.00	21.15	100.0	V	356.0	-16.3
349.992222	30.94	46.00	15.06	100.0	V	329.0	-14.9
400.001111	29.24	46.00	16.76	100.0	V	310.0	-13.8
549.973889	33.72	46.00	12.28	100.0	V	310.0	-10.8
649.991667	33.52	46.00	12.48	100.0	V	120.0	-8.8
890.982778	33.21	46.00	12.79	100.0	V	68.0	-4.9

1GHz - 18GHz
Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

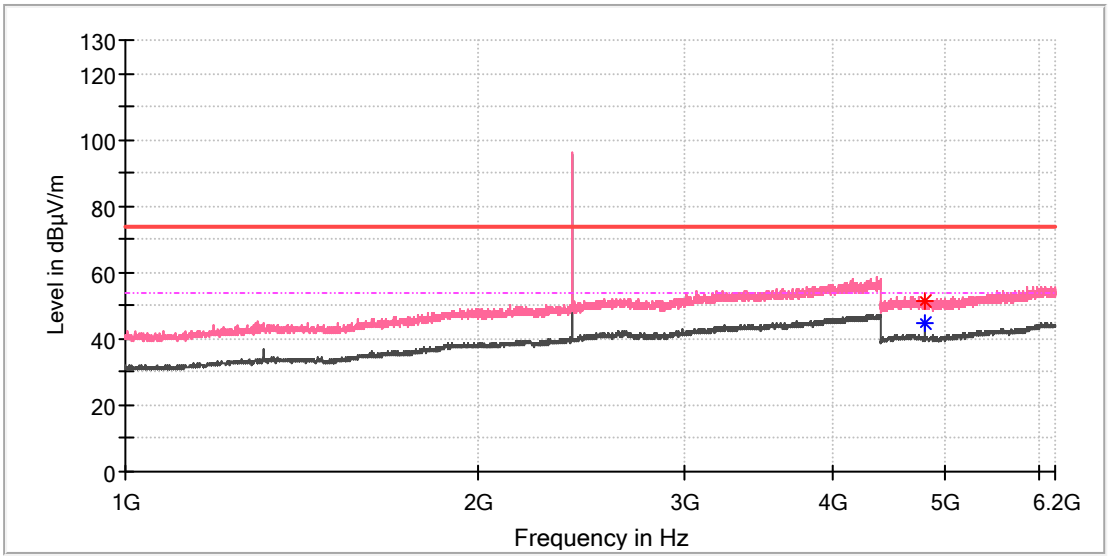


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	---	43.53	54.00	10.47	150.0	H	263.0	13.3
4804.000000	52.12	---	74.00	21.88	150.0	H	203.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

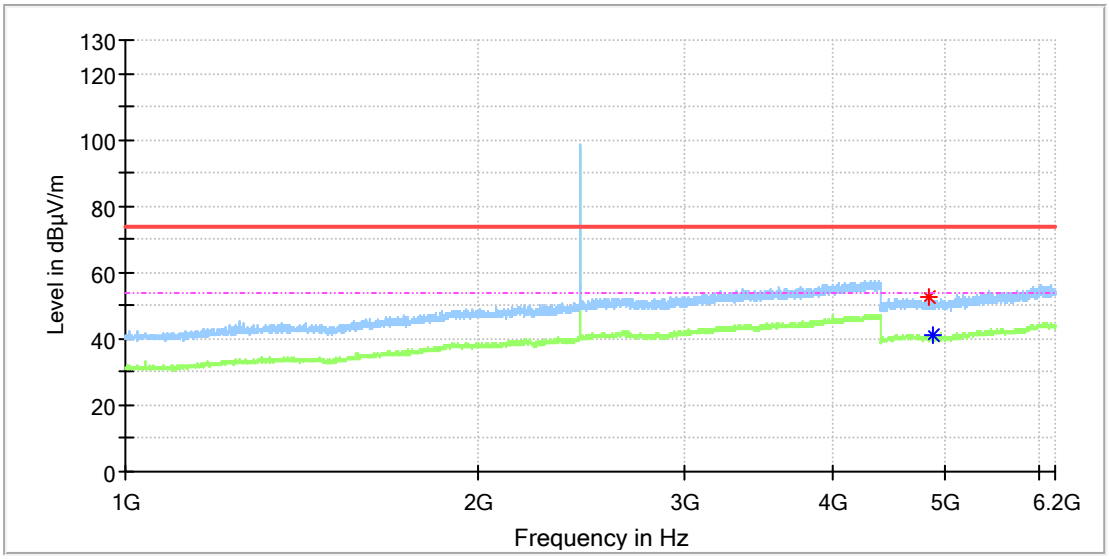


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	51.67	---	74.00	22.33	150.0	V	200.0	13.3
4803.500000	---	44.91	54.00	9.09	150.0	V	200.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

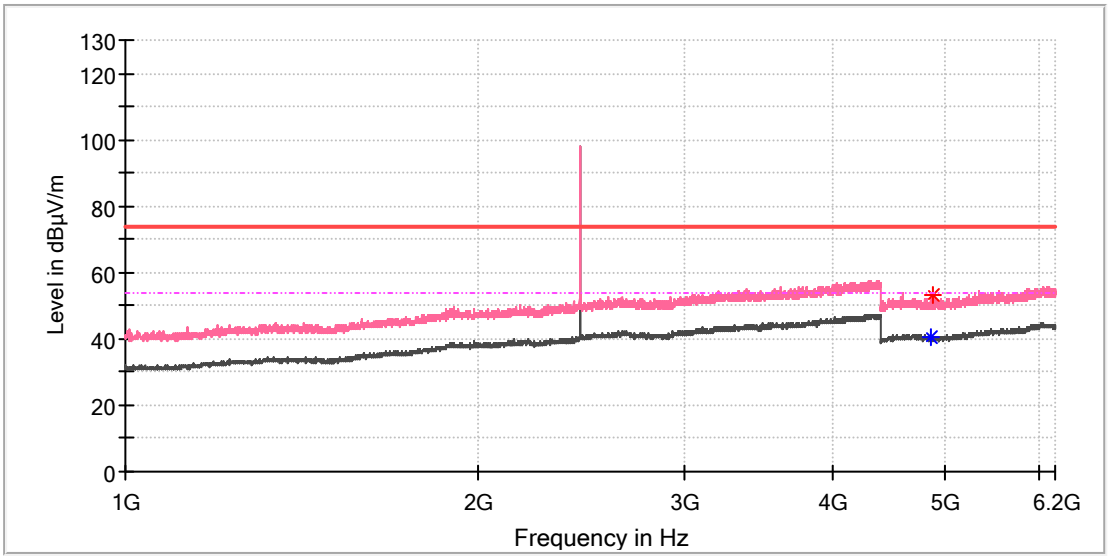


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4844.000000	52.58	---	74.00	21.42	150.0	H	16.0	13.3
4878.500000	---	40.94	54.00	13.06	150.0	H	41.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

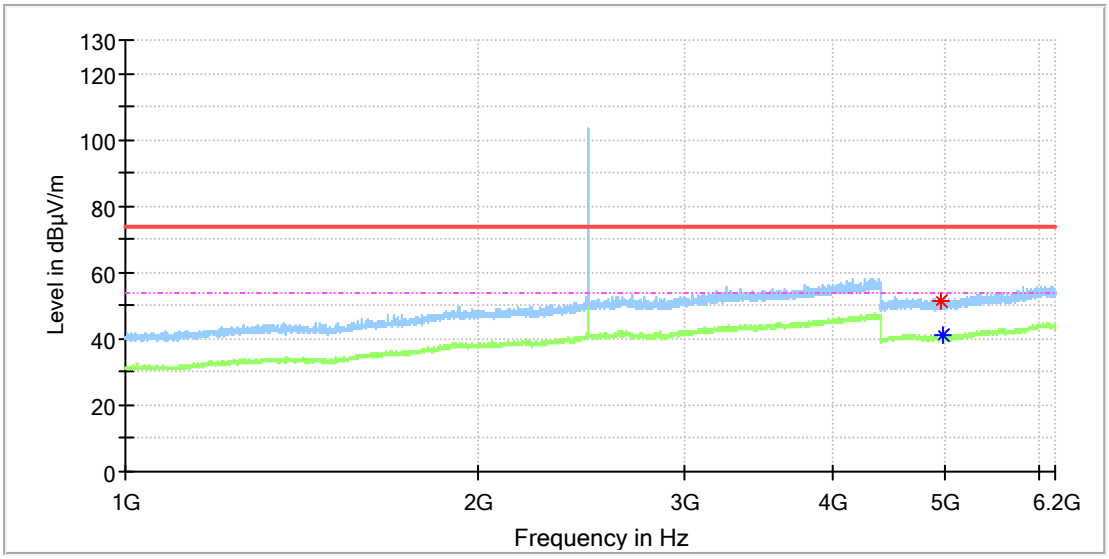


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4854.000000	---	40.66	54.00	13.34	150.0	V	81.0	13.3
4870.500000	53.03	---	74.00	20.97	150.0	V	349.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

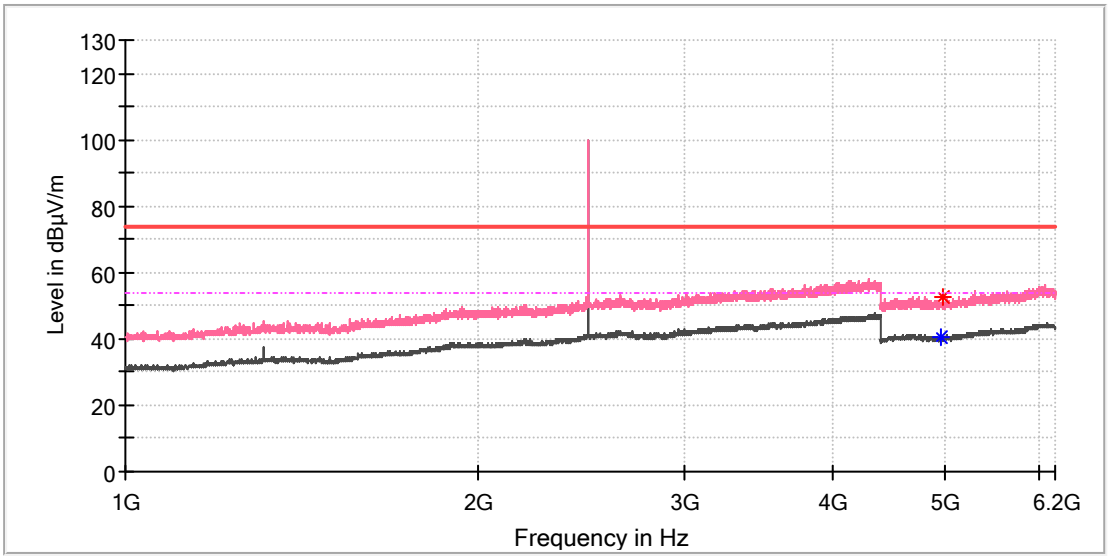


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.500000	51.33	---	74.00	22.67	150.0	H	197.0	13.3
4967.500000	---	40.94	54.00	13.06	150.0	H	154.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

