

Prüfbericht-Nr.: Test report no.:	CN248LXM 005	Auftrags-Nr.: Order no.:	168488928	Seite 1 von 18 Page 1 of 18
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2024-06-12	
Auftraggeber: Client:	SHOKZ (SINGAPORE) PTE. LTD. 11 NORTH BUONA VISTA DRIVE #16-09 THE METROPOLIS, SINGAPORE 138589, Singapore			
Prüfgegenstand: Test item:	Bluetooth headset (OpenSwim Pro)			
Bezeichnung / Typ-Nr.: Identification / Type no.:	SHOKZ S710 (Trademark: SHOKZ)			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 3 August 2023 RSS-Gen Issue 5 February 2021			
Wareneingangsdatum: Date of sample receipt:	2024-04-26, 2024-06-12	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no:	A003704963-001~002 A003739221-005			
Prüfzeitraum: Testing period:	2024-04-26 - 2024-06-21			
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:			genehmigt von: authorized by:	
Datum: Date:	2024-08-12	Signed by: Bell Hu	Ausstellungsdatum: Issue date:	2024-08-12 Signed by: Jonathan Li
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2BCD6-S710, IC: 31129-S710, HVIN: SHOKZ S710, PMN: OpenSwim Pro This report is based on original CN248LXM 002 applying for Class 2 Permissive change, because of the optimizations made on antenna circuits, details as below: a) Removing the capacitor C27; b) Replacing the R3 (an Inductance component) with a capacitor. Based on above changes, the Power re-checked and RSE re-tested.			
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
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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. <i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i>
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4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

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Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM PEAK CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 RADIATED SPURIOUS EMISSION

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

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

Appendix A: Test Results of Bluetooth BR & EDR mode

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.

No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. China.

A2LA Cert. No.: 5162.01

FCC Accreditation Designation No.: 694916

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. until
EXA Signal Analyzer, Multi-touch	Keysight	N9010B	MY60241175	2024-09-21
MXG X-Series RF Vector Signal Generator	Keysight	N5182B	MY61250137	2024-09-21
EXG X-Series Microwave Analog Signal Generator	Keysight	N5173B	MY61250141	2024-09-21
DC power supply	Keysight	E3642A	MY61276100	2024-09-21
Power Control Unit	Tonscend	JS0806-4ADC	N/A	2024-09-21
Automation Control Unit	Tonscend	JS0806-2	21C8060396	2024-09-21
Test Software	Tonscend	JS1120-3	N/A	N/A
Control PC	Lenovo	TianYi510S-071MB	Y LX23JMF	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2024-07-25
Signal Analyzer	R&S	FSV 40	101439	2024-07-25
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2024-07-25
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2024-07-25
Amplifier	R&S	SCU-18F	180070	2024-07-25
Amplifier	R&S	SCU40A	100475	2024-07-25
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn	Steatite	QMS-00880	19067	2024-08-27

Antenna (18-40 GHz)				
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2024-08-06
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	2024-06-22

2.3 Traceability

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

2.4 Calibration

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

2.5 Measurement Uncertainty

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

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 No. 362 Huanguan Road Middle, Longhua District, 518110, Shenzhen, P. R. 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 headset (OpenSwim Pro), which supports Bluetooth wireless technology.

Note: This report is based on original report CN248LXM 002 applying for Class 2 Permissive change, because of the optimizations made on antenna circuits, details as below:

- a) Removing the capacitor C27;
- b) Replacing the R3 (an Inductance component) with a capacitor.

Based on above changes, the Power re-checked and RSE re-tested.

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:	OpenSwim Pro
Type Designation:	SHOKZ S710
Trademark:	SHOKZ
FCC ID:	2BCD6-S710
IC:	31129-S710
HVIN:	SHOKZ S710
Operating Voltage:	Internal battery operated (3.85Vdc)
Operating Temperature Range:	0 °C ~ +40 °C
Technical Specification of Bluetooth (dual mode)	
Operating Frequency:	2402 MHz to 2480 MHz
Type of Modulation:	GFSK, $\pi/4$ -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:	-0.5 dBi (Provided by the Client)

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. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|------------------------------|-------------------------|
| - Application Form | - Operation Description |
| - ID Label and Location Info | - Block Diagram |
| - Schematics | - PCB Layout |

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 *SHOKZ S710* 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

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)

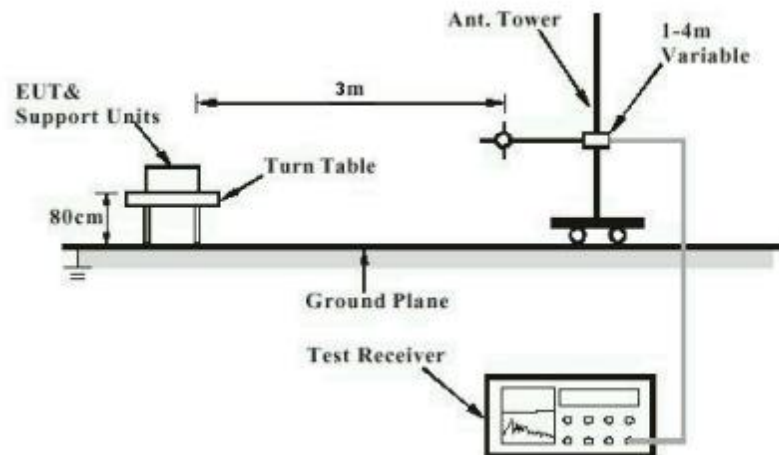


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

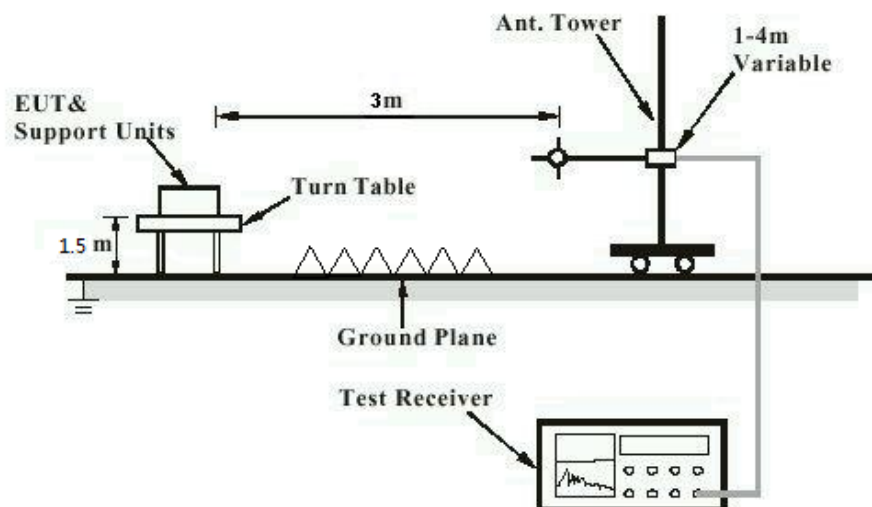


Diagram of Measurement Configuration for Mains Conduction Measurement

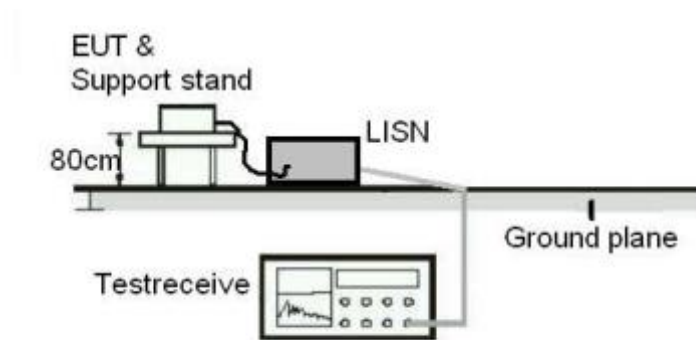
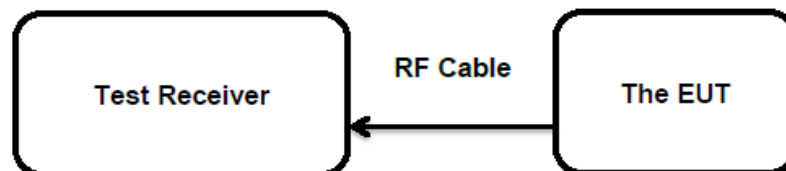


Diagram of Measurement Configuration for Conducted Transmitter Measurement



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
RSS-Gen Clause 6.8

The EUT has an Integral Antenna, the directional gain of antenna is -0.5 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement.

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

Refer to EUT Photo for further details.

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5.1.2 Maximum Peak Conducted Output Power

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.247(b)(1)&(3) RSS-247 Clause 5.4(b)&(d)
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	: 2024-06-17
Input voltage	: Internal battery operated (3.85V DC)
Operation mode	: A, B
Test channel	: Low / Middle / High
Ambient temperature	: 22.8 °C
Relative humidity	: 35 %
Atmospheric pressure	: 101 kPa

For details refer to following test result.

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

Test Mode	Test Channel (MHz)	Measured Peak Power		Conducted Average Power		Limit (W)
		(dBm)	(W)	(dBm)	(W)	
GFSK (BR)	2402.0	5.80	0.0038	5.60	0.0036	< 0.125
	2441.0	6.40	0.0044	6.10	0.0041	
	2480.0	5.60	0.0036	5.30	0.0034	
8DPSK (EDR)	2402.0	5.90	0.0039	4.10	0.0026	< 0.125
	2441.0	6.50	0.0045	4.70	0.0030	
	2480.0	5.80	0.0038	3.90	0.0025	

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

Test Mode	Test Channel (MHz)	Measured Peak Power		Conducted Average Power		Limit (W)
		(dBm)	(W)	(dBm)	(W)	
Bluetooth LE (1 Mbps)	2402	5.70	0.0037	5.60	0.0036	< 1.0
	2440	6.30	0.0043	6.20	0.0042	
	2480	5.60	0.0036	5.40	0.0035	
Bluetooth LE (2 Mbps)	2402	5.80	0.0038	5.60	0.0036	< 1.0
	2440	6.30	0.0043	6.20	0.0042	
	2480	5.40	0.0035	5.30	0.0034	

Max. e.i.r.p.=6.40dBm-0.5dBi=5.9dBm, which is less than 36dBm=4W.

Note:

- 1) The cable loss is taken into account in results.
- 2) Antenna gain(G): -0.5 dBi

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5.1.3 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard : FCC Part 15.247(d) & FCC Part 15.205
RSS-247 Clause 3.3

Basic standard : ANSI C63.10: 2013

Limits : Refer to 15.209(a) of FCC part 15.247(d)
RSS-Gen Section 8.9 & 8.10

Kind of test site : 3m Semi-anechoic Chamber

Test Setup

Date of testing : 2024-04-26 to 2024-06-20

Input voltage : Internal battery operated (3.85V DC)

Operation mode : A, B

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.

