

Prüfbericht-Nr.: Test Report No.:	50069022 001	Auftrags-Nr.: Order No.:	164083177	Seite 1 von 28 Page 1 of 28
Kunden-Referenz-Nr.: Client Reference No.:	N/A	Auftragsdatum: Order date:	30.12.2016	
Auftraggeber: Client:	Country Mate Technology Ltd 5/F, Blk E, Hing Yip Center. 31 Hing Yip Street, Kwun Tong, Kln, Hong Kong			
Prüfgegenstand: Test item:	Bluetooth In-ear Headphones			
Bezeichnung / Typ-Nr.: Identification / Type No.:	NS-CAHBTEB02-BLK, NS-CAHBTEB02-BLK-C			
Auftrags-Inhalt: Order content:	FCC Certification			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 FCC KDB Publication 447498 v06 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109 RSS-247 Issue 1 May 2015 RSS-102 Issue 5 March 2015 RSS-Gen Issue 4 November 2014			
Wareneingangsdatum: Date of receipt:	13.01.2017			
Prüfmuster-Nr.: Test sample No.:	A000482052-010, 011, 012			
Prüfzeitraum: Testing period:	23.01.2017 - 24.02.2017			
Ort der Prüfung: Place of testing:	Shenzhen Accurate Technology Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
 07.03.2017 Andy Yan / Project Manager		 08.03.2017 Winnie Hou / Technical Certifier		
Datum Date	Name / Stellung Name / Position	Unterschrift Signature	Datum Date	Name / Stellung Name / Position
Sonstiges / Other: FCC ID: MV3-CAHBTEB02, IC: 9029A-CAHBTEB02				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

TEST SUMMARY

5.1.1 ANTENNA REQUIREMENT

RESULT: *Passed*

5.1.2 PEAK OUTPUT POWER

RESULT: *Passed*

5.1.3 99% BANDWIDTH

RESULT: *Passed*

5.1.4 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100KHZ BANDWIDTH

RESULT: *Passed*

5.1.5 SPURIOUS EMISSION

RESULT: *Passed*

5.1.6 20dB BANDWIDTH

RESULT: *Passed*

5.1.7 FREQUENCY SEPARATION

RESULT: *Passed*

5.1.8 NUMBER OF HOPPING FREQUENCY

RESULT: *Passed*

5.1.9 TIME OF OCCUPANCY

RESULT: *Passed*

5.1.10 CONDUCTED EMISSIONS

RESULT: *Passed*

5.1.11 RADIATED EMISSION

RESULT: *Passed*

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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 1: Test Result

2. Test Sites

2.1 Test Facilities

Shenzhen Accurate Technology Co., Ltd.

F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, P.R. China

FCC Registration No.: 752051

Test site Industry Canada No.: 5077A-2

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

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Kind of Equipment	Manufacturer	Type	S/N	Calibrated until
Spurious emission and Radiated emission				
Spectrum Analyzer	Rohde&Schwarz	FSV40	101495	06-01-2018
Test Receiver	Rohde&Schwarz	ESCS30	100307	06-01-2018
Bilog Antenna	Schwarzbeck	VULB9163	9163-323	09-01-2018
Loop Antenna	Schwarzbeck	FMZB1516	1516131	09-01-2018
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-655	09-01-2018
Horn Antenna	Schwarzbeck	BBHA9170	9170-359	09-01-2018
RF Switching Unit+PreAMP	Compliance Direction	RSU-M2	38322	06-01-2018
Pre-Amplifier	Rohde&Schwarz	CBLU11835 40-01	3791	06-01-2018
Radio Spectrum Test				
Spectrum Analyzer	Rohde & Schwarz	ESPI3	100396/003	06-01-2018
Conducted Emission				
Test Receiver	Rohde & Schwarz	ESCS30	100307	06-01-2018
L.I.S.N.	Schwarzbeck	NLSK8126	8126431	06-01-2018
Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100815	06-01-2018
50Ω Coaxial Switch	Anritsu Corp	MP59B	6200283933	06-01-2018

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 are $\pm 3\text{dB}$.

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix 1 of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The Shenzhen Accurate Technology Co., Ltd. test facility located at F1, Bldg. A, Changyuan New Material Port, Keyuan Rd., Science & Industry Park Nanshan District, Shenzhen 518057, 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 EUT is Bluetooth in-ear headphones which supports Bluetooth wireless technology. Both models are identical except model number for different regions.

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

3.2 Ratings and System Details

Table 2: Rating of EUT

Kind of Equipment:	Bluetooth in-ear headphones
Type Designation:	NS-CAHBTEB02-BLK, NS-CAHBTEB02-BLK-C
FCC ID	MV3-CAHBTEB02
IC	9029A-CAHBTEB02

Table 3: Technical Specification of Bluetooth (BDR & EDR)

Technical Specification	Value
Operating Frequency band	2402 – 2480 MHz
Bluetooth Core Version	4.1
Channel Number	79 channels
Channel separation	1MHz
Extreme Temperature Range	-10°C to +50°C
Operation Voltage	DC3.7V via Lithium Battery DC5V via USB port for charging
Modulation	GFSK, 8DPSK, $\pi/4$ DQPSK
Antenna Type	Internal Antenna, Non-User Replaceable
Antenna Gain	1.92dBi
RF Output Power	0.00313W (4.95dBm)

Table 4: RF channel and frequency of Bluetooth (BDR & EDR mode)

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		

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth mode (BDR & EDR)
 - 1. Transmitting on low channel
 - 2. Transmitting on middle channel
 - 3. Transmitting on high channel
- B. On, Bluetooth hopping mode
- C. Charging
- D. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to the Circuit Diagram.

3.5 Submitted Documents

- | | |
|-------------------------|----------------------|
| - Bill of Material | - Circuit Diagram |
| - PCB Layout | - Instruction Manual |
| - Photo Document | - Rating Label |
| - Technical Description | |

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The equipment under test (EUT) was configured to measure its maximum power level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2014 and ANSI C63.10: 2013.

Due to models difference indicated in clause 3.1, full test was applied on model NS-CAHBTEB02-BLK only.

4.3 Special Accessories and Auxiliary Equipment

The EUT was tested with following accessories:

Description	Manufacturer	Type	S/N
iPhone6S PLUS	Apple	ML6D2 CH/A	C35QJ76JGRWM
Notebook	LENOVO	ThinkPad X240	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 Constructional Data Form or the Technical Construction File. No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

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

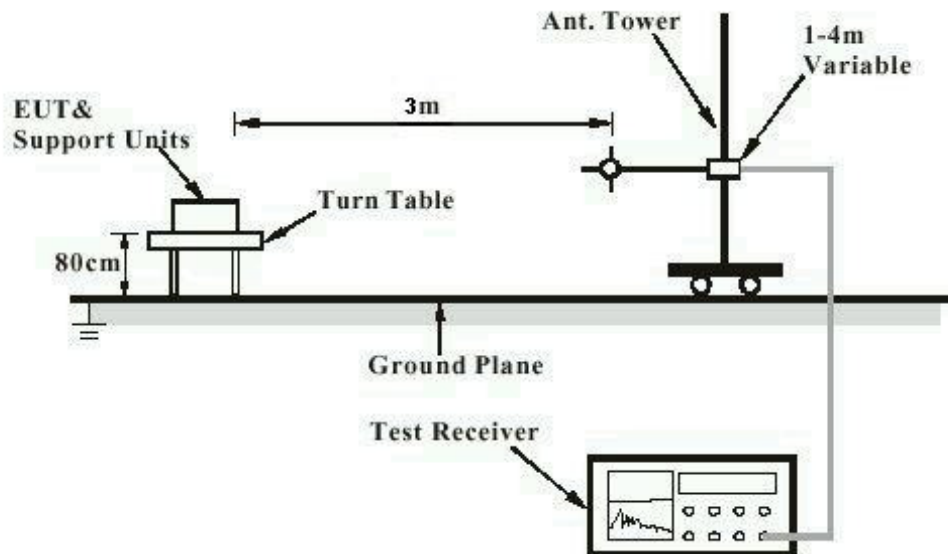


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

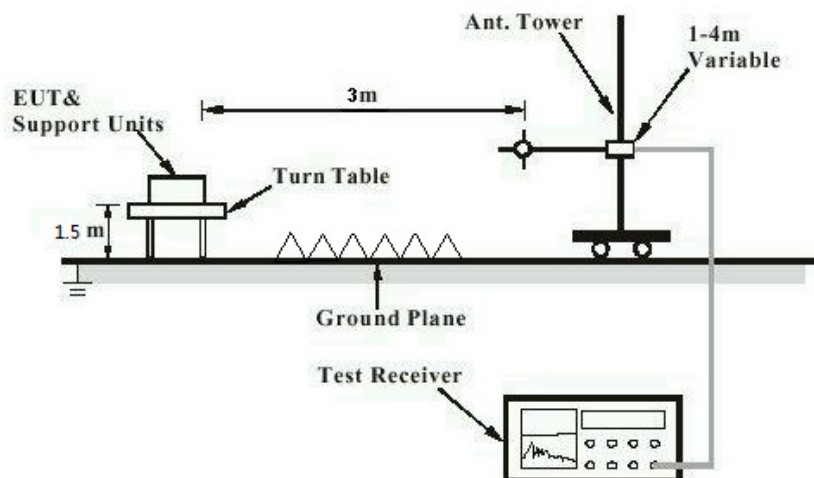


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement

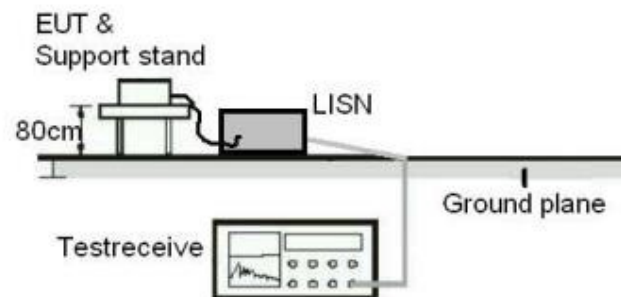
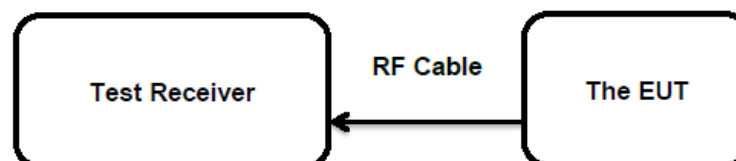


Diagram of Measurement Equipment Configuration for Conducted Transmitter Measurement



5. Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:**Passed**

Test standard	:	FCC Part 15.247(b)(4) and Part 15.203 RSS-Gen 6.7
Limit	:	the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has an internal antenna, the directional gain of antenna is 1.92dBi, 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 details.

Note: The cable loss is taken into account in results.

5.1.3 99% Bandwidth

RESULT:
Passed

Date of testing : 2017-02-24
 Test standard : RSS-Gen clause 6.6
 Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded room

Test setup

Test Channel : Low/ Middle/ High
 Operation Mode : A
 Ambient temperature : 25°C
 Relative humidity : 55%
 Atmospheric pressure : 101 kPa

Table 6: Test result of 99% Bandwidth

Test Mode	Channel Frequency (MHz)	99% Bandwidth (kHz)	Limit (kHz)
BDR	2402	1081.04	/
	2441	1111.43	
	2480	1094.07	
EDR	2402	1198.26	/
	2441	1193.92	
	2480	1198.26	

Note: The cable loss is taken into account in results.

5.1.4 Conducted spurious emissions measured in 100kHz Bandwidth

RESULT:**Passed**

Date of testing	:	2017-02-24
Test standard	:	FCC part 15.247(d) RSS-247 Clause 5.5
Basic standard	:	ANSI C63.10: 2013
Limit	:	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	:	Shield room

Test setup

Test Channel	:	Low/ High
Operation mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

All emissions are more than 20dB below fundamental, details refer to Appendix 1, and compliance is achieved as well.

5.1.5 Spurious Emission

RESULT:**Passed**

Date of testing	:	2017-01-23
Test standard	:	FCC part 15.247(d) FCC Part 15.205 RSS-247 Clause 3.3
Basic standard	:	ANSI C63.10: 2013
Limits	:	Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 4 & Table 5
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Test Channel	:	Low/ Middle/ High
Operation mode	:	A
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

Remark:

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

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

For details refer to Appendix 1.