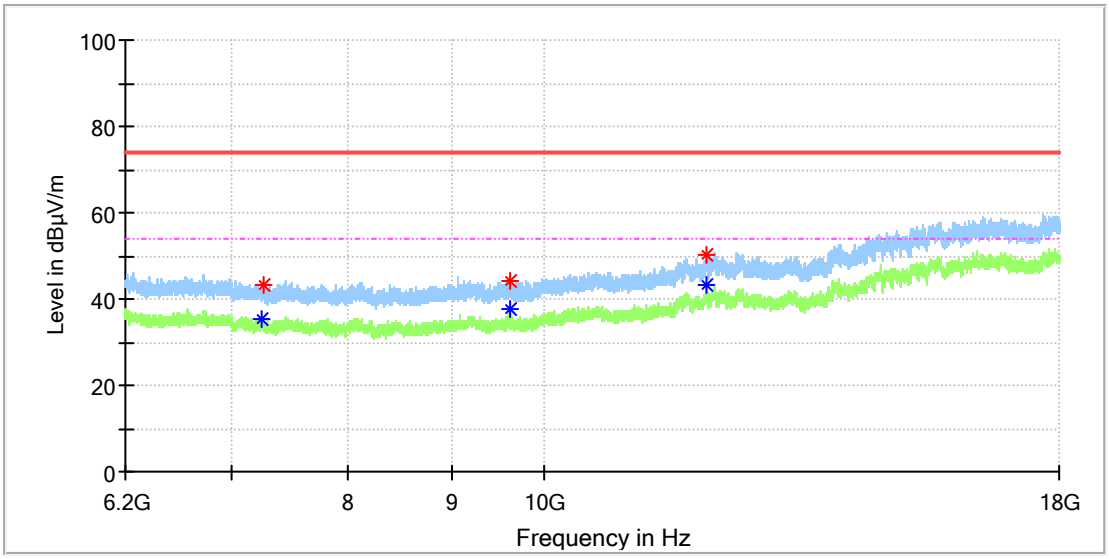


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4954.500000	---	40.80	54.00	13.20	150.0	V	269.0	13.3
4971.000000	52.33	---	74.00	21.67	150.0	V	314.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

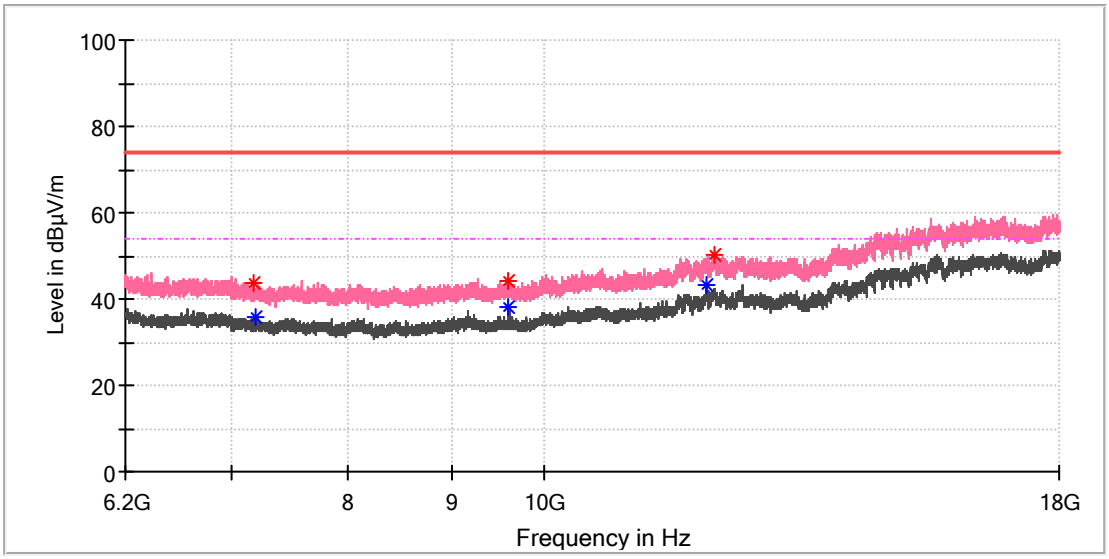


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7241.841667	---	35.26	54.00	18.74	150.0	H	283.0	8.6
7265.441667	43.41	---	74.00	30.59	150.0	H	80.0	8.5
9607.741667	44.25	---	74.00	29.75	150.0	H	0.0	10.4
9607.741667	---	37.85	54.00	16.15	150.0	H	0.0	10.4
12029.200000	50.35	---	74.00	23.65	150.0	H	186.0	15.9
12047.391667	---	43.04	54.00	10.96	150.0	H	163.0	16.4

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

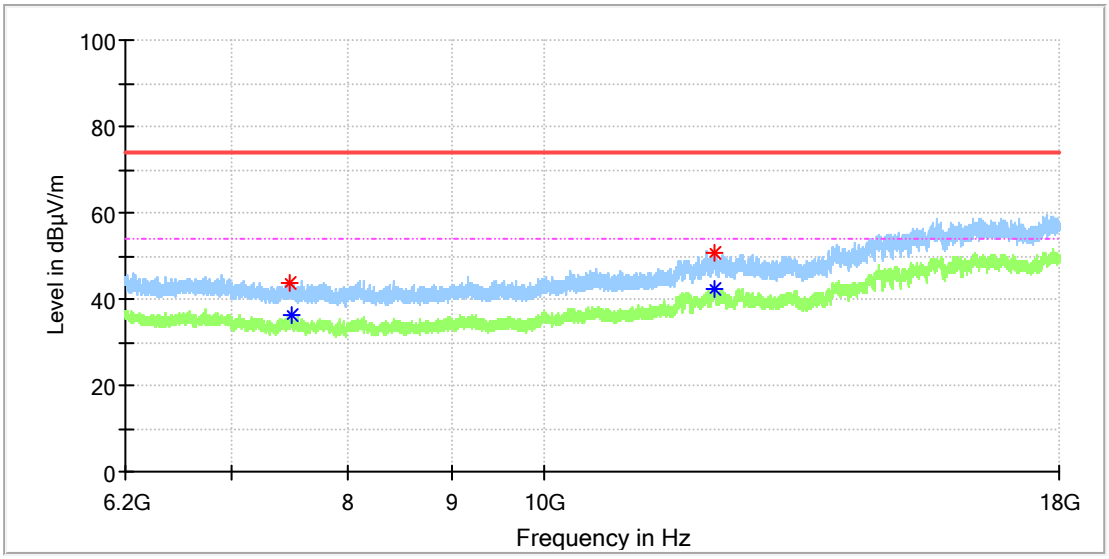


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7180.383333	43.93	---	74.00	30.07	150.0	V	356.0	8.8
7185.791667	---	35.61	54.00	18.39	150.0	V	29.0	8.8
9607.250000	44.24	---	74.00	29.76	150.0	V	0.0	10.4
9607.250000	---	38.01	54.00	15.99	150.0	V	0.0	10.4
12031.166667	---	43.39	54.00	10.61	150.0	V	347.0	16.0
12152.116667	50.30	---	74.00	23.70	150.0	V	267.0	16.6

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

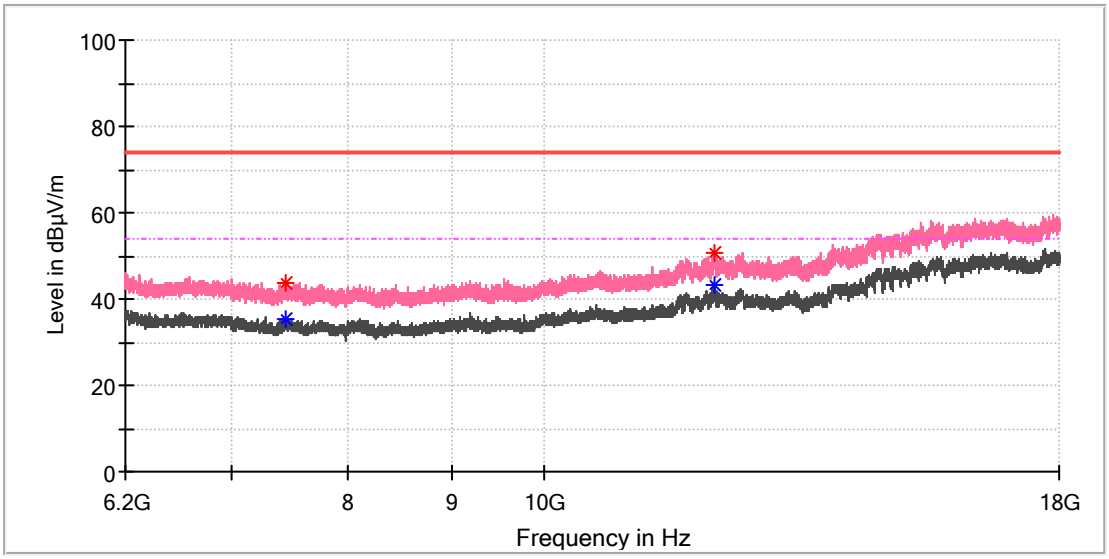


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7474.891667	43.57	---	74.00	30.43	150.0	H	116.0	8.6
7493.575000	---	36.46	54.00	17.54	150.0	H	186.0	8.7
12151.625000	---	42.17	54.00	11.83	150.0	H	141.0	16.6
12156.050000	50.85	---	74.00	23.15	150.0	H	116.0	16.4

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

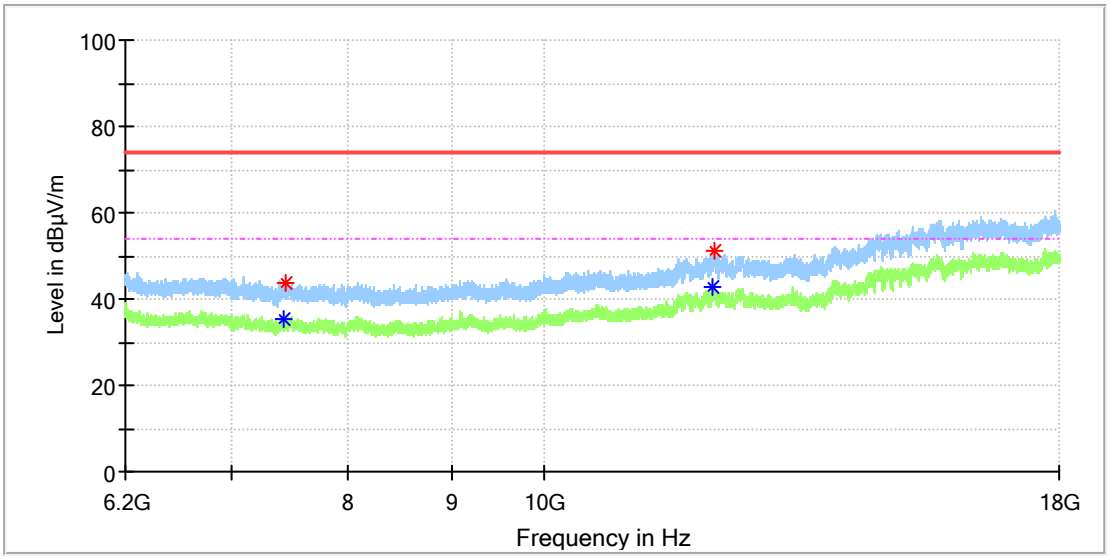


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7440.475000	43.64	---	74.00	30.36	150.0	V	59.0	8.4
7450.800000	---	35.30	54.00	18.70	150.0	V	103.0	8.5
12143.266667	---	43.28	54.00	10.72	150.0	V	81.0	16.6
12145.233333	50.74	---	74.00	23.26	150.0	V	92.0	16.6