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

6 Photographs of the Test Set-Up

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

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Appendix A: Test Results of Bluetooth BR & EDR mode

APPENDIX A: TEST RESULTS OF BLUETOOTH BR & EDR MODE	1
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30 MHz - 1GHz	2
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Appendix A.1: Test Results of Radiated Spurious Emissions

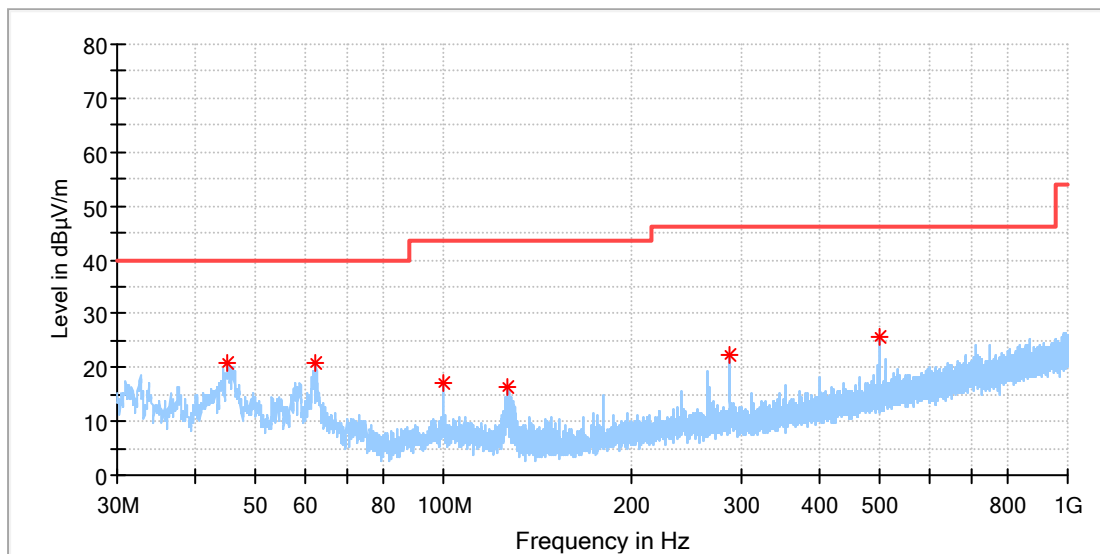
Note:

- 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:	Bluetooth earphone
Model:	SHOKZ S710
Test Mode:	BR_DH5_Mid channel
Order No/Sample No:	168457091/A003739221-005
Test Voltage::	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

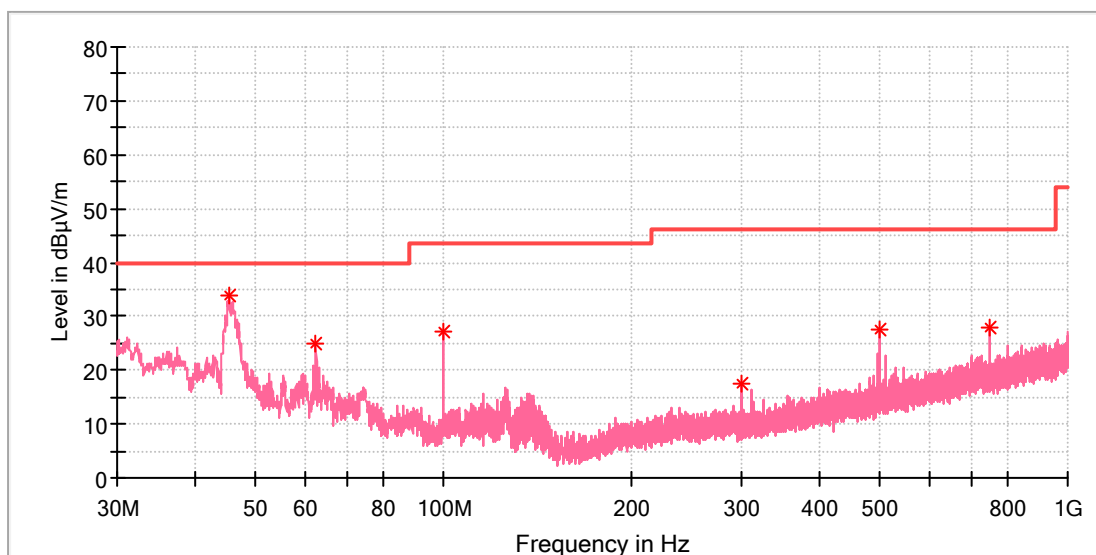
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
45.072308	20.72	40.00	19.28	100.0	H	96.0	-19.1
62.495000	20.90	40.00	19.10	100.0	H	218.0	-19.9
99.989231	17.19	43.50	26.32	100.0	H	279.0	-19.3
126.440385	16.52	43.50	26.98	100.0	H	15.0	-21.8
288.020000	22.35	46.00	23.65	100.0	H	184.0	-16.9
500.002308	25.80	46.00	20.20	100.0	H	348.0	-12.2

Final Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
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)
45.445385	33.83	40.00	6.18	100.0	V	0.0	-19.1
62.495000	25.11	40.00	14.89	100.0	V	49.0	-19.9
99.989231	27.34	43.50	16.16	100.0	V	64.0	-19.3
299.995769	17.61	46.00	28.39	100.0	V	64.0	-16.6
500.002308	27.42	46.00	18.58	100.0	V	89.0	-12.2
750.038462	27.91	46.00	18.09	100.0	V	276.0	-7.6

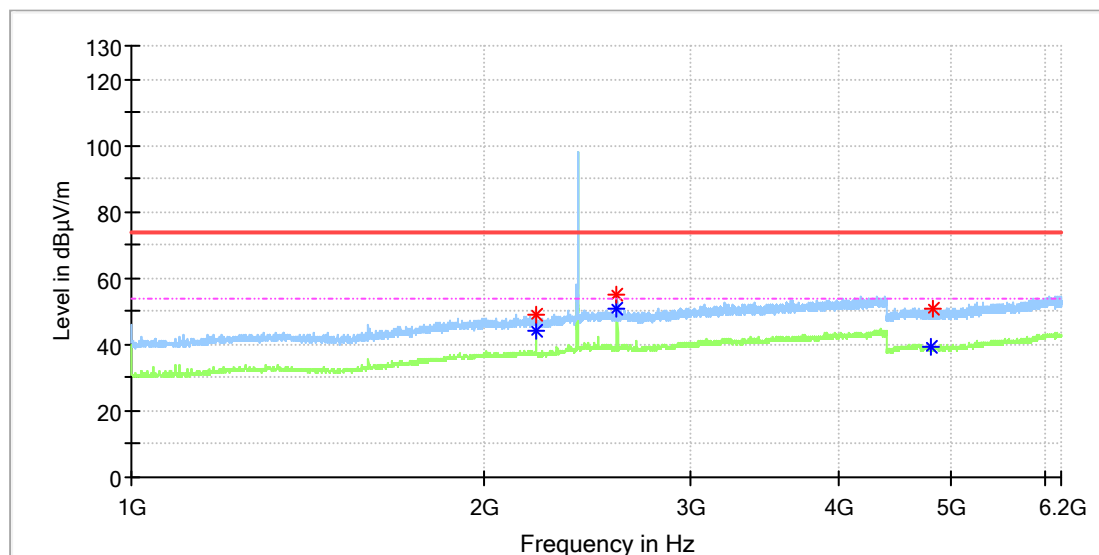
Final_Result

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

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

EUT Information

EUT Name:	Bluetooth earphone
Model:	SHOKZ S710
Test Mode:	BR_DH5_Low channel
Order No/Sample No:	168457091/A003739221-005
Test Voltage::	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

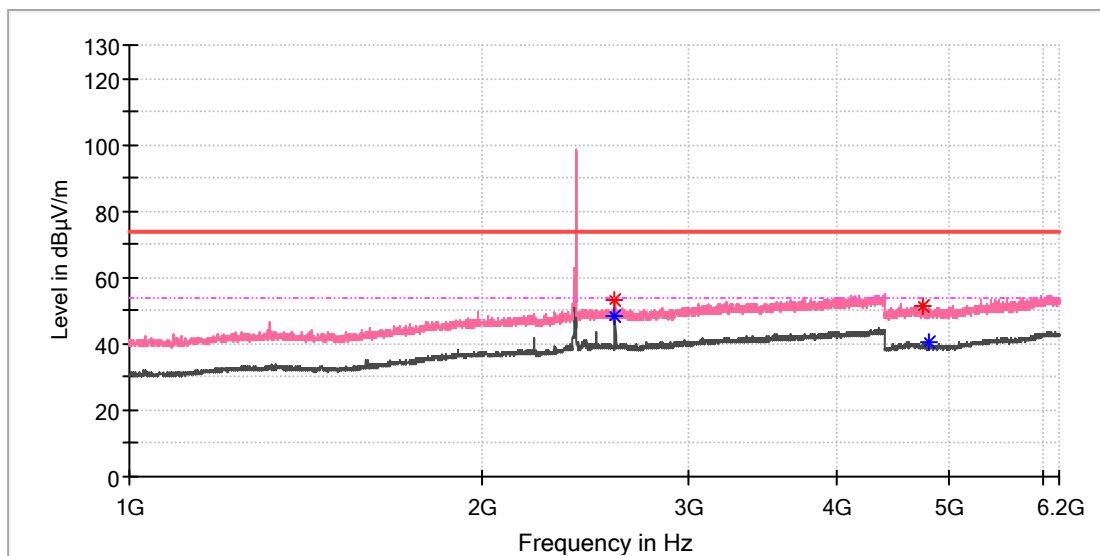
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2210.000000	49.20	---	74.00	24.80	150.0	H	136.0	6.3
2210.000000	---	44.25	54.00	9.75	150.0	H	136.0	6.3
2594.000000	55.32	---	74.00	18.68	150.0	H	179.0	7.4
2594.500000	---	50.97	54.00	3.03	150.0	H	179.0	7.4
4801.000000	---	39.53	54.00	14.47	150.0	H	108.0	11.8
4821.500000	50.73	---	74.00	23.27	150.0	H	23.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

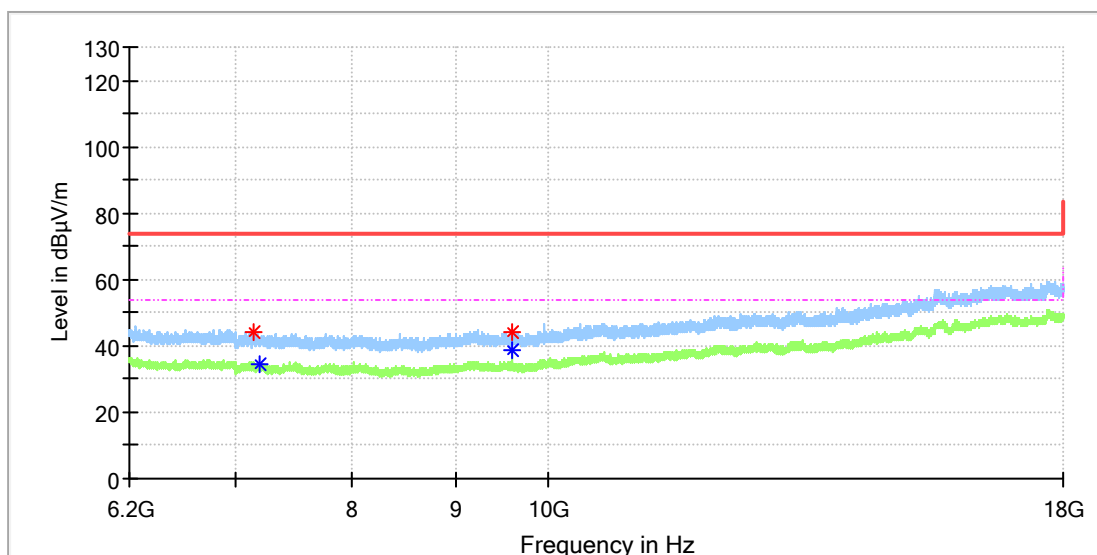
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2594.000000	53.23	---	74.00	20.77	150.0	V	322.0	7.4
2594.500000	---	48.10	54.00	5.90	150.0	V	322.0	7.4
4752.000000	51.31	---	74.00	22.69	150.0	V	179.0	11.8
4801.000000	---	40.53	54.00	13.47	150.0	V	179.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

