Prüfbericht-Nr.: *Test report no.*:	**CN254HIA 001**	**Auftrags-Nr.:** *Order no.*:	168548303	Seite 1 von 27 *Page 1 of 27*
Kunden-Referenz-Nr.: *Client reference no.*:	N/A	**Auftragsdatum:** *Order date:*	2025-04-14	
Auftraggeber: *Client*:	Zhong Shan City Richsound Electronic Industrial Ltd. No.16, East Shagang Road, Gangkou, Zhongshan, Guangdong, China.			
Prüfgegenstand: *Test item*:	5.1.2-Channel Soundbar with Subwoofer and Satellite Speakers			
Bezeichnung / Typ-Nr.: *Identification / Type no.*:	NS-SB512, NS-SB512-C, TB643DW7S (Trademark: INSIGNIA, RSR)			
Auftrags-Inhalt: *Order content*:	Test Report			
Prüfgrundlage: *Test specification*:	CFR Title 47 FCC Part 15: Subpart C Section 15.247			

Wareneingangsdatum: *Date of sample receipt*:	2025-04-21	Please refer to Photo Document
Prüfmuster-Nr.: *Test sample no:*	A003970302-001~003	
Prüfzeitraum: *Testing period*:	2025-04-27 - 2025-05-22	
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 Jonathan Li Signed by: Jonathan Li	**genehmigt von:** *authorized by*:	X Bell Hu Signed by: Bell Hu
Datum: *Date:* 2025-07-07		**Ausstellungsdatum:** *Issue date:* 2025-07-07	
Stellung / Position:	Sachverständige(r)/Expert	**Stellung** / Position:	Sachverständige(r)/Expert

Sonstiges / *Other*:	FCC ID: Z8M-NSSB512 This report is for Bluetooth dual mode.

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*

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.*
2	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. Informationen zur Verifizierung der Authentizität unserer Dokumente erhalten Sie auf folgender Webseite: go.tuv.com/digital-signature *As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged. For information on verifying the authenticity of our documents, please visit the following website: go.tuv.com/digital-signature*
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 115:2023, 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 115:2023, 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 ANTENNA REQUIREMENT
RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER
RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY
RESULT: Pass

5.1.4 6DB BANDWIDTH
RESULT: Pass

5.1.5 99% BANDWIDTH
RESULT: Pass

5.1.6 20DB BANDWIDTH
RESULT: Pass

5.1.7 CARRIER FREQUENCY SEPARATION
RESULT: Pass

5.1.8 NUMBER OF HOPPING FREQUENCY
RESULT: Pass

5.1.9 TIME OF OCCUPANCY
RESULT: Pass

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

5.1.11 RADIATED SPURIOUS EMISSION
RESULT: Pass

5.1.12 CONDUCTED EMISSION ON AC MAINS
RESULT: Pass

Contents

1 General Remarks

1.1 Complementary Materials

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

Appendix A: Test Results of Bluetooth BR & EDR

Appendix B: Test Results of Bluetooth LE

Appendix C: Photographs of the Test Set-up

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, China

A2LA Certificate Number: 5162.01

FCC Accreditation Designation No.: CN1260

ISED wireless device testing laboratory: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (SRD-Tonscend)					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. until**
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2024-09-26	2025-09-25
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2024-09-26	2025-09-25
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2024-09-26	2025-09-25
DC power supply	Keysight	E3642A	MY61276100	2024-09-26	2025-09-25
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2024-09-26	2025-09-25
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2024-09-26	2025-09-25
Test Software	Tonscend	JS1120-3	N/A	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	YLX23JMF	N/A	N/A
Shielding Room	Albatross	SR1	APC17151-SR1	2024-09-14	2027-09-13
Unwanted Emission Testing (TS9975)					
Equipment	**Manufacturer**	**Model**	**Serial No.**	**Cal. Date**	**Cal. until**
EMI Test Receiver	R&S	ESR 7	102021	2024-09-29	2025-09-28
Signal Analyzer	R&S	FSV 40	101439	2024-09-29	2025-09-28
System Controller Interface	R&S	SCI-100	S10010038	N/A	N/A
Filterbank	R&S	Wlan	100759	2024-09-29	2025-09-28
OSP	R&S	OSP 120	102040	N/A	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2024-09-29	2025-09-28
Amplifier	R&S	SCU-18F	180070	2024-09-29	2025-09-28
Amplifier	R&S	SCU40A	100475	2024-09-29	2025-09-28
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-09-28	2025-09-27
Double-Ridged	ETS-LINDGREN	3117	00218717	2024-09-28	2025-09-27

Antenna (1-18 GHz)					
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-09-28	2025-09-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2024-09-28	2025-09-27
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-09-14	2027-09-13

Conducted Emission				
Equipment	**Manufacturer**	**Model No.**	**Serial No.**	**Cal. Until**
EMI Test Receiver	R&S	ESR3	102680	2026-02-09
Artificial Mains Network	R&S	ENV216	102333	2025-07-22
Shield Cable(9k-30MHz)	N/A	N/A	N/A	2025-12-20
EMC32 Test Software	R&S	EMC32(Ver.10.50.00)	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.

Table 2: Measurement Uncertainty

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

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B & C of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. 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, 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 5.1.2 Soundbar with Subwoofer and Satellite Speakers which supports Bluetooth dual mode and 5.8GHz wireless technology.

All the models are the same except for trademark difference.

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

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	**Value**
Kind of Equipment:	5.1.2-Channel Soundbar with Subwoofer and Satellite Speakers
Type Designation:	NS-SB512, NS-SB512-C, TB643DW7S
Trademark:	INSIGNIA, RSR
FCC ID:	Z8M-NSSB512
Operating Voltage:	100-240V~50/60Hz, 30W
Testing Voltage:	AC 120V, 60Hz
Technical Specification of Bluetooth (dual mode)	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK, π/4-DQPSK, 8DPSK
Channel Number:	BR & EDR mode:79 channels, Low Energy mode:40 channels
Channel Separation:	BR & EDR mode:1MHz, Low Energy mode:2MHz
Data Rate:	BR & EDR mode: 1Mbps, 2Mbps, 3Mbps Low Energy mode: 1Mbps, 2Mbps
Antenna Type:	Integral Antenna
Antenna Gain:	2.47 dBi (Provided by the Client)

Note: The correctness of all data provided by customer in the test report is ensured and responsible of the customer. Any misjudgment of the test results caused by the use of incorrect data provided by customer shall be borne by the customer.

Table 4: RF Channel and Frequency of Bluetooth BR & 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		

Test frequencies are lowest channel: 2402 MHz, middle channel: 2441 MHz and highest channel: 2480 MHz for Bluetooth BR & EDR

Table 5: RF Channel and Frequency of Bluetooth LE

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
0	**2402**	10	2422	20	2442	30	2462
1	2404	11	2424	21	2444	31	2464
2	2406	12	2426	22	2446	32	2466
3	2408	13	2428	23	2448	33	2468
4	2410	14	2430	24	2450	34	2470
5	2412	15	2432	25	2452	35	2472
6	2414	16	2434	26	2454	36	2474
7	2416	17	2436	27	2456	37	2476
8	2418	18	2438	28	2458	38	2478
9	2420	**19**	**2440**	29	2460	**39**	**2480**

Test frequencies are lowest channel: 2402 MHz, middle channel: 2440 MHz and highest channel: 2480 MHz for Bluetooth LE

3.3 Independent Operation Modes

The basic operation modes are:

A. On, Bluetooth transmitting mode (BR & EDR mode)
    1) Low Channel
    2) Middle Channel
    3) High Channel

B. On, Bluetooth transmitting mode (Bluetooth LE mode)
    1) Low Channel
    2) Middle Channel
    3) High Channel

C. On, Transmitting on Hopping channel

D. On, Bluetooth with 5.8G co-location

E. On, Normal working

F. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form
- Operation Description
- User Manual
- ID Label and Location Info

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 tests were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model *NS-SB512* in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 6: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Laptop	Lenovo	T480	PF-16A6N8
Wireless subwoofer	INSIGNIA	NS-SB512	N/A
satellite speaker (Left)	INSIGNIA	NS-SB512	N/A
satellite speaker (Right)	INSIGNIA	NS-SB512	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 1GHz)

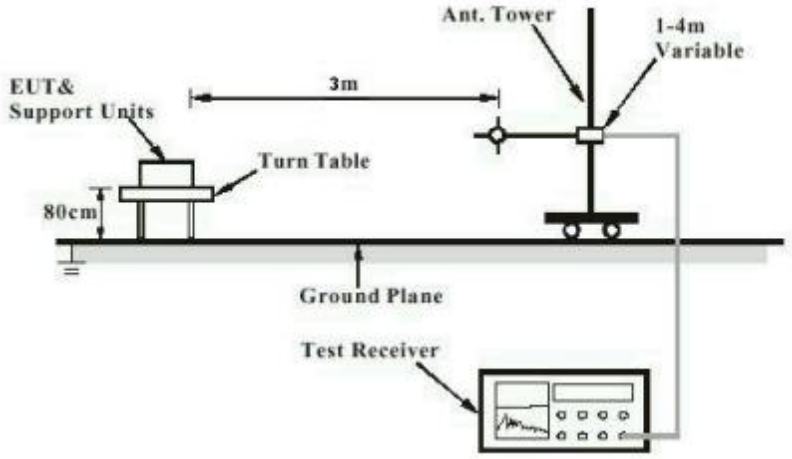


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

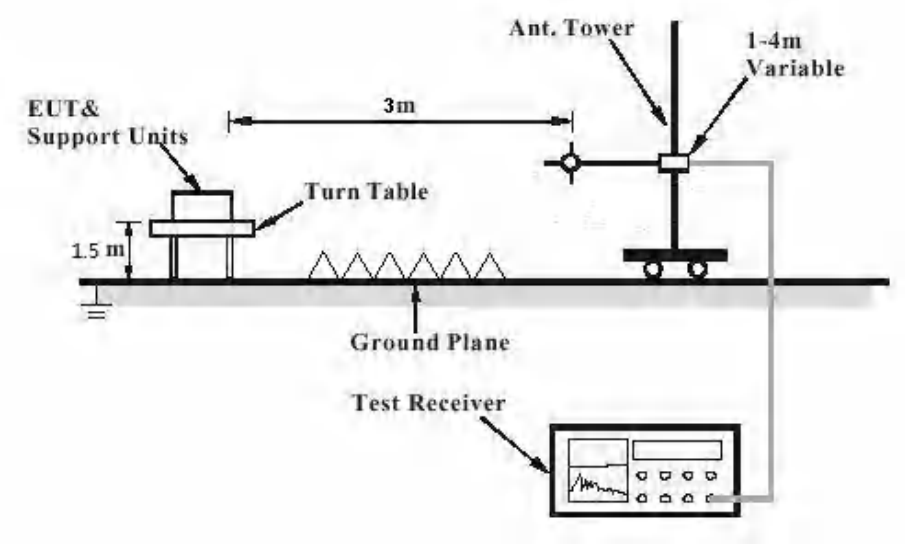


Diagram of Measurement Configuration for Mains Conduction Measurement

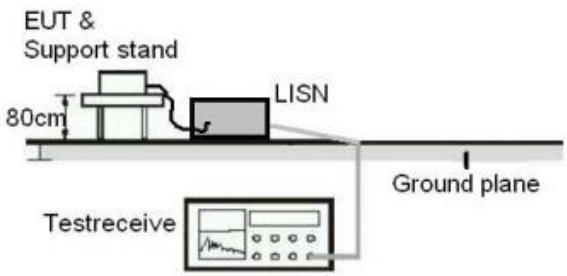
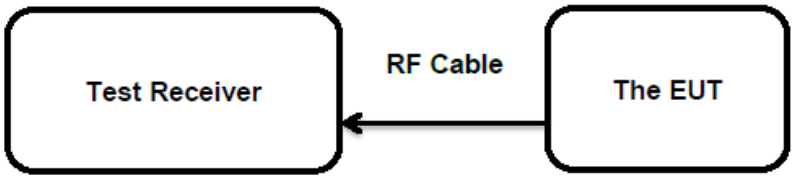


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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

According to the manufacturer declared, the EUT has Integral antenna, permanent attachment and no consideration of replacement, refer to section 3.2 for details.

Therefore, the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Peak Conducted Output Power

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(b)(1)&(3)
Basic standard	:	ANSI C63.10: 2013
Limits	:	FHSS < 0.125 Watts, DSSS < 1.0 Watts
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 7: Test Result of Maximum Peak Conducted Output Power, BR & EDR

Test Mode	Test Channel (MHz)	Measured Peak Power		Limit (W)
		(dBm)	(W)	
GFSK (BR)	2402.0	2.76	0.0019	< 0.125
	2441.0	2.48	0.0018	
	2480.0	2.49	0.0018	
8DPSK (EDR)	2402.0	3.26	0.0021	
	2441.0	3.19	0.0021	
	2480.0	3.16	0.0021	
Maximum Measured Value		**3.26**	**0.0021**	

Table 8: Test Result of Maximum Peak Conducted Output Power, Bluetooth LE

Test Mode	Data Rate	Test Channel (MHz)	Measured Peak Power		Limit (W)
			(dBm)	(W)	
Bluetooth LE	1 Mbps	2402	2.57	0.0018	< 1.0
		2440	2.47	0.0018	
		2480	2.37	0.0017	
	2 Mbps	2402	2.46	0.0018	
		2440	2.22	0.0017	
		2480	2.18	0.0017	
Max. Measured Value			**2.57**	**0.0018**	

Note:
1) The cable loss is taken into account in results.
2) Antenna gain(G): 2.47 dBi

5.1.3 Conducted Power Spectral Density

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(e)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 8 dBm / 3kHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

5.1.4 6dB Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)(2)
Basic standard	:	ANSI C63.10: 2013
Limits	:	> 500 kHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

5.1.5 99% Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(a)
Basic standard	:	ANSI C63.10: 2013
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A, B.

5.1.6 20dB Bandwidth

RESULT: **Pass**

Test Specification

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

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.7 Carrier Frequency Separation

RESULT: **Pass**

Test Specification

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

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.8 Number of Hopping Frequency

RESULT: **Pass**

Test Specification

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

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.9 Time of Occupancy

RESULT: **Pass**

Test Specification

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

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	C
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix A.

5.1.10 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT: **Pass**

Test Specification

Test standard	:	FCC Part 15.247(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2025-04-27
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B, C
Test channel	:	Low / Middle / High
Ambient temperature	:	25 ℃
Relative humidity	:	45 %
Atmospheric pressure	:	101 kPa

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

For the measurement records, refer to the appendix A, B.

5.1.11 Radiated Spurious Emission

RESULT: **Pass**

Test Specification

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

Test Setup

Date of testing	:	2025-05-21 to 2025-05-22
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A, B, D
Test channel	:	Low / Middle / High
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

Remark:
Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.
This test were performed on Bluetooth module+ 5.8G module and BLE+5.8G module operating mode, here just the worst case was shown.

For the measurement records, refer to the appendix A, B.

5.1.12 Conducted Emission on AC Mains

RESULT: **Pass**

Test Specification

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

Test Setup

Date of testing	:	2025-04-29 to 2025-05-08
Input voltage	:	AC 120V, 60Hz
Operation mode	:	E
Earthing	:	Not connected
Ambient temperature	:	Refer to test result
Relative humidity	:	Refer to test result
Atmospheric pressure	:	101 kPa

For the measurement records, refer to the appendix B.

6 Photographs of the Test Set-Up

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

7 List of Tables

Appendix A: Test Results of Bluetooth BR & EDR

Appendix A.1: Test Results of 20dB Bandwidth

Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.939	2401.493	2402.432	---	PASS
		2441	0.891	2440.496	2441.387	---	PASS
		2480	0.945	2479.493	2480.438	---	PASS
3DH5	Ant1	2402	1.281	2401.304	2402.585	---	PASS
		2441	1.257	2440.316	2441.573	---	PASS
		2480	1.251	2479.316	2480.567	---	PASS

Test Graphs

DH5_Ant1_2402

DH5_Ant1_2441

DH5_Ant1_2480

3DH5_Ant1_2402

3DH5_Ant1_2441

3DH5_Ant1_2480

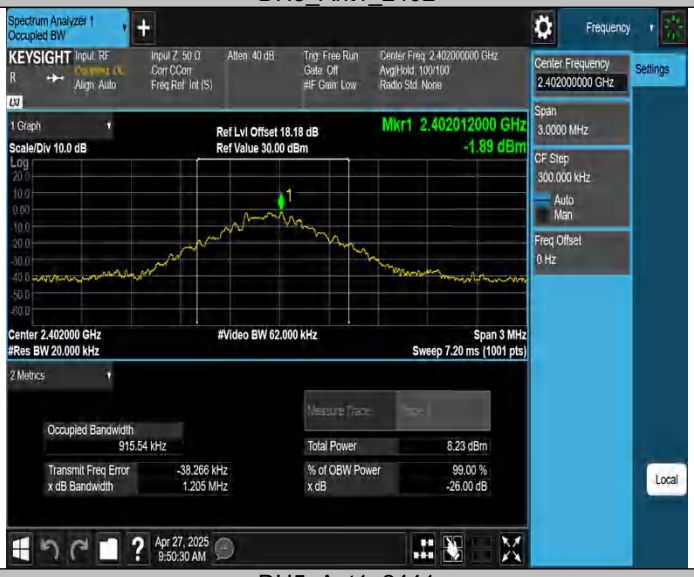
Appendix A.2: Test Results of 99% Bandwidth

Test Result

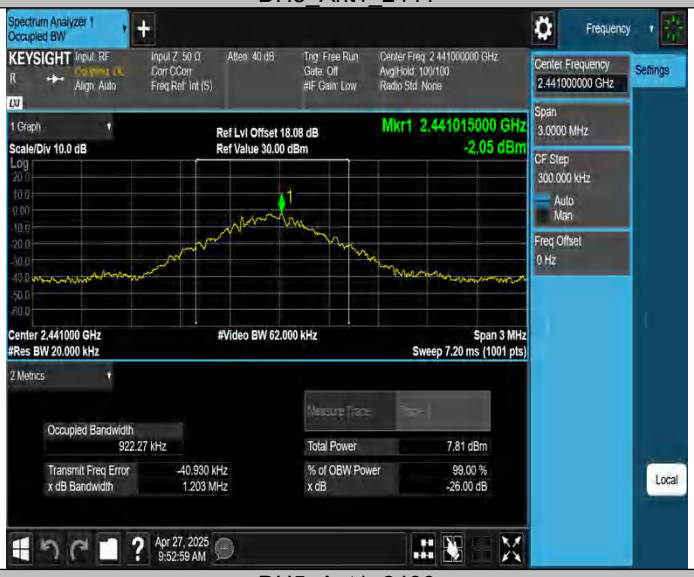
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.91554	2401.5040	2402.4195	---	PASS
		2441	0.92227	2440.4979	2441.4202	---	PASS
		2480	0.91794	2479.4958	2480.4137	---	PASS
3DH5	Ant1	2402	1.1908	2401.3552	2402.5460	---	PASS
		2441	1.1765	2440.3633	2441.5398	---	PASS
		2480	1.1772	2479.3629	2480.5401	---	PASS

Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

3DH5_Ant1_2402

3DH5_Ant1_2441

3DH5_Ant1_2480

Appendix A.3: Test Results of Carrier Frequency Separation

Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.172	≥0.945	PASS
3DH5	Ant1	Hop	1.152	≥0.854	PASS