Test Mode	Channel Frequency (MHz)	20dB Bandwidth (kHz)	2/3 of 20dB Bandwidth (kHz)	Limit (MHz)
BDR	2402	929.1	619.400	/
	2441	929.1	619.400	
	2480	937.8	625.200	
EDR	2402	1207.0	804.667	/
	2441	1207.0	804.667	
	2480	1206.9	804.600	

5.1.8 Number of hopping frequency**RESULT:****Passed**

Date of testing : 2017-02-23
Test standard : FCC part 15.247(a)(1)(iii)
RSS-247 Clause 5.1(4)
Basic standard : ANSI C63.10: 2013
Limits : ≥ 15 non-overlapping channels
Kind of test site : Shield room

Test setup

Test Channel : Low/ Middle/ High
Operation Mode : B
Ambient temperature : 25°C
Relative humidity : 55%
Atmospheric pressure : 101 kPa

Table 9: Test result of Number of hopping frequency

Frequency Range	Measured Quantity of Hopping Channel	Limit	Result
<u>2400</u> to <u>2483.5</u> MHz	79	≥ 15	Pass

5.1.10 Conducted emissions

RESULT:**Passed**

Date of testing	:	2017-01-23
Test standard	:	FCC Part 15.107(a) & FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	:	ANSI C63.10: 2013 & ANSI C63.4: 2014
Frequency range	:	0.15 – 30MHz
Limits	:	FCC Part 15.107(a) & FCC Part 15.207(a) RSS-Gen Table 3
Kind of test site	:	Shield room

Test setup

Input Voltage	:	AC 120V, 60Hz via AC/DC Adapter of notebook
Operation Mode	:	B, C
Earthing	:	Not connected
Ambient temperature	:	25°C
Relative humidity	:	55%
Atmospheric pressure	:	101 kPa

For details refer to Appendix 1.

5.1.11 Radiated Emission**RESULT:****Passed**

Date of testing	:	2017-01-23
Test standard	:	FCC Part 15.109(a) & FCC Part 15.209(a) RSS-Gen 8.9
Basic standard	:	ANSI C63.4: 2014
Frequency range	:	30 - 6000MHz
Classification	:	Class B
Limit	:	FCC Part 15.109(a) & FCC Part 15.209(a) RSS-Gen Table 4
Kind of test site	:	3m Semi-Anechoic Chamber

Test setup

Input Voltage	:	AC 120V, 60Hz via AC/DC Adapter of notebook
Operation mode	:	C
Earthing	:	Not connected
Ambient temperature	:	Refer to Appendix 1
Relative humidity	:	Refer to Appendix 1
Atmospheric pressure	:	Refer to Appendix 1

Test data refer to Appendix 1.

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Figure 39: Test figure of Radiated emissions, Mode D, Below 1GHz, Vertical	Error! Bookmark not defined.
Figure 40: Test figure of Radiated emissions, Mode D, Above 1GHz, Horizontal	Error! Bookmark not defined.
Figure 41: Test figure of Radiated emissions, Mode D, Above 1GHz, Vertical	Error! Bookmark not defined.

Figure 1: Test figure of spurious emissions, mode A.1, Horizontal polarity (9kHz – 30MHz)

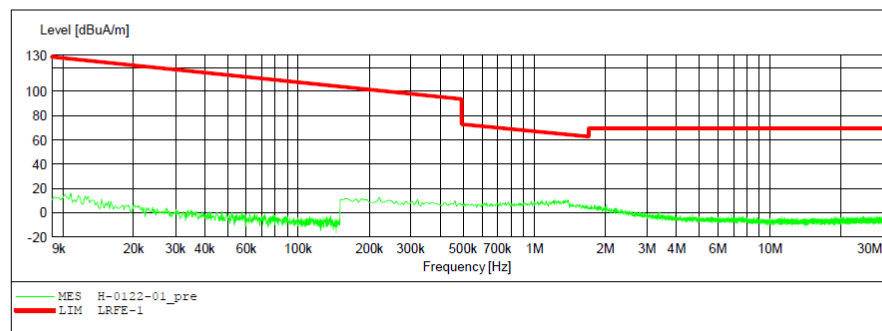
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

EUT: Bluetooth In-Ear Headphones M/N: NS-CAHBTEB02-BLK
 Manufacturer:
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: X

SCAN TABLE: "LFRE Fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M



**Figure 2: Test figure of spurious emissions, mode A.1, Vertical polarity
(9kHz – 30MHz)**

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

EUT: Bluetooth In-Ear Headphones M/N:NS-CAHBTEB02-BLK
 Manufacturer:
 Operating Condition: TX 2402MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: Y

SCAN TABLE: "LFRE Fin"

Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M

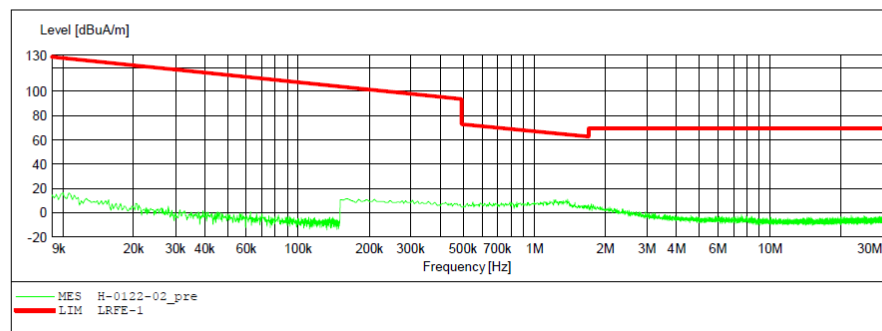


Figure 3: Test figure of spurious emissions, mode A.1, Horizontal polarity (30MHz – 1GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1022

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

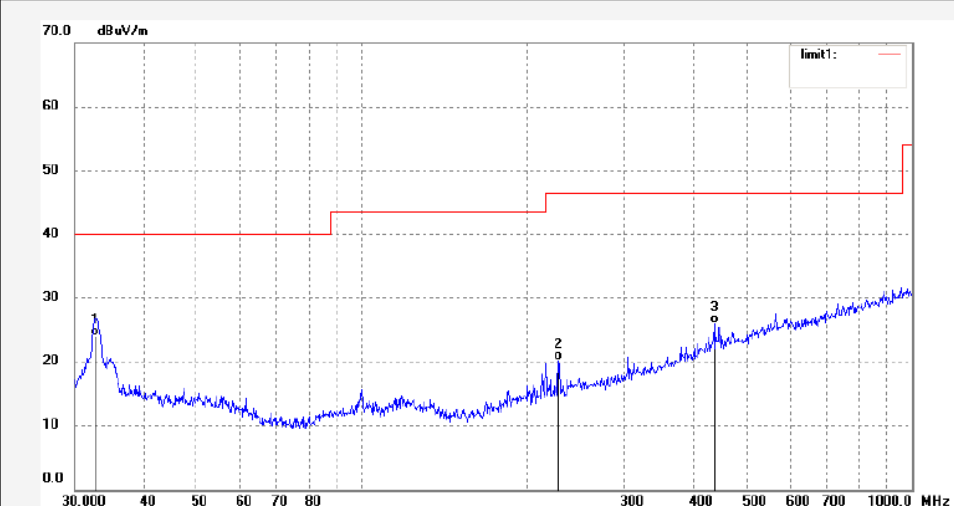
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.7486	34.28	-10.20	24.08	40.00	-15.92	QP			
2	227.6905	31.36	-11.18	20.18	46.40	-26.22	QP			
3	437.1198	31.52	-5.49	26.03	46.40	-20.37	QP			

Figure 4: Test figure of spurious emissions, mode A.1, Vertical polarity (30MHz – 1GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1023

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

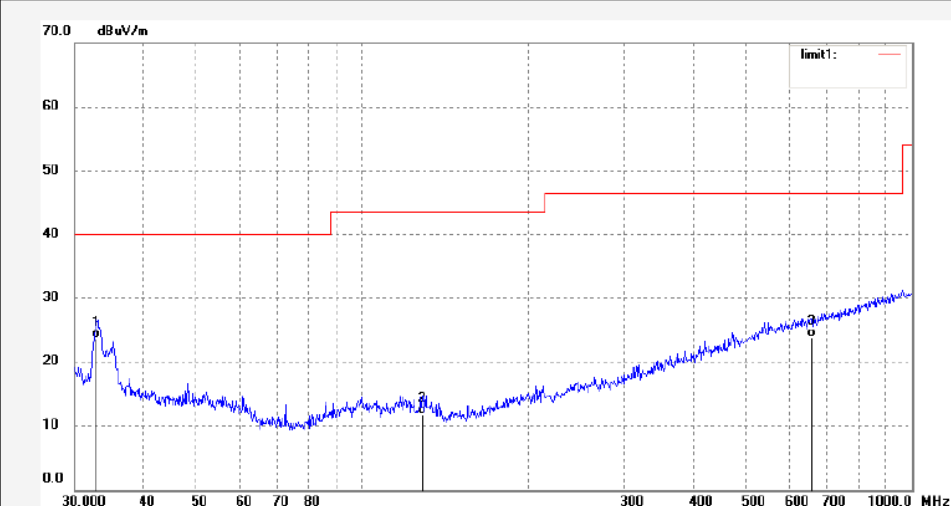
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.8637	33.45	-9.79	23.66	40.00	-16.34	QP			
2	128.5629	25.55	-13.72	11.83	43.50	-31.67	QP			
3	656.5299	25.56	-1.66	23.90	46.40	-22.50	QP			

Figure 5: Test figure of spurious emissions, mode A.1, Horizontal polarity (1GHz –18GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1006

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

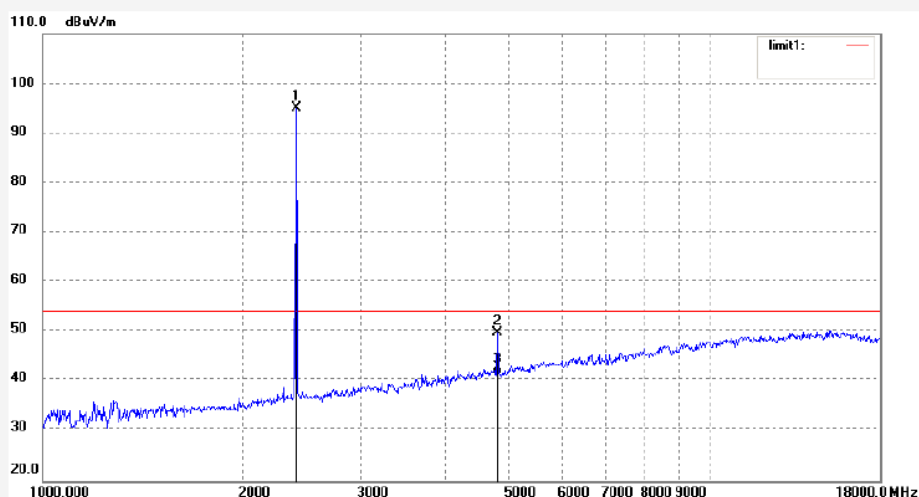
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	96.63	-1.61	95.02	/	/	peak			
2	4804.025	45.02	4.90	49.92	74.00	-24.08	peak			
3	4804.025	36.43	4.90	41.33	54.00	-12.67	AVG			

Figure 6: Test figure of spurious emissions, mode A.1, Vertical polarity (1GHz – 18GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1007

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

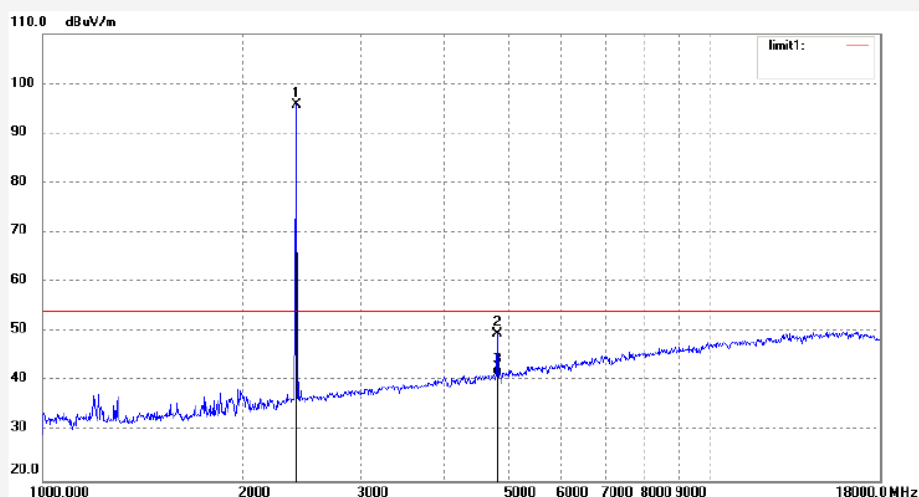
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2402.000	97.25	-1.61	95.64	/	/	peak			
2	4804.028	44.76	4.90	49.66	74.00	-24.34	peak			
3	4804.028	36.45	4.90	41.35	54.00	-12.65	AVG			

Figure 7: Test figure of spurious emissions, mode A.1, Horizontal polarity (18GHz –25GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1017