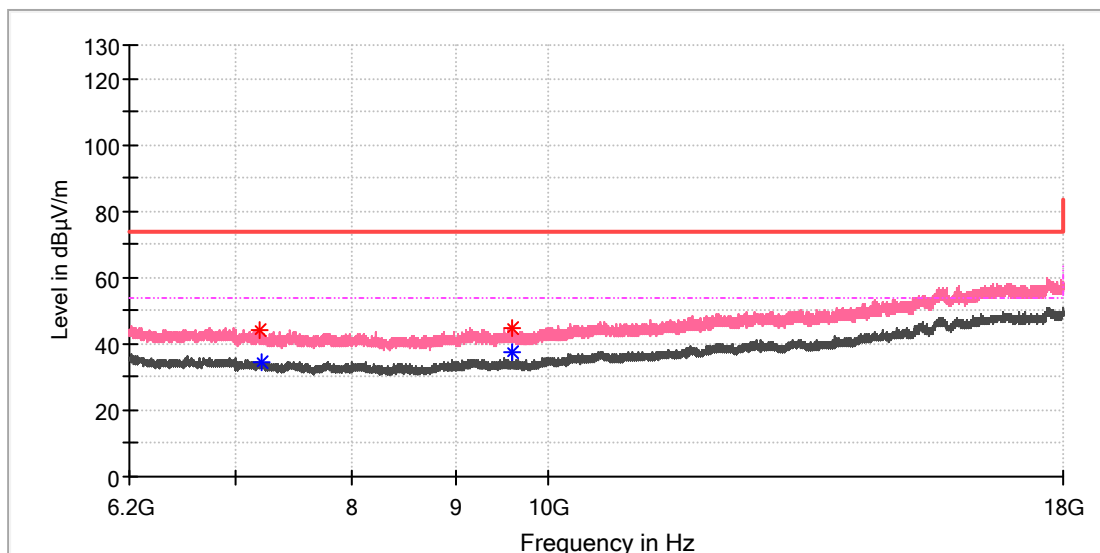
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7150.391667	43.96	---	74.00	30.04	150.0	H	106.0	8.7
7200.050000	---	34.60	54.00	19.40	150.0	H	336.0	8.8
9601.841667	44.08	---	74.00	29.92	150.0	H	106.0	10.4
9602.333333	---	38.42	54.00	15.58	150.0	H	251.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

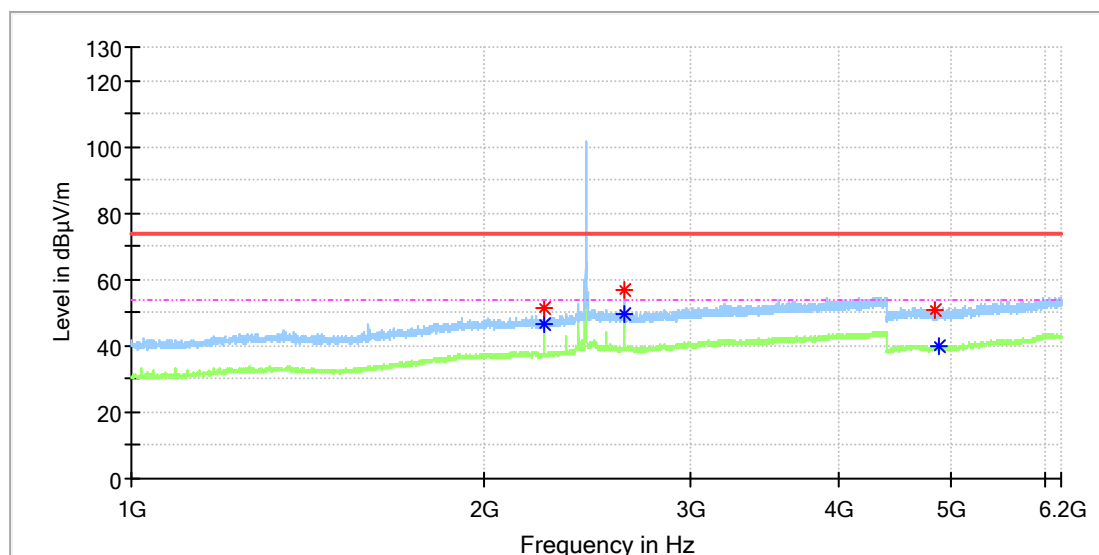
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7200.050000	44.39	---	74.00	29.61	150.0	V	0.0	8.8
7213.816667	---	34.52	54.00	19.48	150.0	V	82.0	8.7
9588.566667	44.63	---	74.00	29.37	150.0	V	226.0	10.3
9601.841667	---	37.58	54.00	16.42	150.0	V	249.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

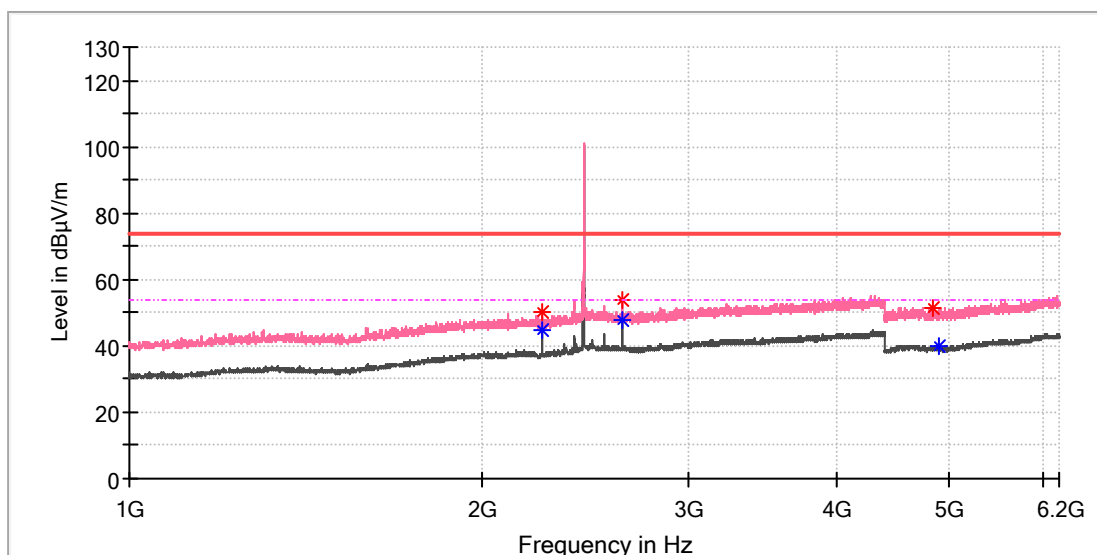
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2249.000000	51.12	---	74.00	22.88	150.0	H	359.0	6.5
2249.000000	---	46.69	54.00	7.31	150.0	H	359.0	6.5
2633.000000	---	49.77	54.00	4.23	150.0	H	13.0	7.5
2633.500000	56.74	---	74.00	17.26	150.0	H	0.0	7.5
4840.500000	50.72	---	74.00	23.28	150.0	H	89.0	11.8
4879.000000	---	39.99	54.00	14.01	150.0	H	114.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

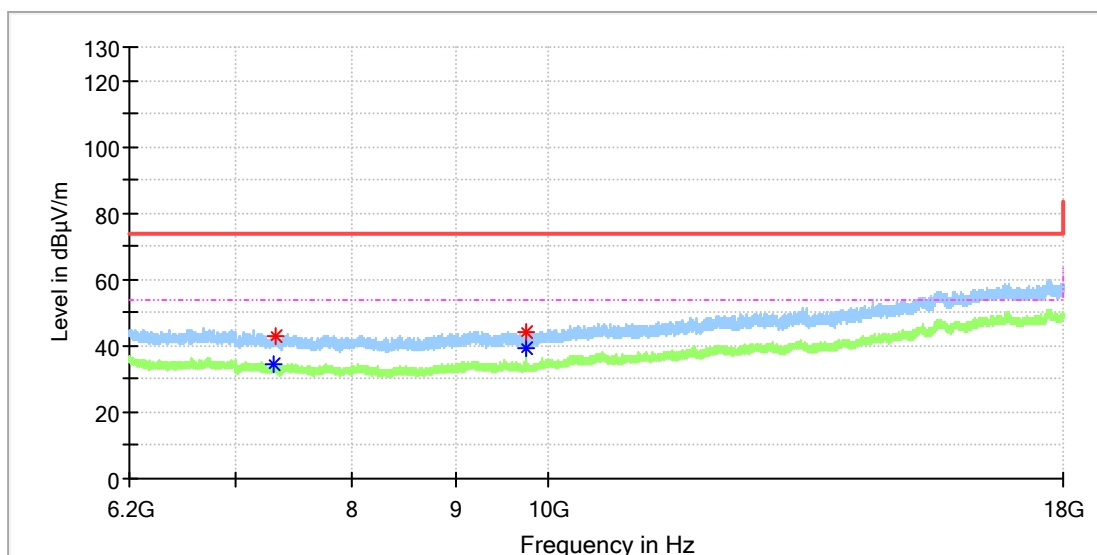
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2248.500000	50.15	---	74.00	23.85	150.0	V	193.0	6.5
2249.000000	---	44.57	54.00	9.43	150.0	V	188.0	6.5
2632.500000	---	47.54	54.00	6.46	150.0	V	188.0	7.5
2633.000000	54.00	---	74.00	20.00	150.0	V	175.0	7.5
4848.500000	51.63	---	74.00	22.37	150.0	V	197.0	11.8
4897.000000	---	40.11	54.00	13.89	150.0	V	1.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

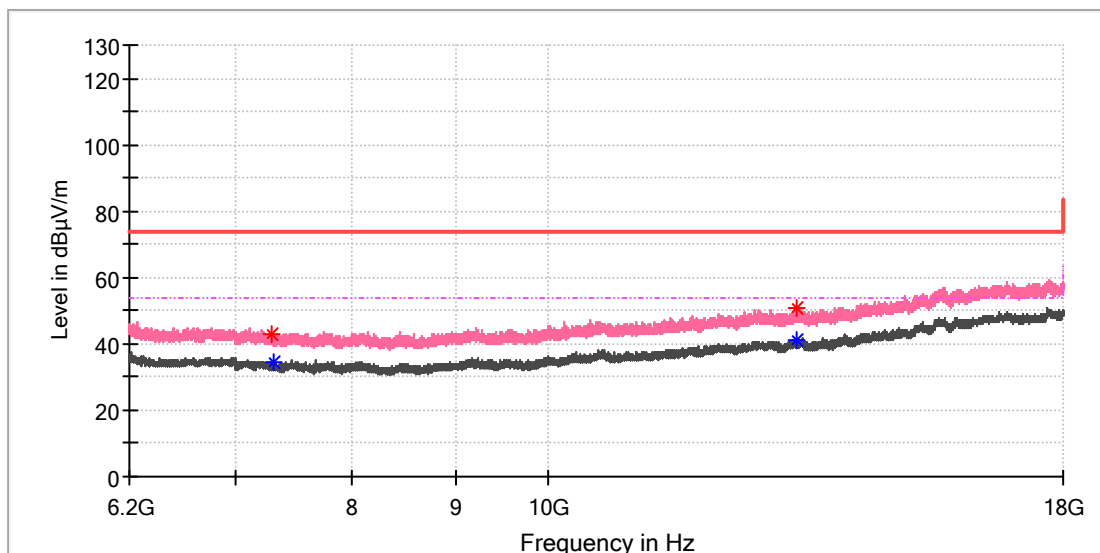
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7317.066667	---	34.71	54.00	19.29	150.0	H	218.0	8.2
7321.491667	42.75	---	74.00	31.25	150.0	H	0.0	8.2
9757.700000	---	39.51	54.00	14.49	150.0	H	49.0	10.4
9758.683333	43.99	---	74.00	30.01	150.0	H	108.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

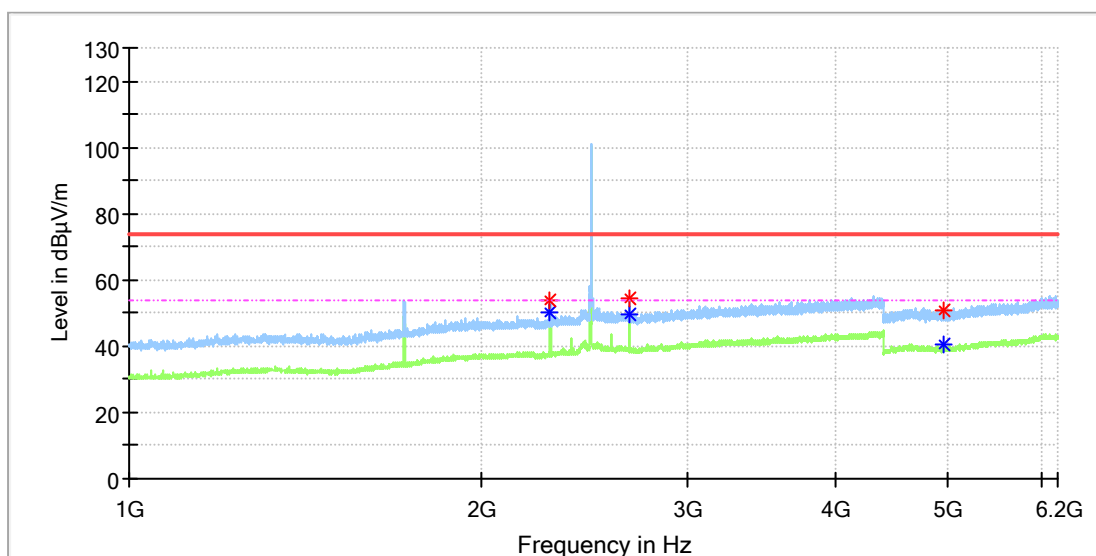
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7300.350000	42.85	---	74.00	31.15	150.0	V	345.0	8.3
7308.216667	---	34.34	54.00	19.66	150.0	V	345.0	8.2
13271.150000	---	41.29	54.00	12.71	150.0	V	310.0	15.5
13289.833333	50.79	---	74.00	23.21	150.0	V	239.0	15.5