Test Graphs

DH5_Ant1_Hop

3DH5_Ant1_Hop

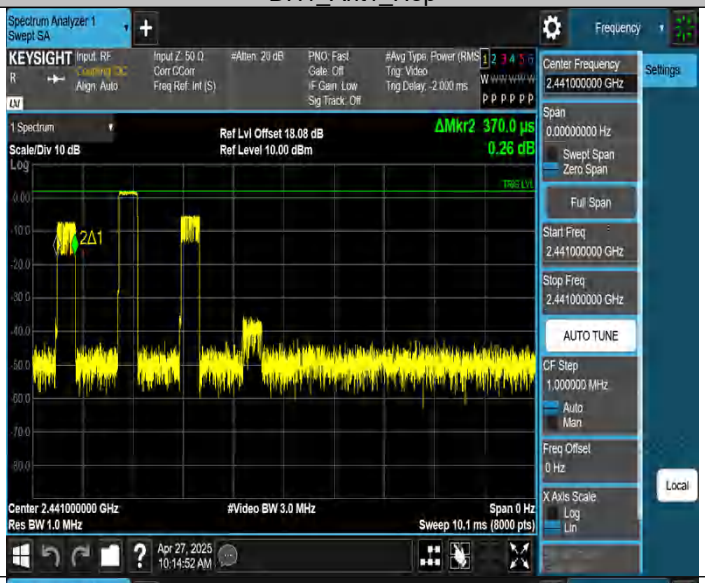
Appendix A.4: Test Results of Time of Occupancy

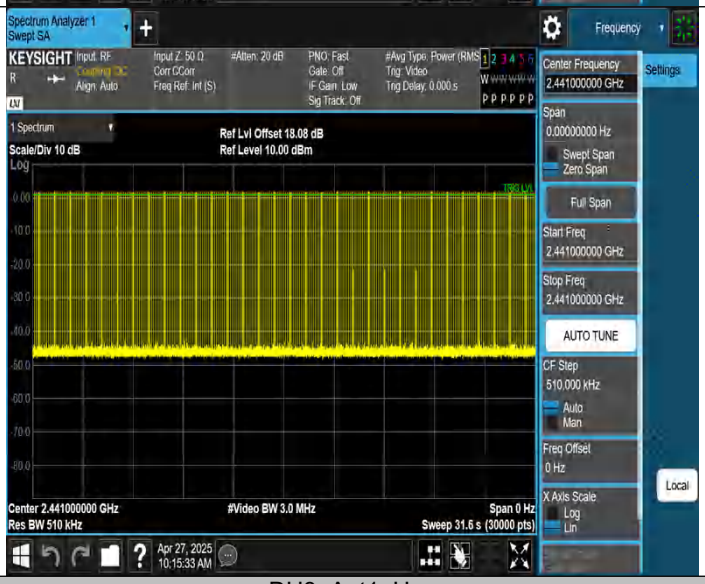
Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.370	319	0.118	≤0.4	PASS
DH3	Ant1	Hop	1.619	159	0.257	≤0.4	PASS
DH5	Ant1	Hop	2.868	107	0.307	≤0.4	PASS
3DH1	Ant1	Hop	0.379	319	0.121	≤0.4	PASS
3DH3	Ant1	Hop	1.630	159	0.259	≤0.4	PASS
3DH5	Ant1	Hop	2.880	107	0.308	≤0.4	PASS

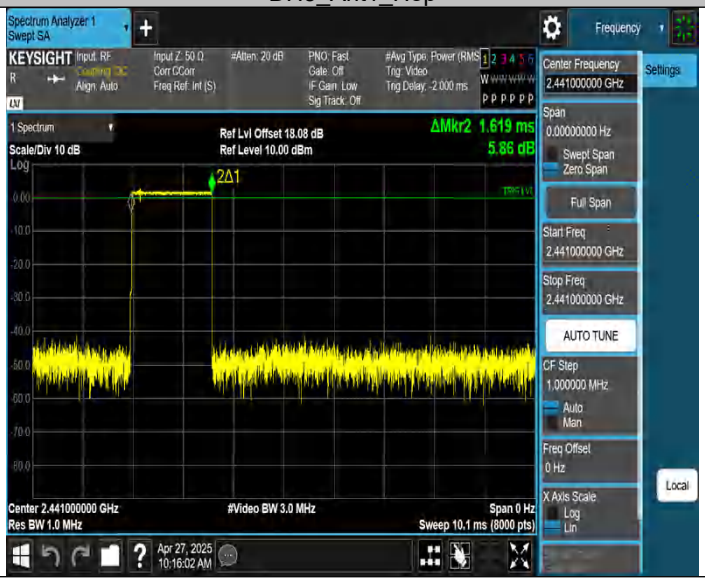
Test Graphs

DH1_Ant1_Hop

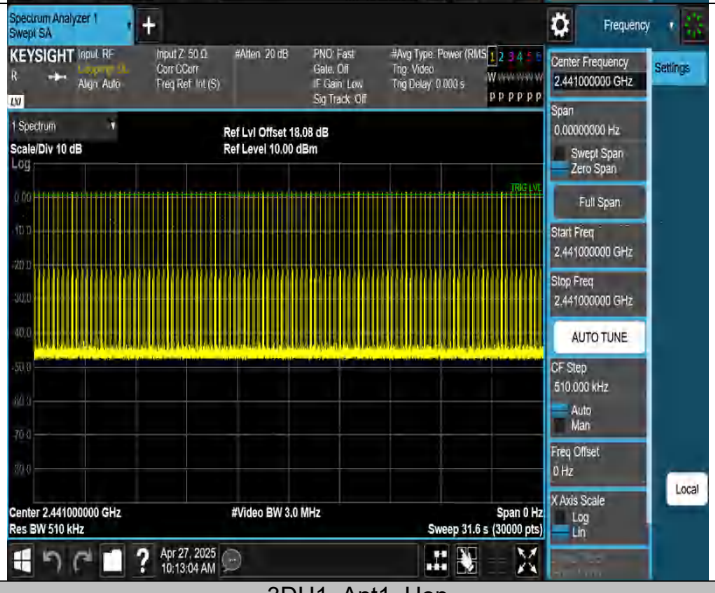




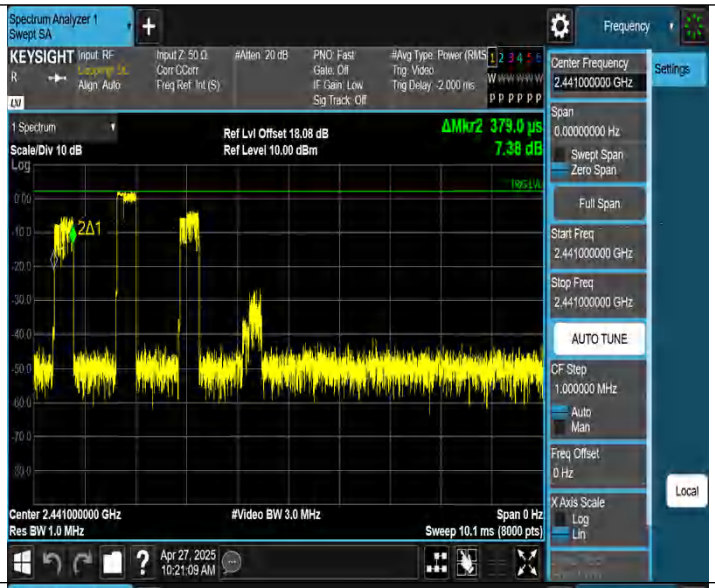
DH3_Ant1_Hop



DH5_Ant1_Hop



3DH1_Ant1_Hop



3DH3_Ant1_Hop

3DH5_Ant1_Hop

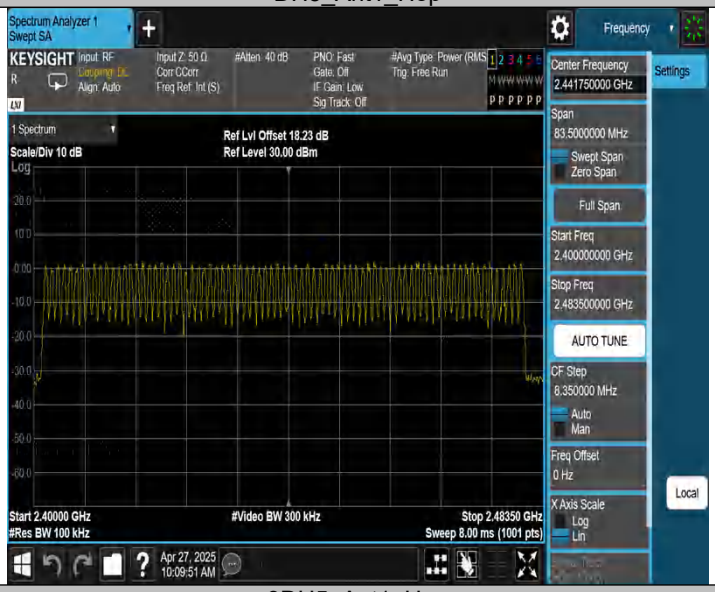
Appendix A.5: Test Results of Number of Hopping Frequency

Test Result

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

Test Graphs

DH5_Ant1_Hop



3DH5_Ant1_Hop

Appendix A.6: Test Results of Band Edge Measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	1.66	-42.86	≤-18.34	PASS
		High	2480	1.43	-43.24	≤-18.57	PASS
3DH5	Ant1	Low	2402	1.66	-44.59	≤-18.34	PASS
		High	2480	1.40	-43.43	≤-18.60	PASS
DH5	Ant1	Hopping	2402	0.64	-43.62	≤-19.36	PASS
		Hopping	2480	0.56	-44.33	≤-19.44	PASS
3DH5	Ant1	Hopping	2402	-1.82	-44.60	≤-21.82	PASS
		Hopping	2480	-2.37	-43.16	≤-22.37	PASS

Test Graphs

DH5_Ant1_Low_2402

DH5_Ant1_High_2480

3DH5_Ant1_Low_2402

3DH5_Ant1_High_2480

DH5_Ant1_Hopping_2402

DH5_Ant1_Hopping_2480

3DH5_Ant1_Hopping_2402

3DH5_Ant1_Hopping_2480

Appendix A.7: Test Results of Conducted Spurious Emission

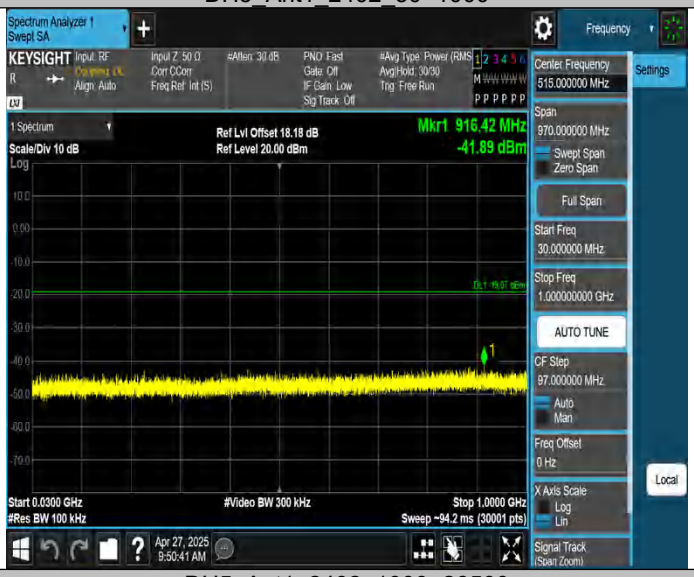
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.93	0.93	---	PASS
			30~1000	0.93	-41.89	≤-19.07	PASS
			1000~26500	0.93	-31.68	≤-19.07	PASS
		2441	Reference	0.85	0.85	---	PASS
			30~1000	0.85	-41.12	≤-19.15	PASS
			1000~26500	0.85	-32.76	≤-19.15	PASS
		2480	Reference	0.55	0.55	---	PASS
			30~1000	0.55	-42.15	≤-19.45	PASS
			1000~26500	0.55	-32.52	≤-19.45	PASS
3DH5	Ant1	2402	Reference	-1.66	-1.66	---	PASS
			30~1000	-1.66	-42.31	≤-21.66	PASS
			1000~26500	-1.66	-32.26	≤-21.66	PASS
		2441	Reference	-2.13	-2.13	---	PASS
			30~1000	-2.13	-41.23	≤-22.13	PASS
			1000~26500	-2.13	-33.05	≤-22.13	PASS
		2480	Reference	0.97	0.97	---	PASS
			30~1000	0.97	-42.11	≤-19.03	PASS
			1000~26500	0.97	-32.69	≤-19.03	PASS

Test Graphs

DH5_Ant1_2402_0~Reference

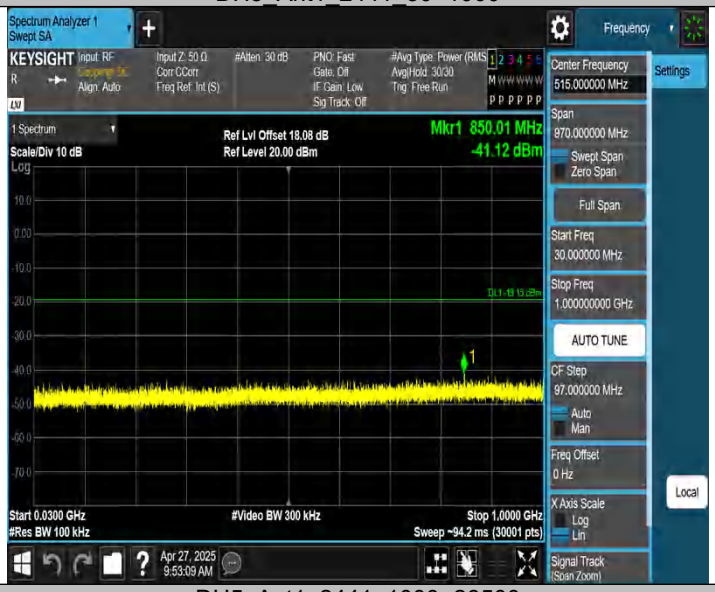
DH5_Ant1_2402_30~1000



DH5_Ant1_2402_1000~26500

DH5_Ant1_2441_0~Reference

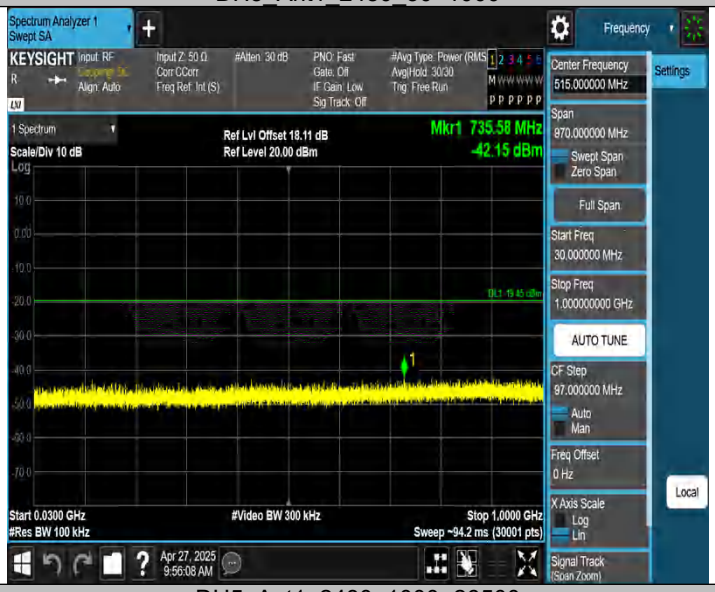
DH5_Ant1_2441_30~1000



DH5_Ant1_2441_1000~26500

DH5_Ant1_2480_0~Reference

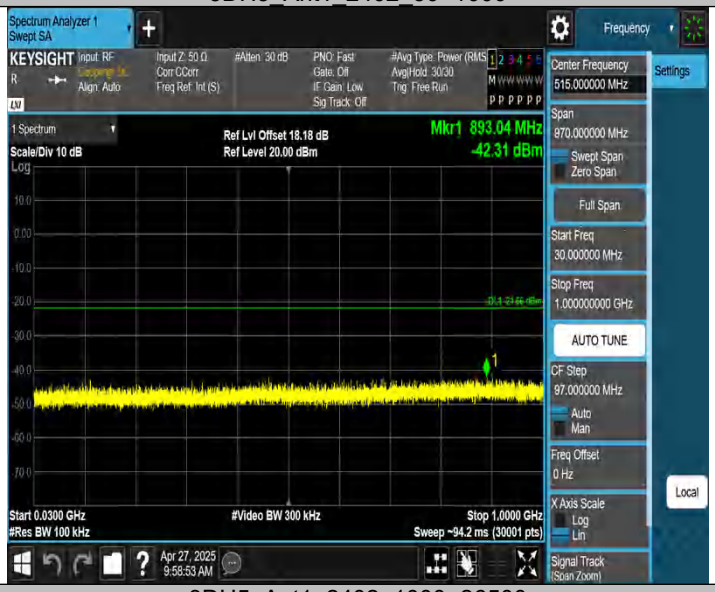
DH5_Ant1_2480_30~1000



DH5_Ant1_2480_1000~26500

3DH5_Ant1_2402_0~Reference

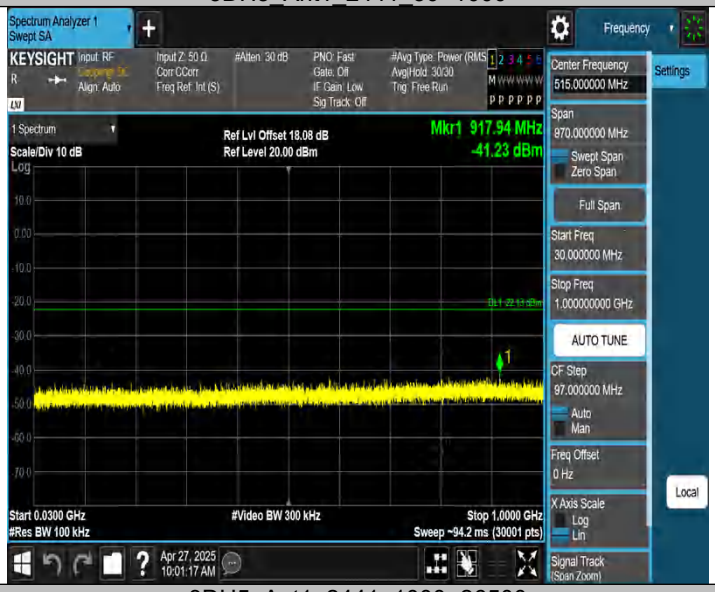
3DH5_Ant1_2402_30~1000



3DH5_Ant1_2402_1000~26500

3DH5_Ant1_2441_0~Reference

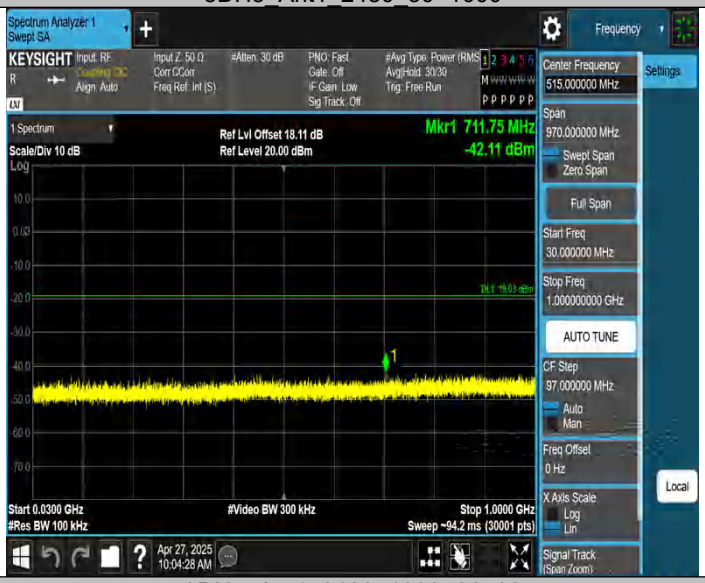
3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500