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

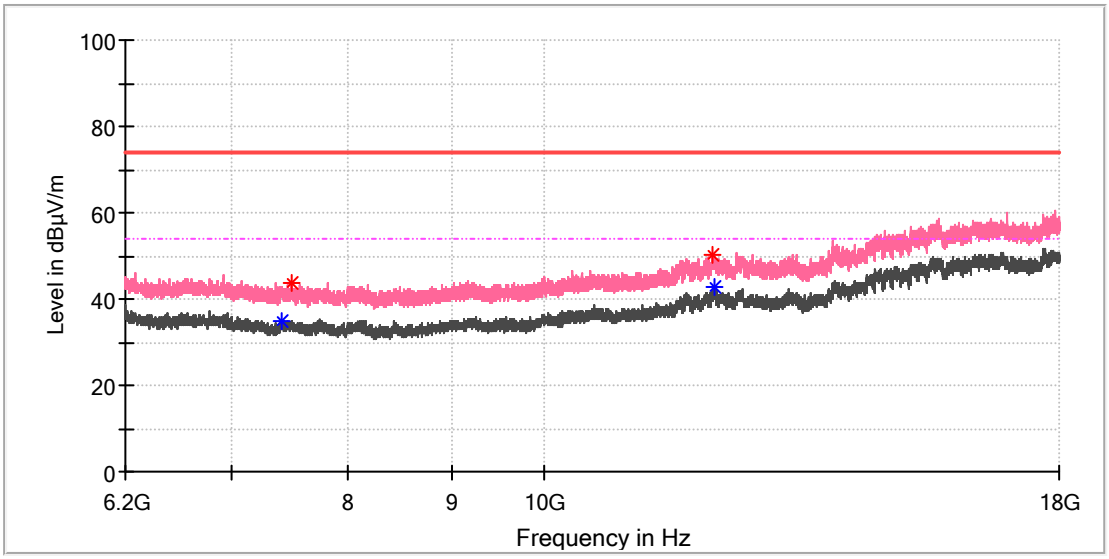


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7426.216667	---	35.30	54.00	18.70	150.0	H	220.0	8.4
7443.916667	43.60	---	74.00	30.40	150.0	H	1.0	8.5
12129.991667	---	42.65	54.00	11.35	150.0	H	0.0	16.2
12131.958333	51.05	---	74.00	22.95	150.0	H	355.0	16.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



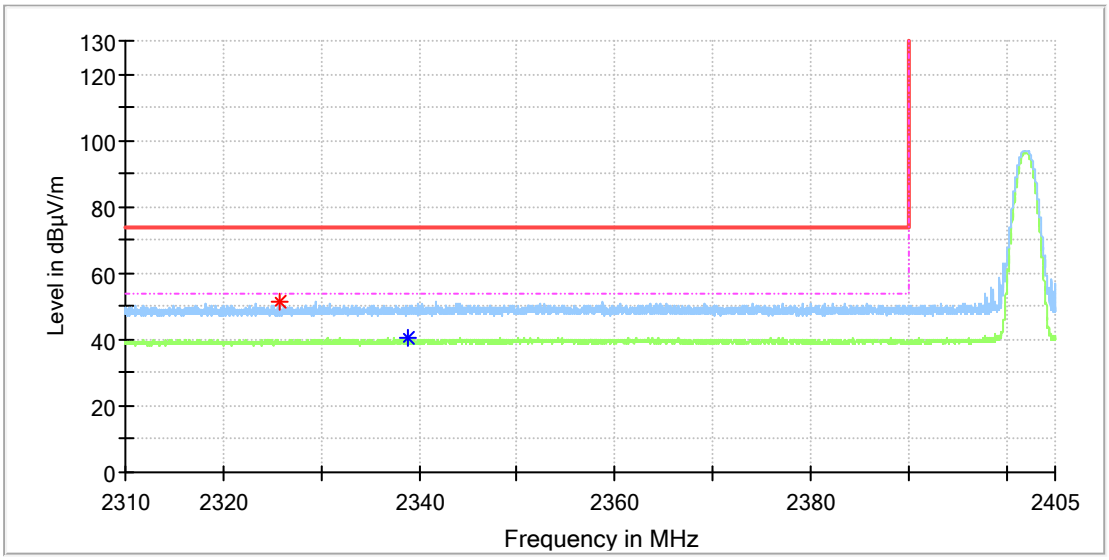
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7414.416667	---	35.00	54.00	19.00	150.0	V	325.0	8.3
7495.541667	43.63	---	74.00	30.37	150.0	V	158.0	8.7
12127.041667	50.34	---	74.00	23.66	150.0	V	0.0	16.1
12151.625000	---	42.80	54.00	11.20	150.0	V	290.0	16.6

Appendix B.2: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

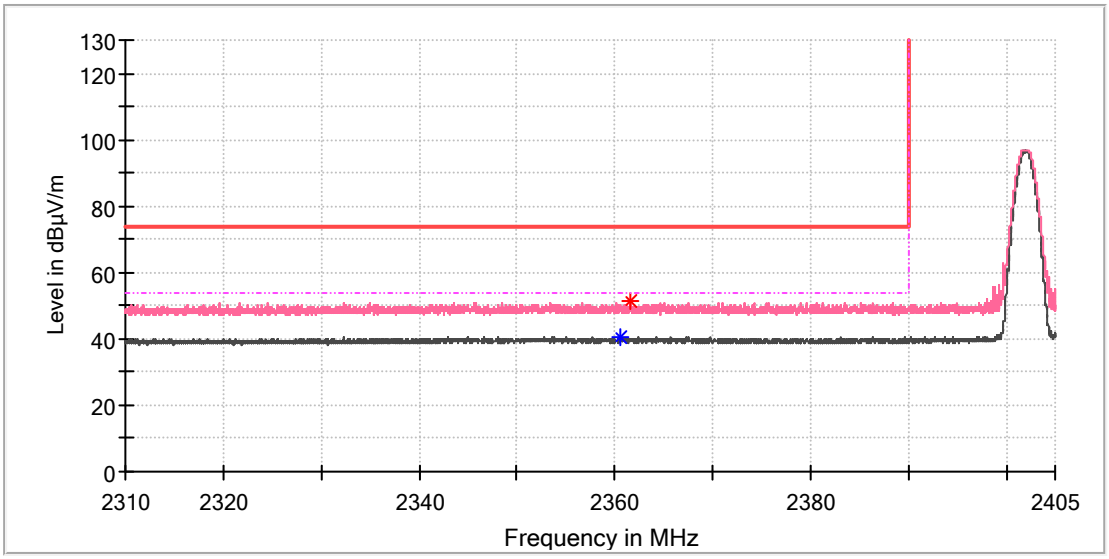


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2325.665588	51.69	---	74.00	22.31	150.0	H	252.0	8.3
2338.794706	---	40.40	54.00	13.60	150.0	H	85.0	8.4

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

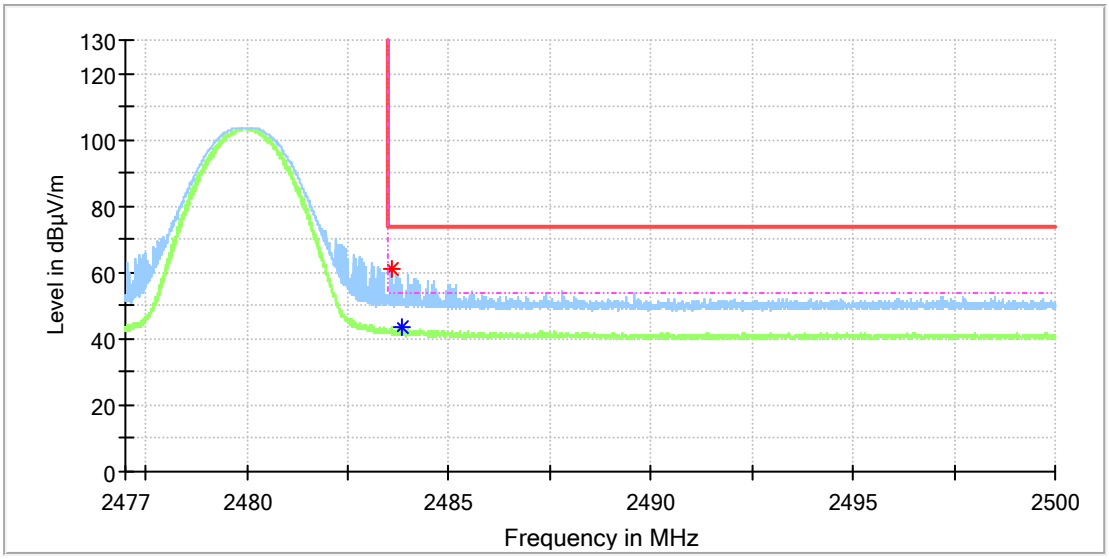


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2360.628530	---	40.28	54.00	13.72	150.0	V	83.0	8.5
2361.666177	51.49	---	74.00	22.51	150.0	V	223.0	8.5

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

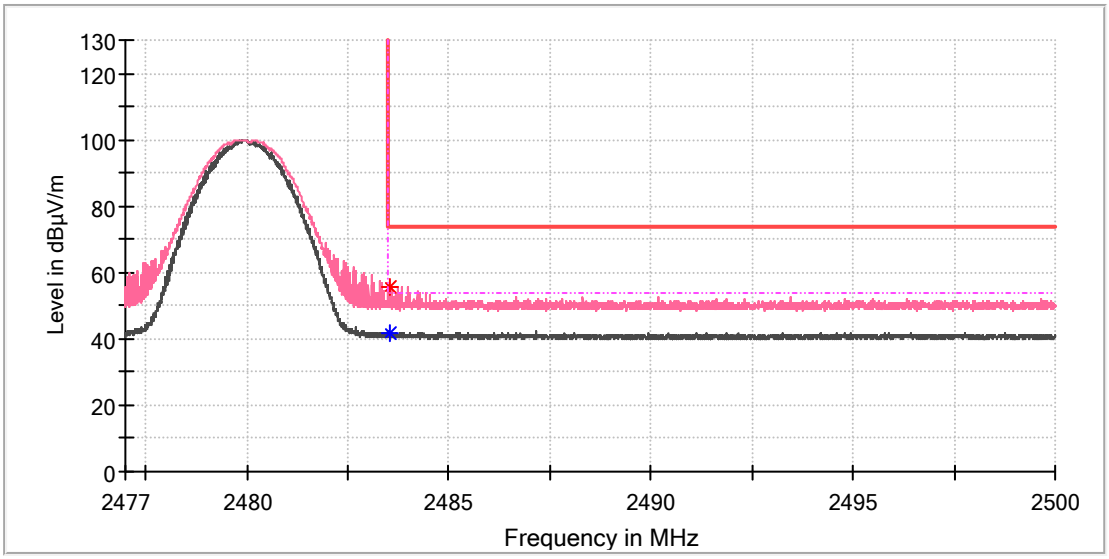


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.591912	60.95	---	74.00	13.05	150.0	H	177.0	9.0
2483.863971	---	43.45	54.00	10.55	150.0	H	163.0	9.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BR DH5_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



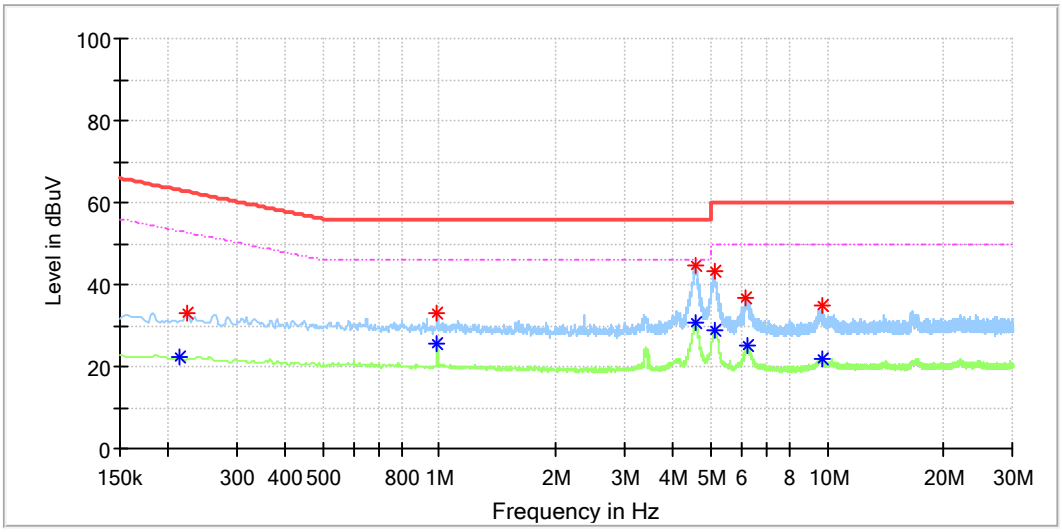
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.536765	---	42.00	54.00	12.00	150.0	V	163.0	9.0
2483.536765	55.82	---	74.00	18.18	150.0	V	163.0	9.0