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_High channel
Order No./Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

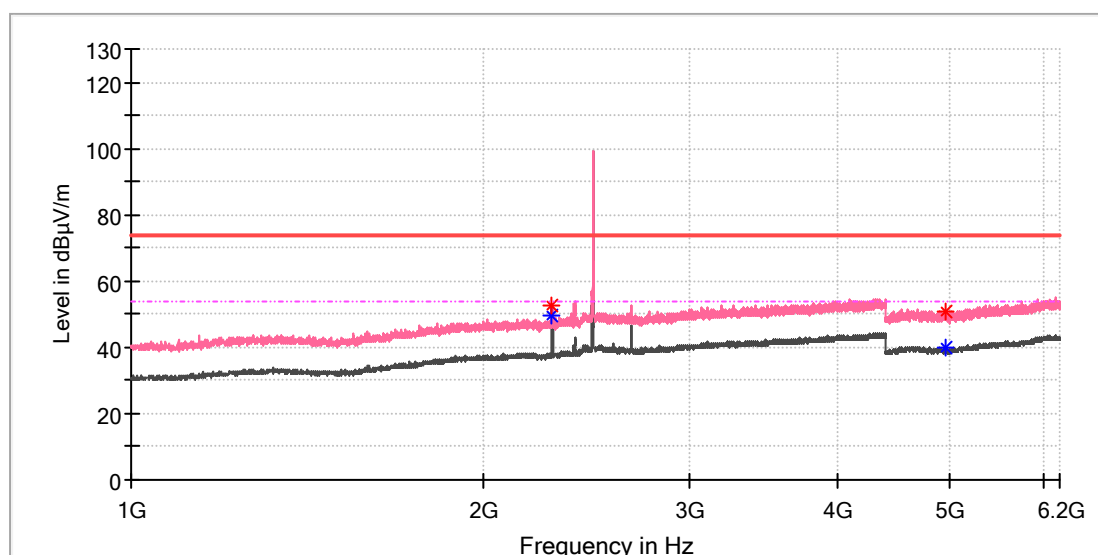
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2287.500000	---	49.97	54.00	4.03	150.0	H	11.0	6.4
2287.500000	53.93	---	74.00	20.07	150.0	H	11.0	6.4
2672.500000	54.27	---	74.00	19.73	150.0	H	359.0	7.5
2672.500000	---	49.29	54.00	4.71	150.0	H	359.0	7.5
4956.500000	---	40.30	54.00	13.70	150.0	H	116.0	11.8
4959.500000	50.95	---	74.00	23.05	150.0	H	350.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

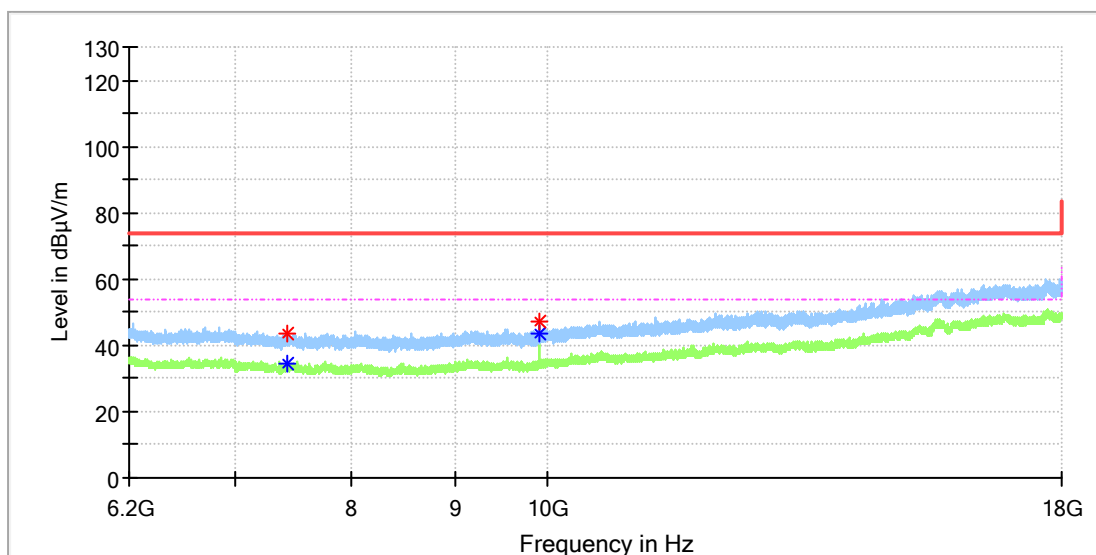
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2288.000000	52.66	---	74.00	21.34	150.0	V	172.0	6.4
2288.000000	---	49.55	54.00	4.45	150.0	V	172.0	6.4
4950.000000	50.61	---	74.00	23.39	150.0	V	82.0	11.8
4957.000000	---	39.98	54.00	14.02	150.0	V	190.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

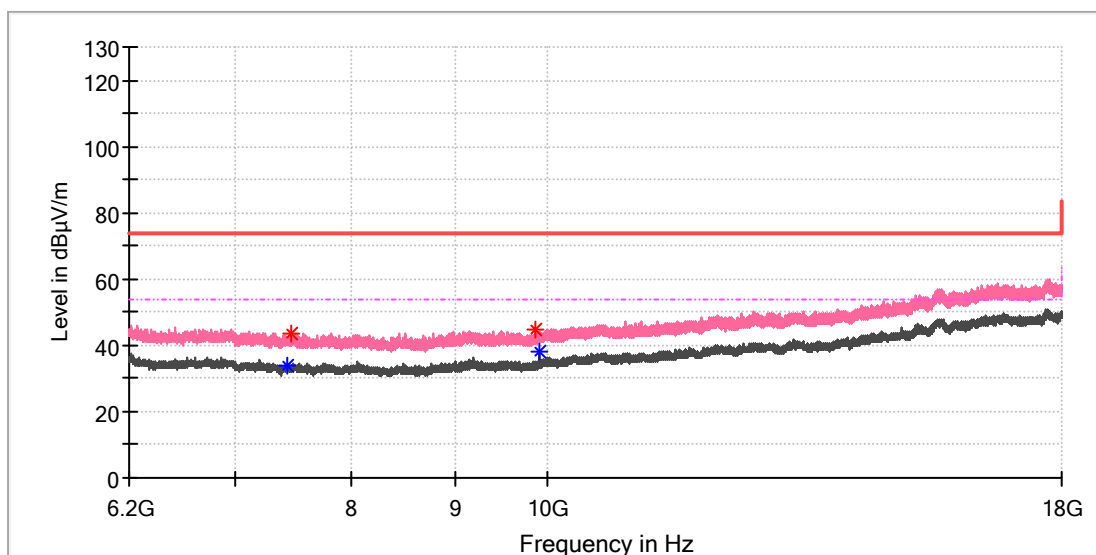
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7423.266667	43.32	---	74.00	30.68	150.0	H	304.0	8.4
7423.266667	---	34.60	54.00	19.40	150.0	H	304.0	8.4
9913.558333	47.29	---	74.00	26.71	150.0	H	240.0	10.8
9913.558333	---	43.65	54.00	10.35	150.0	H	240.0	10.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
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)
7425.233333	---	33.90	54.00	20.10	150.0	V	127.0	8.4
7463.583333	43.43	---	74.00	30.57	150.0	V	274.0	8.6
9866.850000	44.73	---	74.00	29.27	150.0	V	176.0	10.6
9914.050000	---	38.22	54.00	15.78	150.0	V	53.0	10.8

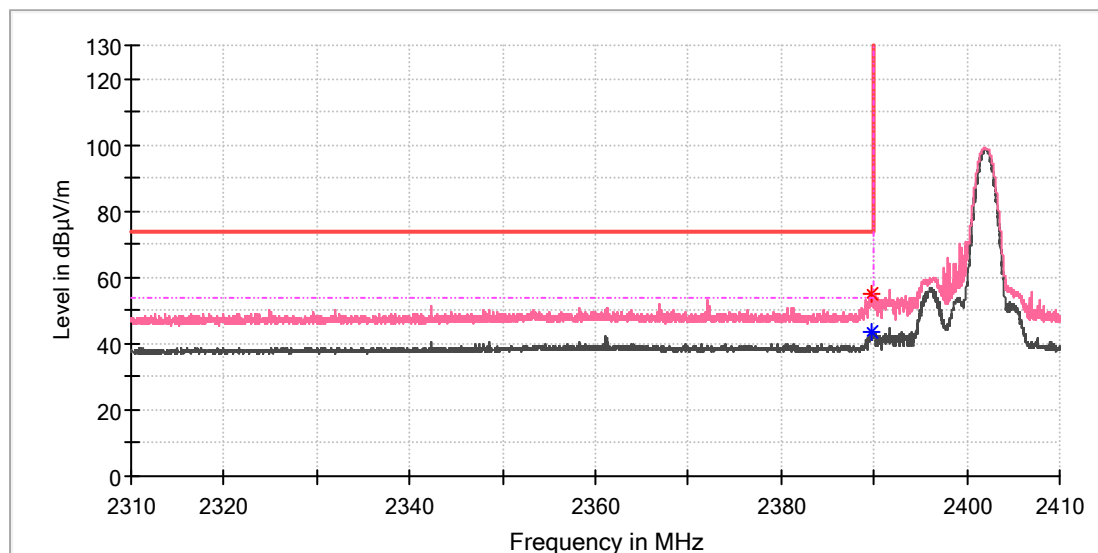
Final_Result

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

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

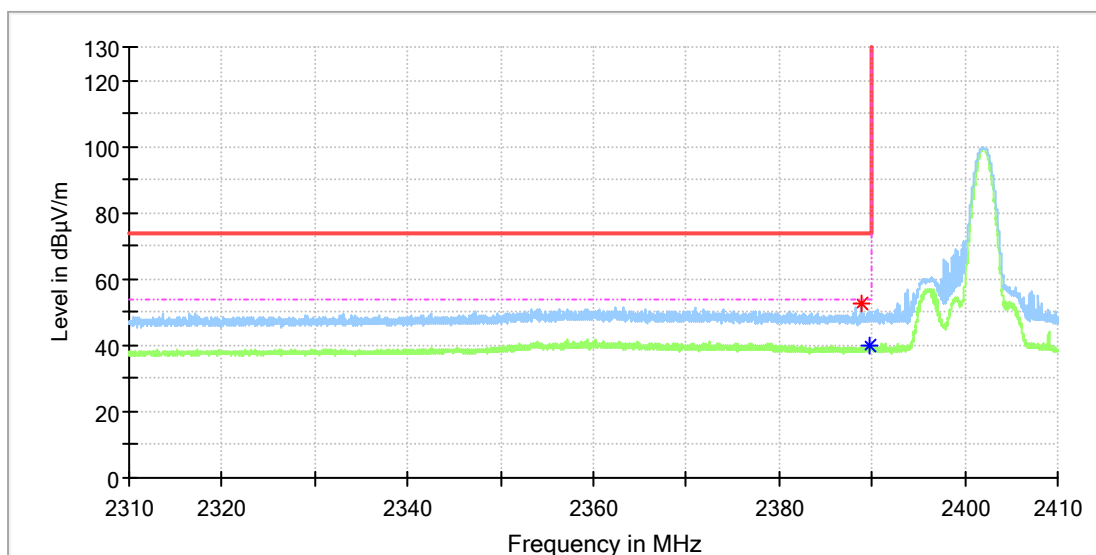
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.676471	55.21	---	74.00	18.79	150.0	V	256.0	7.0
2389.676471	---	43.27	54.00	10.73	150.0	V	256.0	7.0