3DH5_Ant1_2480_0~Reference

3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500

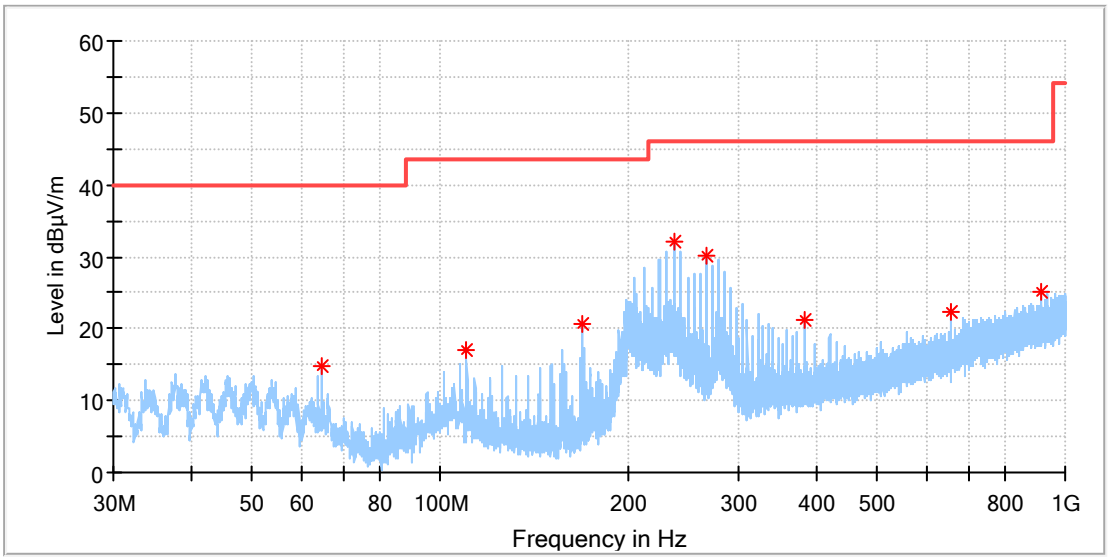
Appendix A.8: Test Results of Radiated Spurious Emissions

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

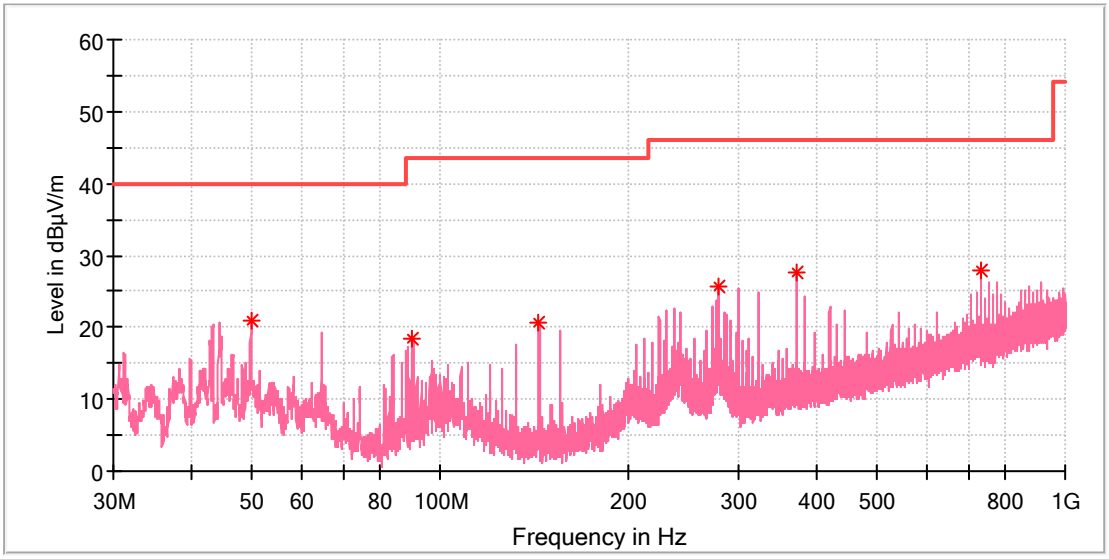
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
64.509615	14.67	40.00	25.33	100.0	H	359.0	-20.1
110.323462	17.00	43.50	26.50	100.0	H	264.0	-19.2
169.008462	20.62	43.50	22.88	100.0	H	306.0	-21.4
236.535385	32.14	46.00	13.86	100.0	H	316.0	-17.9
267.276923	30.00	46.00	16.00	100.0	H	306.0	-17.0
384.050000	21.09	46.00	24.91	100.0	H	98.0	-14.1
657.776539	22.43	46.00	23.57	100.0	H	223.0	-8.7
911.953846	25.05	46.00	20.95	100.0	H	282.0	-4.7

Final_Result

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
49.847692	20.84	40.00	19.16	100.0	V	121.0	-18.4
90.438462	18.52	43.50	24.98	100.0	V	219.0	-21.0
144.012308	20.54	43.50	22.96	100.0	V	68.0	-22.4
279.551154	25.70	46.00	20.30	100.0	V	6.0	-16.7
372.036923	27.74	46.00	18.26	100.0	V	104.0	-14.4
732.093462	27.94	46.00	18.06	100.0	V	112.0	-7.4

Final_Result

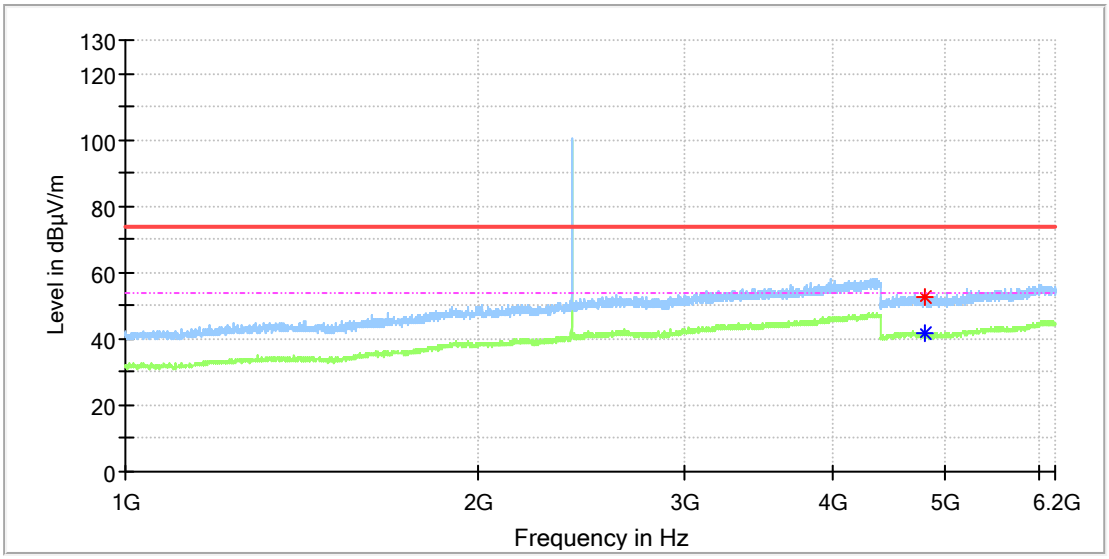
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

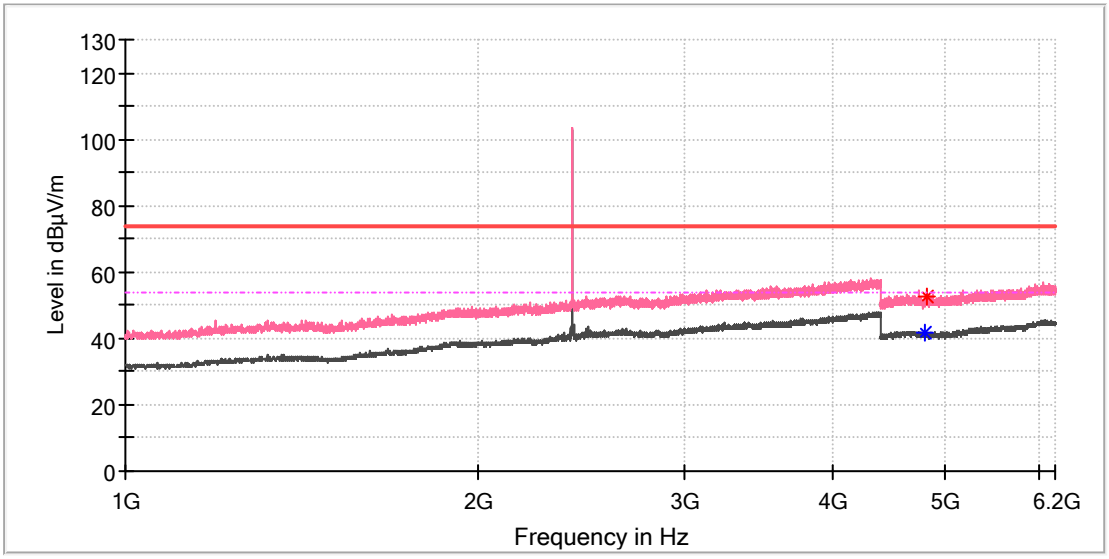
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4799.000000	---	41.74	54.00	12.26	150.0	H	179.0	13.3
4808.000000	52.53	---	74.00	21.47	150.0	H	307.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

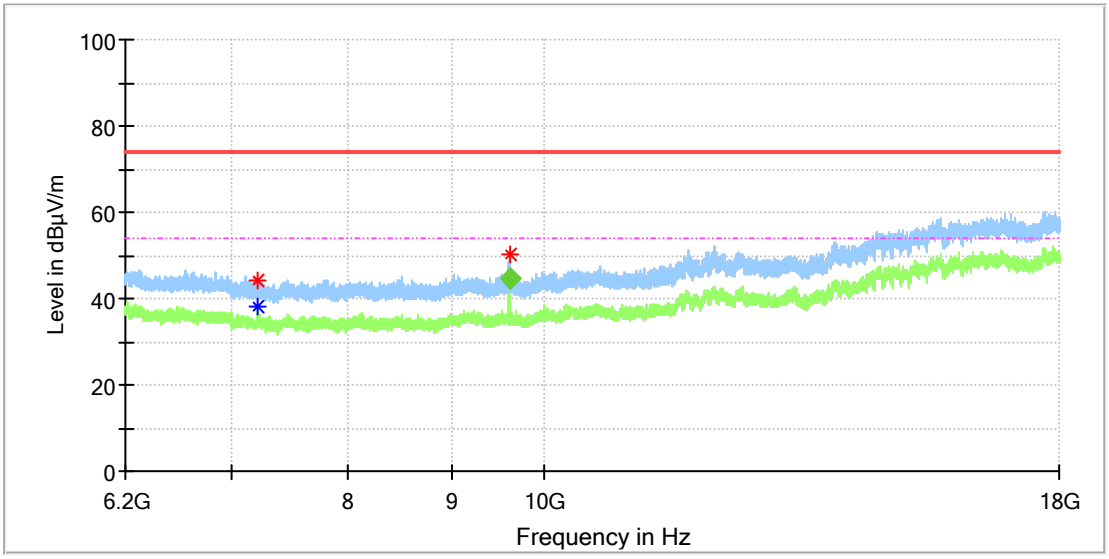
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4810.500000	---	41.52	54.00	12.48	150.0	V	278.0	13.3
4826.000000	52.67	---	74.00	21.33	150.0	V	206.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

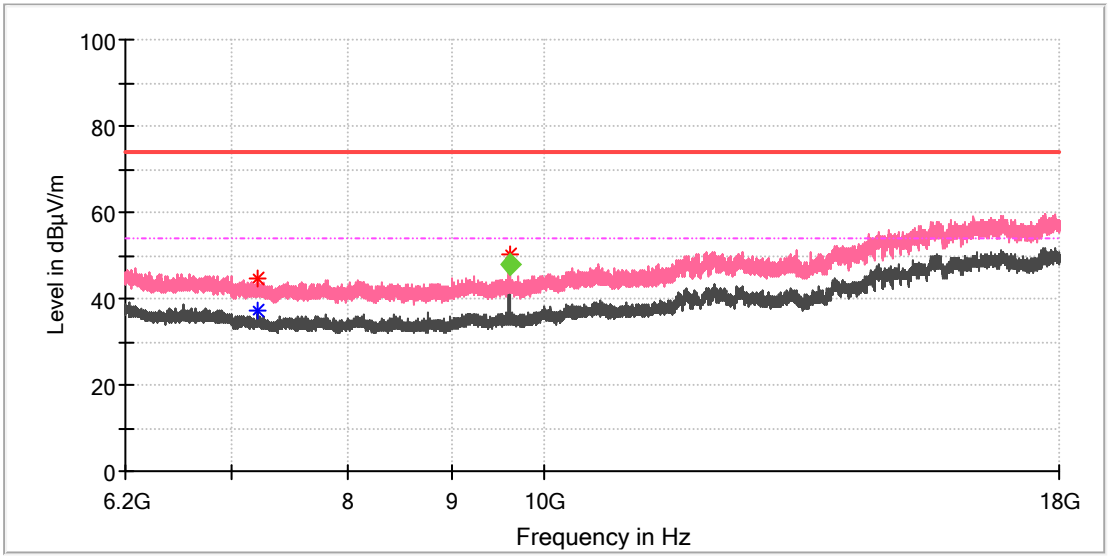
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.950000	44.05	---	74.00	29.95	150.0	H	304.0	8.8
7205.950000	---	38.17	54.00	15.83	150.0	H	304.0	8.8
9608.233333	50.00	---	74.00	24.00	150.0	H	325.0	10.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9607.816667	---	44.77	54.00	9.23	150.0	H	325.0	10.4

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

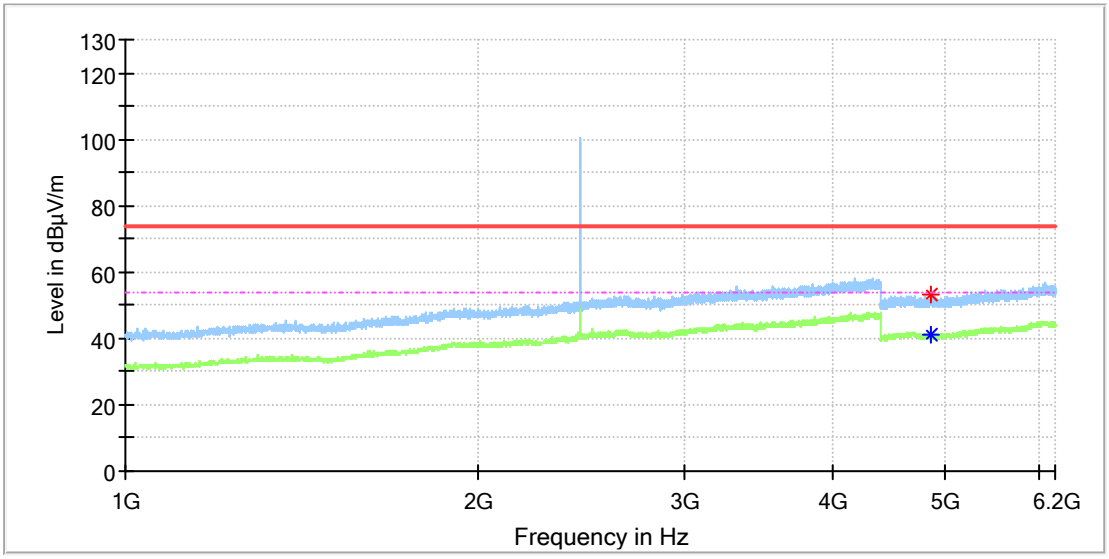
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.950000	---	37.14	54.00	16.86	150.0	V	297.0	8.8
7218.241667	44.73	---	74.00	29.27	150.0	V	334.0	8.7
9607.741667	50.12	---	74.00	23.88	150.0	V	226.0	10.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9607.837500	---	47.72	54.00	6.28	150.0	V	226.0	10.4

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

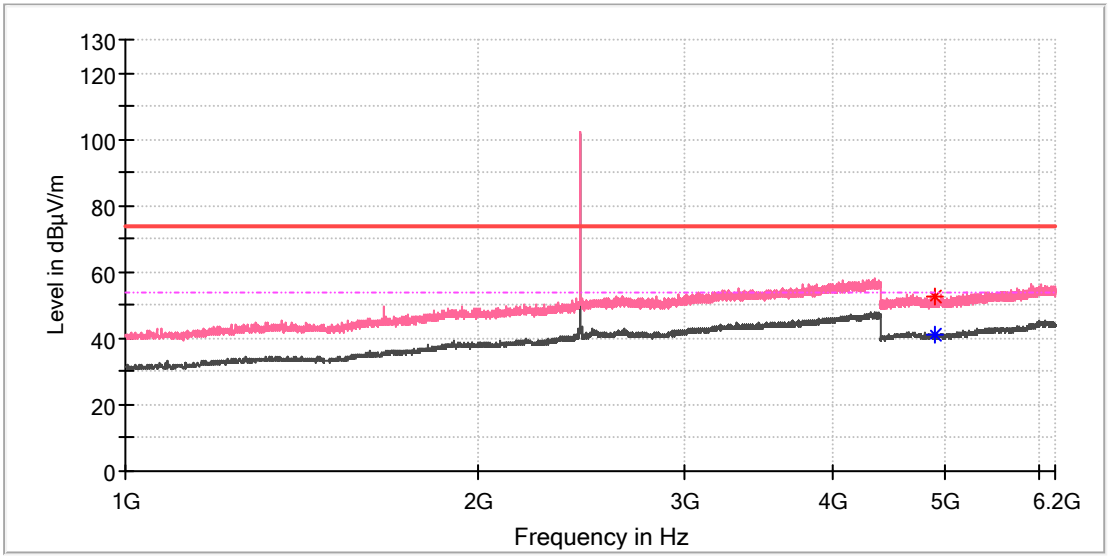
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4853.000000	52.95	---	74.00	21.05	150.0	H	204.0	13.3
4860.500000	---	40.96	54.00	13.04	150.0	H	56.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

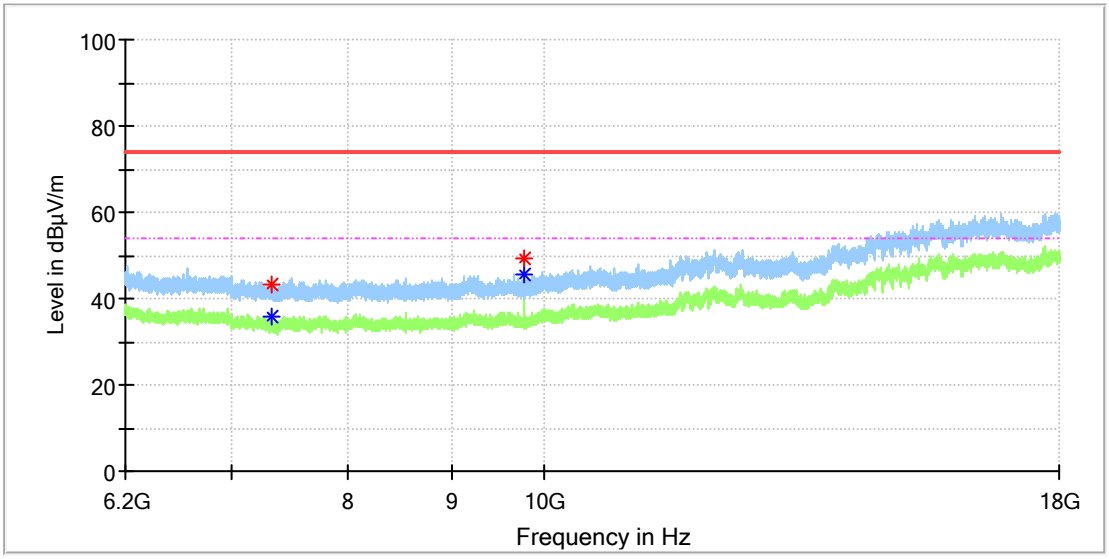
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4896.500000	---	41.07	54.00	12.93	150.0	V	184.0	13.3
4902.000000	52.41	---	74.00	21.59	150.0	V	307.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