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

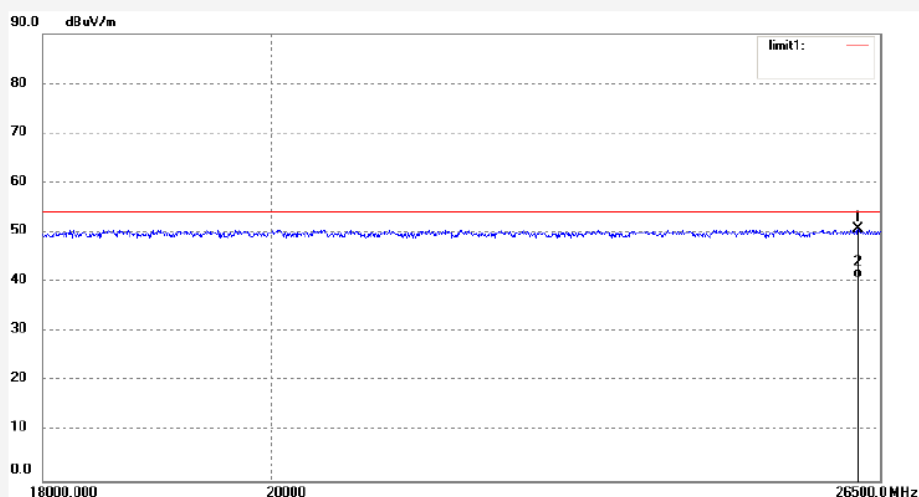
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	26234.849	10.39	40.37	50.76	74.00	-23.24	peak			
2	26234.849	0.40	40.37	40.77	54.00	-13.23	AVG			

Figure 8: Test figure of spurious emissions, mode A.1, Vertical polarity (18GHz – 25GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1016

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

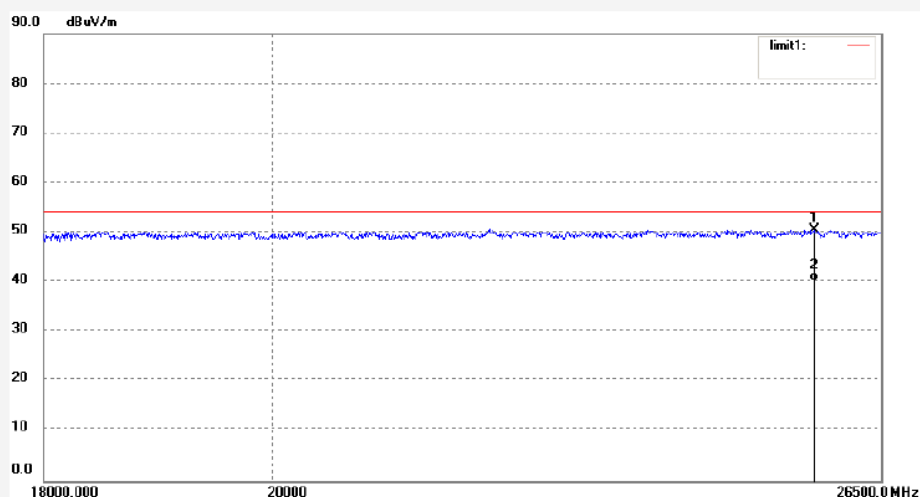
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25692.597	9.45	41.03	50.48	74.00	-23.52	peak			
2	25692.597	-0.89	41.03	40.14	54.00	-13.86	AVG			

Figure 9: Test figure of spurious emissions, mode A.2, Horizontal polarity (9kHz – 30MHz)

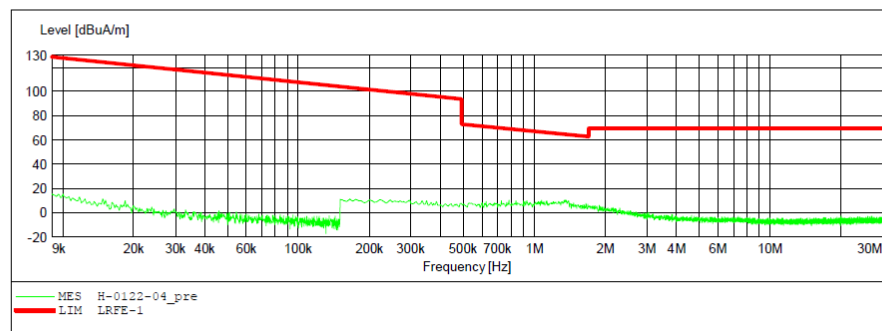
ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

EUT: Bluetooth In-Ear Headphones M/N: NS-CAHBTEB02-BLK
 Manufacturer:
 Operating Condition: TX 2441MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: X

SCAN TABLE: "LFRE Fin"

Short Description:				_SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer	
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M	
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M	



**Figure 10: Test figure of spurious emissions, mode A.2, Vertical polarity
(9kHz – 30MHz)**

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

EUT: Bluetooth In-Ear Headphones M/N:NS-CAHBTEB02-BLK
Manufacturer:
Operating Condition: TX 2441MHz
Test Site: 2# Chamber
Operator: LGWADE
Test Specification: DC 3.7V
Comment: Y

SCAN TABLE: "LFRE Fin"

Short Description:			_SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M

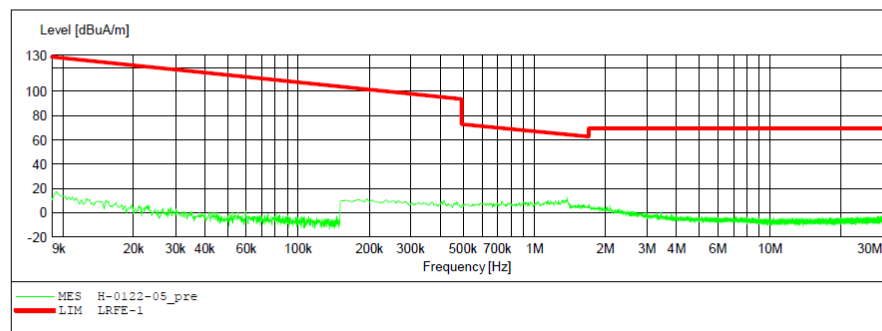


Figure 11: Test figure of spurious emissions, mode A.2, Horizontal polarity (30MHz – 1GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1025

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2441MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

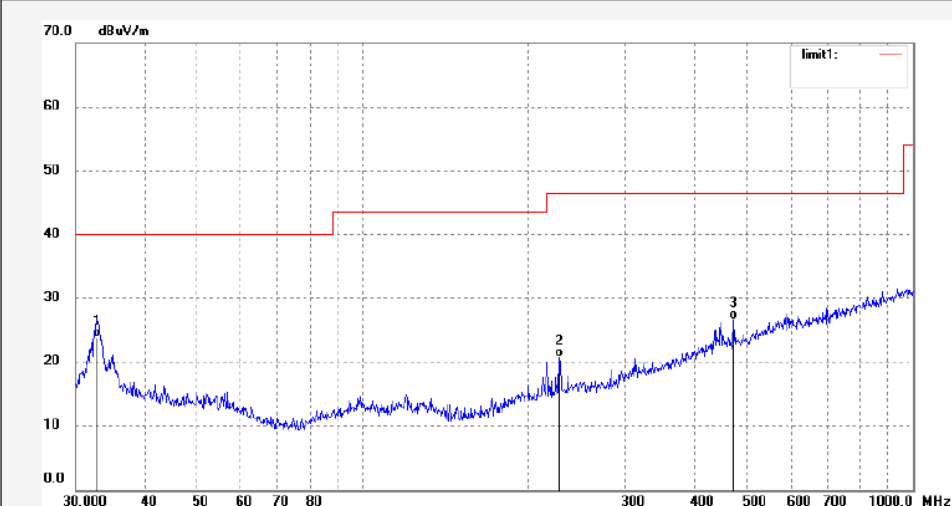
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.8637	34.16	-10.21	23.95	40.00	-16.05	QP			
2	227.6905	31.88	-11.18	20.70	46.40	-25.70	QP			
3	472.1759	31.63	-5.01	26.62	46.40	-19.78	QP			

Figure 12: Test figure of spurious emissions, mode A.2, Vertical polarity (30MHz – 1GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1024

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2441MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

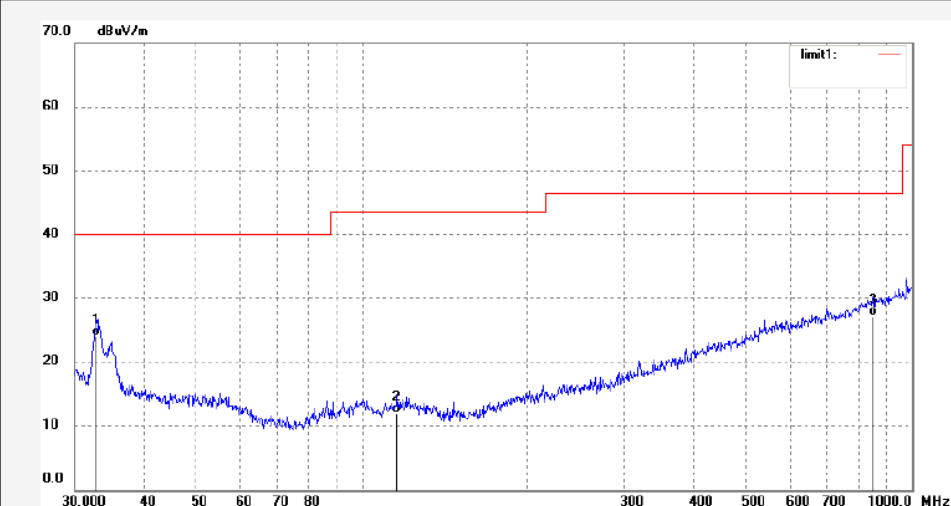
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.8637	33.90	-9.79	24.11	40.00	-15.89	QP			
2	115.7256	25.05	-13.06	11.99	43.50	-31.51	QP			
3	851.0353	25.73	1.57	27.30	46.40	-19.10	QP			

Figure 13: Test figure of spurious emissions, mode A.2, Horizontal polarity (1GHz – 18GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1010

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2441MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

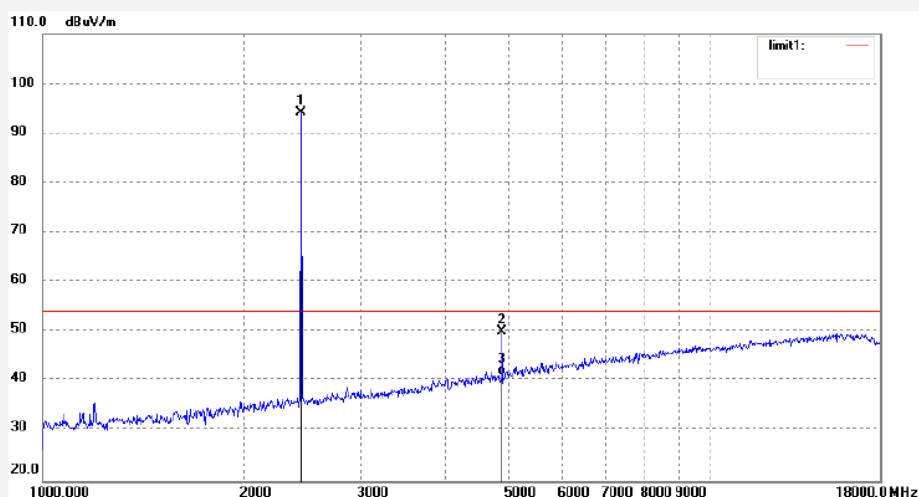
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	95.65	-1.44	94.21	/	/	peak			
2	4882.028	44.34	5.61	49.95	74.00	-24.05	peak			
3	4882.028	35.73	5.61	41.34	54.00	-12.66	AVG			

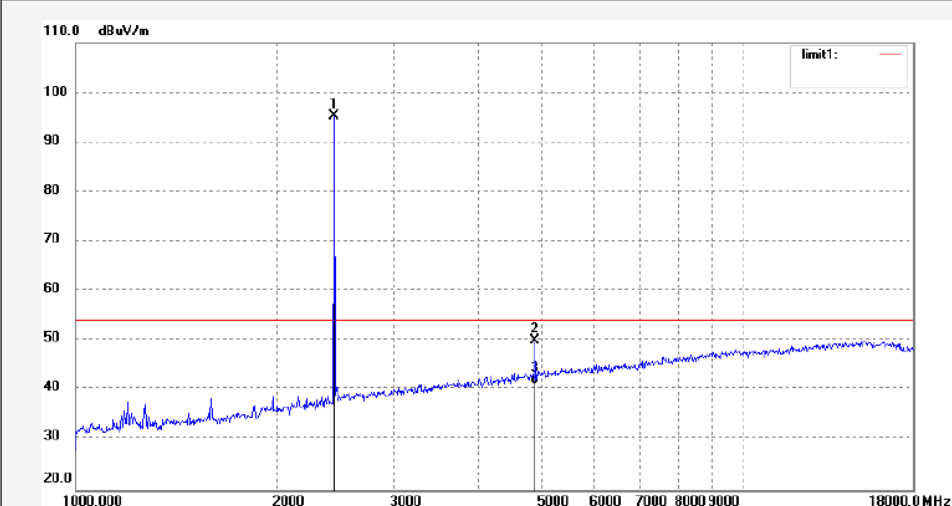
Figure 14: Test figure of spurious emissions, mode A.2, Vertical polarity (1GHz – 18GHz)



ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1011	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 17/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth In-Ear Headphones	Engineer Signature: LGWADE
Mode: TX 2441MHz	Distance: 3m
Model: NS-CAHBTEB02-BLK	
Manufacturer:	
Note: Bluetooth	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2441.000	96.80	-1.44	95.36	/	/	peak			
2	4882.029	44.50	5.61	50.11	74.00	-23.89	peak			
3	4882.029	35.73	5.61	41.34	54.00	-12.66	AVG			

Figure 15: Test figure of spurious emissions, mode A.2, Horizontal polarity (18GHz – 25GHz)

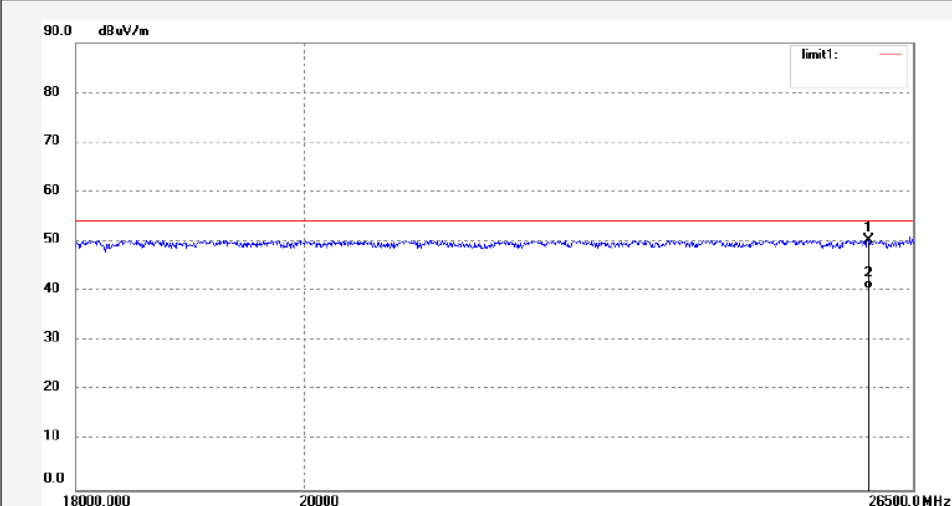


ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1018	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 17/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth In-Ear Headphones	Engineer Signature: LGWADE
Mode: TX 2441MHz	Distance: 3m
Model: NS-CAHBTEB02-BLK	
Manufacturer:	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25962.307	10.03	40.23	50.26	74.00	-23.74	peak			
2	25962.307	0.11	40.23	40.34	54.00	-13.66	AVG			

Figure 16: Test figure of spurious emissions, mode A.2, Vertical polarity (18GHz – 25GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1019

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2441MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

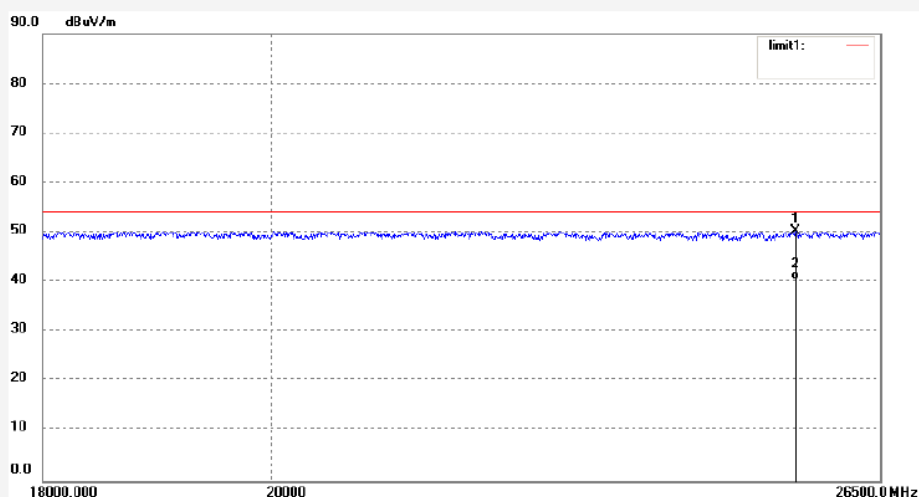
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25484.761	9.13	41.07	50.20	74.00	-23.80	peak			
2	25484.761	-0.66	41.07	40.41	54.00	-13.59	AVG			

Figure 17: Test figure of spurious emissions, mode A.3, Horizontal polarity (9kHz – 30MHz)

ACCURATE TECHNOLOGY CO.,LTD

FCC Class B 3m Radiated

EUT: Bluetooth In-Ear Headphones M/N: NS-CAHBTEB02-BLK
 Manufacturer:
 Operating Condition: TX 2480MHz
 Test Site: 2# Chamber
 Operator: LGWADE
 Test Specification: DC 3.7V
 Comment: X

SCAN TABLE: "LFRE Fin"

Short Description:			_SUB_STD_VTERM2 1.70			
Start	Stop	Step	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	1516M
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	1516M

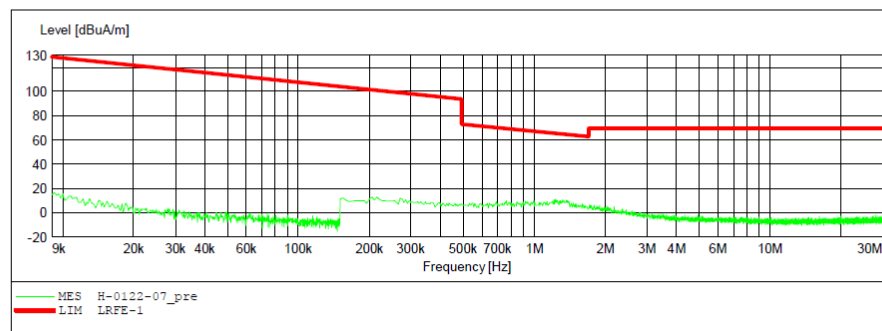


Figure 18: Test figure of spurious emissions, mode A.3, Vertical polarity
(9kHz – 30MHz)

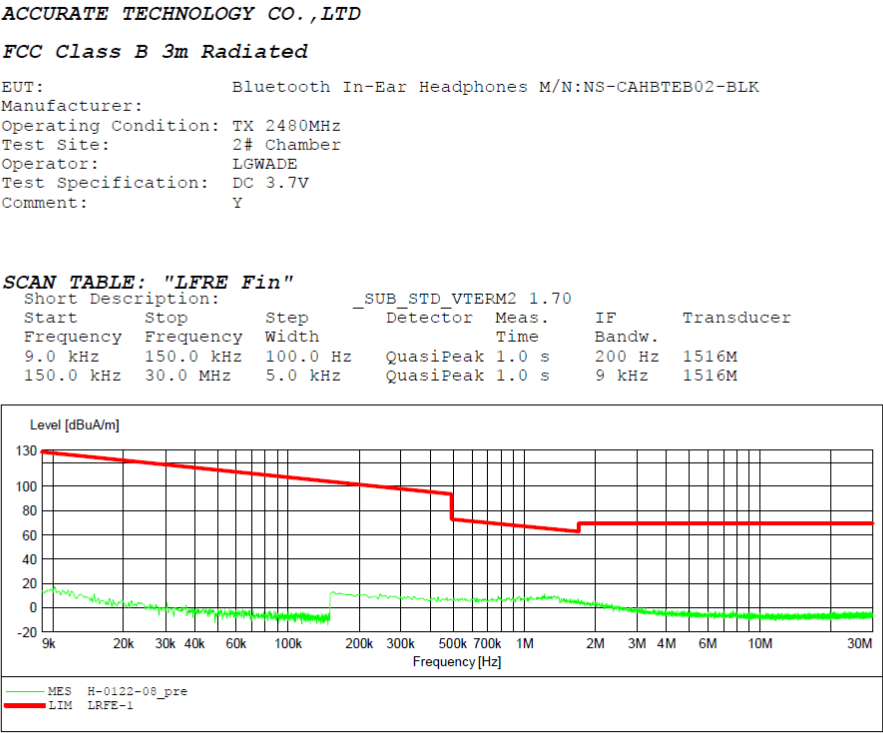


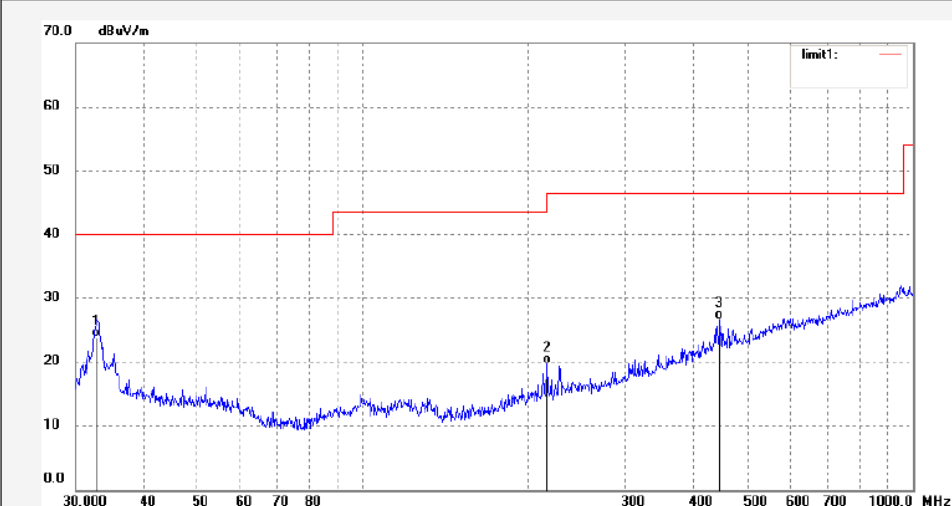
Figure 19: Test figure of spurious emissions, mode A.3, Horizontal polarity (30MHz – 1GHz)



ACCURATE TECHNOLOGY CO., LTD.
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber
Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1026	Polarization: Horizontal
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 17/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth In-Ear Headphones	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: NS-CAHBTEB02-BLK	
Manufacturer:	
Note: Bluetooth	



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.7486	34.15	-10.20	23.95	40.00	-16.05	QP			
2	216.0240	31.41	-11.66	19.75	46.40	-26.65	QP			
3	444.8514	32.17	-5.43	26.74	46.40	-19.66	QP			

Figure 20: Test figure of spurious emissions, mode A.3, Vertical polarity (30MHz – 1GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1027

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2480MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

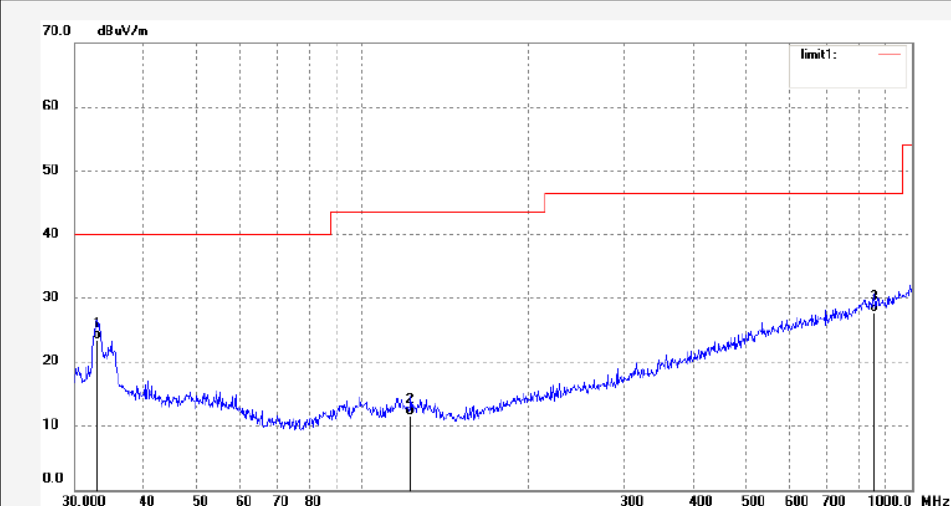
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	32.9791	33.35	-9.82	23.53	40.00	-16.47	QP			
2	122.4039	24.91	-13.33	11.58	43.50	-31.92	QP			
3	854.0247	26.15	1.59	27.74	46.40	-18.66	QP			

Figure 21: Test figure of spurious emissions, mode A.3, Horizontal polarity (1GHz –18GHz)



ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1013

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2480MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

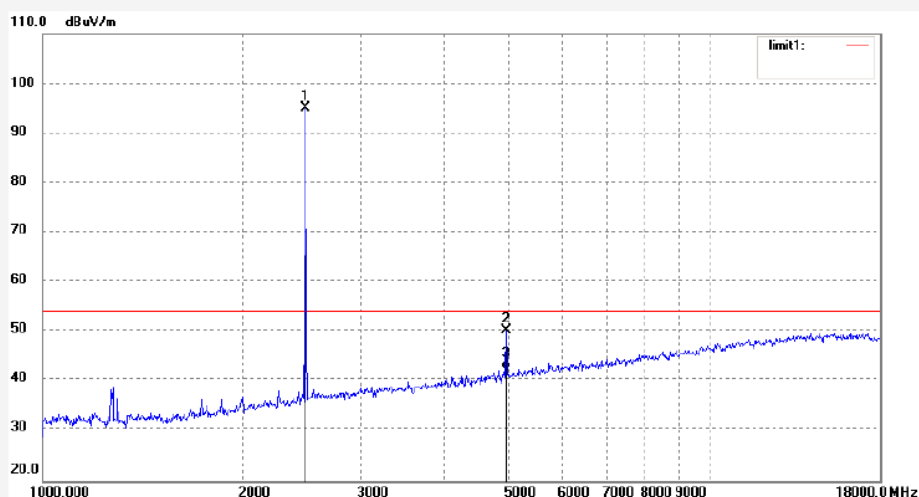
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	96.50	-1.40	95.10	/	/	peak			
2	4960.026	44.15	6.10	50.25	74.00	-23.75	peak			
3	4960.026	36.27	6.10	42.37	54.00	-11.63	AVG			

Figure 22: Test figure of spurious emissions, mode A.3, Vertical polarity (1GHz – 18GHz)



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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1012

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2480MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

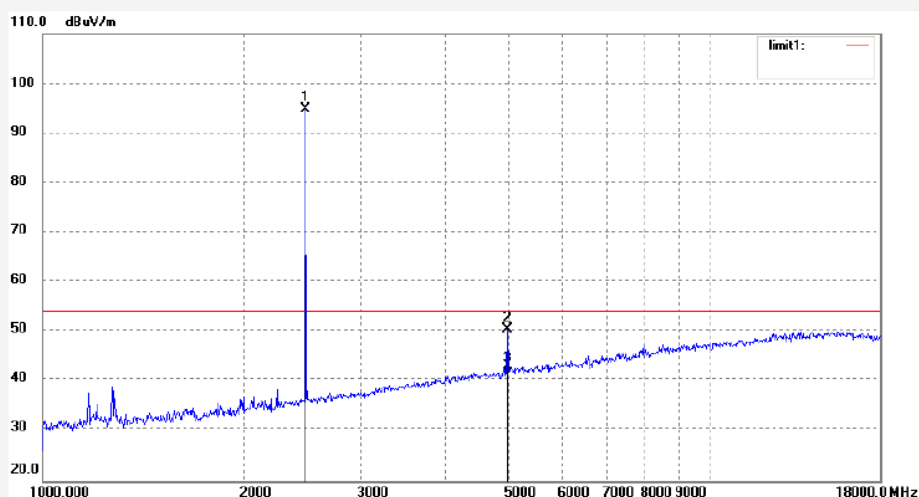
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2480.000	96.25	-1.40	94.85	/	/	peak			
2	4960.030	44.29	6.10	50.39	74.00	-23.61	peak			
3	4960.030	35.34	6.10	41.44	54.00	-12.56	AVG			

Figure 23: Test figure of spurious emissions, mode A.3, Horizontal polarity (18GHz –25GHz)



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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1021

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2480MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 3.7V

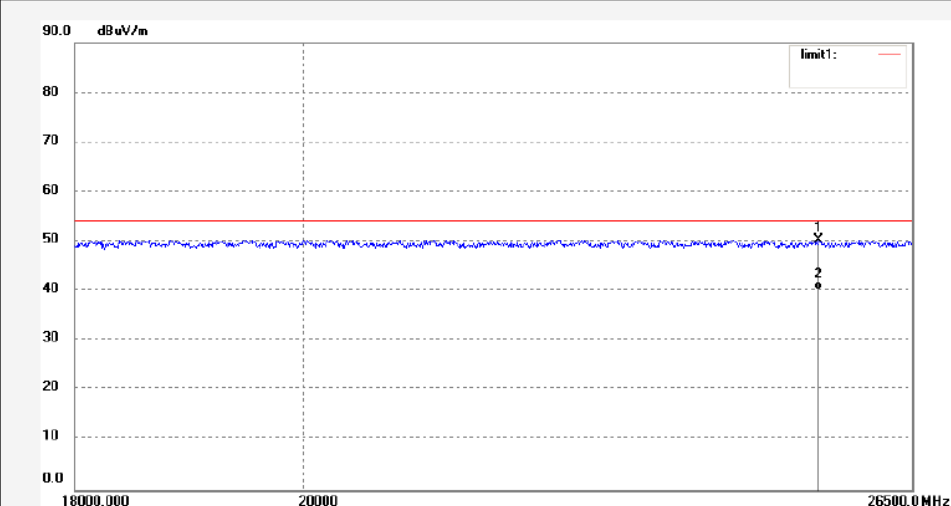
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25386.383	10.24	39.94	50.18	74.00	-23.82	peak			
2	25386.383	0.30	39.94	40.24	54.00	-13.76	AVG			

Figure 24: Test figure of spurious emissions, mode A.3, Vertical polarity (18GHz – 25GHz)



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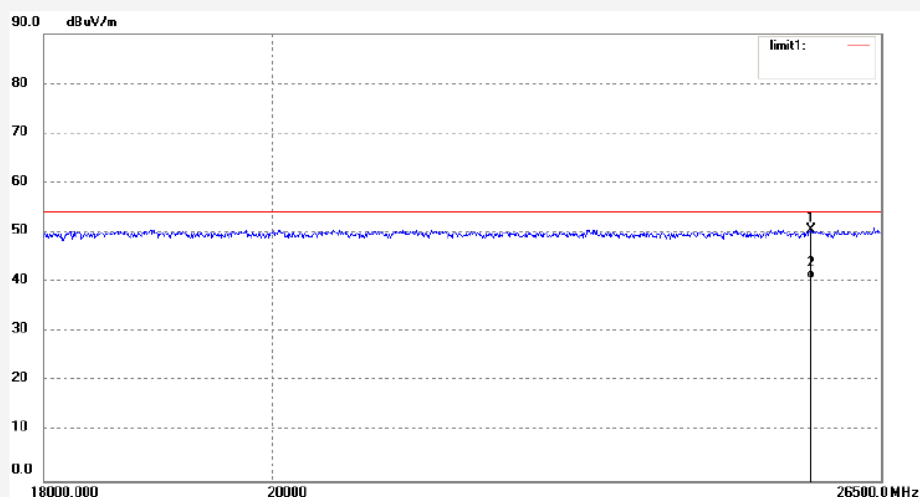
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1020	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 3.7V
Test item: Radiation Test	Date: 17/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth In-Ear Headphones	Engineer Signature: LGWADE
Mode: TX 2480MHz	Distance: 3m
Model: NS-CAHBTEB02-BLK	
Manufacturer:	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	25652.879	9.44	41.03	50.47	74.00	-23.53	peak			
2	25652.879	-0.49	41.03	40.54	54.00	-13.46	AVG			

Figure 25: Test figure of Radiated emissions in restricted bands, Mode A.1, Horizontal



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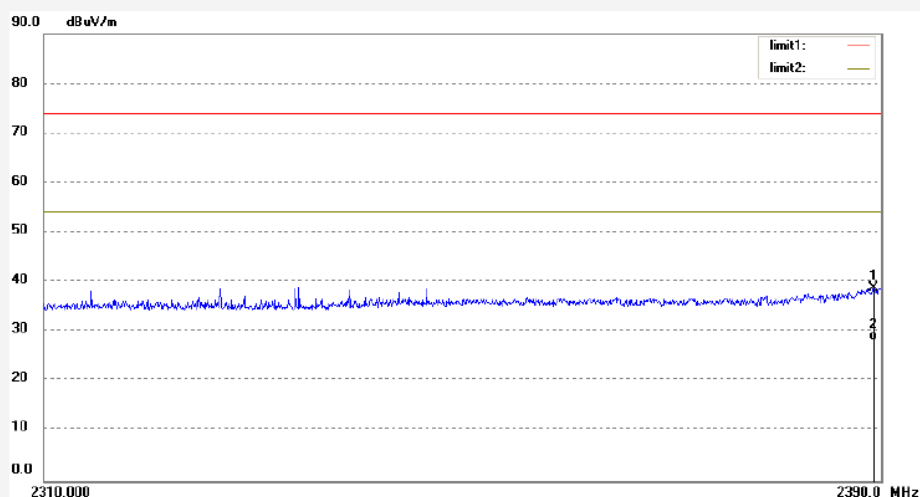
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1009	Polarization: Horizontal
Standard: FCC (Band Edge)	Power Source: DC 3.7V
Test item: Radiation Test	Date: 17/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth In-Ear Headphones	Engineer Signature: LGWADE
Mode: TX 2402MHz	Distance: 3m
Model: NS-CAHBTEB02-BLK	
Manufacturer:	

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2389.280	40.44	-1.71	38.73	74.00	-35.27	peak			
2	2389.280	30.05	-1.71	28.34	54.00	-25.66	AVG			

Figure 26: Test figure of Radiated emissions in restricted bands, Mode A.1, Vertical



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Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1008

Standard: FCC (Band Edge)

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: TX 2402MHz

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 3.7V

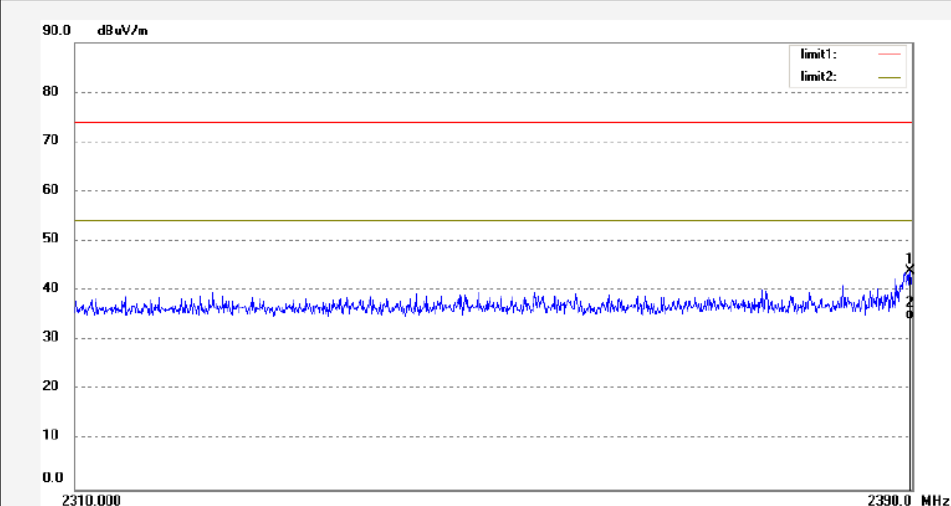
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note: Bluetooth



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	2389.840	45.73	-1.71	44.02	74.00	-29.98	peak			
2	2389.840	35.95	-1.71	34.24	54.00	-19.76	AVG			

Figure 27: Test figure of Radiated emissions in restricted bands, Mode A.3, Horizontal