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

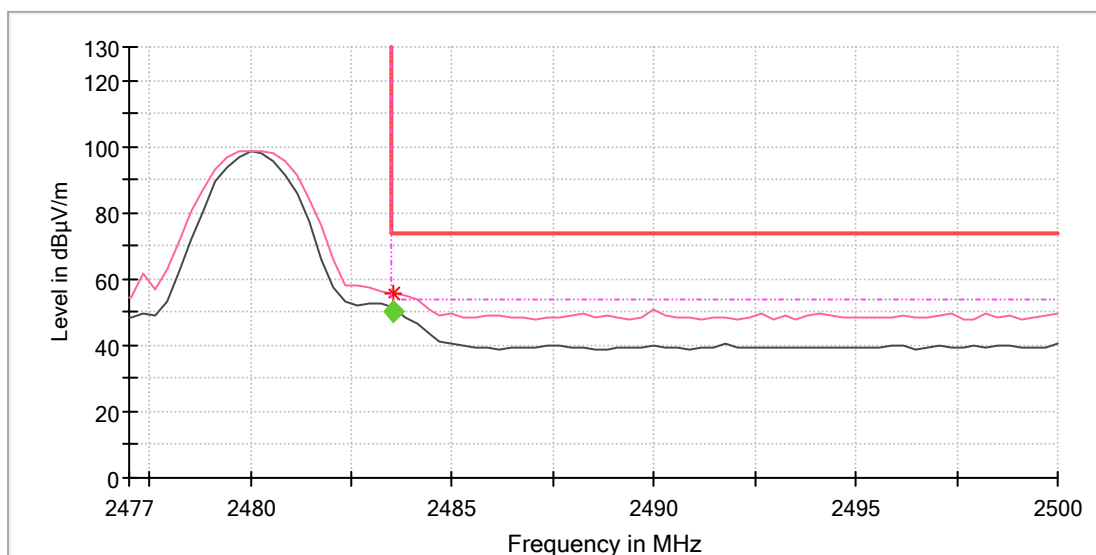
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.779412	52.39	---	74.00	21.61	150.0	H	20.0	7.0
2389.794118	---	40.13	54.00	13.87	150.0	H	241.0	7.0

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

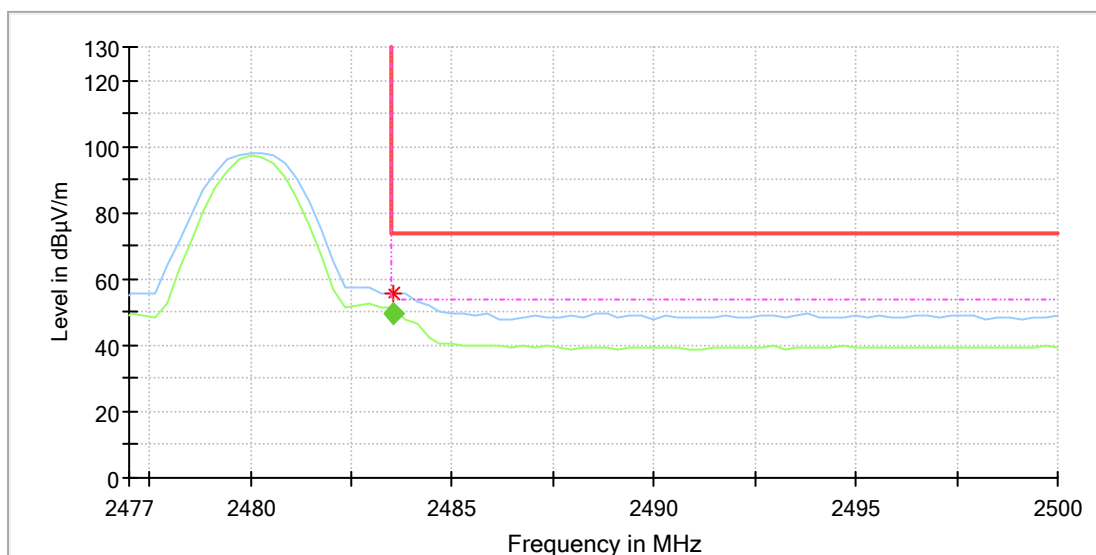
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	55.73	---	74.00	18.27	150.0	V	317.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	50.07	54.00	3.93	145.0	V	312.0	7.4

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BR_DH5_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
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)
2483.529412	55.63	---	74.00	18.37	150.0	H	295.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	49.79	54.00	4.21	149.0	H	290.0	7.4

Appendix B: Test Results of Bluetooth Low Energy

APPENDIX B: TEST RESULTS OF BLUETOOTH LOW ENERGY	1
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30 MHz - 1GHz	2
1GHz - 18GHz	4
APPENDIX B.6: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS.....	16

Appendix B.1: Test Results of Radiated Spurious Emissions

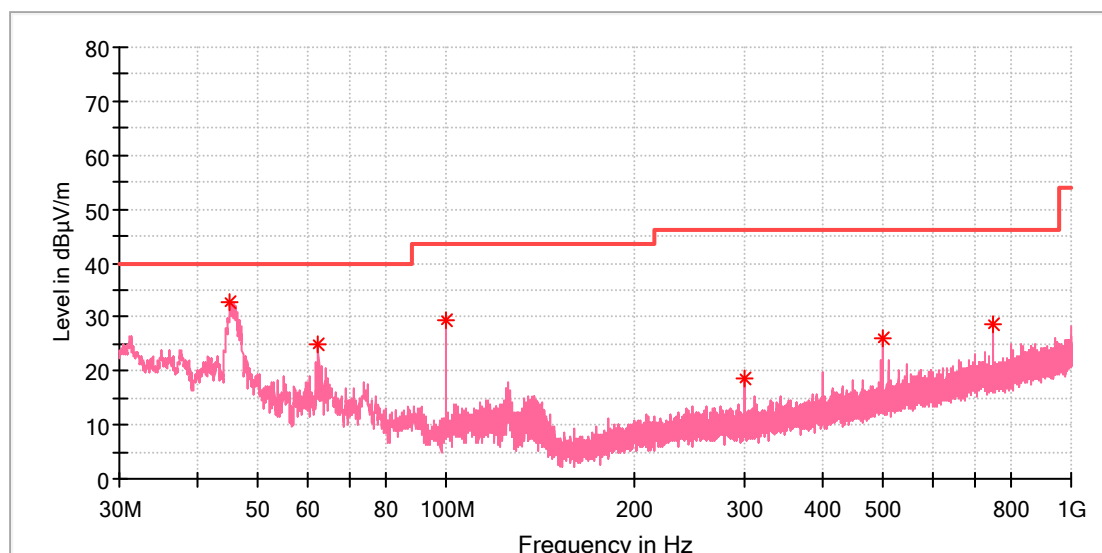
Note:

- 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: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

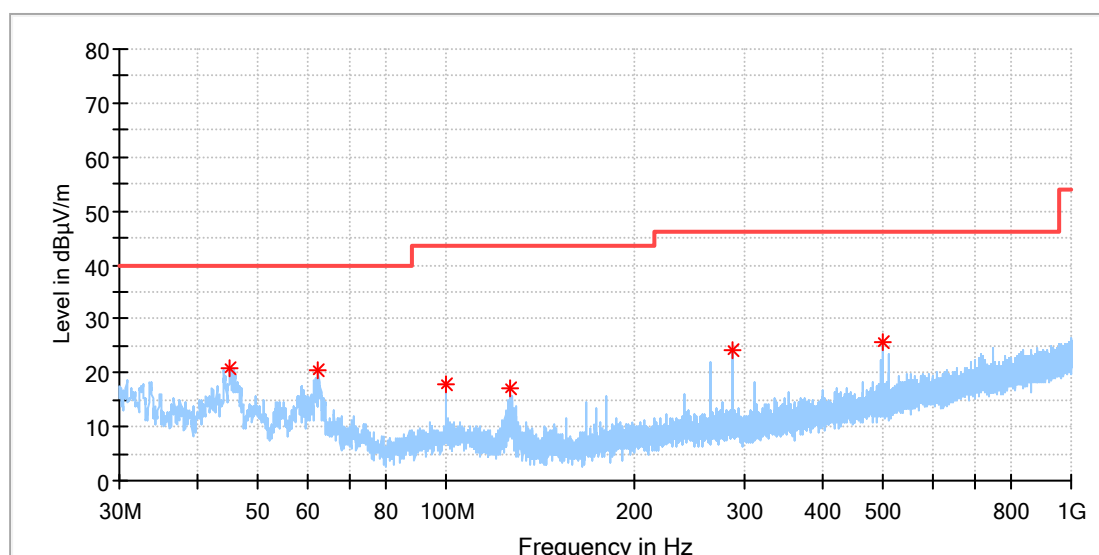
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
45.072308	32.79	40.00	7.21	100.0	V	67.0	-19.1
62.495000	24.91	40.00	15.09	100.0	V	74.0	-19.9
99.989231	29.28	43.50	14.22	100.0	V	57.0	-19.3
299.995769	18.77	46.00	27.23	100.0	V	90.0	-16.6
500.002308	26.13	46.00	19.87	100.0	V	41.0	-12.2
750.038462	28.64	46.00	17.36	100.0	V	74.0	-7.6

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
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)
45.072308	20.99	40.00	19.01	100.0	H	345.0	-19.1
62.495000	20.34	40.00	19.66	100.0	H	20.0	-19.9
100.026539	17.84	43.50	25.66	100.0	H	111.0	-19.3
126.403077	16.99	43.50	26.51	100.0	H	183.0	-21.8
288.020000	24.13	46.00	21.87	100.0	H	111.0	-16.9
500.002308	25.76	46.00	20.24	100.0	H	283.0	-12.2

Final_Result

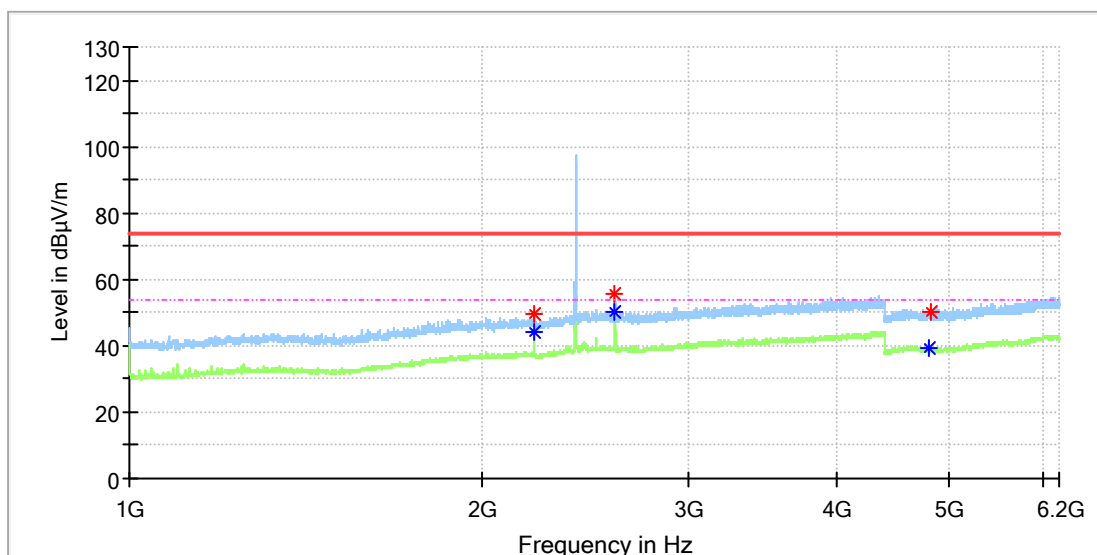
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