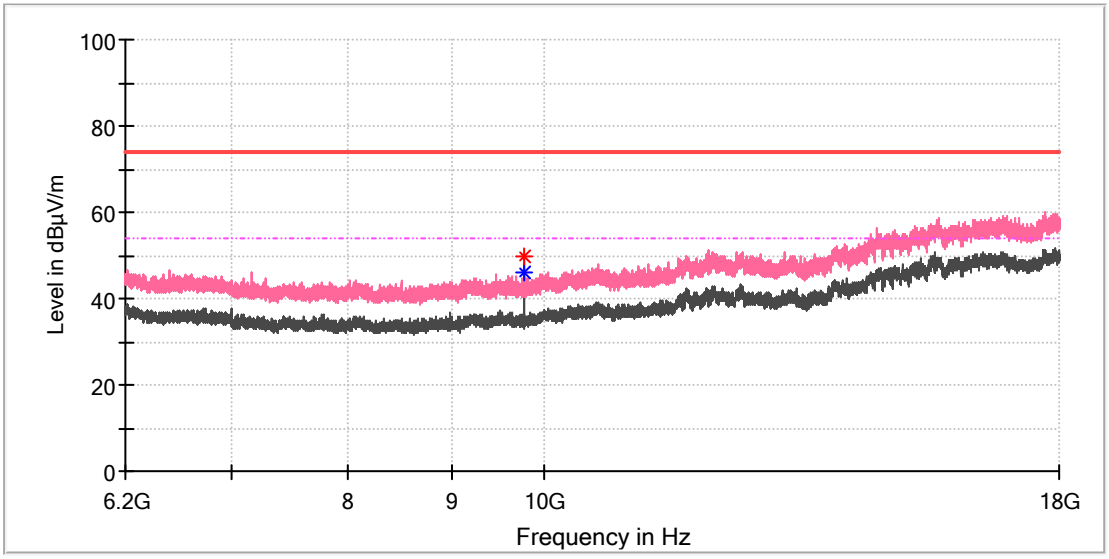
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7322.966667	43.46	---	74.00	30.54	150.0	H	6.0	8.2
7322.966667	---	36.00	54.00	18.00	150.0	H	6.0	8.2
9763.600000	---	45.72	54.00	8.28	150.0	H	282.0	10.4
9764.091667	49.16	---	74.00	24.84	150.0	H	282.0	10.4

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

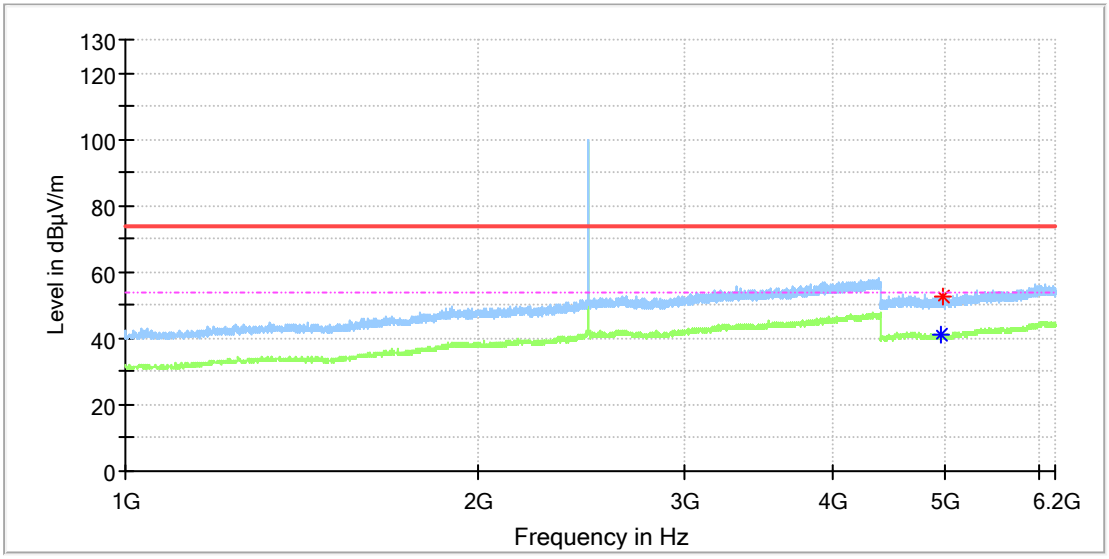
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9763.600000	49.65	---	74.00	24.35	150.0	V	231.0	10.4
9763.600000	---	46.26	54.00	7.74	150.0	V	231.0	10.4

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

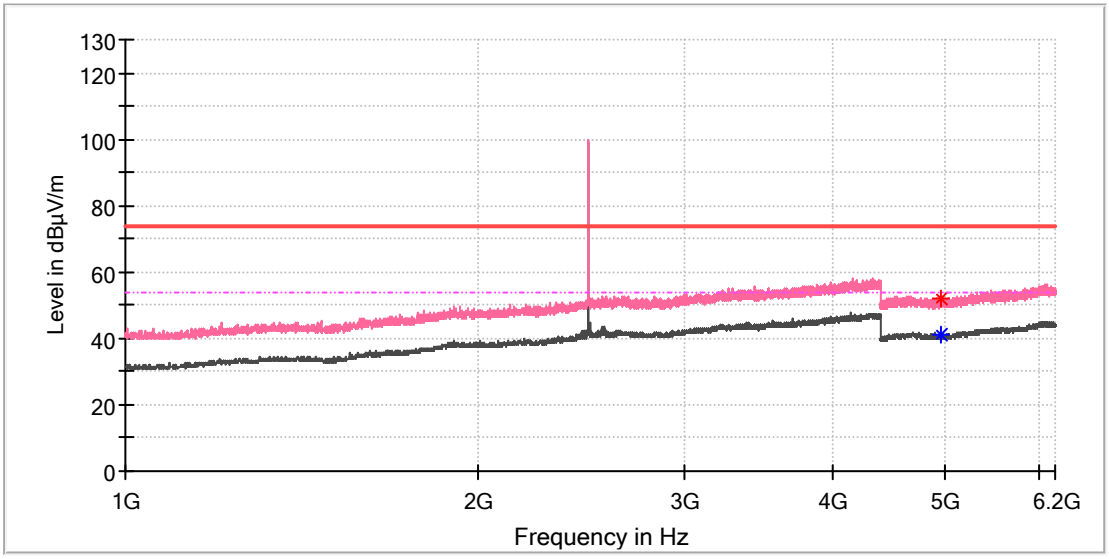
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4950.000000	---	41.40	54.00	12.60	150.0	H	80.0	13.3
4971.500000	52.51	---	74.00	21.49	150.0	H	163.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

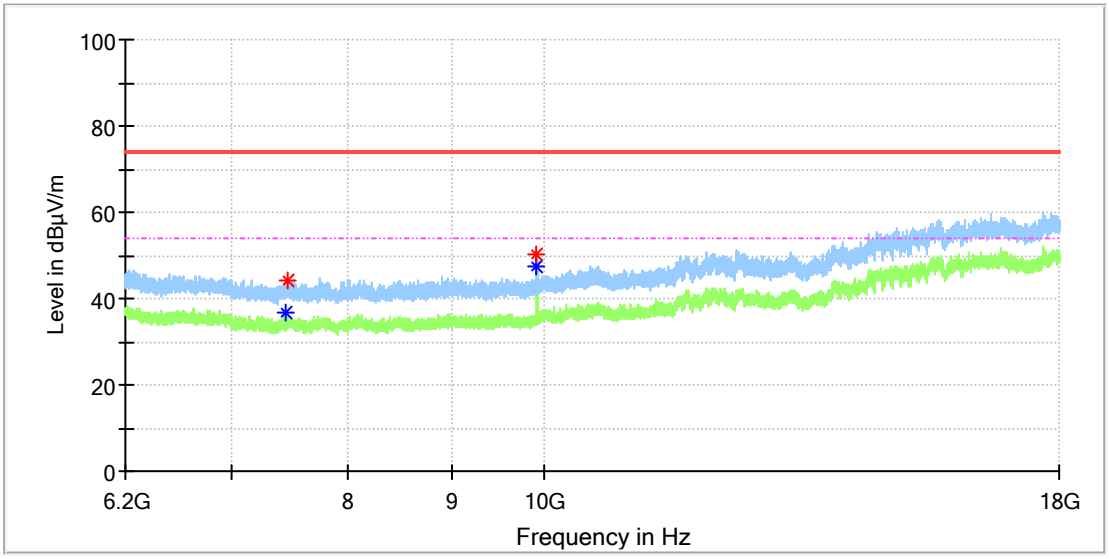
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4951.500000	---	41.12	54.00	12.88	150.0	V	318.0	13.3
4961.500000	51.91	---	74.00	22.09	150.0	V	330.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

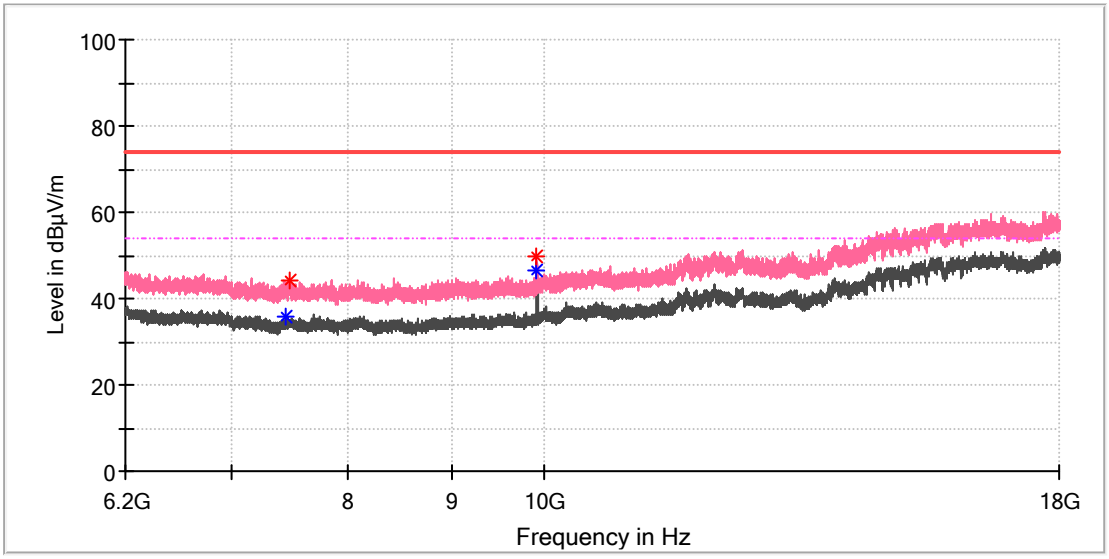
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7439.491667	---	36.75	54.00	17.25	150.0	H	0.0	8.4
7469.483333	44.09	---	74.00	29.91	150.0	H	130.0	8.6
9919.950000	50.35	---	74.00	23.65	150.0	H	304.0	10.8
9919.950000	---	47.29	54.00	6.71	150.0	H	304.0	10.8

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
7445.391667	---	35.78	54.00	18.22	150.0	V	143.0	8.5
7477.350000	44.34	---	74.00	29.66	150.0	V	28.0	8.6
9919.458333	49.88	---	74.00	24.12	150.0	V	232.0	10.8
9919.458333	---	46.53	54.00	7.47	150.0	V	232.0	10.8

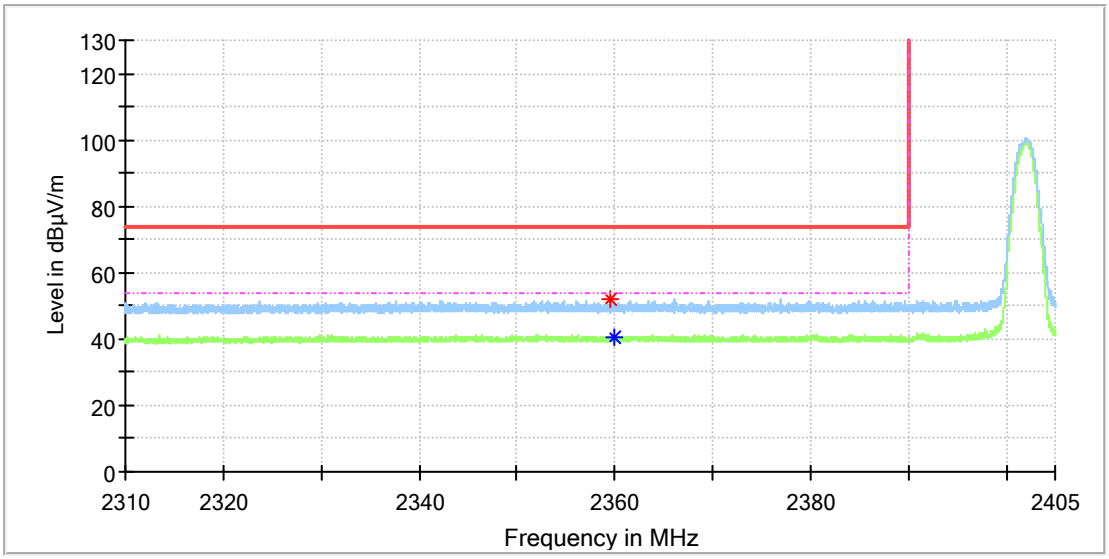
Final_Result

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

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

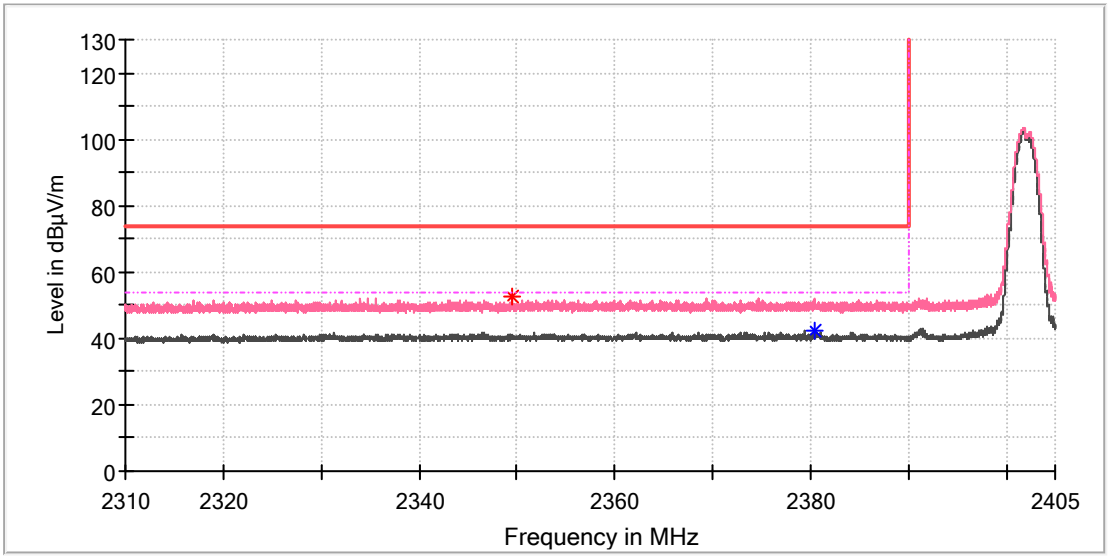
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2359.539706	51.79	---	74.00	22.21	150.0	H	208.0	8.5
2359.958824	---	40.55	54.00	13.45	150.0	H	265.0	8.5

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

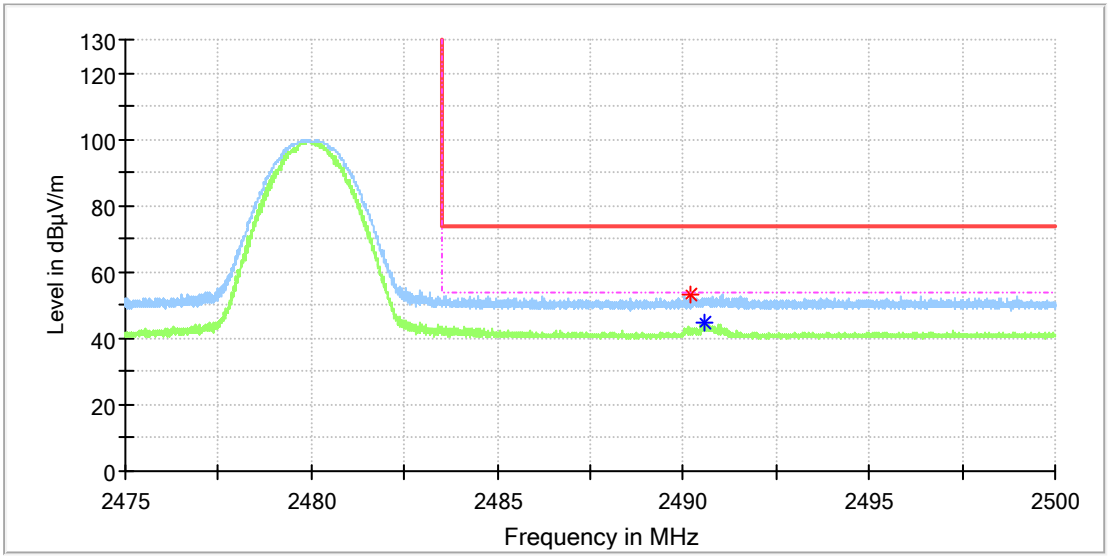
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2349.578677	52.31	---	74.00	21.69	150.0	V	177.0	8.5
2380.509559	---	42.05	54.00	11.95	150.0	V	297.0	8.5

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

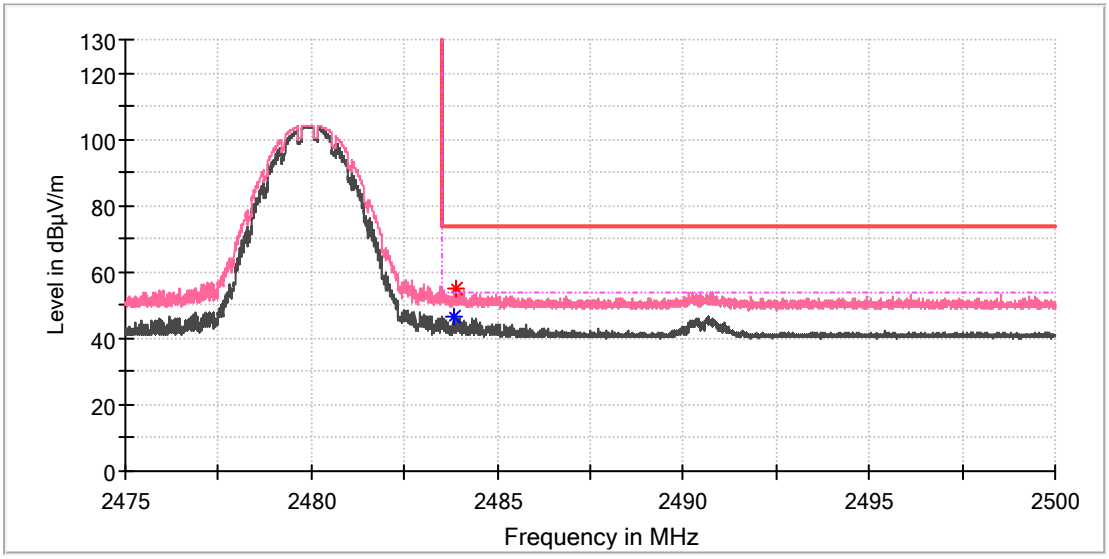
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2490.180147	53.03	---	74.00	20.97	150.0	H	231.0	9.0
2490.584559	---	44.46	54.00	9.54	150.0	H	231.0	9.0

Final_Result

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BR_DH5_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
2483.852941	---	46.49	54.00	7.51	150.0	V	340.0	9.0
2483.893382	55.00	---	74.00	19.00	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)
---	---	---	---	---	---		---	---