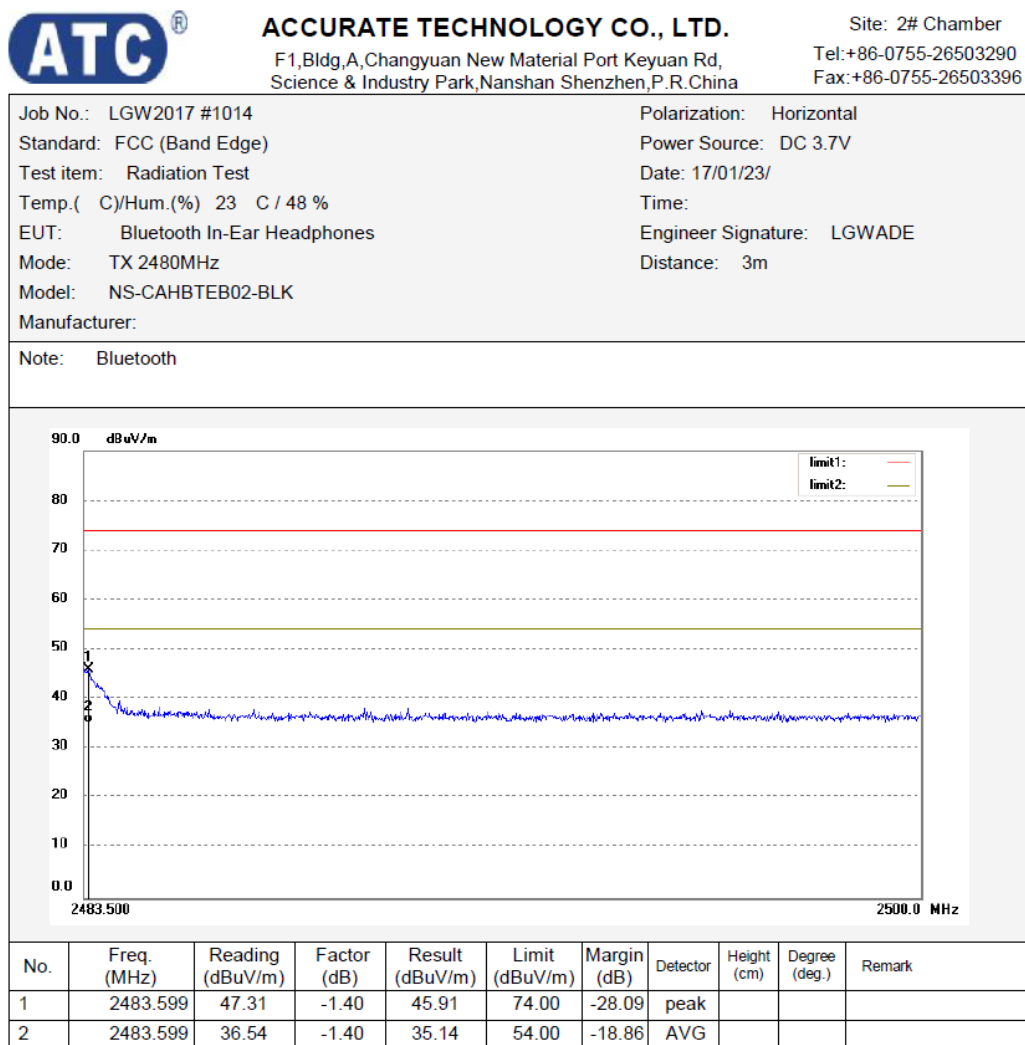


Figure 28: Test figure of Radiated emissions in restricted bands, Mode A.3, Vertical

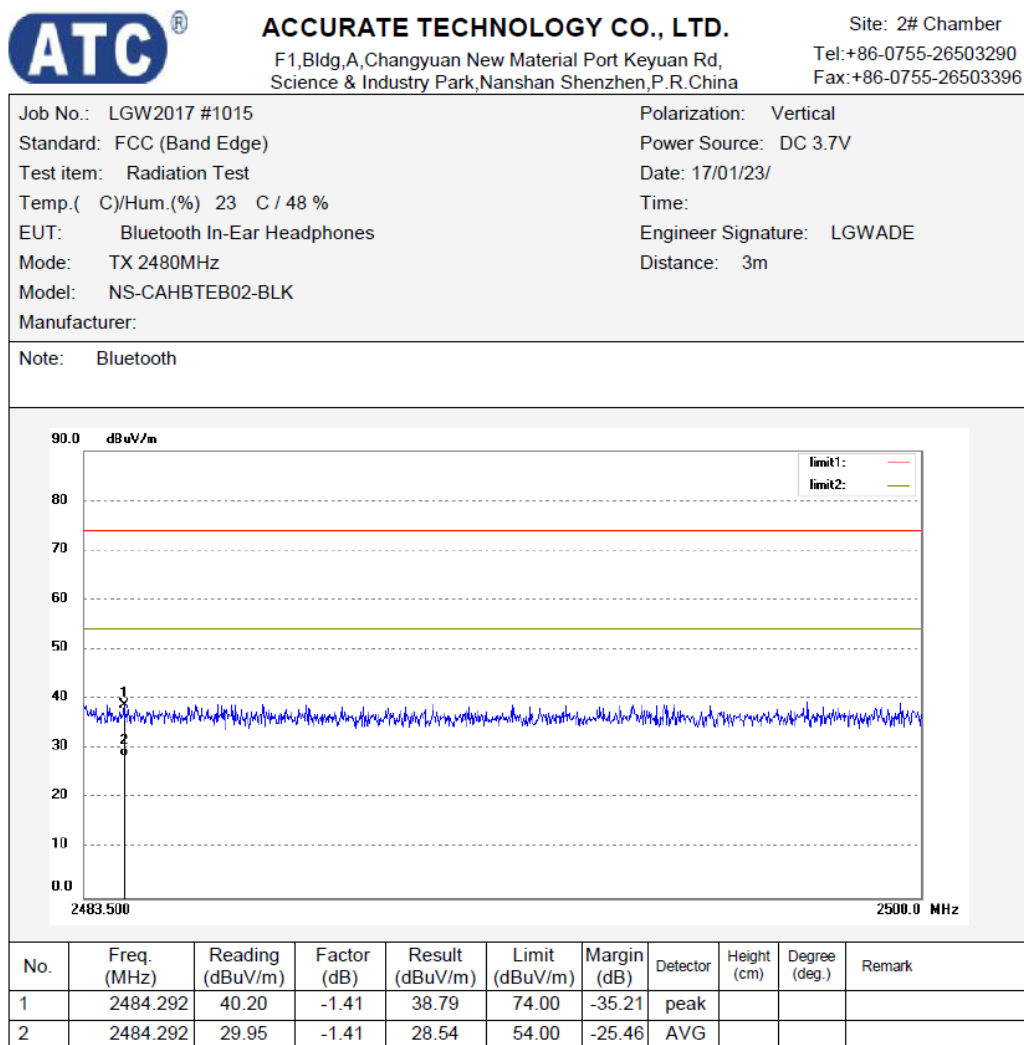
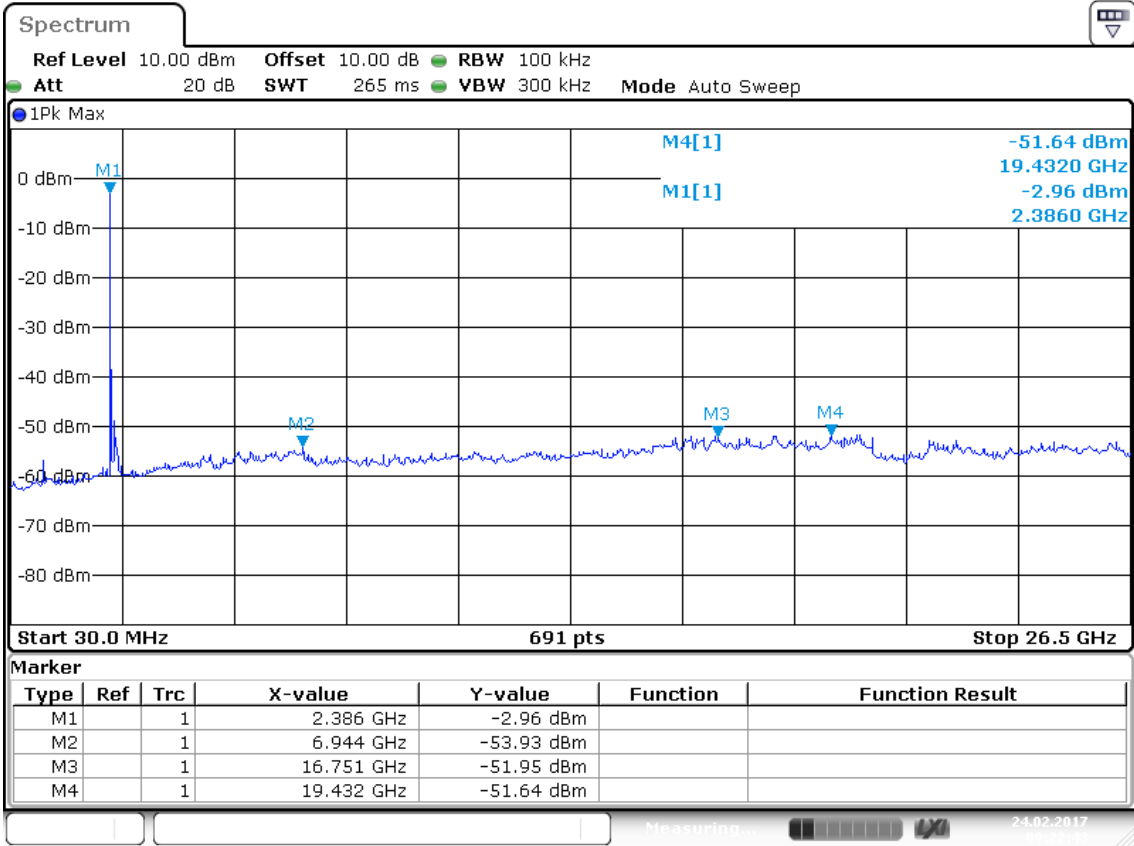
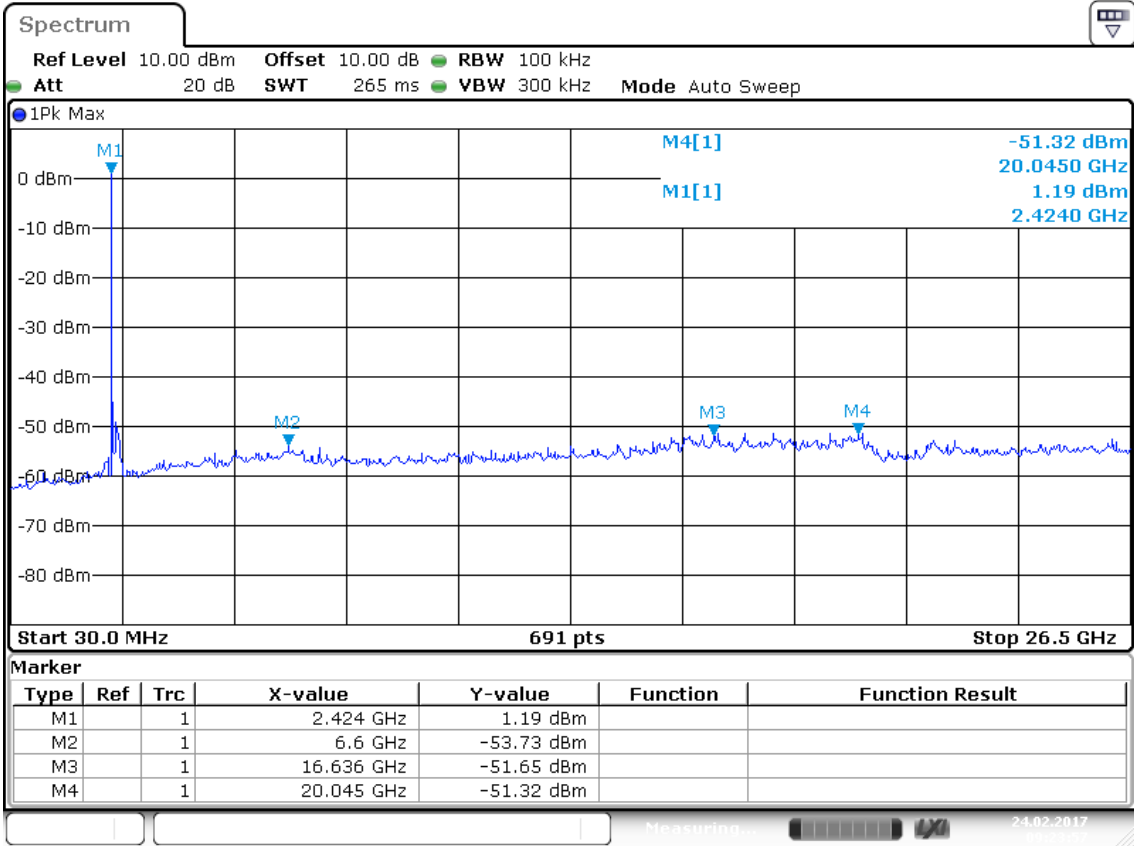