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

EUT Information

EUT Name:	Bluetooth earphone
Model:	SHOKZ S710
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168457091/A003739221-005
Test Voltage::	Battery
Remark:	Temp 22 Humi:52%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

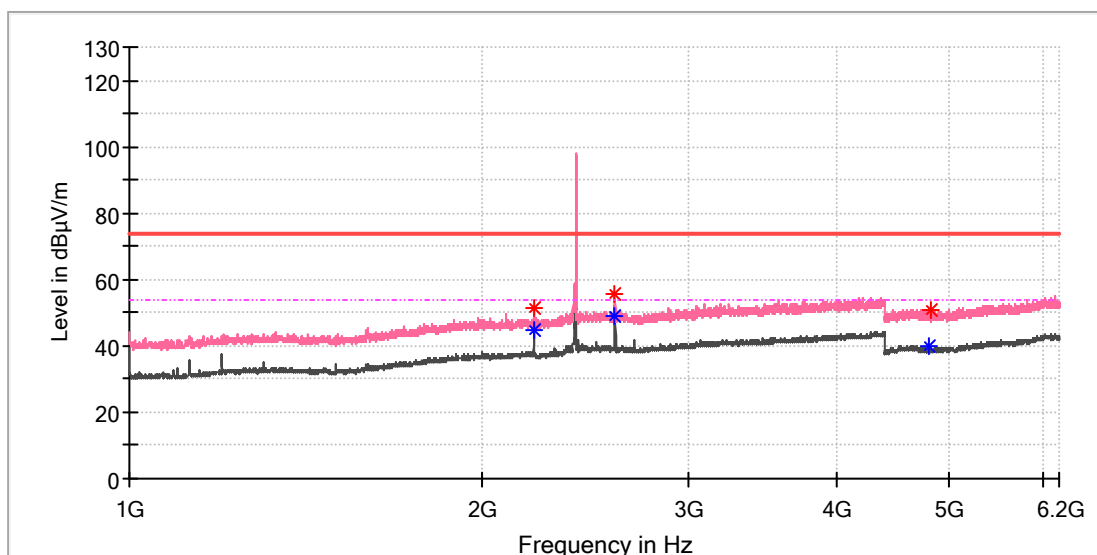
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2209.500000	49.33	---	74.00	24.67	150.0	H	209.0	6.3
2210.000000	---	44.19	54.00	9.81	150.0	H	102.0	6.3
2593.500000	---	50.30	54.00	3.70	150.0	H	180.0	7.4
2594.500000	55.53	---	74.00	18.47	150.0	H	127.0	7.4
4801.000000	---	39.45	54.00	14.55	150.0	H	209.0	11.8
4819.500000	50.24	---	74.00	23.76	150.0	H	95.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

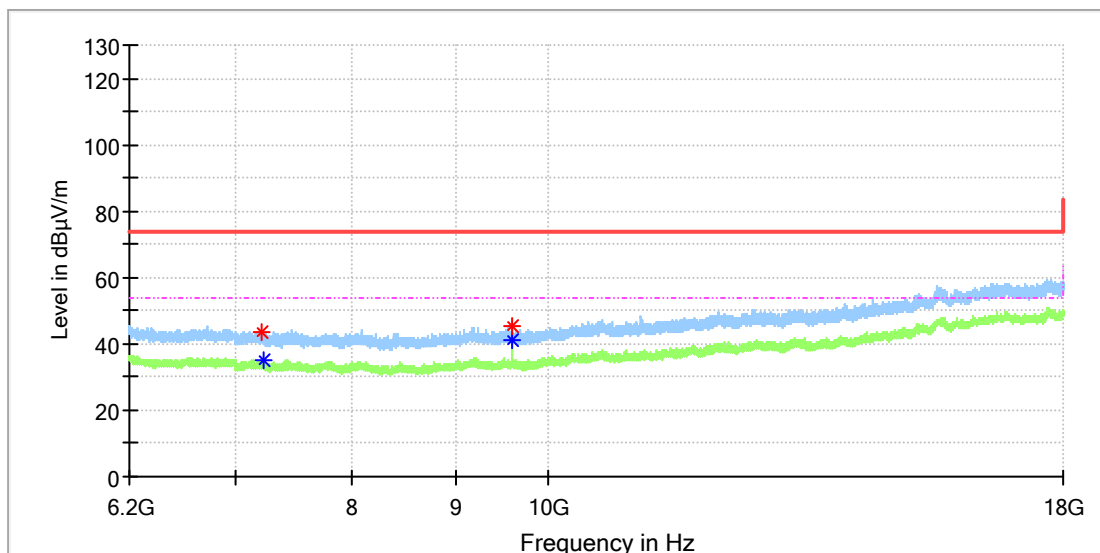
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2210.000000	51.29	---	74.00	22.71	150.0	V	341.0	6.3
2210.000000	---	44.89	54.00	9.11	150.0	V	341.0	6.3
2593.500000	---	48.97	54.00	5.03	150.0	V	268.0	7.4
2594.000000	55.33	---	74.00	18.67	150.0	V	308.0	7.4
4800.500000	---	39.77	54.00	14.23	150.0	V	329.0	11.8
4820.500000	50.52	---	74.00	23.48	150.0	V	155.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

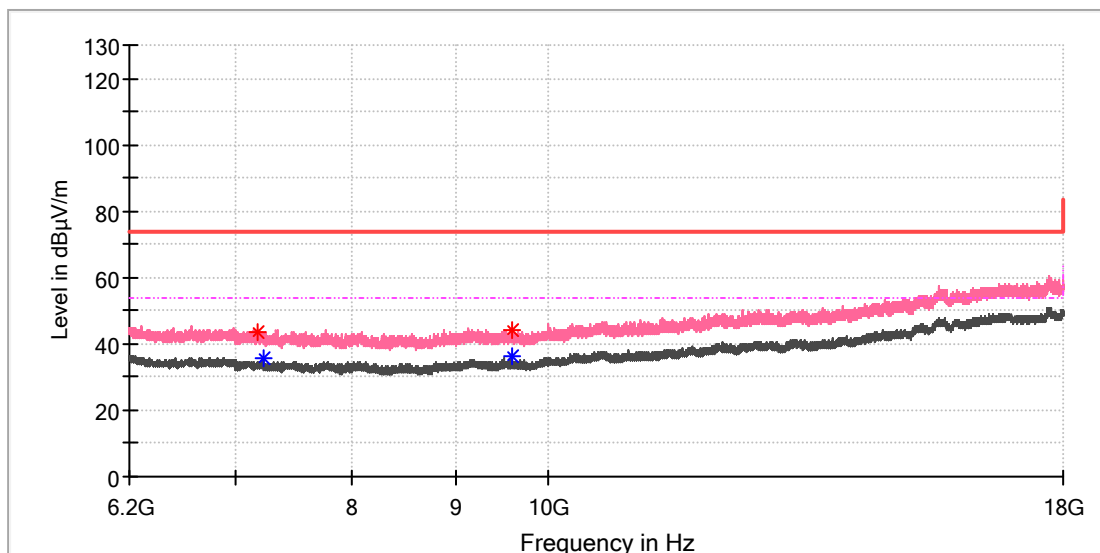
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.950000	43.34	---	74.00	30.66	150.0	H	213.0	8.8
7222.175000	---	35.05	54.00	18.95	150.0	H	142.0	8.7
9601.841667	45.64	---	74.00	28.36	150.0	H	105.0	10.4
9601.841667	---	41.37	54.00	12.63	150.0	H	105.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

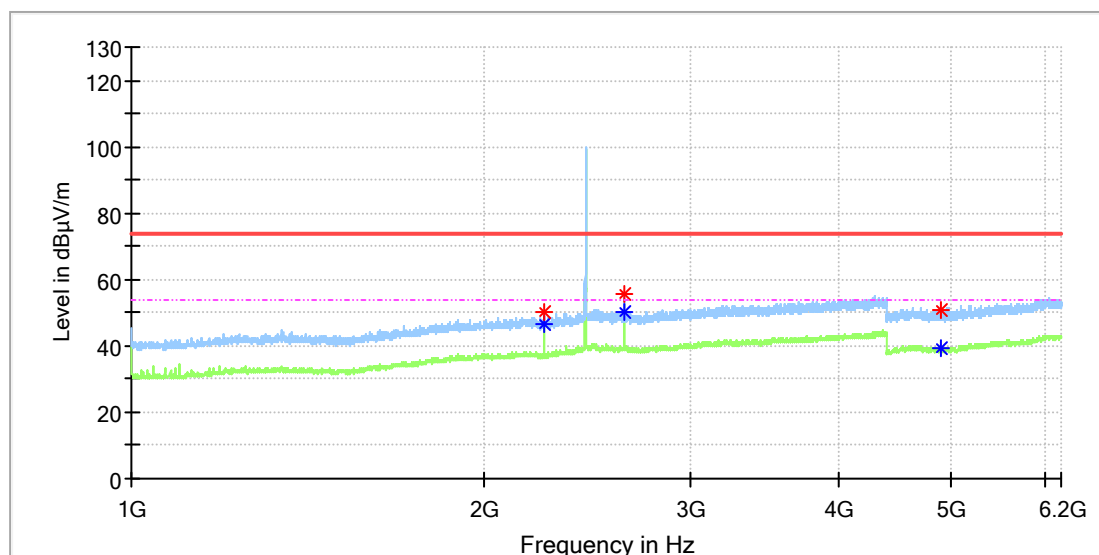
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7185.300000	43.55	---	74.00	30.45	150.0	V	161.0	8.8
7220.700000	---	35.40	54.00	18.60	150.0	V	210.0	8.7
9601.841667	---	36.04	54.00	17.96	150.0	V	222.0	10.4
9607.250000	43.91	---	74.00	30.09	150.0	V	39.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
 Model: SHOKZ S710
 Test Mode: BLE 1M_Mid channel
 Order No/Sample No: 168457091/A003739221-005
 Test Voltage:: Battery
 Remark: Temp 22 Humi:52%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical_Freqs

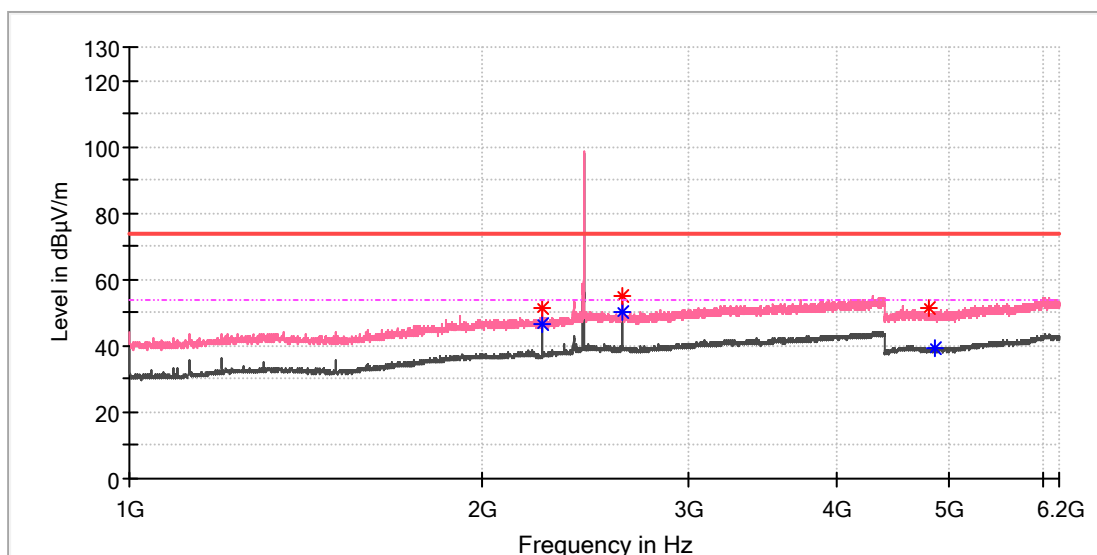
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2248.000000	---	46.64	54.00	7.36	150.0	H	214.0	6.4
2248.500000	50.29	---	74.00	23.71	150.0	H	214.0	6.5
2631.500000	---	50.14	54.00	3.86	150.0	H	131.0	7.5
2632.000000	55.73	---	74.00	18.27	150.0	H	131.0	7.5
4890.500000	51.01	---	74.00	22.99	150.0	H	57.0	11.8
4897.500000	---	39.59	54.00	14.41	150.0	H	9.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