Appendix B: Test Results of Bluetooth LE

Appendix B.1: Test Results of 6dB Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.700	2401.612	2402.312	0.5	PASS
		2440	0.716	2439.600	2440.316	0.5	PASS
		2480	0.724	2479.596	2480.320	0.5	PASS
BLE_2M	Ant1	2402	1.180	2401.372	2402.552	0.5	PASS
		2440	1.244	2439.316	2440.560	0.5	PASS
		2480	1.164	2479.392	2480.556	0.5	PASS

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

Appendix B.2: Test Results of 99% Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0680	2401.4263	2402.4943	---	PASS
		2440	1.0724	2439.4208	2440.4932	---	PASS
		2480	1.0730	2479.4181	2480.4911	---	PASS
BLE_2M	Ant1	2402	2.0967	2400.9170	2403.0137	---	PASS
		2440	2.0980	2438.9200	2441.0180	---	PASS
		2480	2.0882	2478.9131	2481.0013	---	PASS

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

Appendix B.3: Test Results of Conducted Power Spectral Density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-13.53	≤8.00	PASS
		2440	-13.80	≤8.00	PASS
		2480	-13.90	≤8.00	PASS
BLE_2M	Ant1	2402	-17.14	≤8.00	PASS
		2440	-17.41	≤8.00	PASS
		2480	-17.49	≤8.00	PASS

Test Graphs

BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

BLE_2M_Ant1_2402

BLE_2M_Ant1_2440

BLE_2M_Ant1_2480

Appendix B.4: Test Results of Band Edge Measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.99	-43.57	≤-19.01	PASS
		High	2480	0.64	-44.47	≤-19.36	PASS
BLE_2M	Ant1	Low	2402	0.13	-33.90	≤-19.87	PASS
		High	2480	-0.11	-44.44	≤-20.11	PASS

Test Graphs

BLE_1M_Ant1_Low_2402

BLE_1M_Ant1_High_2480

BLE_2M_Ant1_Low_2402

BLE_2M_Ant1_High_2480


Appendix B.5: Test Results of Conducted Spurious Emission

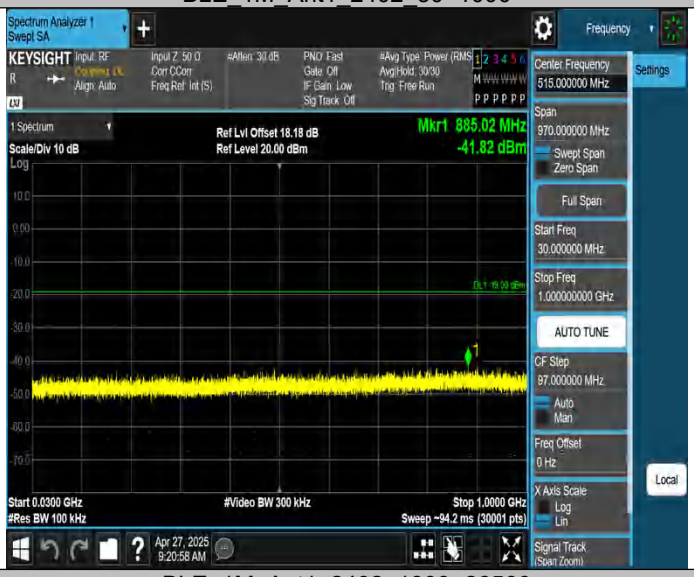
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.00	1.00	---	PASS
			30~1000	1.00	-41.82	≤-19	PASS
			1000~26500	1.00	-33.13	≤-19	PASS
		2440	Reference	0.63	0.63	---	PASS
			30~1000	0.63	-41.59	≤-19.37	PASS
			1000~26500	0.63	-33.08	≤-19.37	PASS
		2480	Reference	0.46	0.46	---	PASS
			30~1000	0.46	-41.68	≤-19.54	PASS
			1000~26500	0.46	-33.09	≤-19.54	PASS
BLE_2M	Ant1	2402	Reference	-0.01	-0.01	---	PASS
			30~1000	-0.01	-41.23	≤-20.01	PASS
			1000~26500	-0.01	-32.44	≤-20.01	PASS
		2440	Reference	-0.13	-0.13	---	PASS
			30~1000	-0.13	-41.77	≤-20.13	PASS
			1000~26500	-0.13	-32.81	≤-20.13	PASS
		2480	Reference	-0.20	-0.20	---	PASS
			30~1000	-0.20	-41.93	≤-20.2	PASS
			1000~26500	-0.20	-32.83	≤-20.2	PASS

Test Graphs

BLE_1M_Ant1_2402_0~Reference

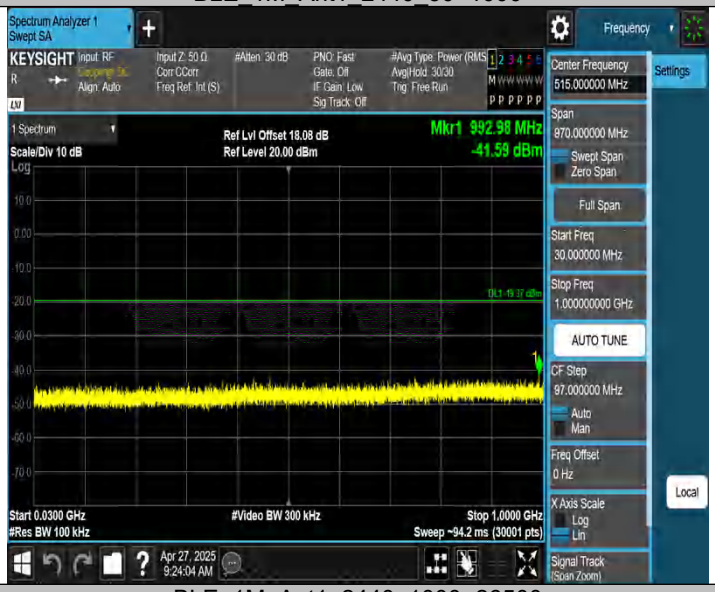
BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

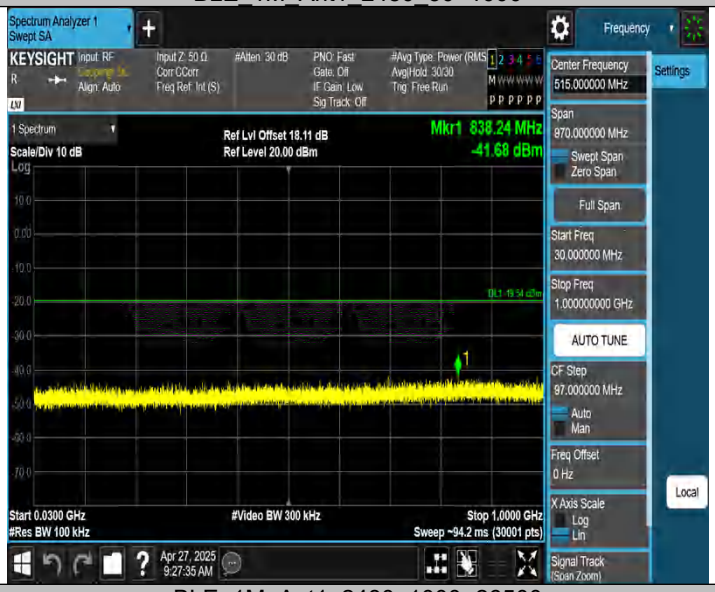
BLE_1M_Ant1_2440_0~Reference

BLE_1M_Ant1_2440_30~1000



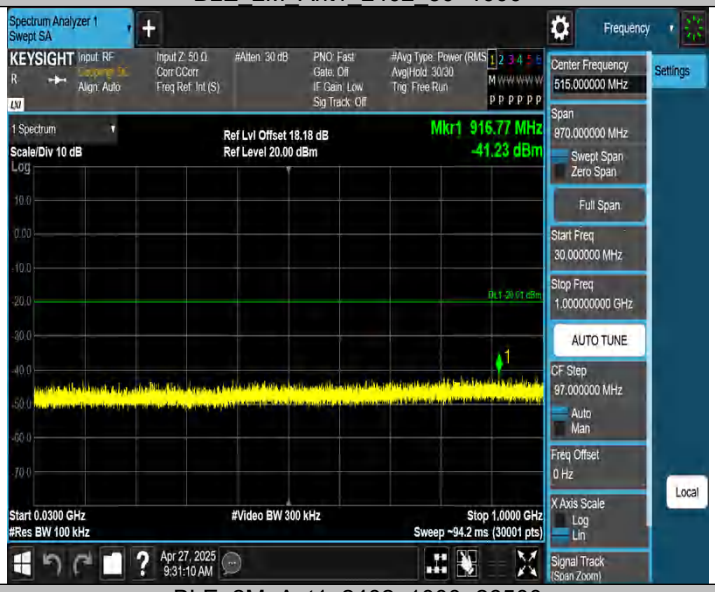
BLE_1M_Ant1_2440_1000~26500

BLE_1M_Ant1_2480_0~Reference

BLE_1M_Ant1_2480_30~1000

BLE_1M_Ant1_2480_1000~26500


BLE_2M_Ant1_2402_0~Reference

BLE_2M_Ant1_2402_30~1000



BLE_2M_Ant1_2402_1000~26500

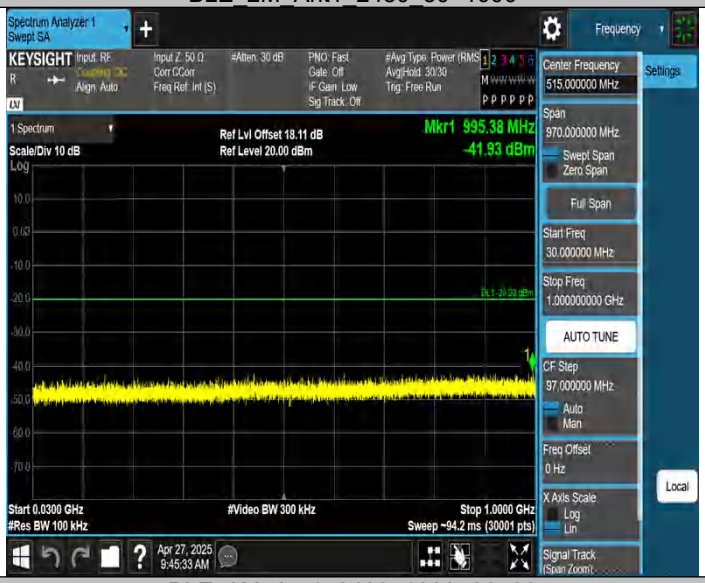
BLE_2M_Ant1_2440_0~Reference

BLE_2M_Ant1_2440_30~1000

BLE_2M_Ant1_2440_1000~26500

BLE_2M_Ant1_2480_0~Reference

BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500

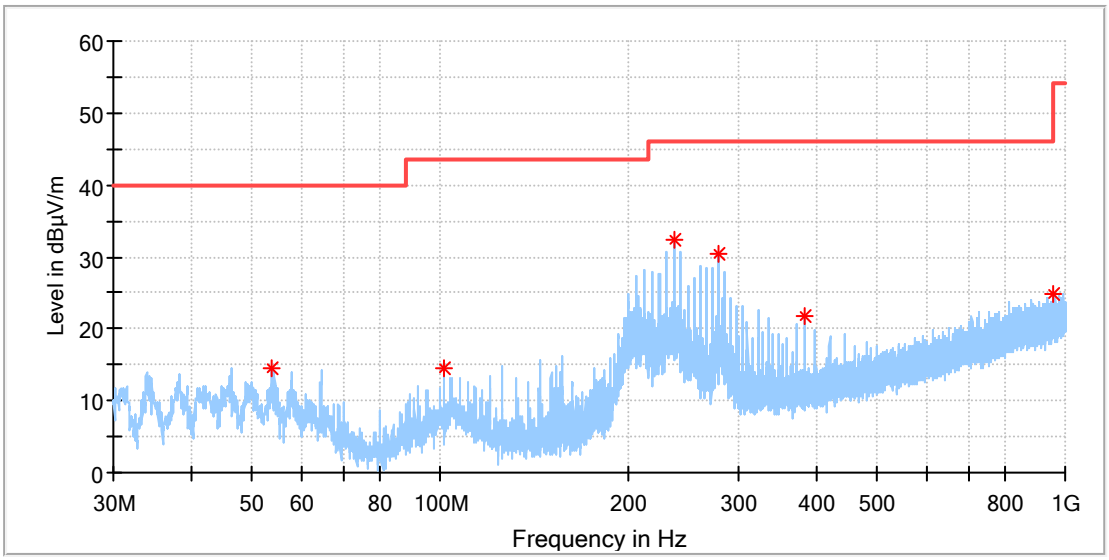
Appendix B.6: Test Results of Radiated Spurious Emissions

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

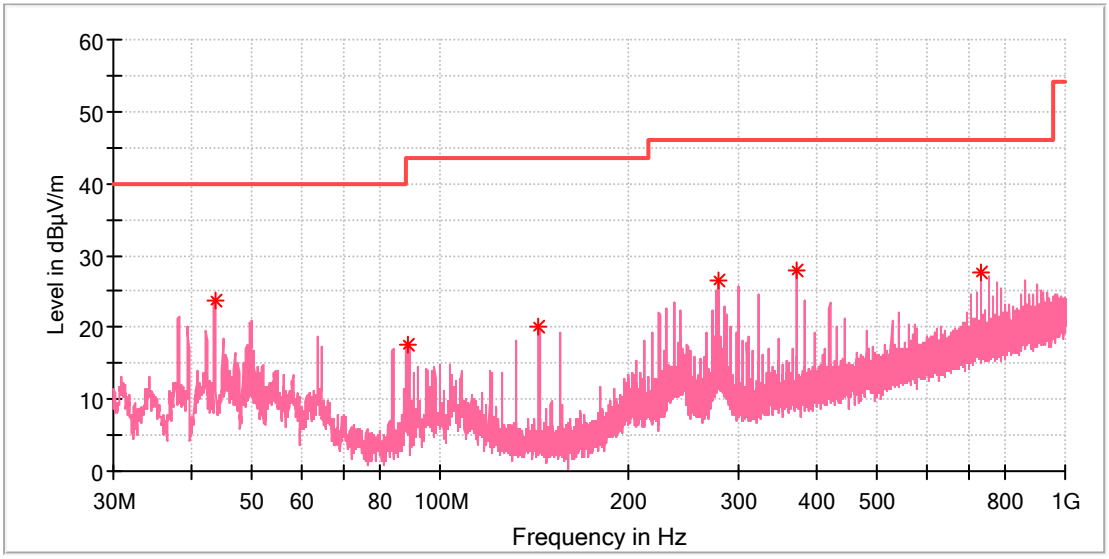
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
53.615769	14.40	40.00	25.60	100.0	H	14.0	-18.5
101.406923	14.61	43.50	28.89	100.0	H	5.0	-19.1
236.572692	32.39	46.00	13.61	100.0	H	314.0	-17.9
279.551154	30.44	46.00	15.56	100.0	H	42.0	-16.7
384.050000	21.65	46.00	24.35	100.0	H	114.0	-14.1
956.499231	24.74	46.00	21.26	100.0	H	95.0	-4.2

Final_Result

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
43.617308	23.66	40.00	16.34	100.0	V	80.0	-19.2
88.834231	17.52	43.50	25.98	100.0	V	217.0	-21.4
144.012308	20.05	43.50	23.45	100.0	V	16.0	-22.4
279.588462	26.41	46.00	19.59	100.0	V	6.0	-16.7
372.036923	27.86	46.00	18.14	100.0	V	16.0	-14.4
732.093462	27.70	46.00	18.30	100.0	V	300.0	-7.4

Final_Result

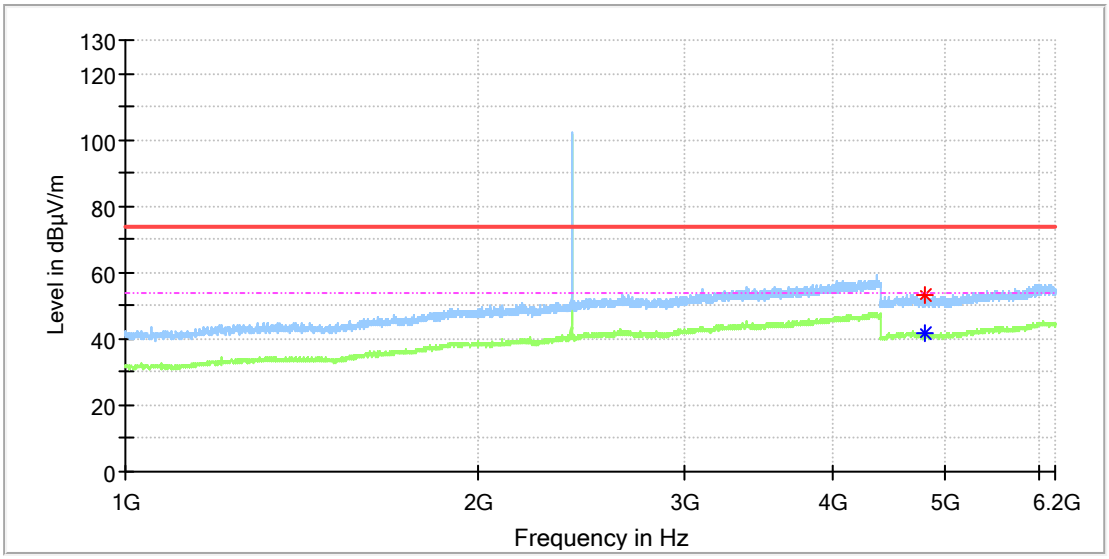
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

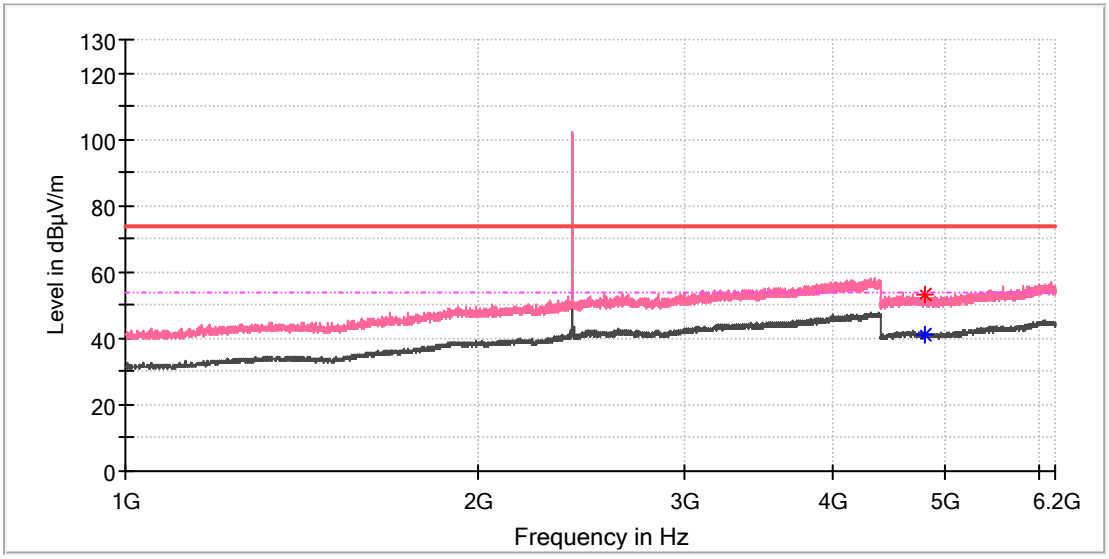
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4806.500000	53.12	---	74.00	20.88	150.0	H	77.0	13.3
4809.000000	---	41.58	54.00	12.42	150.0	H	329.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