Appendix B.3: Test Results of Conducted Emissions on AC mains

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLUETOOTH + output
Test Voltage:	AC 120V/60Hz
Standard:	FCC PART 15
Test By:/Review By:	Charron Chen / Charlie Zha
Tem./Hum./Pressure:	24.2°C/51.0%/101kPa
Remark:	SR 3

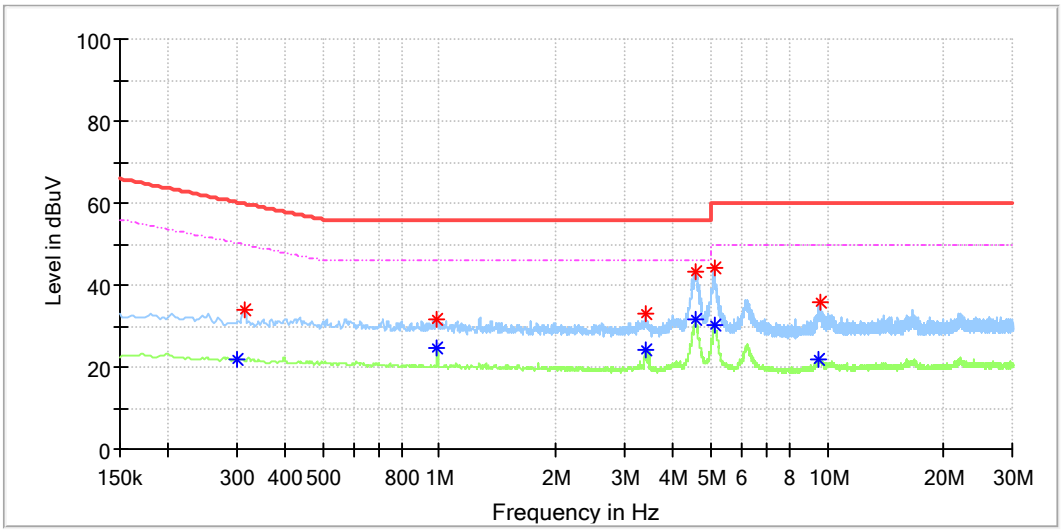


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.215	---	22.1	53.02	30.93	L1	9.7
0.225	32.9	---	62.65	29.75	L1	9.7
0.988	---	25.4	46.00	20.64	L1	9.7
0.988	32.9	---	56.00	23.07	L1	9.7
4.553	---	30.8	46.00	15.20	L1	9.7
4.553	44.9	---	56.00	11.12	L1	9.7
5.108	---	29.0	50.00	20.95	L1	9.8
5.130	43.3	---	60.00	16.75	L1	9.8
6.185	36.7	---	60.00	23.25	L1	9.8
6.217	---	25.3	50.00	24.73	L1	9.8
9.672	34.8	---	60.00	25.15	L1	10.0
9.677	---	21.6	50.00	28.37	L1	10.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLUETOOTH
Test Voltage:	AC 120V/60Hz
Standard:	FCC PART 15 B
Test By:/Review By:	Charron Chen / Charlie Zha
Tem./Hum./Pressure:	24.2°C/51.0%/101kPa
Remark:	SR 3



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.302	---	22.1	50.20	28.12	N	9.9
0.314	34.0	---	59.86	25.91	N	9.9
0.988	---	24.5	46.00	21.52	N	9.8
0.988	31.6	---	56.00	24.37	N	9.8
3.389	33.1	---	56.00	22.91	N	9.7
3.396	---	24.0	46.00	21.99	N	9.7
4.560	43.5	---	56.00	12.53	N	9.7
4.570	---	31.5	46.00	14.52	N	9.7
5.103	---	30.4	50.00	19.56	N	9.8
5.113	44.2	---	60.00	15.77	N	9.8
9.510	---	22.1	50.00	27.94	N	9.7
9.548	36.0	---	60.00	23.98	N	9.7

Appendix C: Test Results (Bluetooth LE) of with host

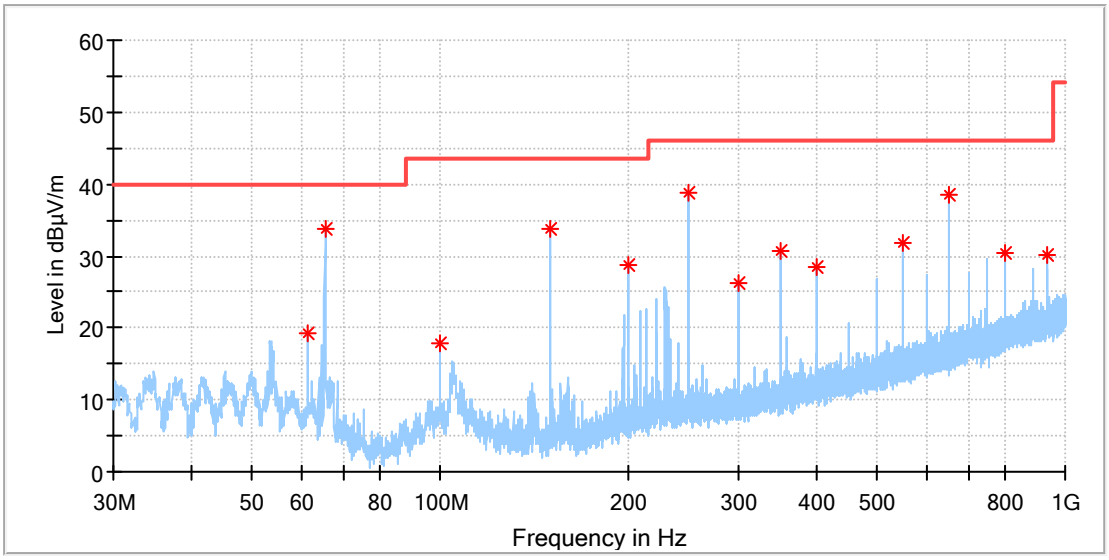
Appendix C.1: Test Results of Radiated Spurious Emissions

Note:
1) This testing was carried out on different modulations, but only the worst case was presented in this report.
2) 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.

30 MHz - 1GHz

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

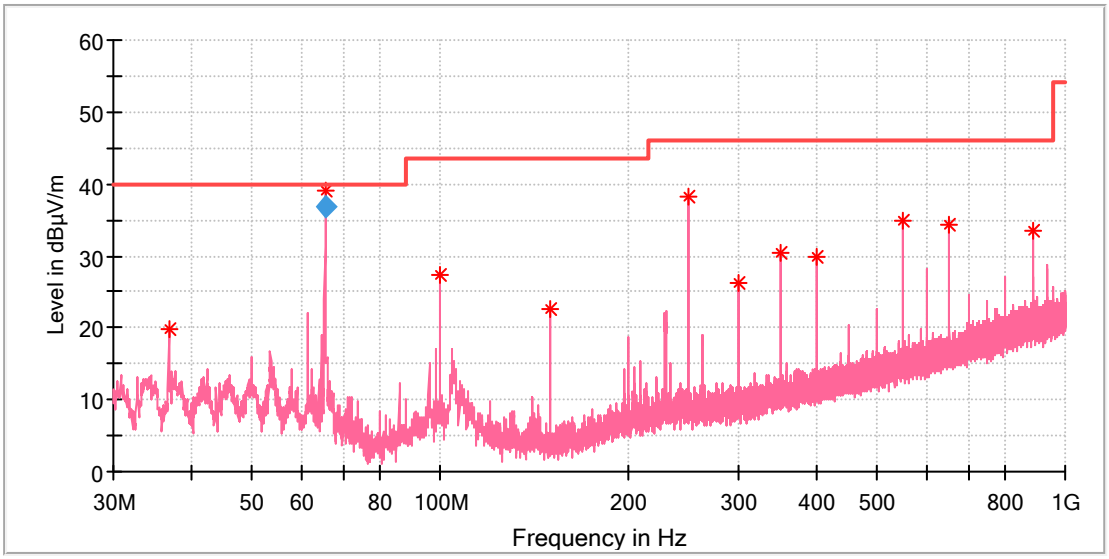


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
61.417222	19.13	40.00	20.87	100.0	H	0.0	-19.4
65.512778	33.81	40.00	6.19	100.0	H	340.0	-20.4
100.001667	17.86	43.50	25.64	100.0	H	6.0	-19.1
149.956667	33.76	43.50	9.74	100.0	H	0.0	-22.3
199.965556	28.88	43.50	14.62	100.0	H	169.0	-19.1
249.974444	38.66	46.00	7.34	100.0	H	331.0	-17.4
299.983333	26.30	46.00	19.70	100.0	H	250.0	-16.3
349.992222	30.77	46.00	15.23	100.0	H	40.0	-14.9
400.001111	28.54	46.00	17.46	100.0	H	250.0	-13.8
550.027778	31.69	46.00	14.31	100.0	H	206.0	-10.8
649.991667	38.48	46.00	7.52	100.0	H	48.0	-8.8
800.018333	30.38	46.00	15.62	100.0	H	40.0	-6.2
938.405000	30.26	46.00	15.74	100.0	H	95.0	-4.4

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



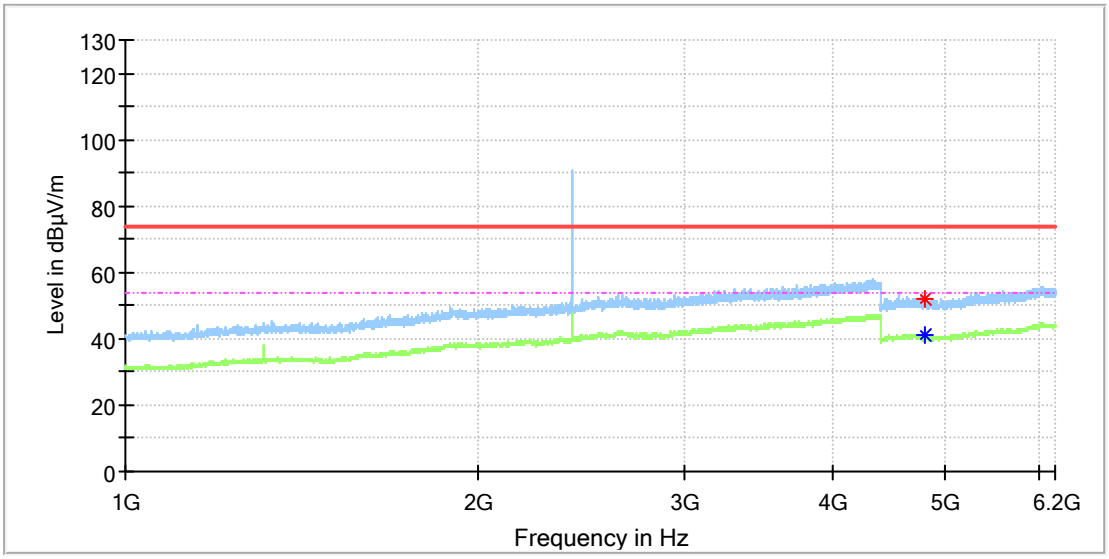
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.843889	19.88	40.00	20.12	100.0	V	103.0	-21.3
65.566667	39.00	40.00	1.00	100.0	V	54.0	-20.4
100.001667	27.35	43.50	16.15	100.0	V	24.0	-19.1
149.956667	22.65	43.50	20.85	100.0	V	54.0	-22.3
249.974444	38.14	46.00	7.86	100.0	V	156.0	-17.4
299.983333	26.19	46.00	19.81	100.0	V	358.0	-16.3
349.992222	30.47	46.00	15.53	100.0	V	325.0	-14.9
400.001111	29.91	46.00	16.09	100.0	V	182.0	-13.8
550.027778	34.98	46.00	11.02	100.0	V	43.0	-10.8
649.991667	34.45	46.00	11.55	100.0	V	112.0	-8.8
890.982778	33.51	46.00	12.49	100.0	V	287.0	-4.9