Figure 29: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.1



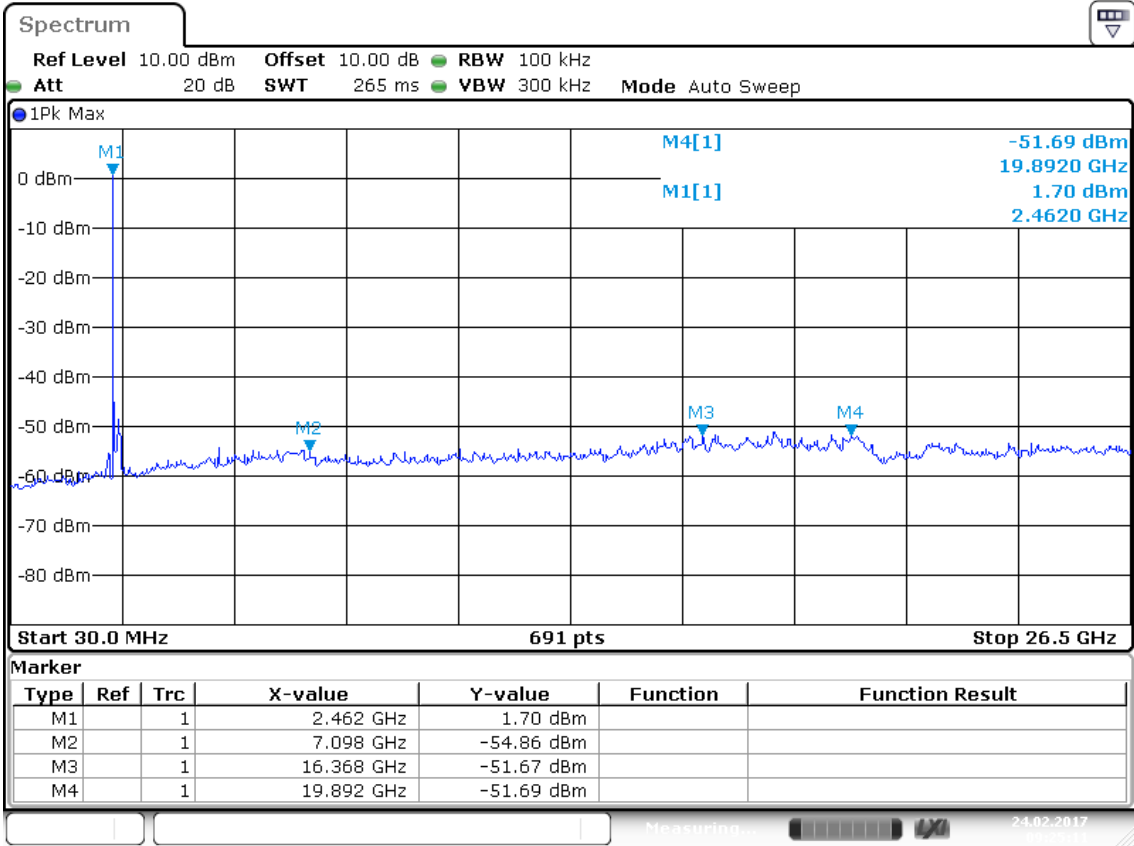
Date: 24.FEB.2017 09:22:44

Figure 30: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.2



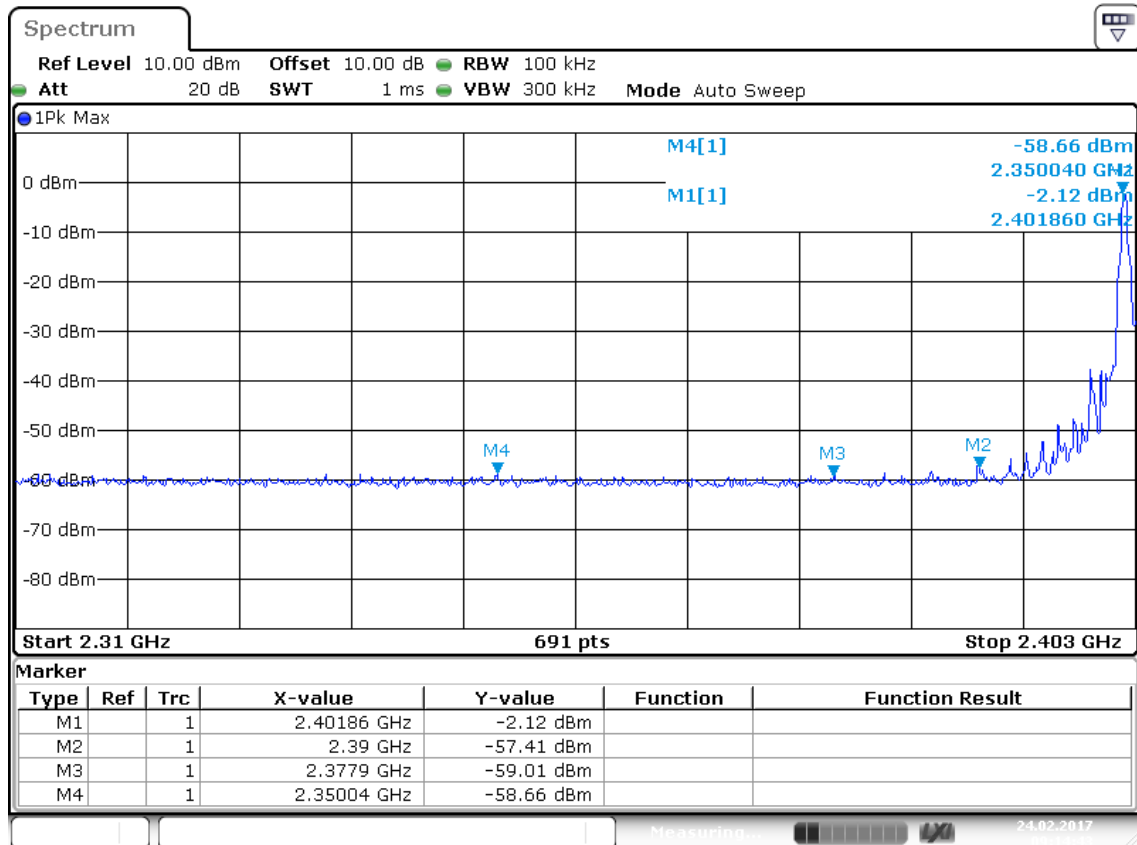
Date: 24.FEB.2017 09:23:58

Figure 31: Test figure of conducted emissions in 100kHz Bandwidth, Mode A.3



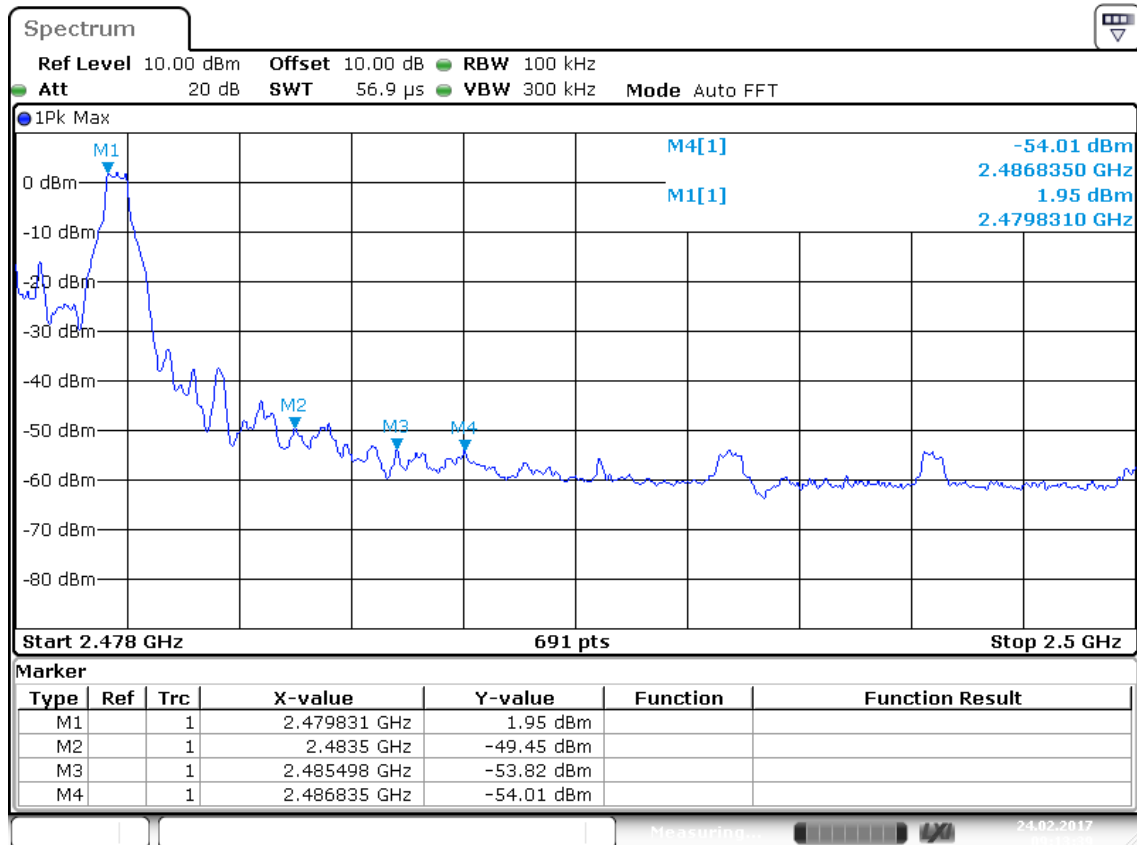
Date: 24.FEB.2017 09:25:11

Figure 32: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.1



Date: 24.FEB.2017 09:14:44

Figure 33: Test figure of Frequency Band Edge in 100kHz Bandwidth, Mode A.3



Date: 24.FEB.2017 09:13:39

Figure 34: Test figure of Conducted emissions, Mode B, line live

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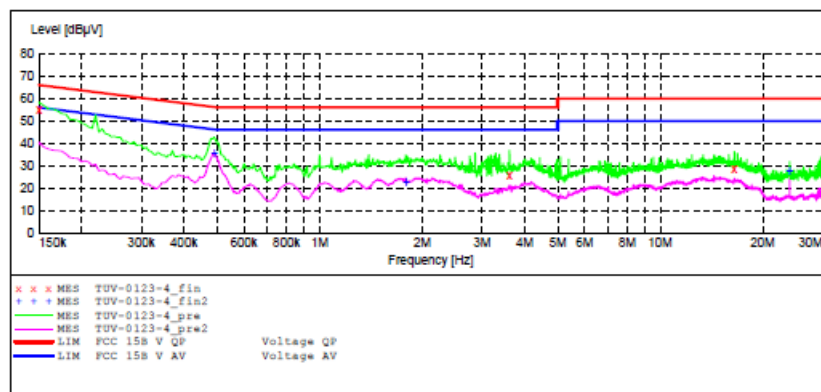
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth In-Ear Headphones M/N: NS-CAHTEB02-BLK
 Manufacturer:
 Operating Condition: TX
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/23/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average			
			QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "TUV-0123-4_fin"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	54.70	10.5	66	11.3	QP	L1	GND
3.610000	25.30	11.1	56	30.7	QP	L1	GND
16.495000	28.10	11.4	60	31.9	QP	L1	GND

MEASUREMENT RESULT: "TUV-0123-4_fin2"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.490000	35.30	10.7	46	10.9	AV	L1	GND
1.790000	22.80	11.0	46	23.2	AV	L1	GND
23.995000	27.50	11.5	50	22.5	AV	L1	GND

Figure 35: Test figure of Conducted emissions, Mode B, line neutral

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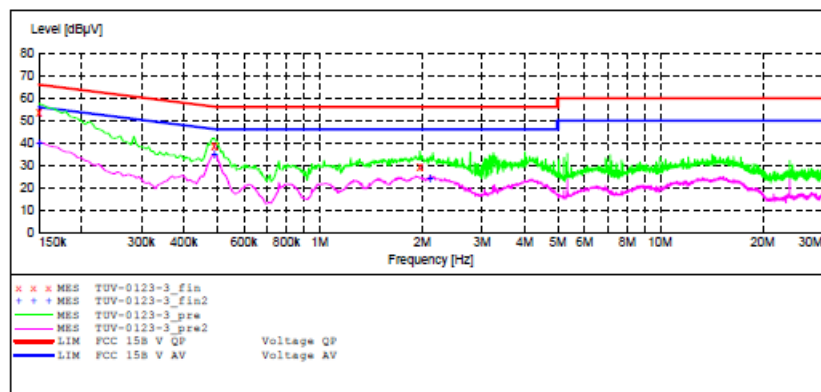
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth In-Ear Headphones M/N: NS-CAHTEB02-BLK
 Manufacturer:
 Operating Condition: TX
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/23/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: SUB STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average			
			QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "TUV-0123-3_fin"

1/23/2017	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBμV	dB	dBμV	dB			
	0.150000	53.60	10.5	66	12.4	QP	N	GND
	0.490000	38.60	10.7	56	17.6	QP	N	GND
	1.970000	29.20	11.0	56	26.8	QP	N	GND

MEASUREMENT RESULT: "TUV-0123-3_fin2"

1/23/2017	Frequency	Level	Transd	Limit	Margin	Detector	Line	PE
	MHz	dBμV	dB	dBμV	dB			
	0.150000	39.60	10.5	56	16.4	AV	N	GND
	0.490000	35.00	10.7	46	11.2	AV	N	GND
	2.110000	24.40	11.0	46	21.6	AV	N	GND