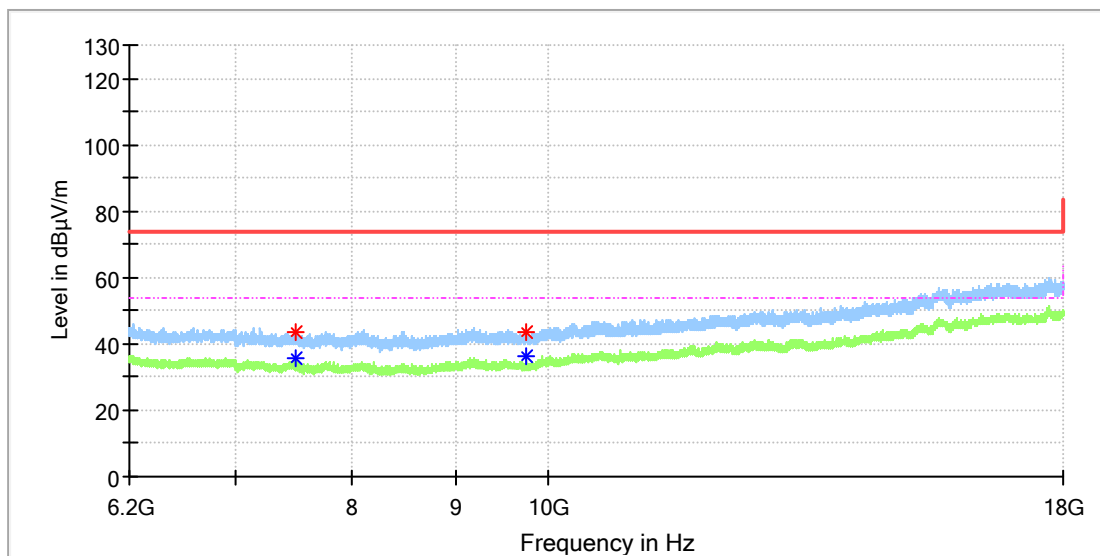
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2247.500000	51.43	---	74.00	22.57	150.0	V	206.0	6.4
2248.000000	---	46.26	54.00	7.74	150.0	V	195.0	6.4
2631.500000	---	50.35	54.00	3.65	150.0	V	266.0	7.5
2632.000000	55.32	---	74.00	18.68	150.0	V	246.0	7.5
4809.000000	51.17	---	74.00	22.83	150.0	V	32.0	11.8
4861.500000	---	39.43	54.00	14.57	150.0	V	280.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

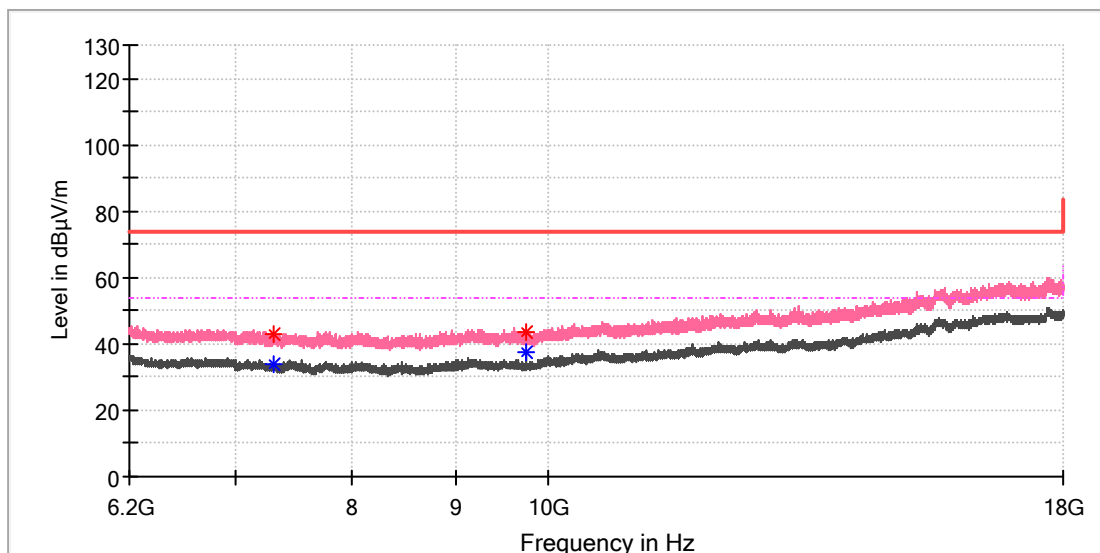
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7500.950000	---	35.56	54.00	18.44	150.0	H	107.0	8.7
7503.900000	43.26	---	74.00	30.74	150.0	H	190.0	8.7
9753.766667	43.30	---	74.00	30.70	150.0	H	59.0	10.4
9754.258333	---	36.47	54.00	17.53	150.0	H	355.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

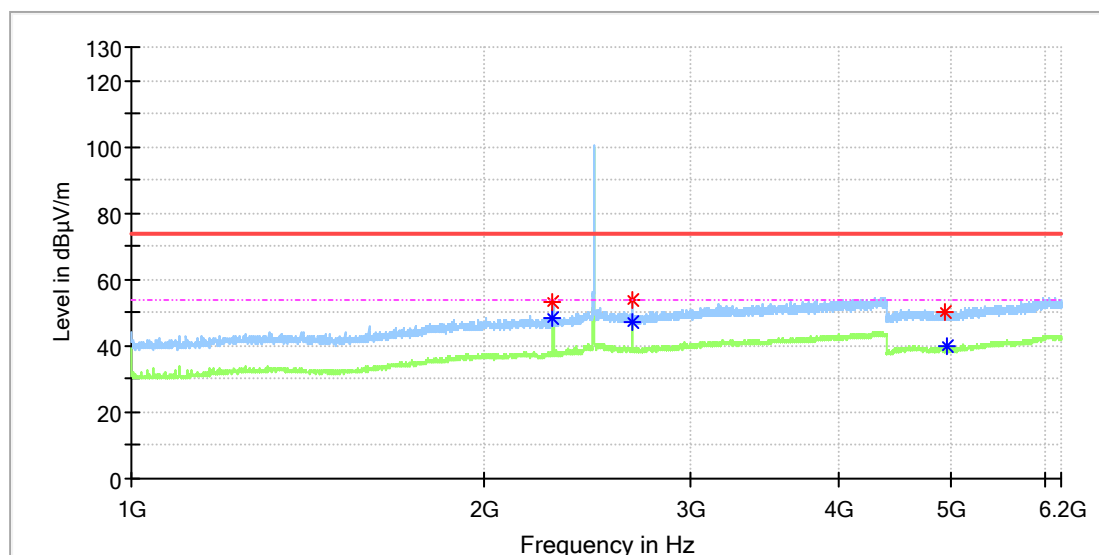
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7308.708333	43.05	---	74.00	30.95	150.0	V	60.0	8.2
7316.083333	---	33.89	54.00	20.11	150.0	V	316.0	8.2
9753.766667	43.77	---	74.00	30.23	150.0	V	232.0	10.4
9754.258333	---	37.45	54.00	16.55	150.0	V	232.0	10.4

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
 Model: SHOKZ S710
 Test Mode: BLE 1M_High channel
 Order No/Sample No: 168457091/A003739221-005
 Test Voltage:: Battery
 Remark: Temp 22 Humi:52%
 Test Standard: FCC 15.247
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical_Freqs

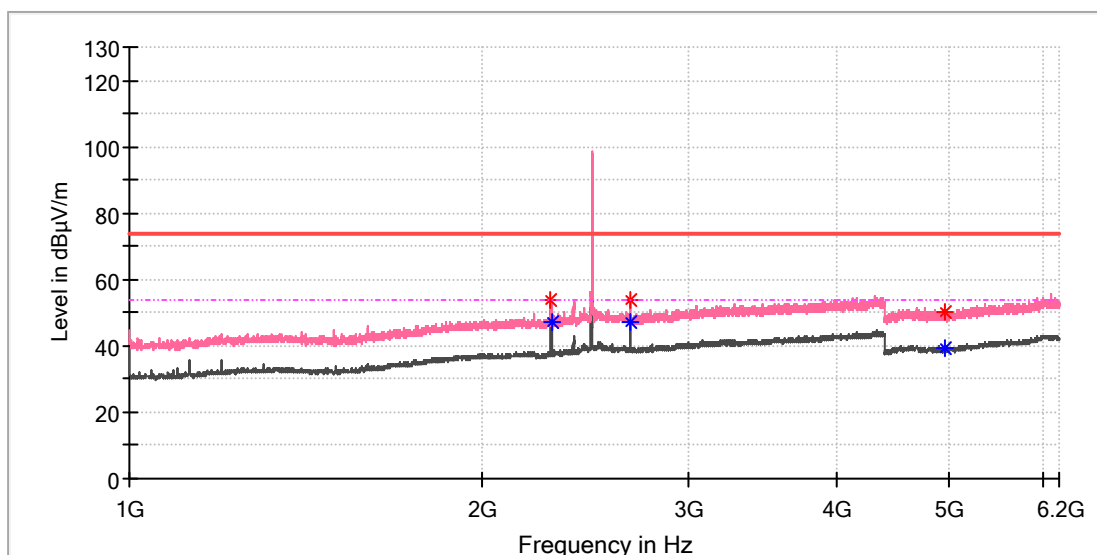
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2287.500000	---	48.13	54.00	5.87	150.0	H	213.0	6.4
2288.000000	53.47	---	74.00	20.53	150.0	H	213.0	6.4
2671.500000	---	47.31	54.00	6.69	150.0	H	175.0	7.5
2672.500000	53.95	---	74.00	20.05	150.0	H	127.0	7.5
4942.000000	50.11	---	74.00	23.89	150.0	H	189.0	11.8
4956.500000	---	39.72	54.00	14.28	150.0	H	33.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

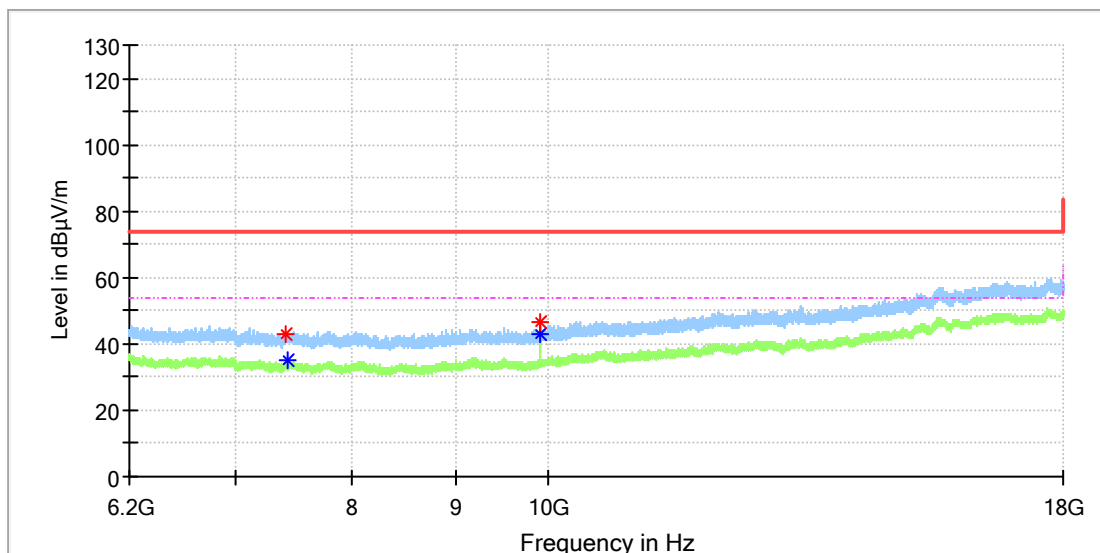
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2287.500000	53.98	---	74.00	20.02	150.0	V	274.0	6.4
2288.500000	---	47.45	54.00	6.55	150.0	V	274.0	6.4
2671.500000	---	47.35	54.00	6.65	150.0	V	52.0	7.5
2672.000000	53.58	---	74.00	20.42	150.0	V	52.0	7.5
4953.500000	50.43	---	74.00	23.57	150.0	V	319.0	11.8
4957.000000	---	39.58	54.00	14.42	150.0	V	194.0	11.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