1GHz - 18GHz
Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

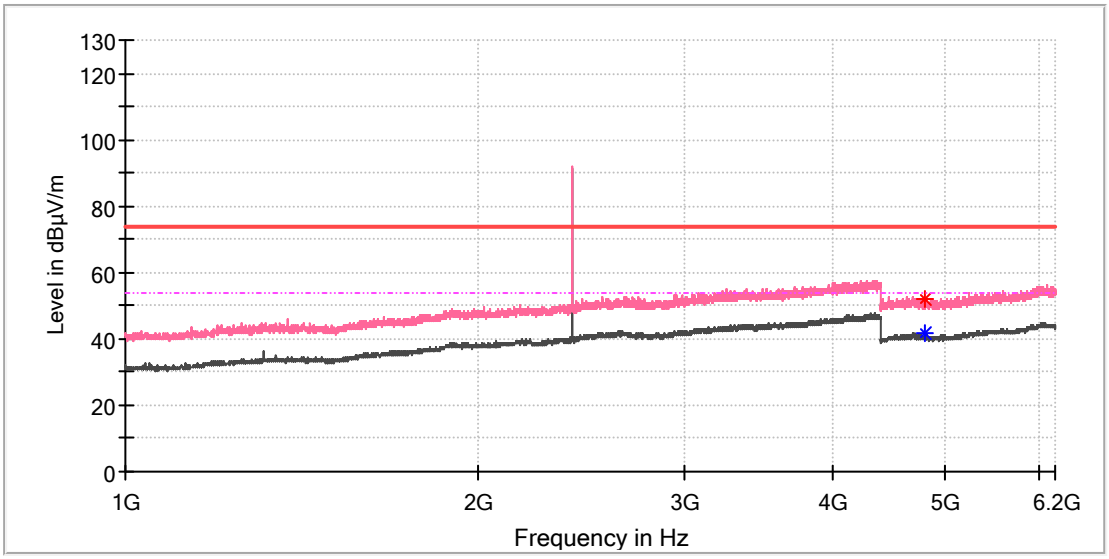


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4799.000000	51.88	---	74.00	22.12	150.0	H	105.0	13.3
4803.500000	---	41.29	54.00	12.71	150.0	H	199.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

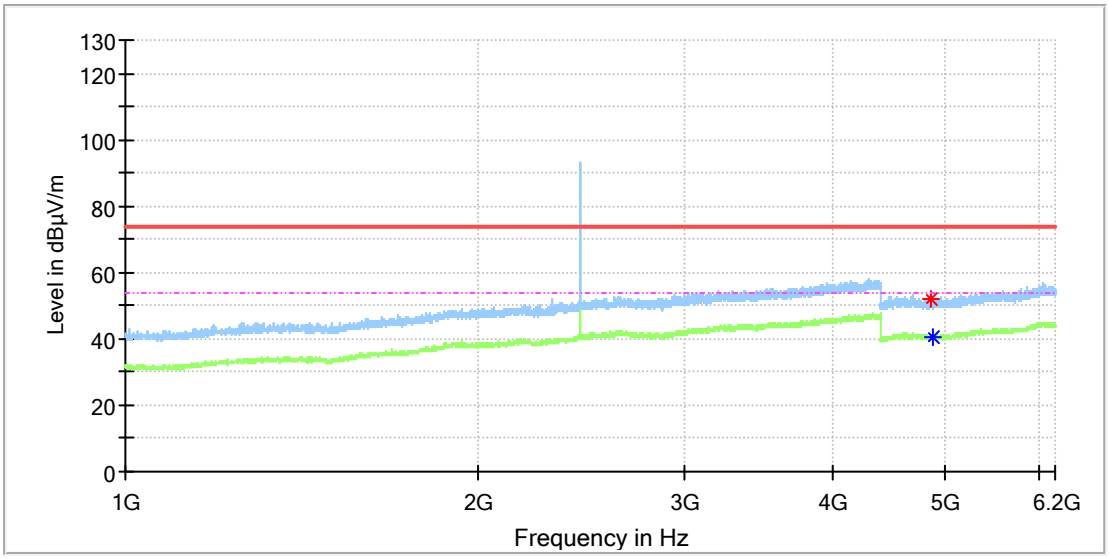


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	51.79	---	74.00	22.21	150.0	V	75.0	13.3
4803.500000	---	41.64	54.00	12.36	150.0	V	75.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

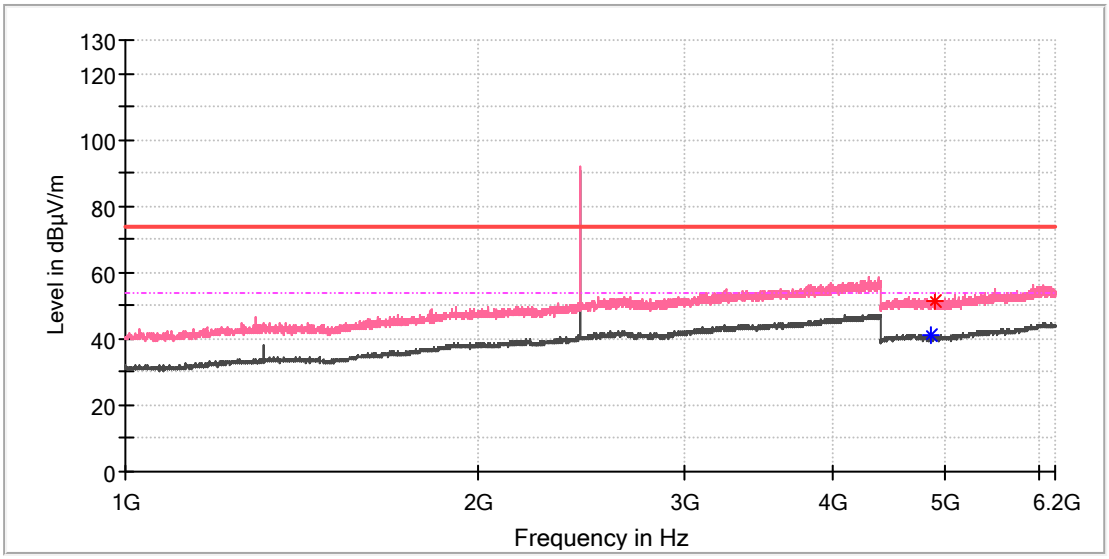


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4866.000000	52.18	---	74.00	21.82	150.0	H	0.0	13.3
4877.000000	---	40.80	54.00	13.20	150.0	H	55.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

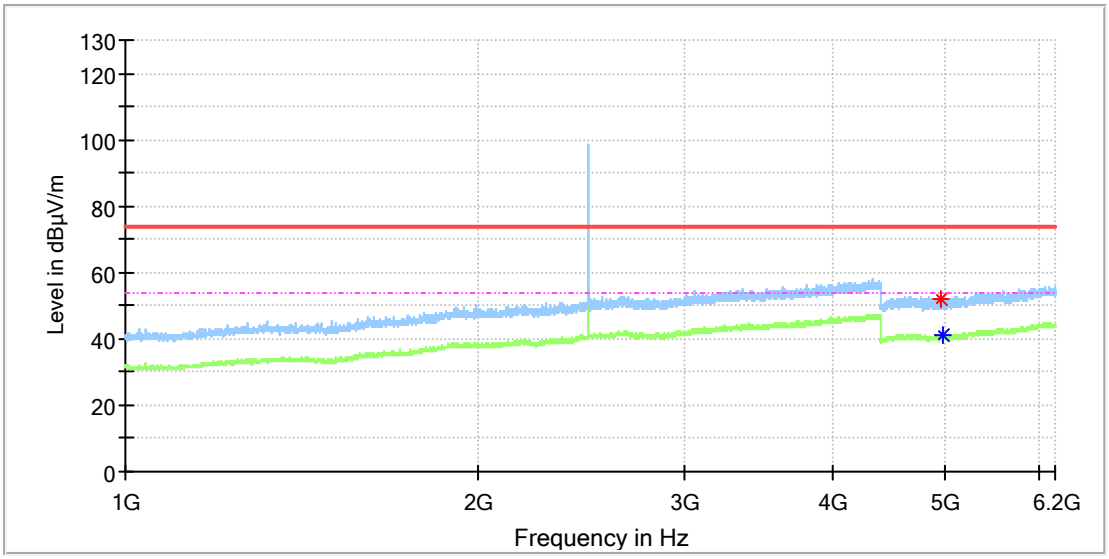


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4862.000000	---	40.91	54.00	13.09	150.0	V	115.0	13.3
4900.000000	51.66	---	74.00	22.34	150.0	V	23.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

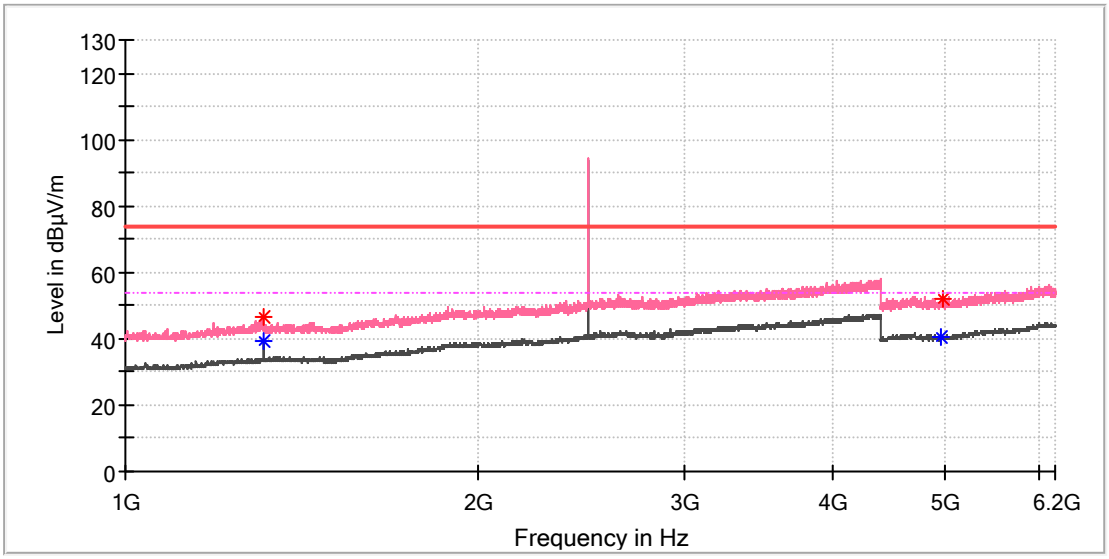


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.000000	51.87	---	74.00	22.13	150.0	H	178.0	13.3
4974.000000	---	41.10	54.00	12.90	150.0	H	152.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

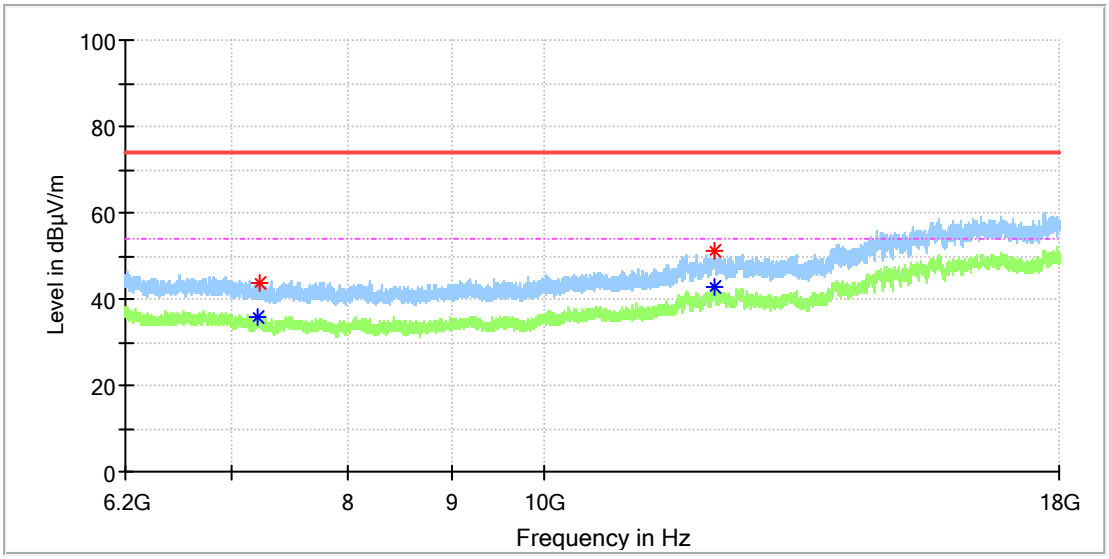


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1312.000000	46.51	---	74.00	27.49	150.0	V	256.0	2.8
1312.500000	---	39.20	54.00	14.80	150.0	V	256.0	2.8
4950.000000	---	40.69	54.00	13.31	150.0	V	0.0	13.3
4967.500000	52.21	---	74.00	21.79	150.0	V	328.0	13.3