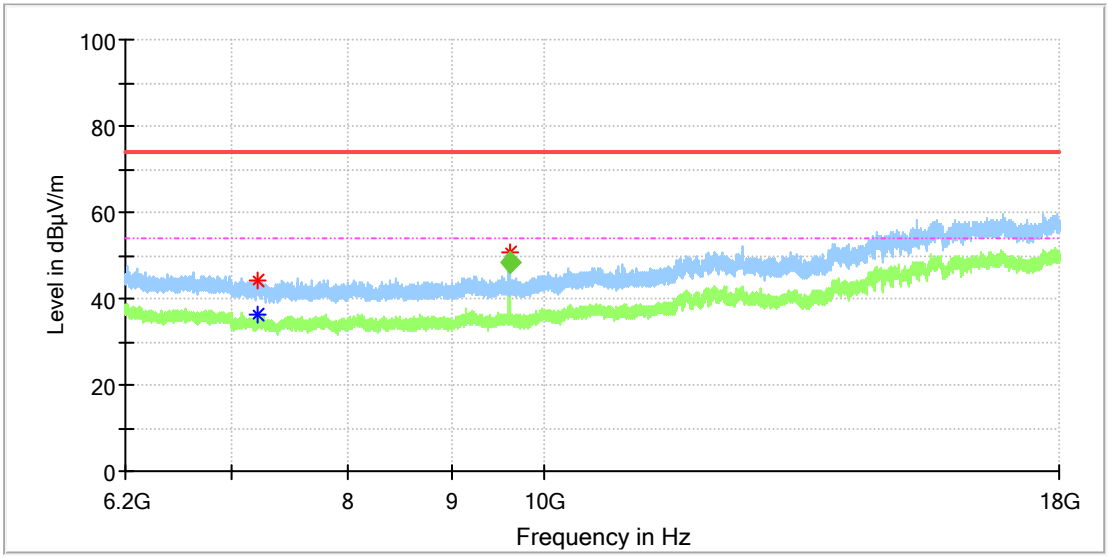
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	---	41.29	54.00	12.71	150.0	V	0.0	13.3
4809.500000	52.96	---	74.00	21.04	150.0	V	353.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

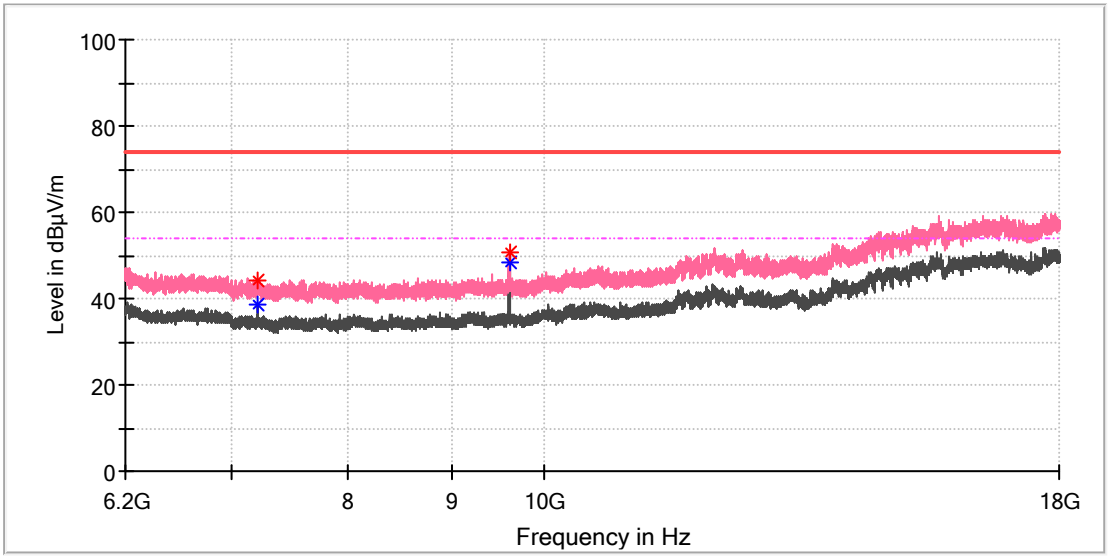
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.458333	---	36.35	54.00	17.65	150.0	H	301.0	8.8
7206.441667	44.36	---	74.00	29.64	150.0	H	301.0	8.8
9607.741667	50.88	---	74.00	23.12	150.0	H	312.0	10.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9607.917084	---	48.15	54.00	5.85	150.0	H	312.0	10.4

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

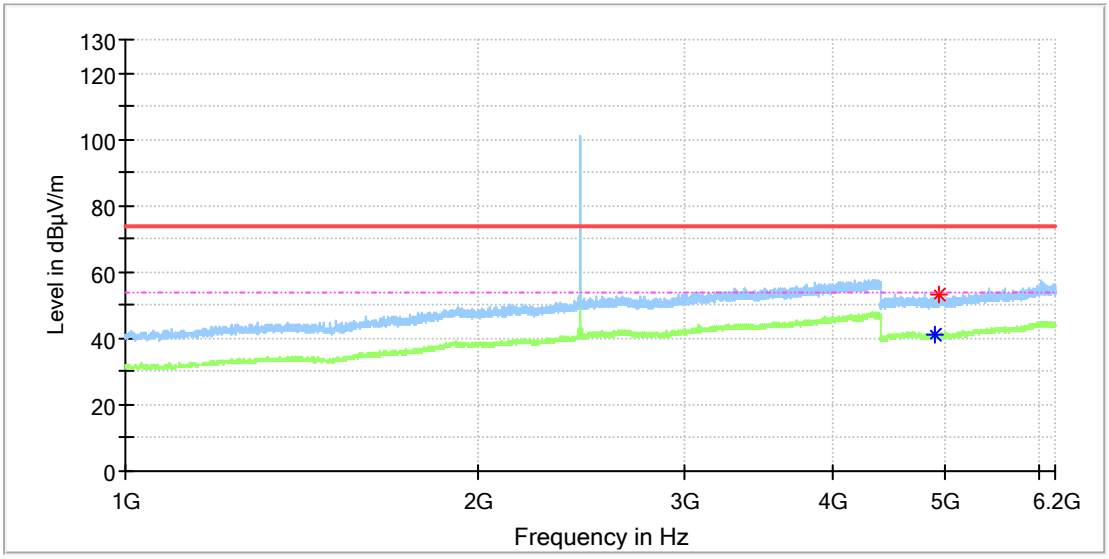
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.458333	44.29	---	74.00	29.71	150.0	V	313.0	8.8
7205.458333	---	38.58	54.00	15.42	150.0	V	313.0	8.8
9607.741667	50.56	---	74.00	23.44	150.0	V	228.0	10.4
9607.741667	---	48.58	54.00	5.42	150.0	V	228.0	10.4

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

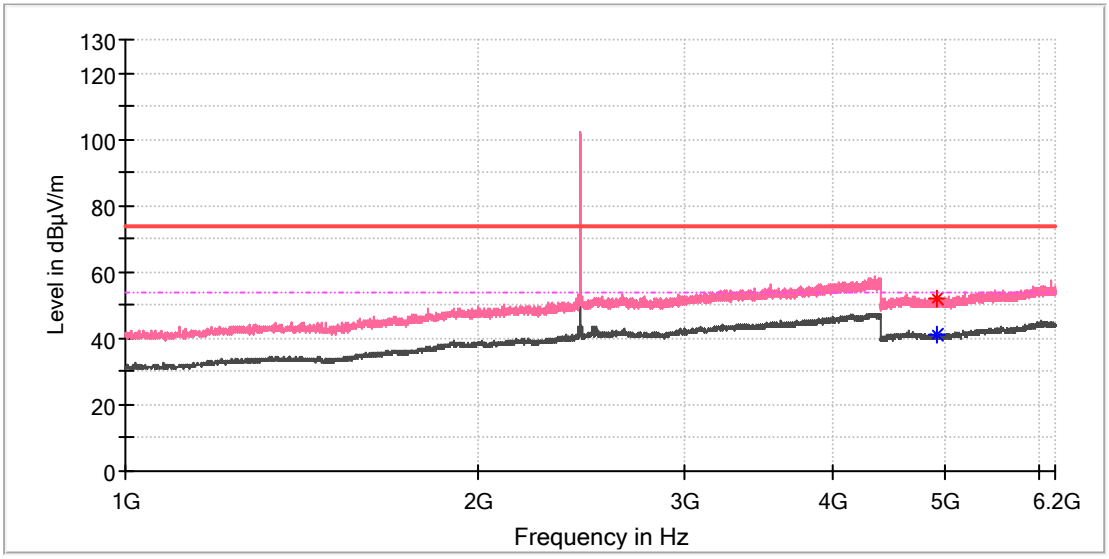
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4904.000000	---	41.19	54.00	12.81	150.0	H	249.0	13.3
4927.500000	53.21	---	74.00	20.79	150.0	H	97.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

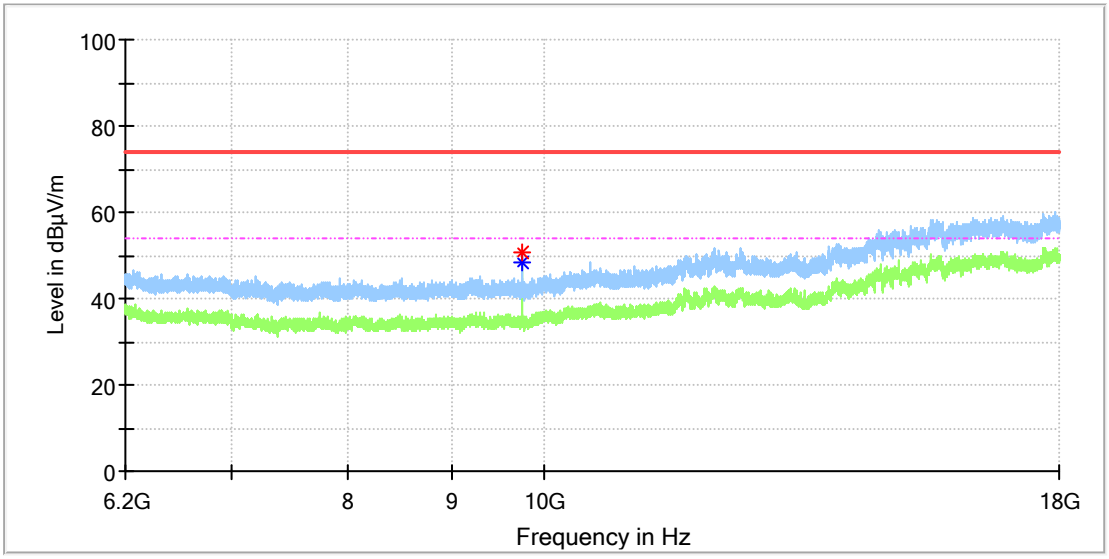
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4907.000000	52.11	---	74.00	21.89	150.0	V	217.0	13.3
4909.000000	---	41.18	54.00	12.82	150.0	V	36.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

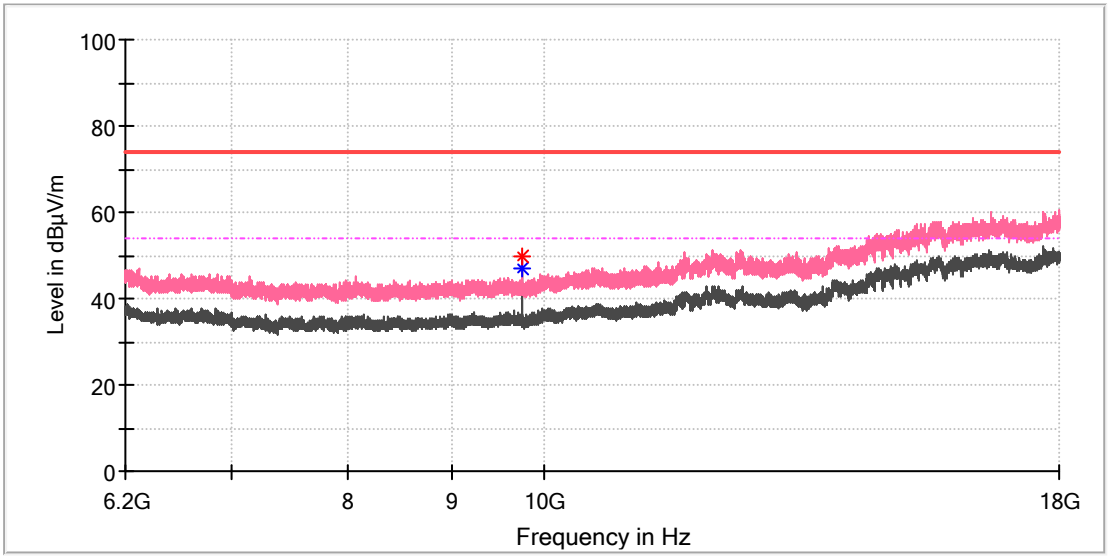
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9759.666667	50.63	---	74.00	23.37	150.0	H	236.0	10.4
9759.666667	---	48.44	54.00	5.56	150.0	H	236.0	10.4

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

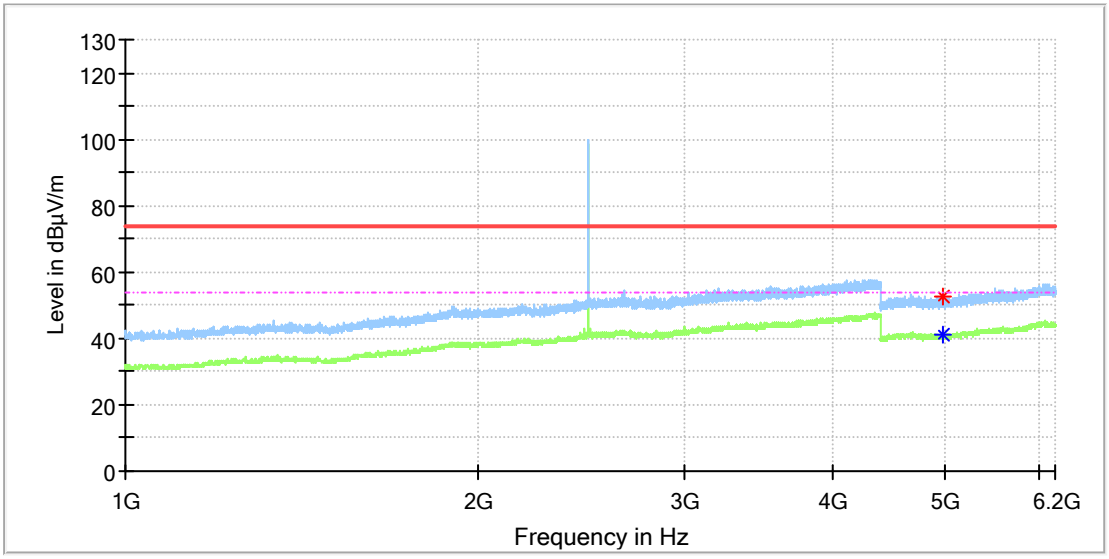
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9759.666667	---	46.91	54.00	7.09	150.0	V	254.0	10.4
9760.158333	49.78	---	74.00	24.22	150.0	V	254.0	10.4

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

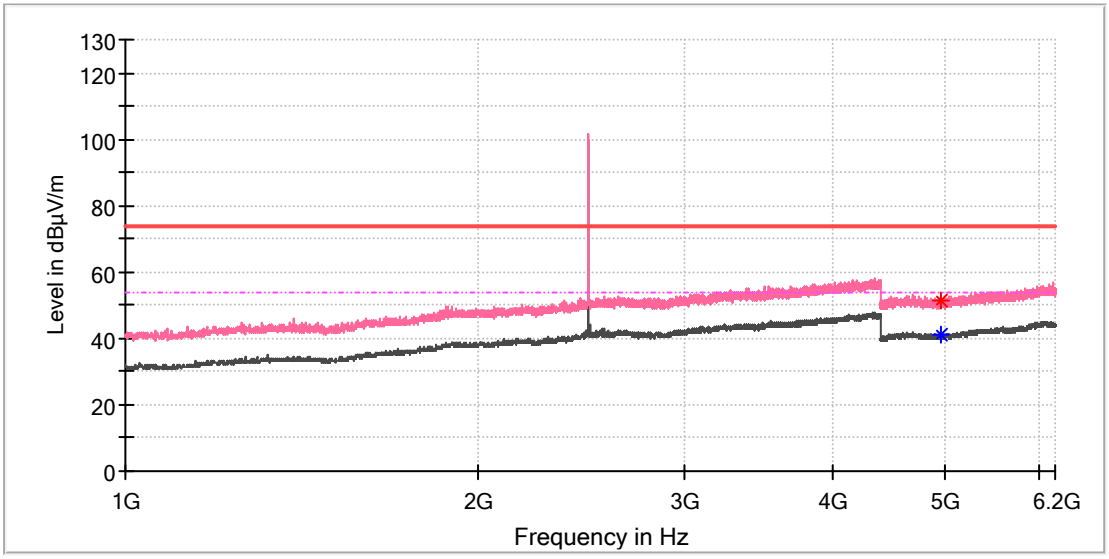
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4966.000000	---	41.07	54.00	12.93	150.0	H	1.0	13.3
4976.000000	52.77	---	74.00	21.23	150.0	H	99.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

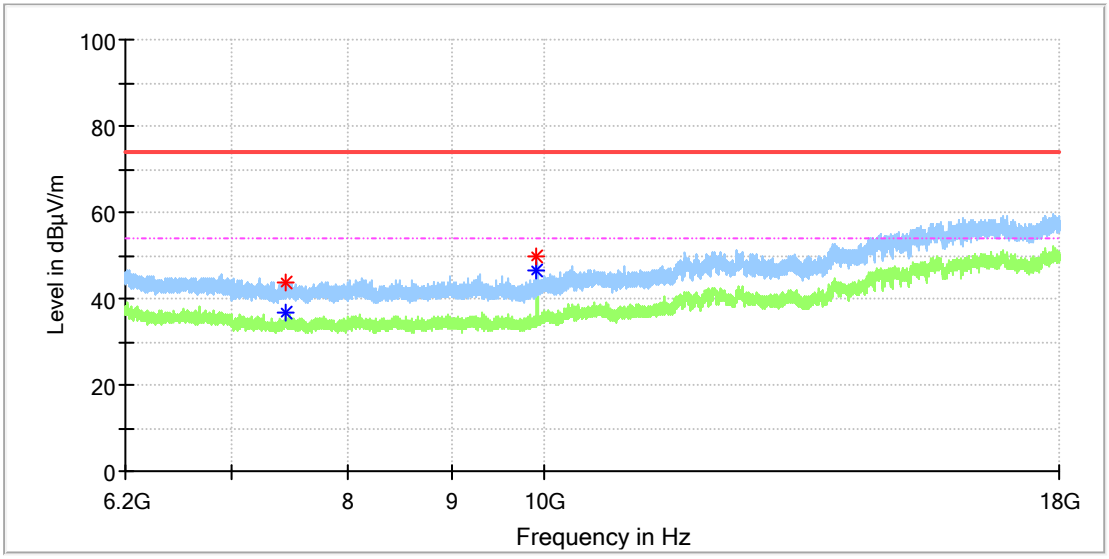
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4958.000000	51.68	---	74.00	22.33	150.0	V	95.0	13.3
4960.000000	---	41.35	54.00	12.65	150.0	V	102.0	13.3