Figure 36: Test figure of Conducted emissions, Mode C, line live

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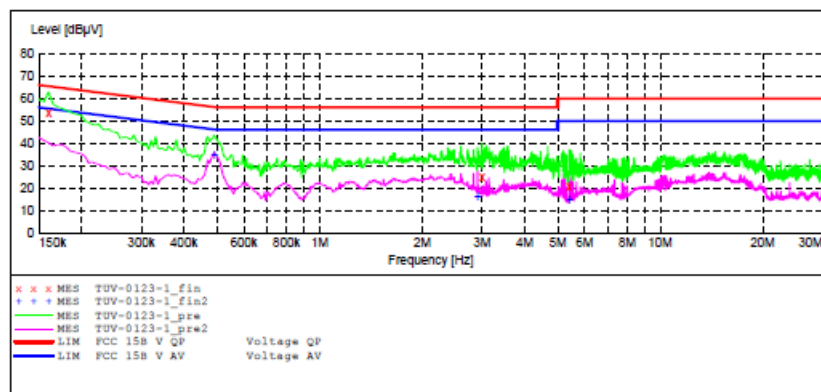
CONDUCTED EMISSION STANDARD FCC PART 15 B

EUT: Bluetooth In-Ear Headphones M/N: NS-CAHTEB02-BLK
 Manufacturer:
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: L 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/23/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	Average			
			QuasiPeak	1.0 s	9 kHz	NSLK8126 2008
			Average			



MEASUREMENT RESULT: "TUV-0123-1_fin"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.160000	53.60	10.5	66	11.9	QP	L1	GND
3.000000	24.90	11.1	56	31.1	QP	L1	GND
5.410000	20.90	11.2	60	39.1	QP	L1	GND

MEASUREMENT RESULT: "TUV-0123-1_fin2"

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.490000	34.90	10.7	46	11.3	AV	L1	GND
2.910000	16.30	11.0	46	29.7	AV	L1	GND
5.410000	14.50	11.2	50	35.5	AV	L1	GND

Figure 37: Test figure of Conducted emissions, Mode C, line neutral

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CONDUCTED EMISSION STANDARD FCC PART 15 B

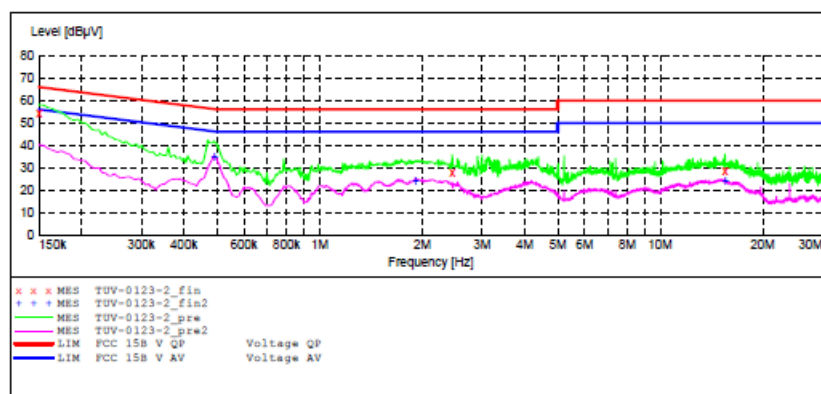
EUT: Bluetooth In-Ear Headphones M/N: NS-CAHBTB02-BLK
 Manufacturer:
 Operating Condition: Charging
 Test Site: 1#Shielding Room
 Operator: LGWADE
 Test Specification: N 120V/60Hz
 Comment: Mains Port
 Start of Test: 1/23/2017 /

SCAN TABLE: "V 9K-30MHz fin"

Short Description: _SUB STD_VTERM2 1.70

Start Frequency	Stop Frequency	Step Width	Detector	Meas. Time	IF Bandw.	Transducer
9.0 kHz	150.0 kHz	100.0 Hz	QuasiPeak	1.0 s	200 Hz	NSLK8126 2008
150.0 kHz	30.0 MHz	5.0 kHz	QuasiPeak	1.0 s	9 kHz	NSLK8126 2008

Average



MEASUREMENT RESULT: "TUV-0123-2_fin"

1/23/2017

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.150000	54.30	10.5	66	11.7	QP	N	GND
2.450000	28.00	11.0	56	28.0	QP	N	GND
15.490000	28.20	11.4	60	31.8	QP	N	GND

MEASUREMENT RESULT: "TUV-0123-2_fin2"

1/23/2017

Frequency MHz	Level dBμV	Transd dB	Limit dBμV	Margin dB	Detector	Line	PE
0.490000	34.80	10.7	46	11.4	AV	N	GND
1.910000	24.40	11.0	46	21.6	AV	N	GND
15.490000	23.80	11.4	50	26.2	AV	N	GND

Figure 38: Test figure of Radiated emissions, Mode C, below 1GHz, Horizontal



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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1045

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: Charging

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 5V

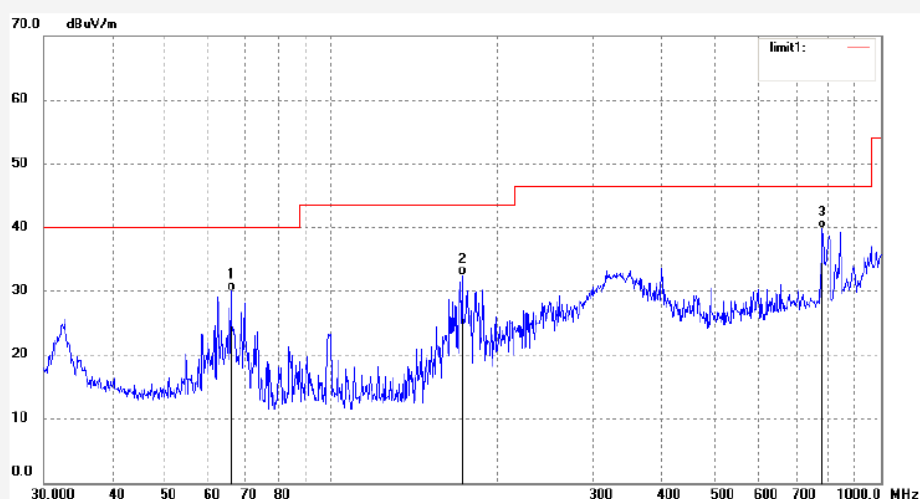
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	65.8031	45.82	-15.75	30.07	40.00	-9.93	QP			
2	173.2050	46.03	-13.50	32.53	43.50	-10.97	QP			
3	782.3452	39.34	0.41	39.75	46.40	-6.65	QP			

Figure 39: Test figure of Radiated emissions, Mode C, below 1GHz, Vertical



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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1044

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: Charging

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Vertical

Power Source: DC 5V

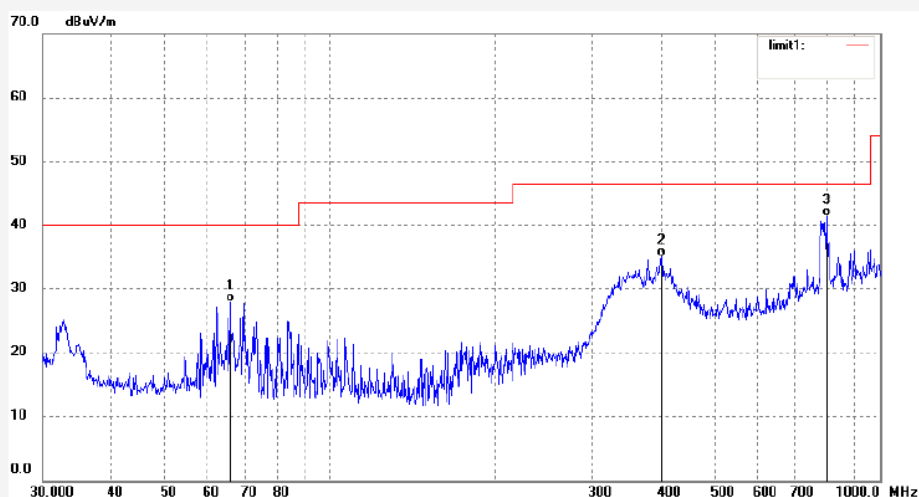
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	65.8031	43.70	-15.75	27.95	40.00	-12.05	QP			
2	400.4318	41.44	-6.43	35.01	46.40	-11.39	QP			
3	798.9796	40.55	0.81	41.36	46.40	-5.04	QP			

Figure 40: Test figure of Radiated emissions, Mode C, above 1GHz, Horizontal



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F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: LGW2017 #1046

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.(C)/Hum.(%) 23 C / 48 %

EUT: Bluetooth In-Ear Headphones

Mode: Charging

Model: NS-CAHBTEB02-BLK

Manufacturer:

Polarization: Horizontal

Power Source: DC 5V

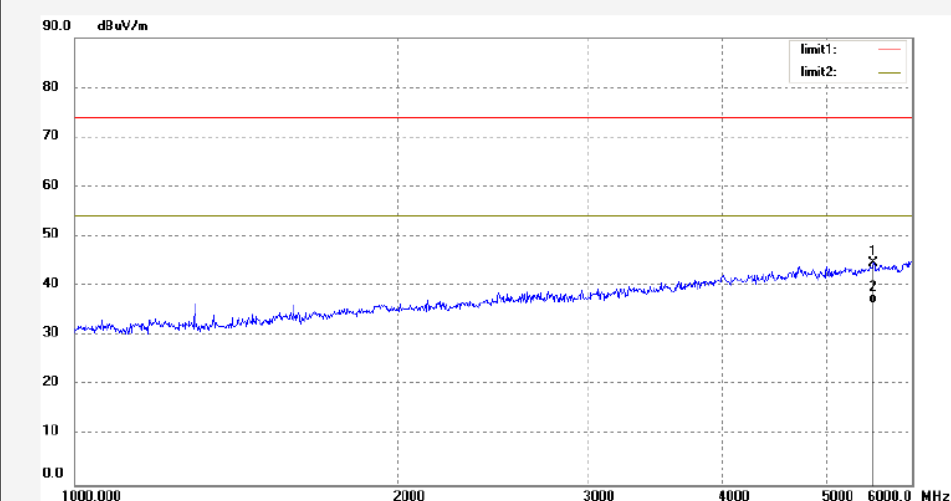
Date: 17/01/23/

Time:

Engineer Signature: LGWADE

Distance: 3m

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	5525.306	37.27	7.48	44.75	74.00	-29.25	peak			
2	5525.306	29.09	7.48	36.57	54.00	-17.43	AVG			

Figure 41: Test figure of Radiated emissions, Mode C, above 1GHz, Vertical



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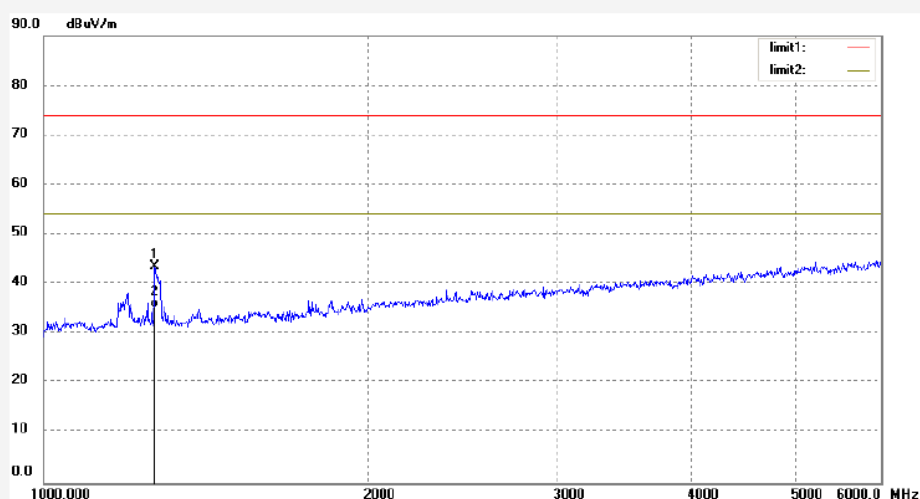
F1,Bldg,A,Changyuan New Material Port Keyuan Rd,
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 2# Chamber

Tel:+86-0755-26503290
Fax:+86-0755-26503396

Job No.: LGW2017 #1047	Polarization: Vertical
Standard: FCC Class B 3M Radiated	Power Source: DC 5V
Test item: Radiation Test	Date: 17/01/23/
Temp.(C)/Hum.(%) 23 C / 48 %	Time:
EUT: Bluetooth In-Ear Headphones	Engineer Signature: LGWADE
Mode: Charging	Distance: 3m
Model: NS-CAHBTEB02-BLK	
Manufacturer:	

Note:



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Degree (deg.)	Remark
1	1269.095	52.13	-8.69	43.44	74.00	-30.56	peak			
2	1269.095	43.92	-8.69	35.23	54.00	-18.77	AVG			