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

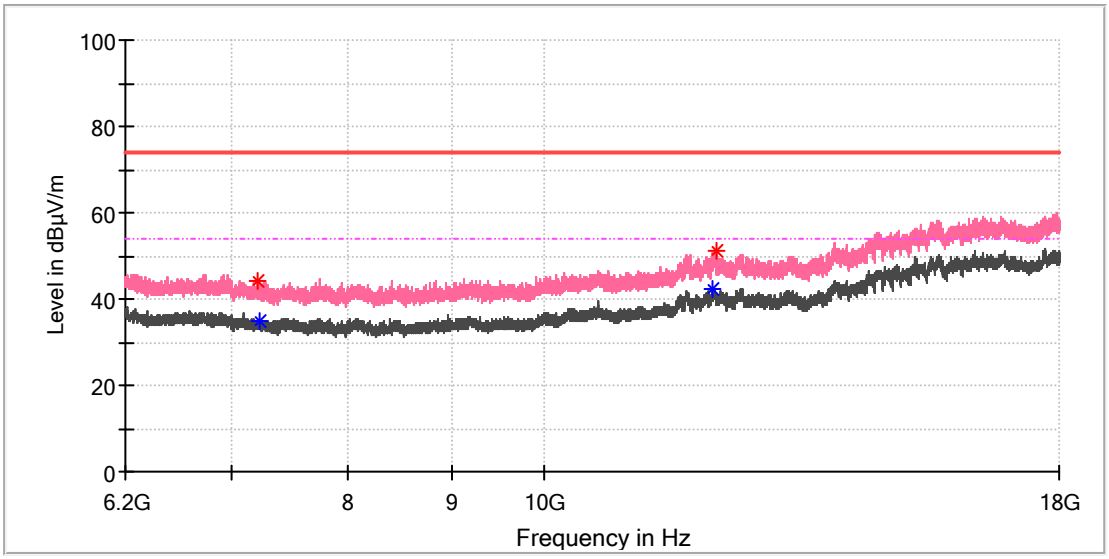


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7212.341667	---	35.75	54.00	18.25	150.0	H	119.0	8.7
7221.683333	43.63	---	74.00	30.37	150.0	H	0.0	8.7
12146.216667	51.17	---	74.00	22.83	150.0	H	277.0	16.6
12155.558333	---	42.60	54.00	11.40	150.0	H	277.0	16.4

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

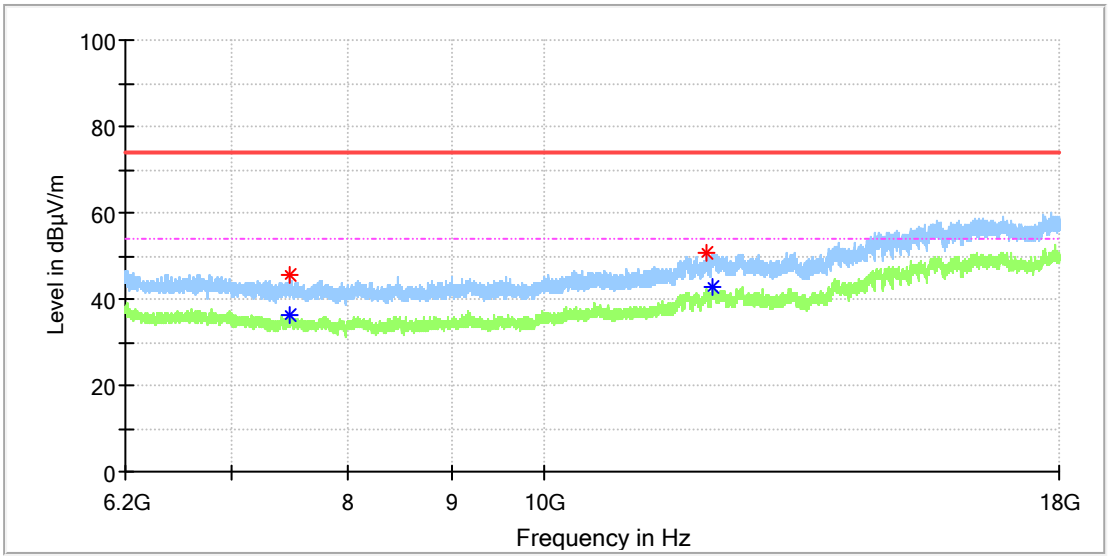


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7213.325000	44.08	---	74.00	29.92	150.0	V	313.0	8.7
7227.583333	---	34.93	54.00	19.07	150.0	V	292.0	8.7
12131.466667	---	42.46	54.00	11.54	150.0	V	68.0	16.2
12164.408333	50.98	---	74.00	23.02	150.0	V	68.0	16.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

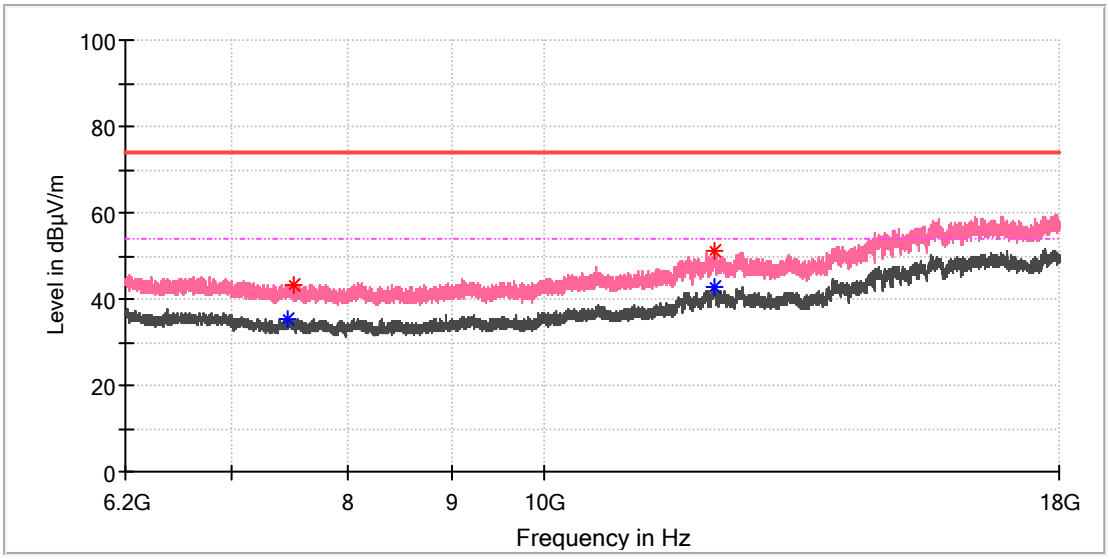


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7471.450000	45.35	---	74.00	28.65	150.0	H	136.0	8.6
7475.875000	---	36.33	54.00	17.67	150.0	H	0.0	8.6
12046.408333	50.59	---	74.00	23.41	150.0	H	281.0	16.3
12127.533333	---	42.66	54.00	11.34	150.0	H	0.0	16.1

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

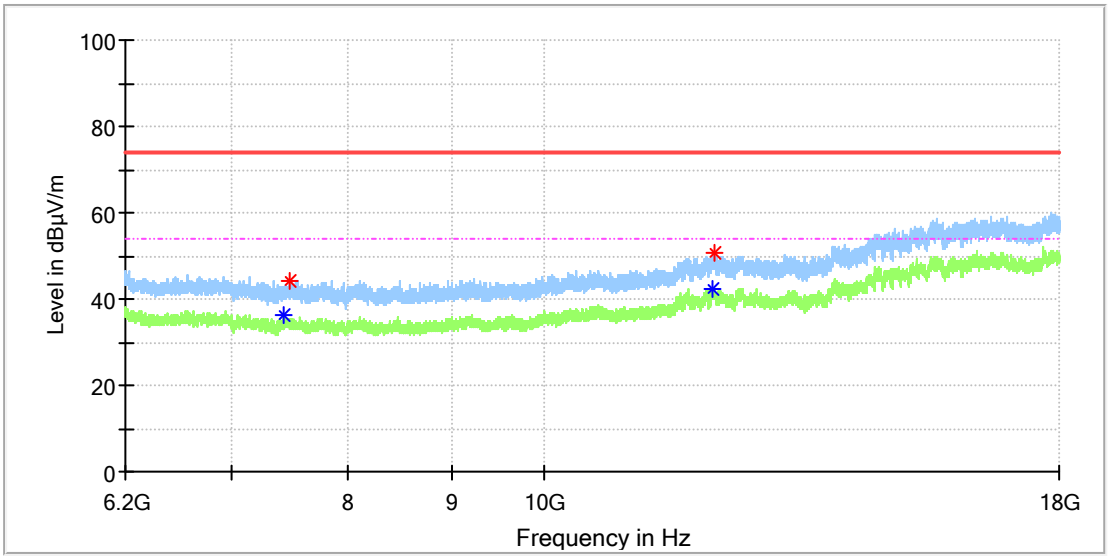


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7463.091667	---	35.37	54.00	18.63	150.0	V	91.0	8.6
7506.358333	43.41	---	74.00	30.59	150.0	V	297.0	8.7
12151.625000	---	42.75	54.00	11.25	150.0	V	315.0	16.6
12153.591667	51.03	---	74.00	22.97	150.0	V	1.0	16.5

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

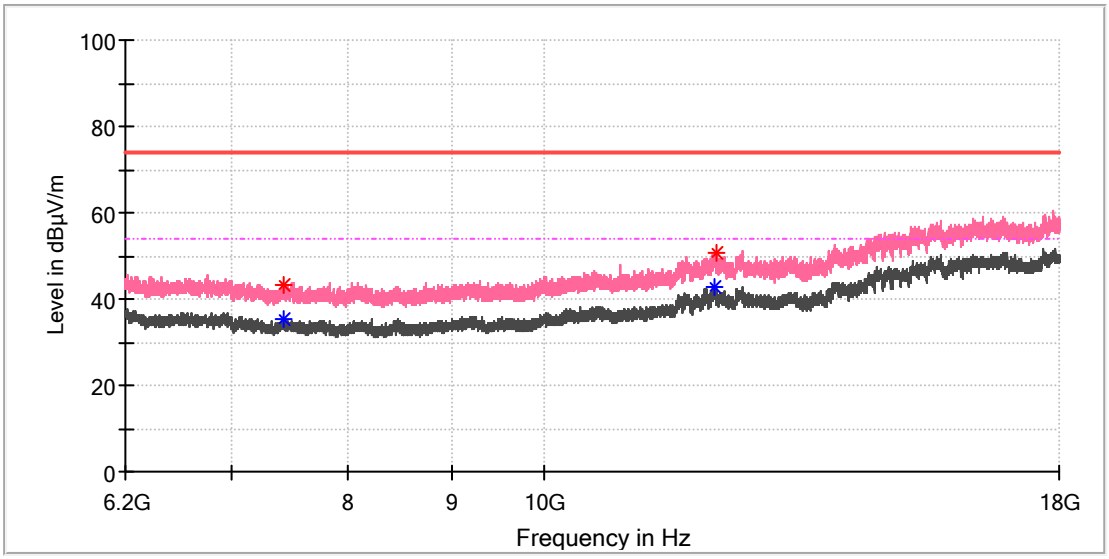


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7432.608333	---	36.16	54.00	17.84	150.0	H	44.0	8.4
7481.775000	44.15	---	74.00	29.85	150.0	H	249.0	8.7
12128.516667	---	42.56	54.00	11.44	150.0	H	260.0	16.2
12148.183333	50.48	---	74.00	23.52	150.0	H	294.0	16.7