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

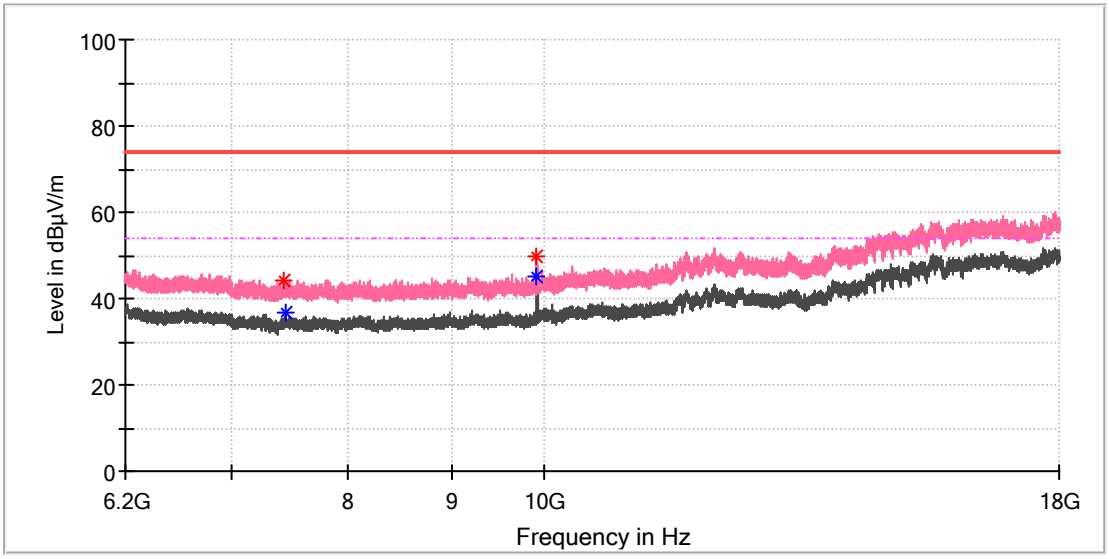
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7439.491667	---	36.64	54.00	17.36	150.0	H	6.0	8.4
7439.983333	43.58	---	74.00	30.42	150.0	H	235.0	8.4
9919.950000	49.74	---	74.00	24.26	150.0	H	272.0	10.8
9919.950000	---	46.61	54.00	7.39	150.0	H	272.0	10.8

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
7428.183333	44.05	---	74.00	29.95	150.0	V	101.0	8.4
7439.983333	---	36.85	54.00	17.15	150.0	V	316.0	8.4
9919.950000	49.82	---	74.00	24.18	150.0	V	236.0	10.8
9919.950000	---	45.01	54.00	8.99	150.0	V	236.0	10.8

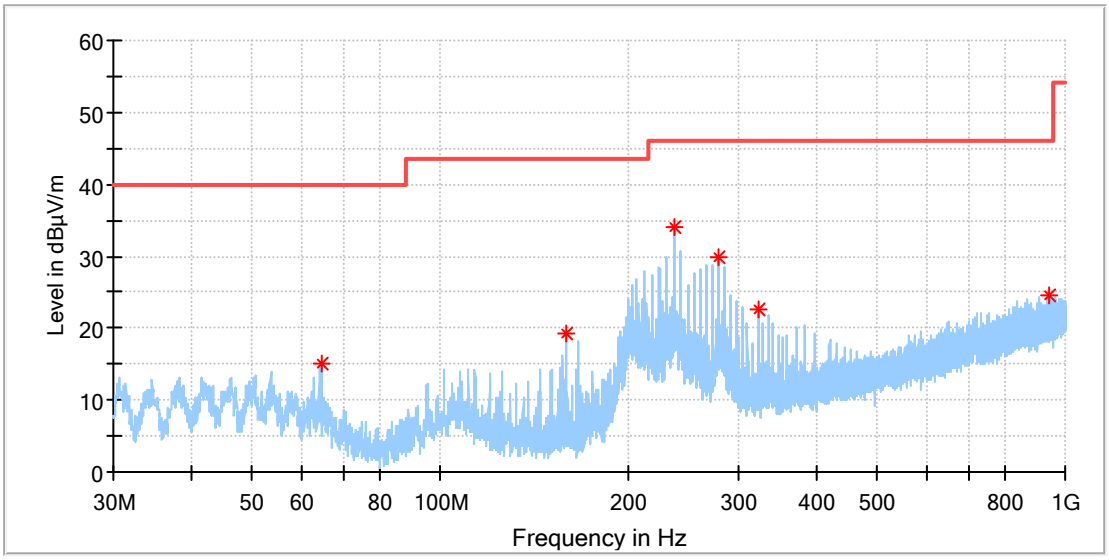
Final_Result

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

30 MHz - 1GHz for co-location

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel+5.8GHz_5789MHz
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

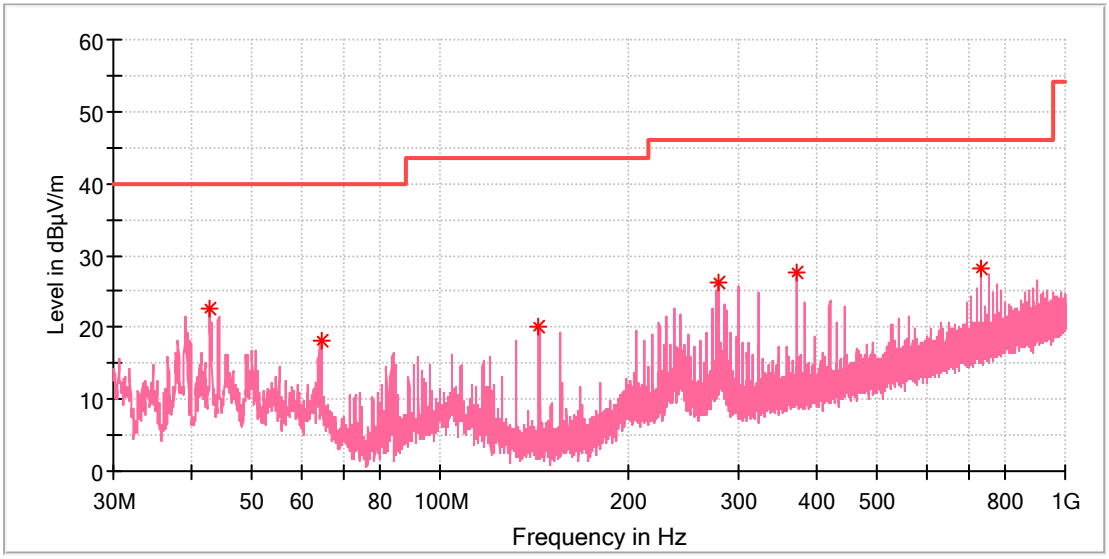
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
64.509615	15.10	40.00	24.90	100.0	H	354.0	-20.1
159.345769	19.37	43.50	24.13	100.0	H	308.0	-21.8
236.572692	33.91	46.00	12.09	100.0	H	318.0	-17.9
279.551154	29.74	46.00	16.26	100.0	H	285.0	-16.7
324.021923	22.52	46.00	23.48	100.0	H	254.0	-15.5
942.247692	24.65	46.00	21.35	100.0	H	126.0	-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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel+5.8GHz_5789MHz
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
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)
42.833846	22.70	40.00	17.30	100.0	V	98.0	-19.5
64.509615	18.27	40.00	21.73	100.0	V	327.0	-20.1
144.012308	20.03	43.50	23.47	100.0	V	211.0	-22.4
279.551154	26.12	46.00	19.88	100.0	V	0.0	-16.7
372.036923	27.62	46.00	18.38	100.0	V	177.0	-14.4
732.093462	28.17	46.00	17.83	100.0	V	295.0	-7.4

Final_Result

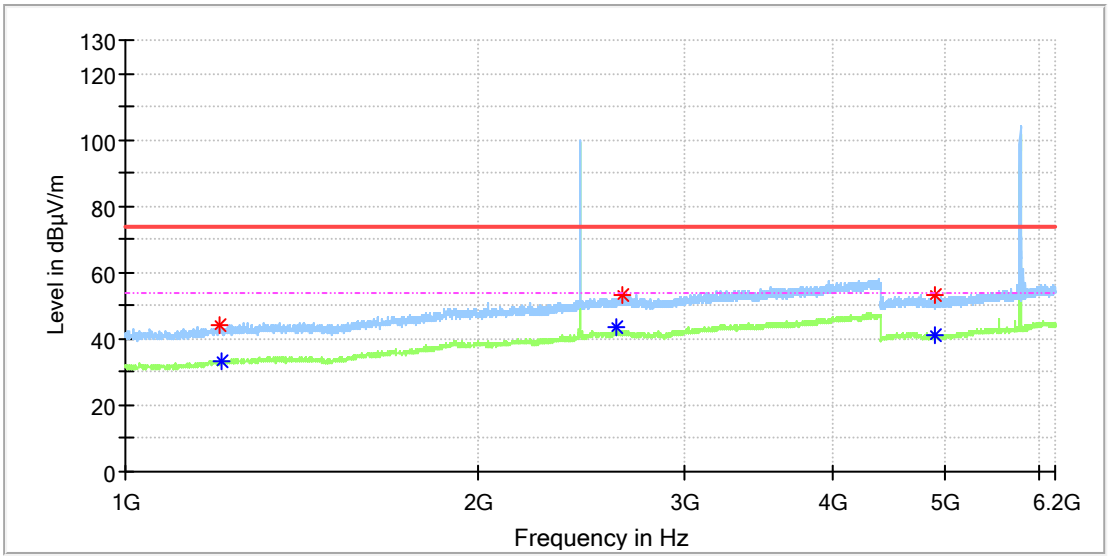
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz for co-location

Note: The highest waveform in the figure is Bluetooth and 5.8G Fundamental.

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel+5.8GHz_5789MHz
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

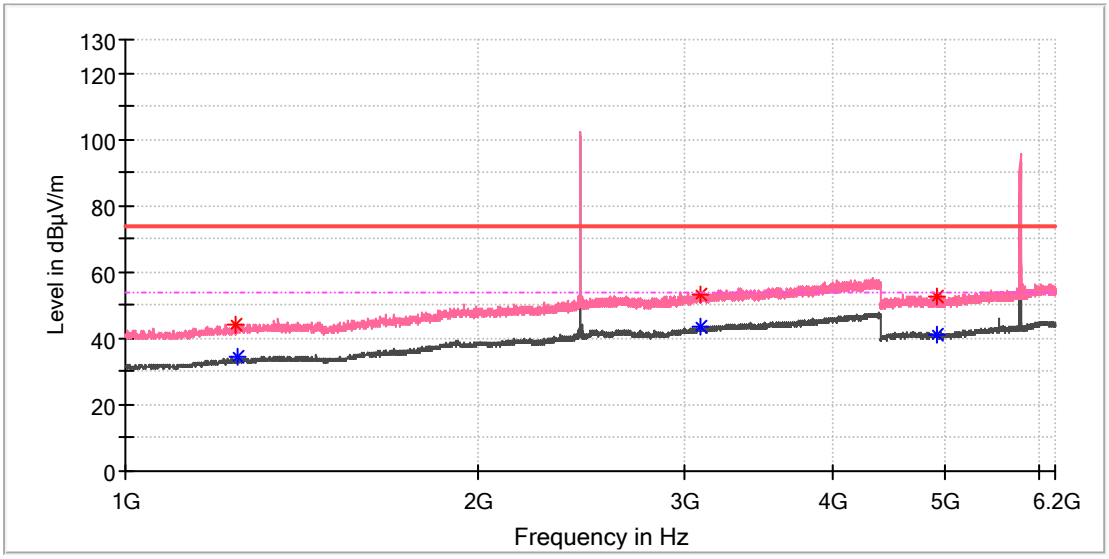
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1201.500000	43.96	---	74.00	30.04	150.0	H	8.0	1.8
1209.500000	---	33.54	54.00	20.46	150.0	H	71.0	1.9
2625.500000	---	43.28	54.00	10.72	150.0	H	21.0	9.9
2652.500000	53.25	---	74.00	20.75	150.0	H	103.0	10.2
4903.000000	53.03	---	74.00	20.97	150.0	H	355.0	13.3
4905.000000	---	41.27	54.00	12.73	150.0	H	182.0	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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel+5.8GHz_5789MHz
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

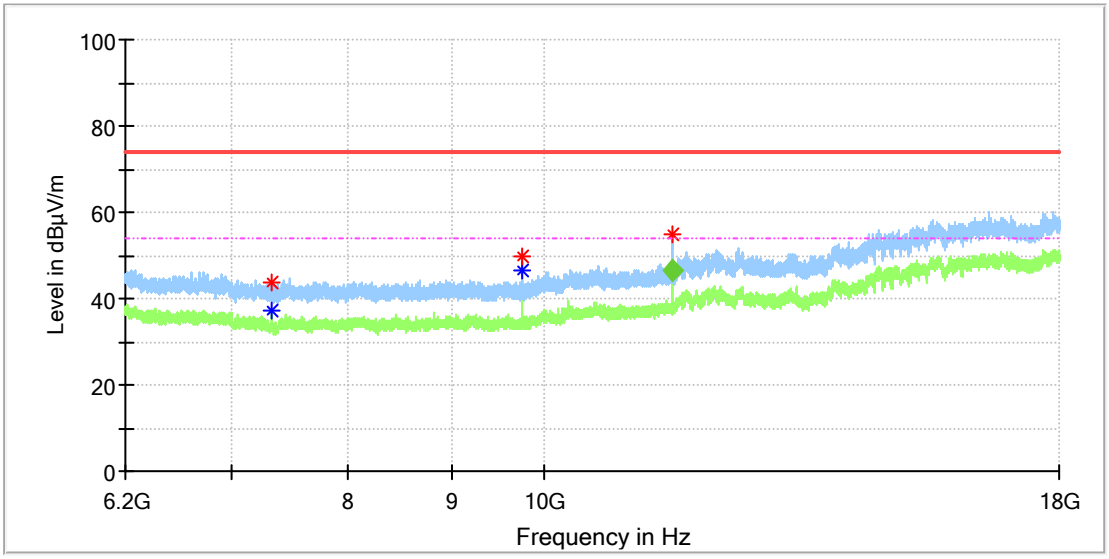
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1243.500000	44.20	---	74.00	29.80	150.0	V	119.0	2.5
1247.000000	---	34.54	54.00	19.46	150.0	V	207.0	2.6
3091.000000	53.48	---	74.00	20.52	150.0	V	62.0	10.6
3096.000000	---	43.53	54.00	10.47	150.0	V	132.0	10.6
4907.500000	52.77	---	74.00	21.23	150.0	V	184.0	13.3
4913.000000	---	41.21	54.00	12.79	150.0	V	223.0	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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel+5.8GHz_5789MHz
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

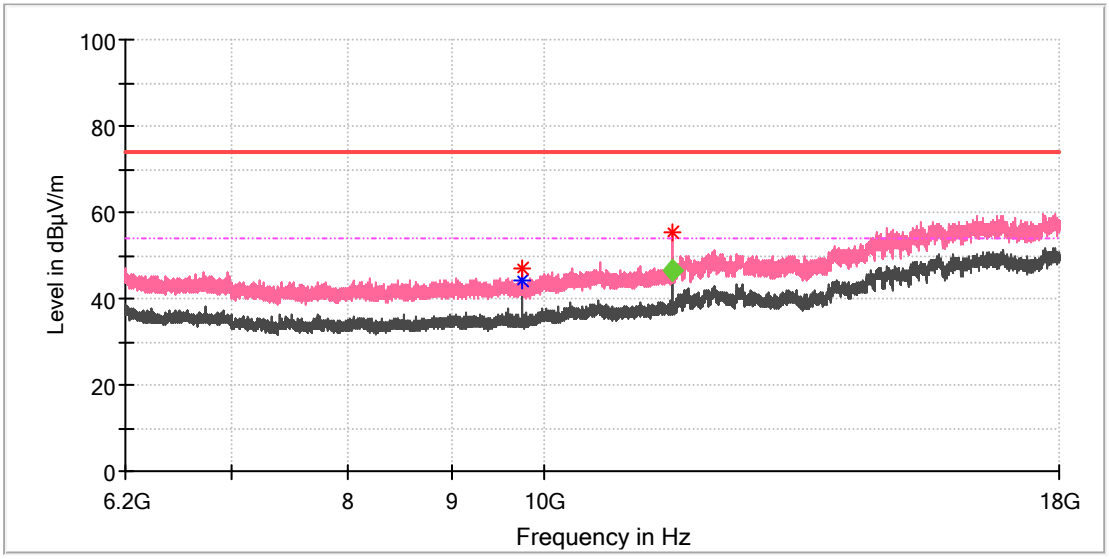
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7319.525000	---	37.19	54.00	16.81	150.0	H	8.0	8.2
7324.933333	43.74	---	74.00	30.26	150.0	H	299.0	8.2
9759.666667	---	46.42	54.00	7.58	150.0	H	240.0	10.4
9759.666667	49.74	---	74.00	24.26	150.0	H	240.0	10.4
11576.375000	55.05	---	74.00	18.95	150.0	H	0.0	13.4

Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11577.934584	---	46.47	54.00	7.53	150.0	H	0.0	13.4

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Mid channel+5.8GHz_5789MHz
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
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)
9759.666667	---	44.06	54.00	9.94	150.0	V	256.0	10.4
9759.666667	47.12	---	74.00	26.88	150.0	V	256.0	10.4
11576.375000	55.57	---	74.00	18.43	150.0	V	34.0	13.4

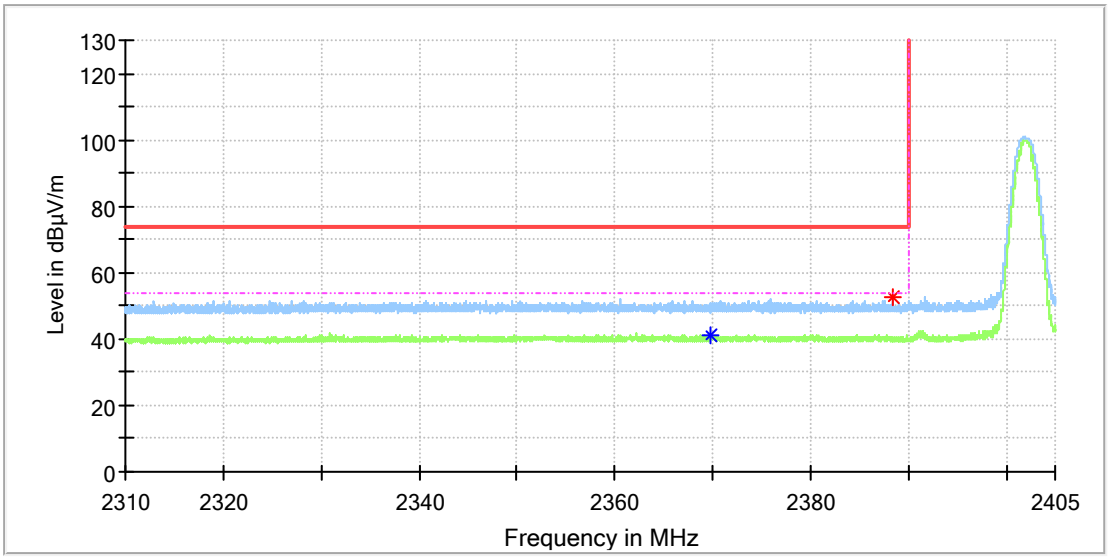
Final_Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
11577.817084	---	46.54	54.00	7.46	150.0	V	34.0	13.4

Appendix B.7: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

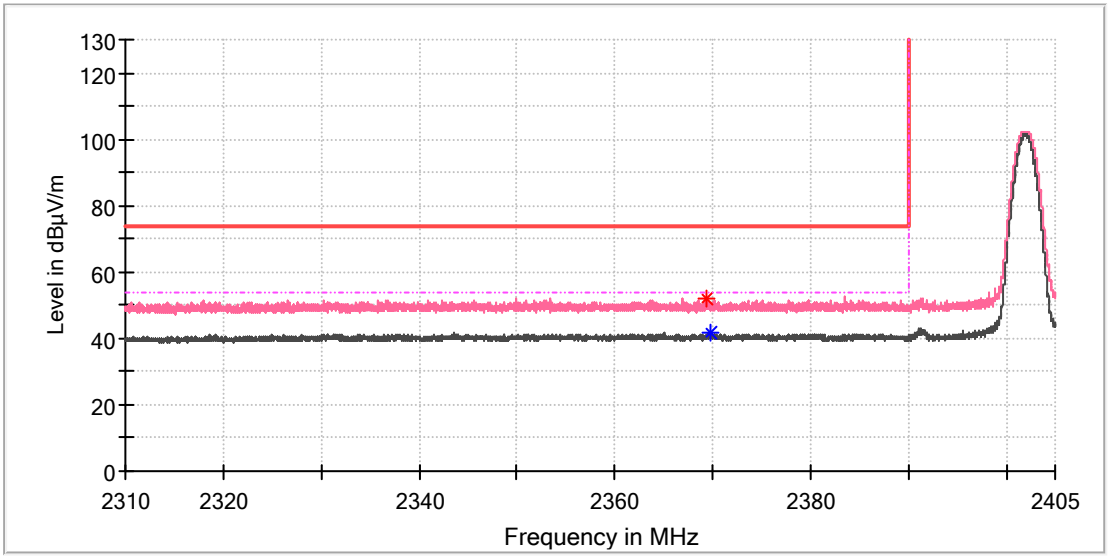
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2369.766177	---	41.33	54.00	12.67	150.0	H	311.0	8.5
2388.430882	52.51	---	74.00	21.49	150.0	H	185.0	8.5