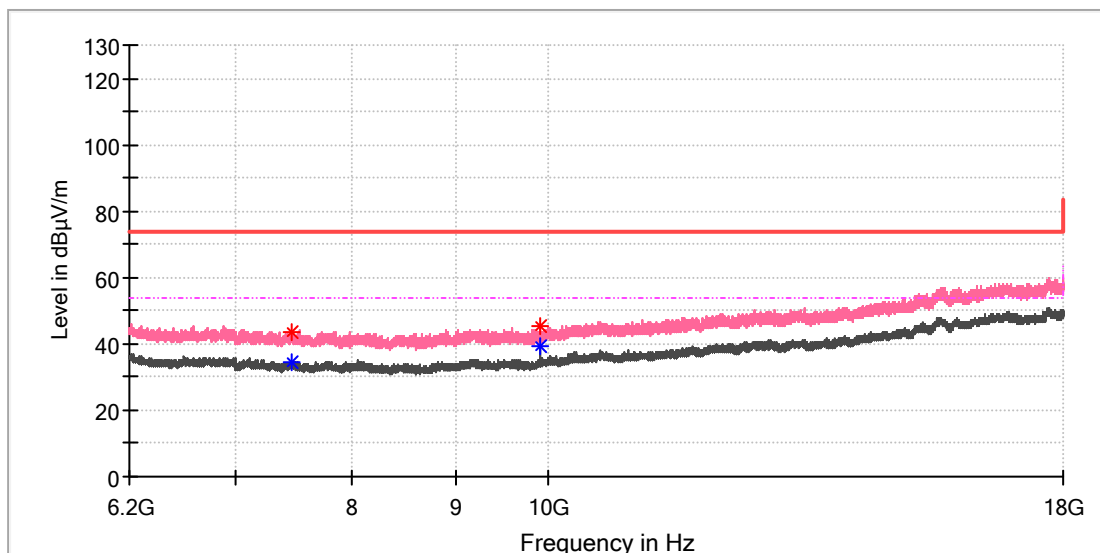
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7418.350000	43.17	---	74.00	30.83	150.0	H	43.0	8.3
7434.083333	---	35.08	54.00	18.92	150.0	H	67.0	8.4
9914.050000	46.33	---	74.00	27.67	150.0	H	107.0	10.8
9914.050000	---	42.88	54.00	11.12	150.0	H	107.0	10.8

Final_Result

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
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)
7461.125000	43.77	---	74.00	30.23	150.0	V	327.0	8.5
7466.041667	---	34.48	54.00	19.52	150.0	V	338.0	8.6
9913.558333	45.34	---	74.00	28.66	150.0	V	231.0	10.8
9914.050000	---	39.44	54.00	14.56	150.0	V	254.0	10.8

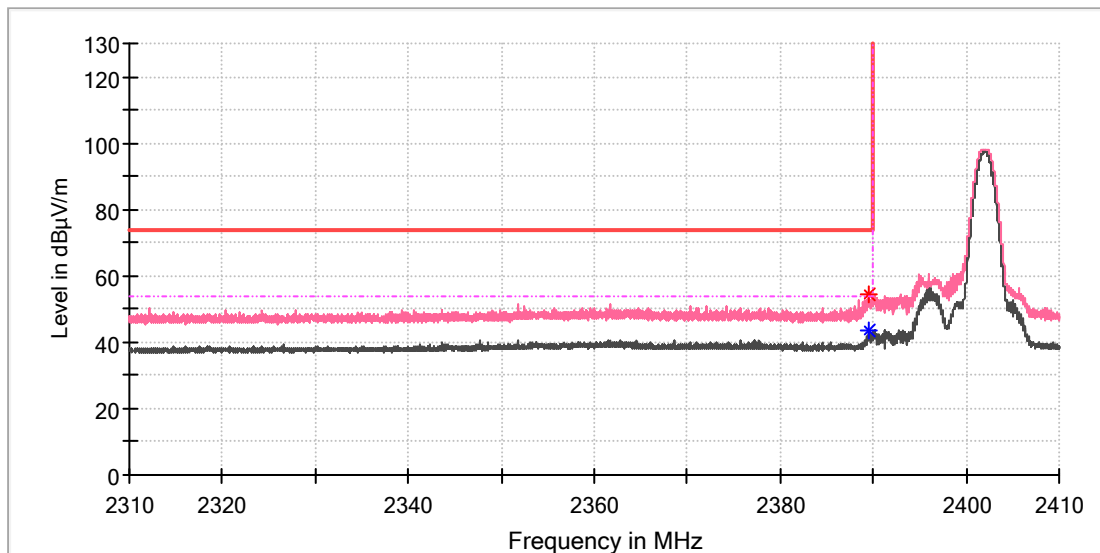
Final_Result

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

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

EUT Information

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

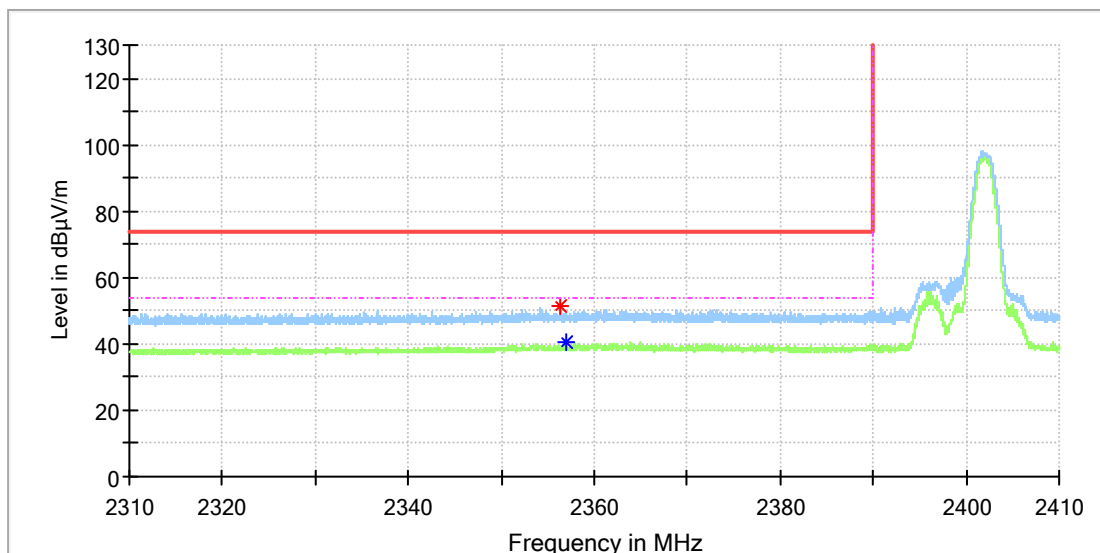
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2389.441177	---	43.47	54.00	10.53	150.0	V	258.0	7.0
2389.529412	54.47	---	74.00	19.53	150.0	V	265.0	7.0

Final_Result

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

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

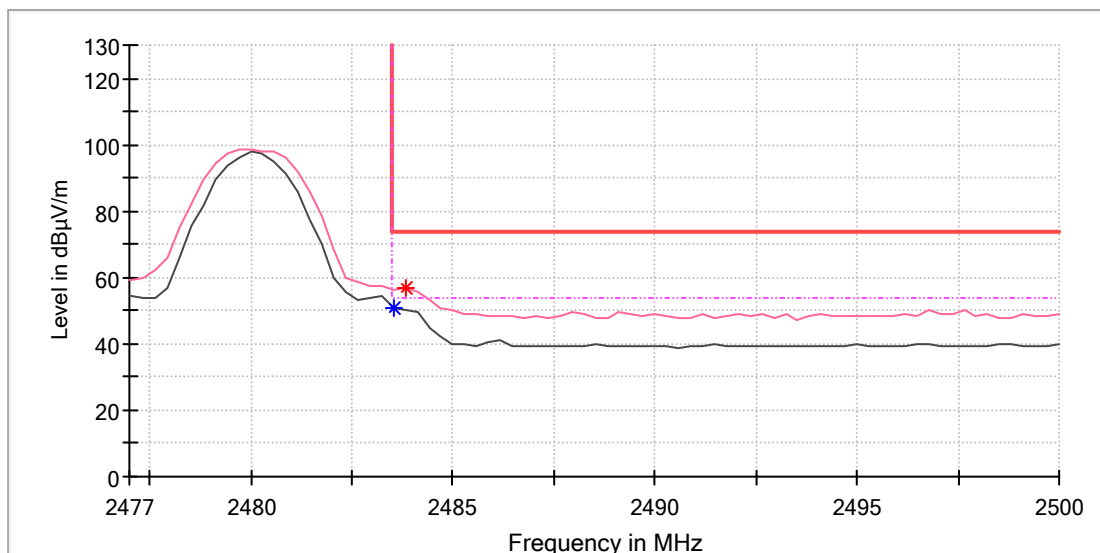
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2356.264706	51.59	---	74.00	22.41	150.0	H	89.0	6.9
2356.897059	---	40.36	54.00	13.64	150.0	H	95.0	6.9

Final_Result

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

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

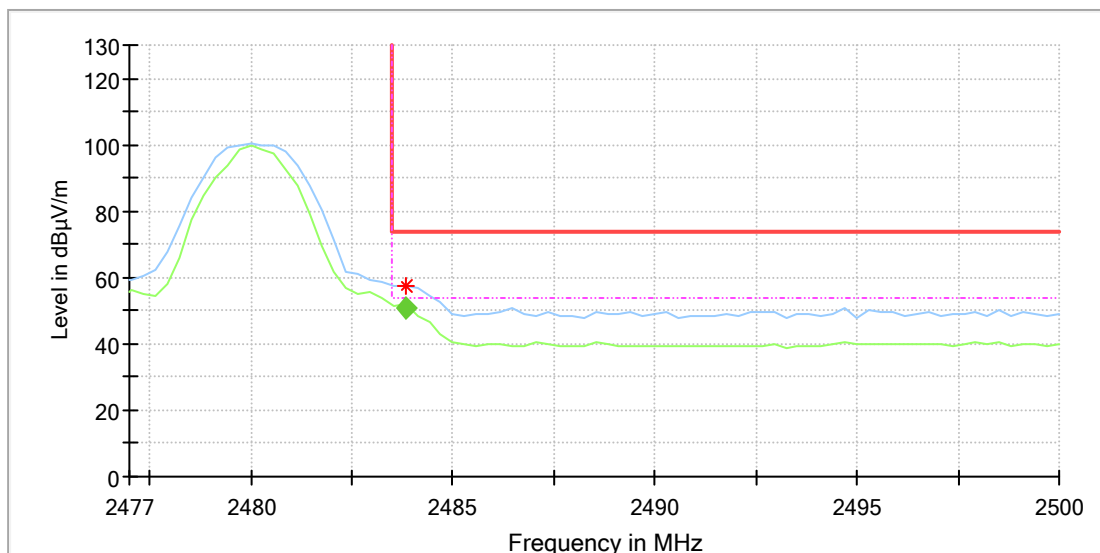
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.529412	---	50.63	54.00	3.37	150.0	V	47.0	7.4
2483.823529	56.71	---	74.00	17.29	150.0	V	279.0	7.4

Final_Result

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

EUT Name: Bluetooth earphone
Model: SHOKZ S710
Test Mode: BLE 1M_High channel
Order No/Sample No: 168457091/A003739221-005
Test Voltage:: Battery
Remark: Temp 22 Humi:52%
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)
2483.823529	57.60	---	74.00	16.40	150.0	H	183.0	7.4

Final_Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.823529	50.74	54.00	3.26	149.0	H	178.0	7.4