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



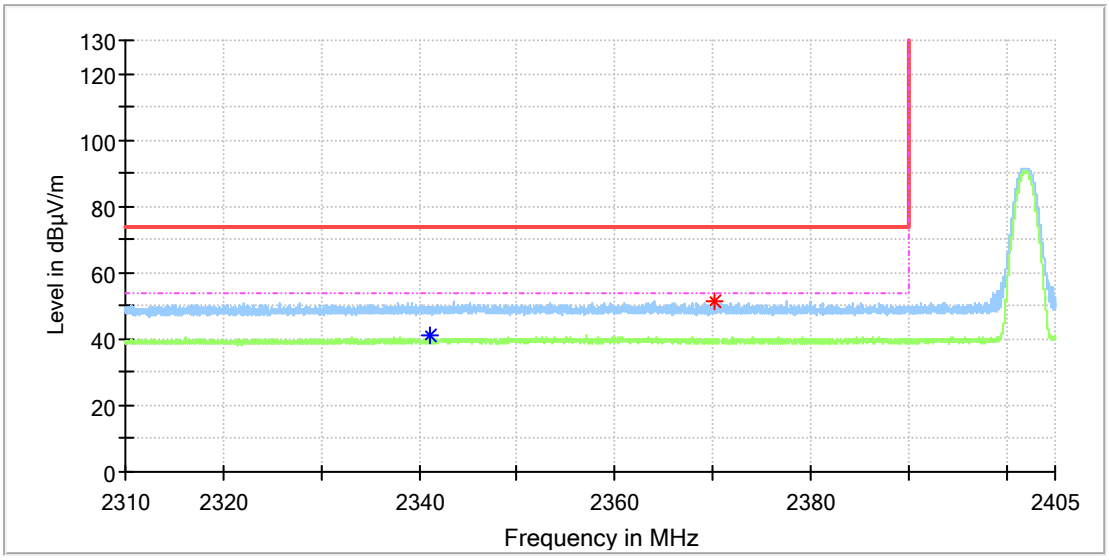
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7431.625000	---	35.47	54.00	18.53	150.0	V	267.0	8.4
7433.100000	43.34	---	74.00	30.66	150.0	V	211.0	8.4
12158.016667	---	42.89	54.00	11.11	150.0	V	145.0	16.3
12162.933333	50.80	---	74.00	23.20	150.0	V	51.0	16.1

Appendix C.2: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

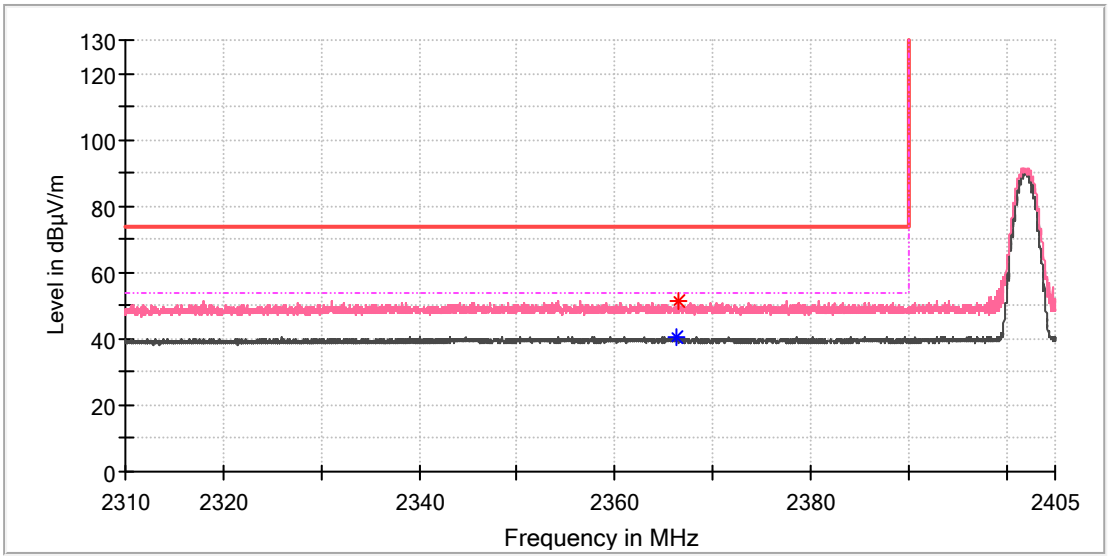


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2341.071765	---	40.85	54.00	13.15	150.0	H	356.0	8.4
2370.270000	51.49	---	74.00	22.51	150.0	H	261.0	8.5

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

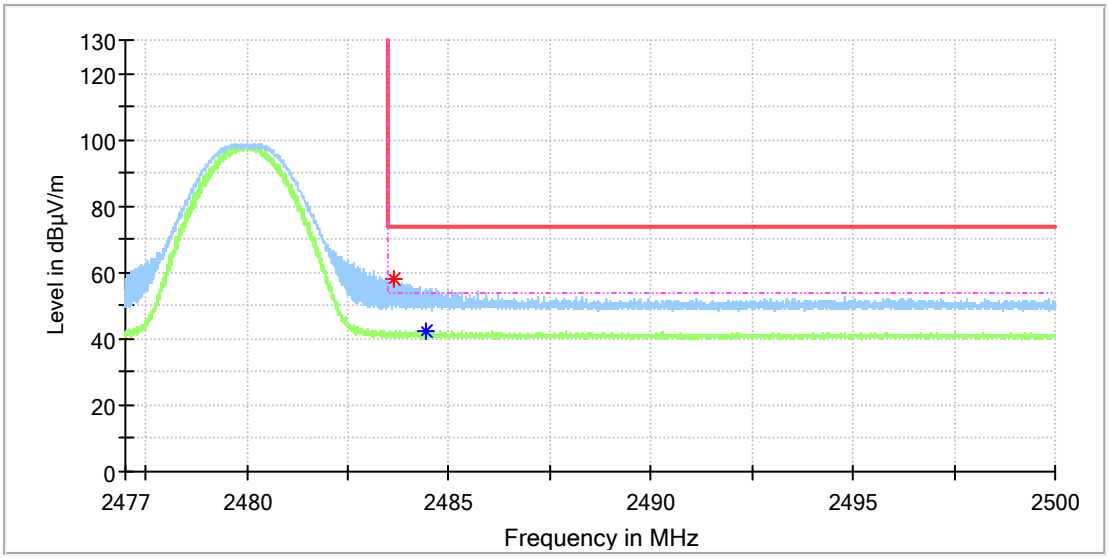


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2366.350000	---	40.59	54.00	13.41	150.0	V	63.0	8.5
2366.479706	51.45	---	74.00	22.55	150.0	V	246.0	8.5

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

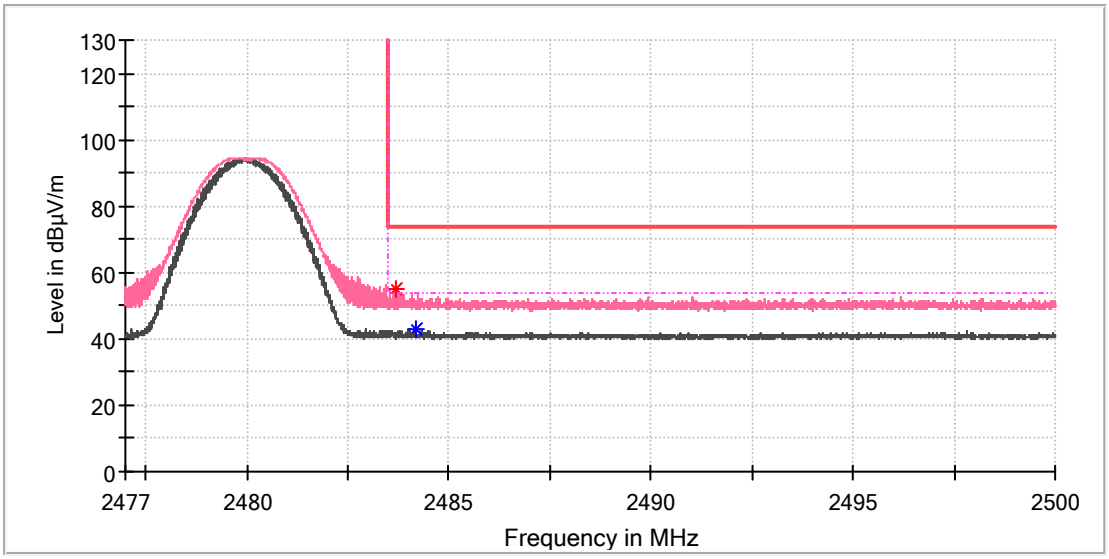


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.647059	57.89	---	74.00	16.11	150.0	H	154.0	9.0
2484.411765	---	42.46	54.00	11.54	150.0	H	162.0	9.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 1M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

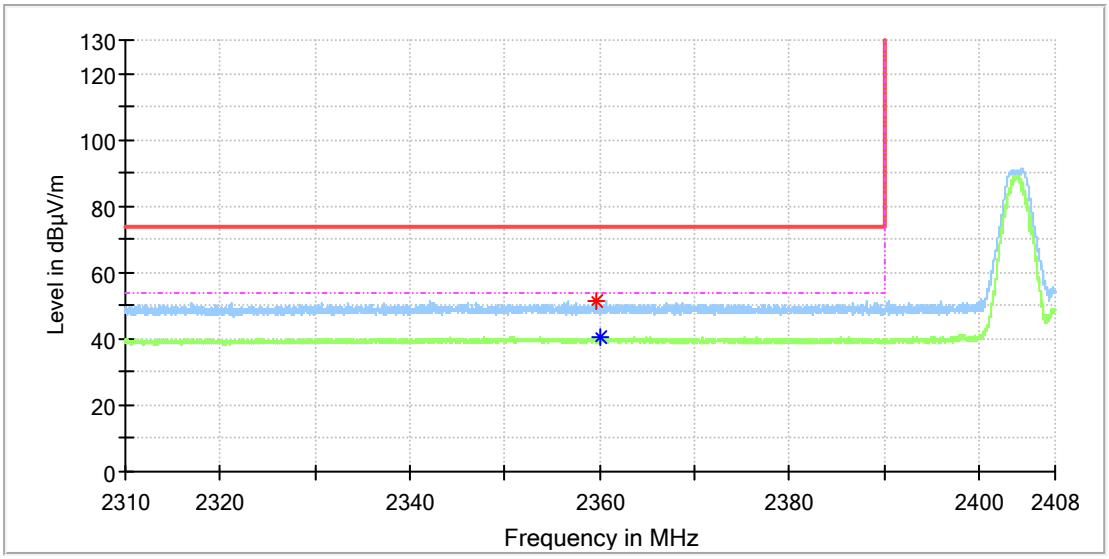


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.698530	54.83	---	74.00	19.17	150.0	V	168.0	9.0
2484.191177	---	42.82	54.00	11.18	150.0	V	264.0	9.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