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

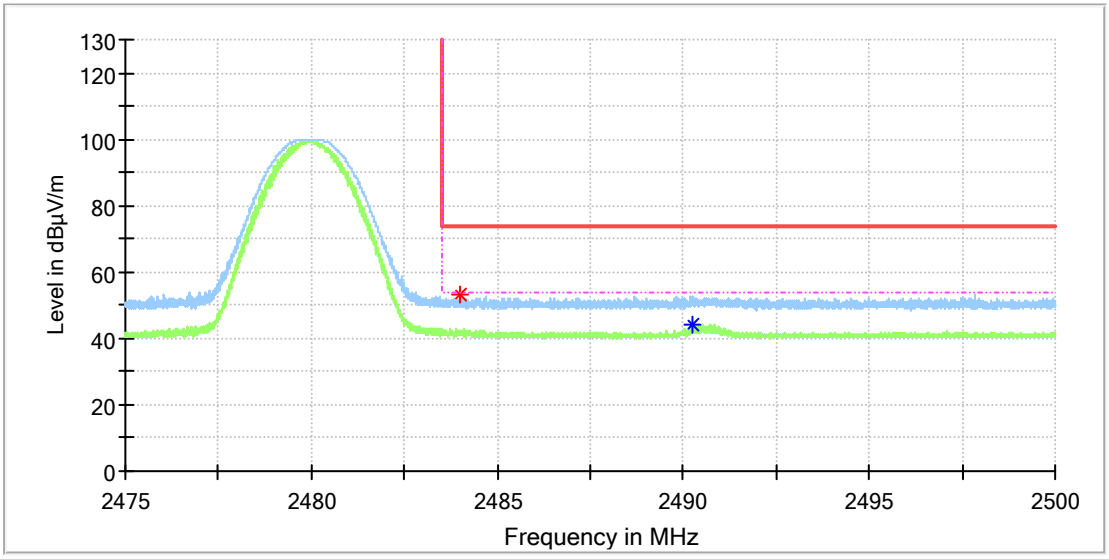
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2369.416912	52.11	---	74.00	21.89	150.0	V	0.0	8.5
2369.738235	---	41.96	54.00	12.04	150.0	V	295.0	8.5

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

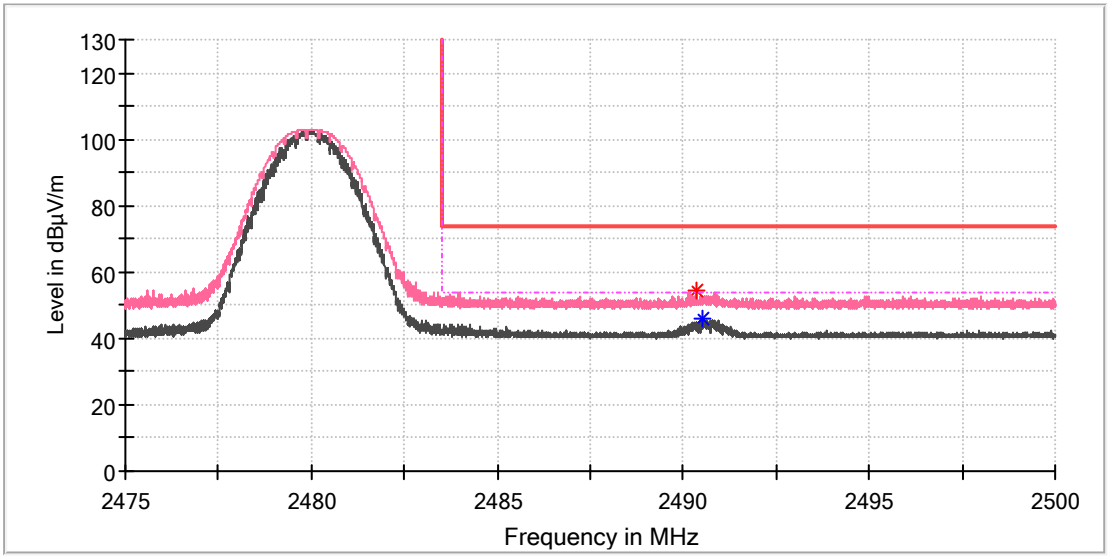
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.000000	53.02	---	74.00	20.98	150.0	H	75.0	9.0
2490.261030	---	44.16	54.00	9.84	150.0	H	235.0	9.0

Final_Result

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

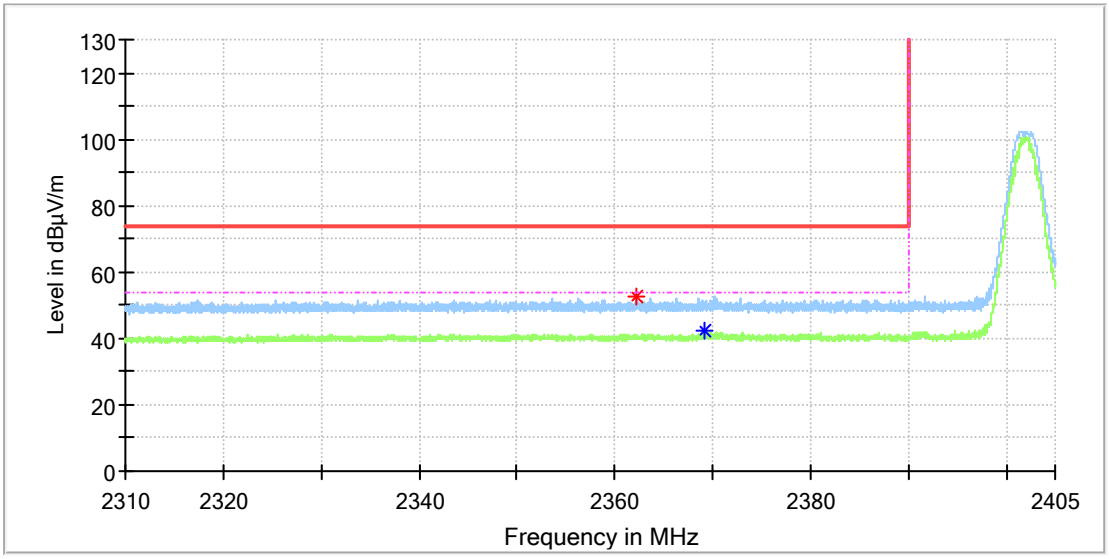
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2490.338235	54.37	---	74.00	19.63	150.0	V	339.0	9.0
2490.522059	---	46.25	54.00	7.75	150.0	V	339.0	9.0

Final_Result

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

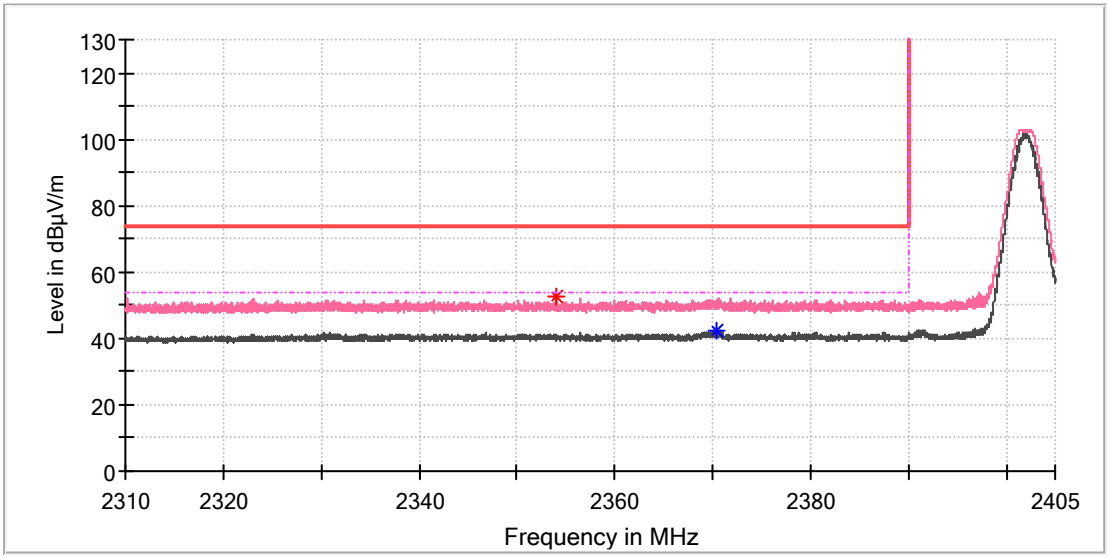
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2362.180147	52.45	---	74.00	21.55	150.0	H	308.0	8.5
2369.193382	---	42.48	54.00	11.52	150.0	H	308.0	8.5

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

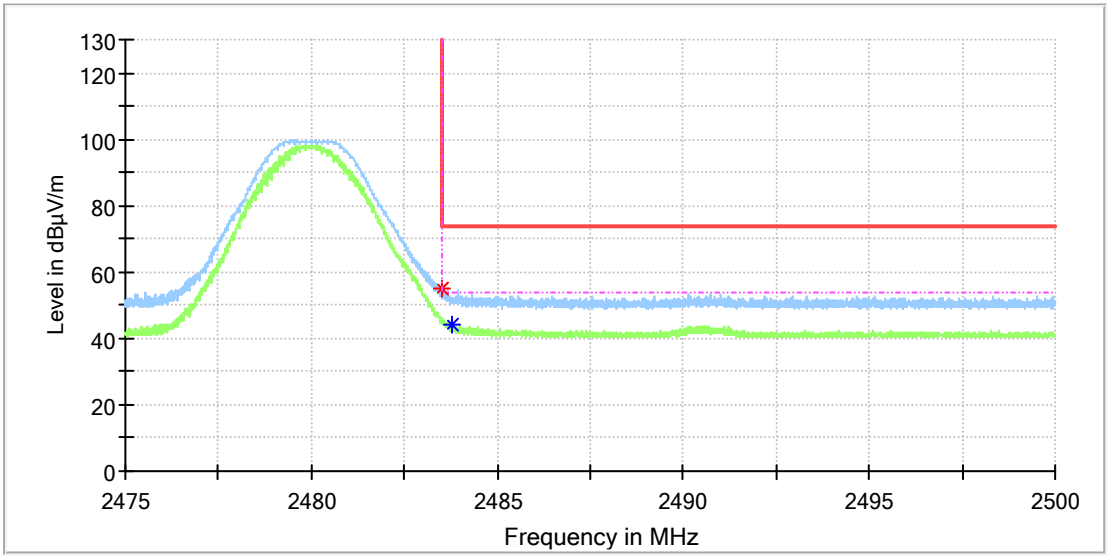
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2353.965441	52.75	---	74.00	21.25	150.0	V	4.0	8.5
2370.366912	---	42.23	54.00	11.77	150.0	V	349.0	8.5

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:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 2M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

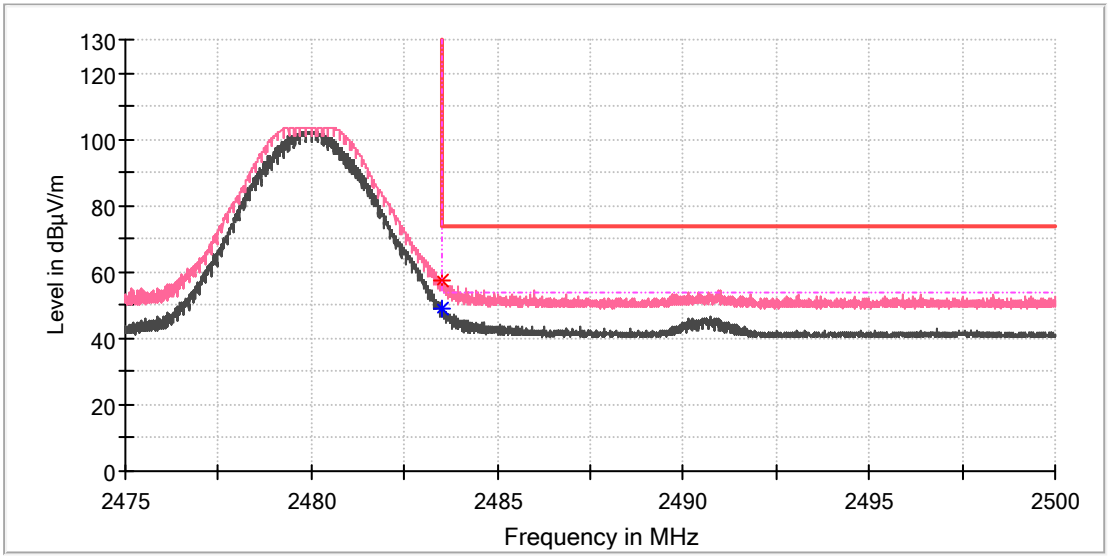
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.514706	54.75	---	74.00	19.25	150.0	H	305.0	9.0
2483.801471	---	44.11	54.00	9.89	150.0	H	263.0	9.0

Final_Result

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

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Model:	NS-SB512
Test Mode:	BLE 2M_High channel
Order No/Sample No:	168548303/A003970302-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
2483.525735	57.20	---	74.00	16.80	150.0	V	343.0	9.0
2483.525735	---	49.13	54.00	4.87	150.0	V	343.0	9.0

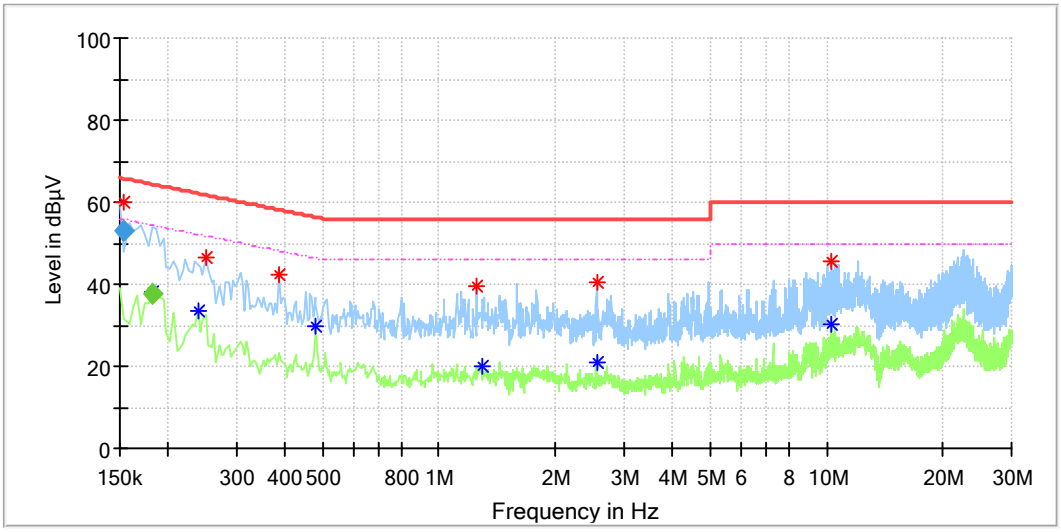
Final_Result

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

Appendix B.8: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Order Number:	168548303
Model:	NS-SB512
Test Mode:	Normal Working
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15C
Test By:/Review By:	Dawn Shen/Shower Dai
Tem./Hum./Pressure:	24.9°C/52.3%/101kPa
Remark:	SR3



Critical_Freqs

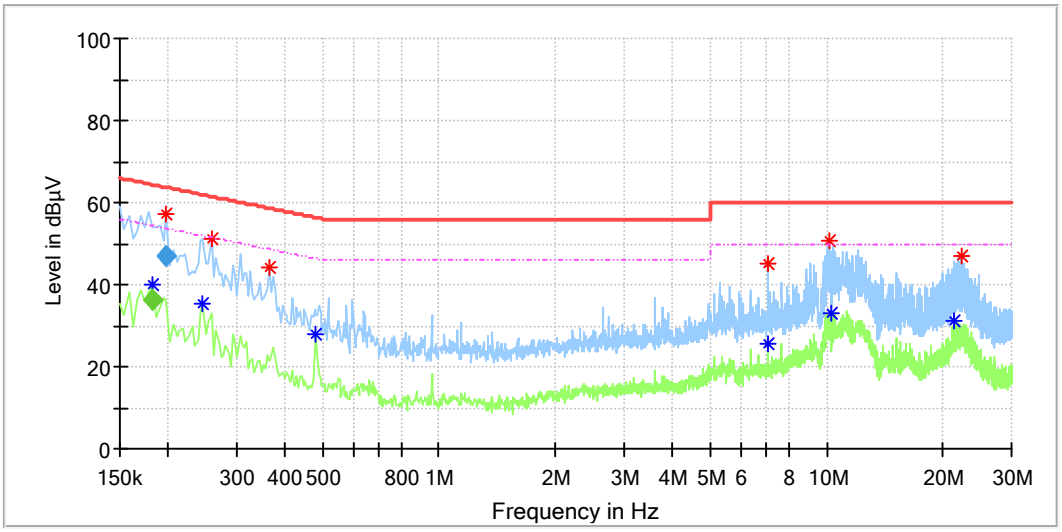
Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.154000	60.14	---	66.00	5.86	L1	9.8
0.181500	---	38.28	54.21	15.93	L1	9.8
0.238000	---	33.39	52.17	18.77	L1	9.8
0.250000	46.73	---	61.76	15.03	L1	9.8
0.386000	42.40	---	58.15	15.75	L1	9.9
0.482000	---	29.62	46.31	16.68	L1	9.9
1.250000	39.46	---	56.00	16.54	L1	10.0
1.286000	---	19.91	46.00	26.09	L1	10.0
2.546000	40.25	---	56.00	15.75	L1	10.1
2.550000	---	20.84	46.00	25.16	L1	10.1
10.302000	45.71	---	60.00	14.29	L1	10.2
10.302000	---	30.05	50.00	19.95	L1	10.2

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.154000	53.14	---	65.78	12.65	1000.0	9.000	L1	9.8
0.181500	---	37.56	54.42	16.85	1000.0	9.000	L1	9.8

EUT Information

EUT Name:	5.1.2 Soundbar with Subwoofer and Satellite Speakers
Order Number:	168548303
Model:	NS-SB512
Test Mode:	Normal Working
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15C
Test By:/Review By:	Dawn Shen/Shower Dai
Tem./Hum./Pressure:	24.9°C/52.3%/101kPa
Remark:	SR3



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.181500	---	39.92	54.39	14.47	N	9.7
0.197500	57.33	---	63.69	6.37	N	9.7
0.246000	---	35.27	51.89	16.62	N	9.7
0.258000	51.00	---	61.50	10.50	N	9.7
0.366000	44.40	---	58.59	14.19	N	9.7
0.482000	---	28.10	46.31	18.20	N	9.7
7.038000	---	25.78	50.00	24.22	N	9.8
7.038000	44.97	---	60.00	15.03	N	9.8
10.214000	50.84	---	60.00	9.16	N	9.9
10.250000	---	33.19	50.00	16.81	N	9.9
21.266000	---	31.35	50.00	18.65	N	10.0
22.182000	47.03	---	60.00	12.97	N	10.0

Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.181500	---	36.29	54.42	18.12	1000.0	9.000	N	9.7
0.197500	47.20	---	63.72	16.51	1000.0	9.000	N	9.7