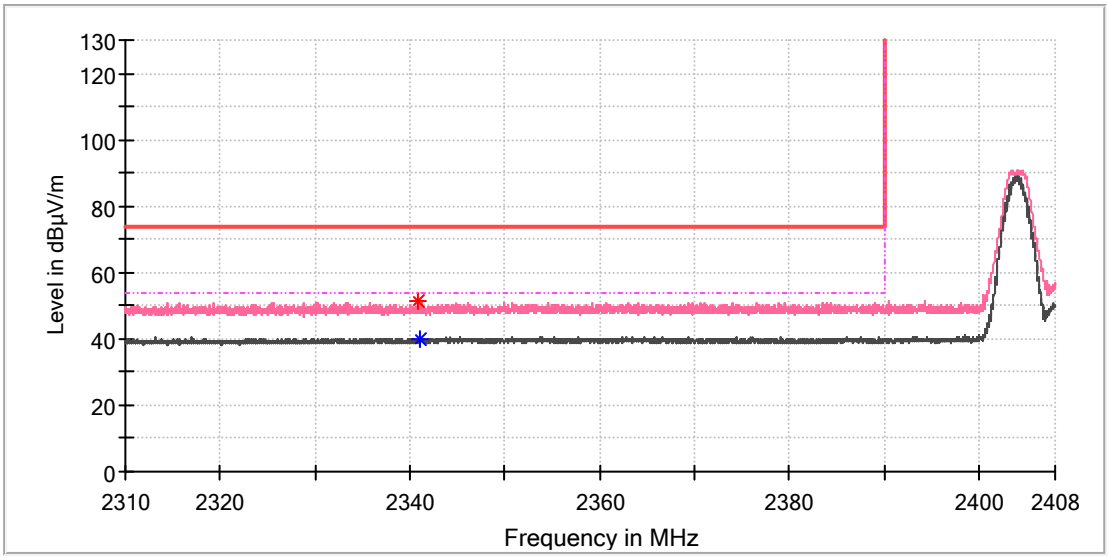


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2359.648530	51.37	---	74.00	22.63	150.0	H	38.0	8.5
2359.980000	---	40.28	54.00	13.72	150.0	H	301.0	8.5

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

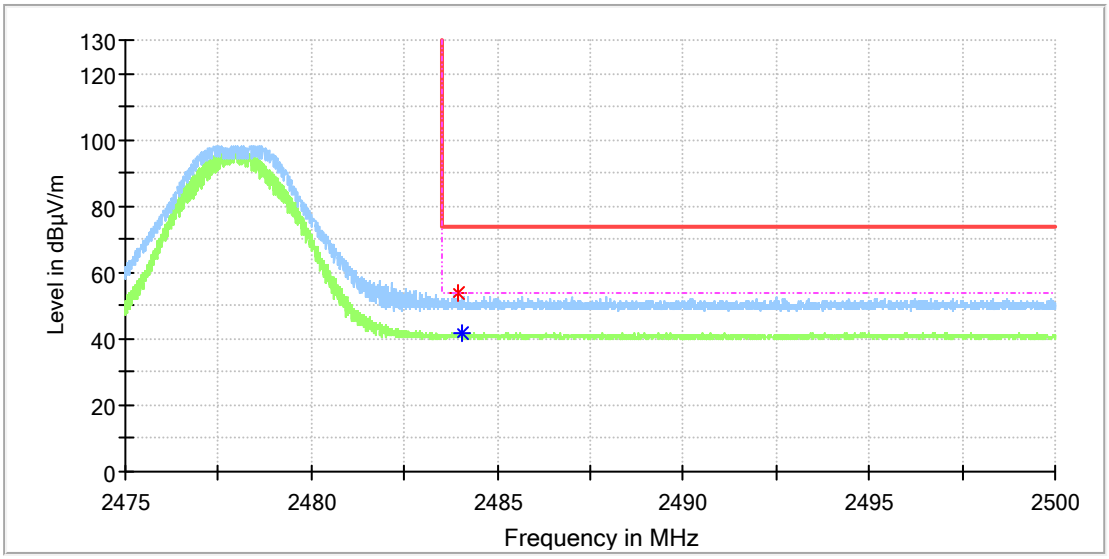


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2340.826765	51.26	---	74.00	22.74	150.0	V	17.0	8.4
2341.100588	---	40.05	54.00	13.95	150.0	V	4.0	8.4

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 2M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

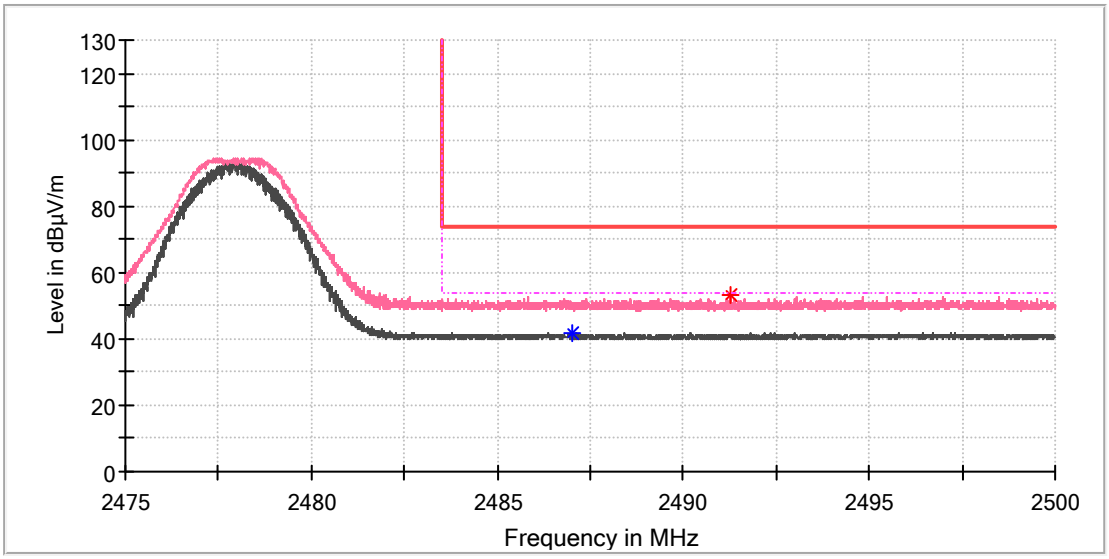


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.963235	53.72	---	74.00	20.28	150.0	H	149.0	9.0
2484.069853	---	41.75	54.00	12.25	150.0	H	163.0	9.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLE 2M_High channel
Order No/Sample No:	A004293324 002
Test Voltage:	AC 120V/60Hz
Remark:	Temp 23.8°C Humi:57%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



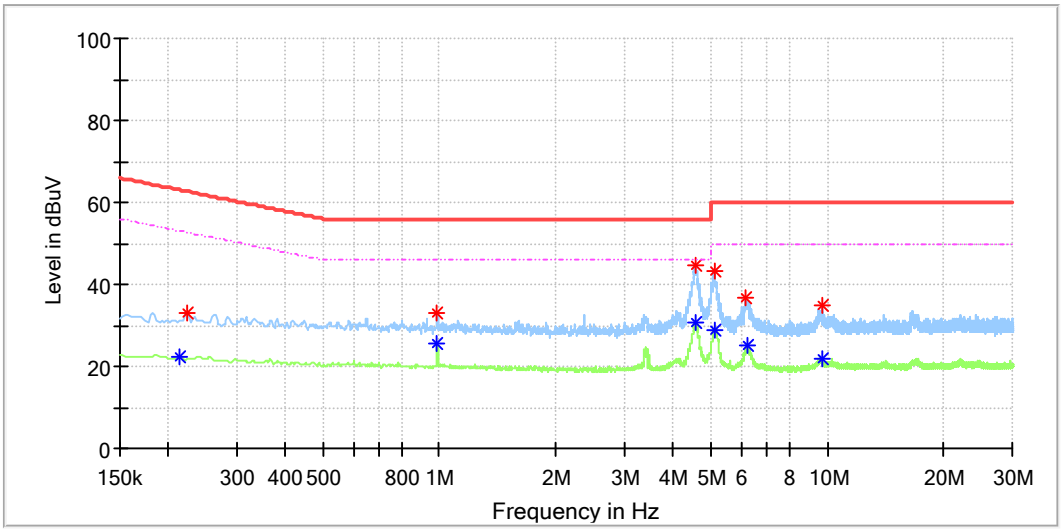
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.000000	---	41.43	54.00	12.57	150.0	V	213.0	9.0
2491.261029	53.02	---	74.00	20.98	150.0	V	318.0	9.0

Appendix C.3: Test Results of Conducted Emissions on AC mains

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLUETOOTH + output
Test Voltage:	AC 120V/60Hz
Standard:	FCC PART 15
Test By:/Review By:	Charron Chen / Charlie Zha
Tem./Hum./Pressure:	24.2°C/51.0%/101kPa
Remark:	SR 3

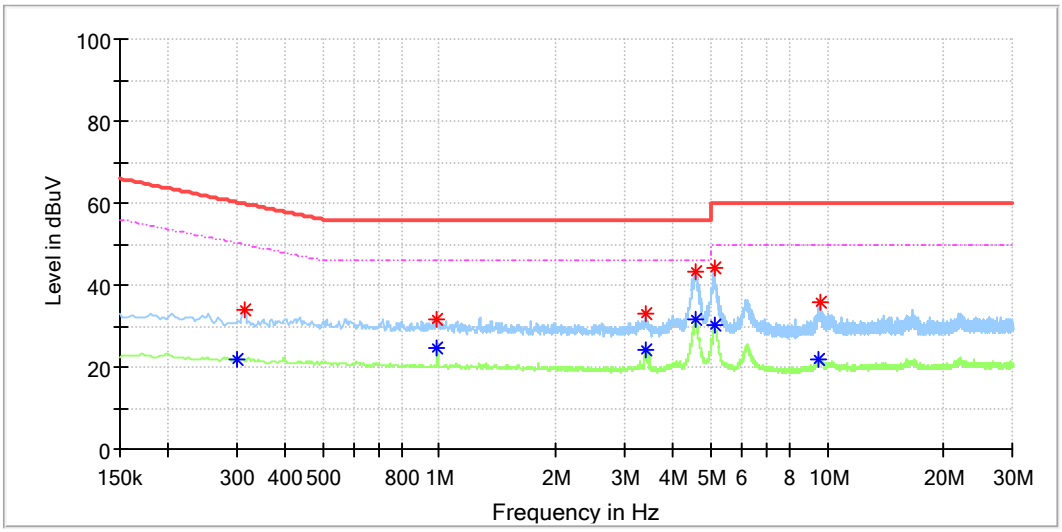


Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.215	---	22.1	53.02	30.93	L1	9.7
0.225	32.9	---	62.65	29.75	L1	9.7
0.988	---	25.4	46.00	20.64	L1	9.7
0.988	32.9	---	56.00	23.07	L1	9.7
4.553	---	30.8	46.00	15.20	L1	9.7
4.553	44.9	---	56.00	11.12	L1	9.7
5.108	---	29.0	50.00	20.95	L1	9.8
5.130	43.3	---	60.00	16.75	L1	9.8
6.185	36.7	---	60.00	23.25	L1	9.8
6.217	---	25.3	50.00	24.73	L1	9.8
9.672	34.8	---	60.00	25.15	L1	10.0
9.677	---	21.6	50.00	28.37	L1	10.0

EUT Information

EUT Name:	Integrated Amplifier
Model:	A50 Signature
Test Mode:	BLUETOOTH
Test Voltage:	AC 120V/60Hz
Standard:	FCC PART 15 B
Test By:/Review By:	Charron Chen / Charlie Zha
Tem./Hum./Pressure:	24.2°C/51.0%/101kPa
Remark:	SR 3



Critical_Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.302	---	22.1	50.20	28.12	N	9.9
0.314	34.0	---	59.86	25.91	N	9.9
0.988	---	24.5	46.00	21.52	N	9.8
0.988	31.6	---	56.00	24.37	N	9.8
3.389	33.1	---	56.00	22.91	N	9.7
3.396	---	24.0	46.00	21.99	N	9.7
4.560	43.5	---	56.00	12.53	N	9.7
4.570	---	31.5	46.00	14.52	N	9.7
5.103	---	30.4	50.00	19.56	N	9.8
5.113	44.2	---	60.00	15.77	N	9.8
9.510	---	22.1	50.00	27.94	N	9.7
9.548	36.0	---	60.00	23.98	N	9.7