

TEST REPORT

Product Name : True wireless earbuds
Brand Mark : N/A
Model No. : A21
Extension model : A21 Plus, A21 Pro, A20+, A20, A20 Plus, A20 Pro, A22, A22 Plus, A22 Pro, M2, M2 Plus, M2 Pro
Report Number : BLA-EMC-202212-A7402
FCC ID : 2AXI9A21
Date of Sample Receipt : 2022/12/19
Date of Test : 2022/12/19 to 2023/2/1
Date of Issue : 2023/2/1
Test Standard : 47 CFR Part 15, Subpart C 15.247
Test Result : Pass

Prepared for:

Shenzhen RB-LINK Intelligent Technology Co., Ltd
Room 401, Building C , Runhe Industrial Park, Zhentou
Road,Nandong,Huangpu Community,Xinqiao Street , Baoan
District ,Shenzhen

Prepared by:

BlueAsia Technical Services(Shenzhen) Co.,Ltd.
No.41, South of Beihuan Road, Shangwu Community, Shiyan Subdistrict,
Bao'an District, Shenzhen,Guangdong ,China
TEL: +86-755-23059481

Compiled by:

Jozu

Approved by:

Blue Zheng

Review by:

Sueels

Date:

2023/2/1



REPORT REVISE RECORD

Version No.	Date	Description
00	2023/2/1	Original

BlueAsia

TABLE OF CONTENTS

1	TEST SUMMARY	5
2	GENERAL INFORMATION	6
3	GENERAL DESCRIPTION OF E.U.T.	6
4	TEST ENVIRONMENT	7
5	TEST MODE	7
6	MEASUREMENT UNCERTAINTY	7
7	DESCRIPTION OF SUPPORT UNIT	8
8	LABORATORY LOCATION	8
9	TEST INSTRUMENTS LIST	9
10	ANTENNA REQUIREMENT	11
10.1	CONCLUSION	11
11	CONDUCTED SPURIOUS EMISSIONS	12
11.1	LIMITS	12
11.2	BLOCK DIAGRAM OF TEST SETUP	12
11.3	TEST DATA	13
12	20DB BANDWIDTH	14
12.1	BLOCK DIAGRAM OF TEST SETUP	14
12.2	TEST DATA	14
13	CONDUCTED PEAK OUTPUT POWER	15
13.1	LIMITS	15
13.2	BLOCK DIAGRAM OF TEST SETUP	15
13.3	TEST DATA	16
14	CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)	17
14.1	LIMITS	17
14.2	BLOCK DIAGRAM OF TEST SETUP	17
14.3	PROCEDURE	17
14.4	TEST DATA	19
15	RADIATED SPURIOUS EMISSIONS	22
15.1	LIMITS	22

15.2	BLOCK DIAGRAM OF TEST SETUP	23
15.3	PROCEDURE	23
15.4	TEST DATA	25
16	RADIATED EMISSIONS WHICH FALL IN THE RESTRICTED BANDS	34
16.1	LIMITS	34
16.2	BLOCK DIAGRAM OF TEST SETUP	35
16.3	PROCEDURE	35
16.4	TEST DATA	37
17	CONDUCTED BAND EDGES MEASUREMENT	42
17.1	LIMITS	42
17.2	BLOCK DIAGRAM OF TEST SETUP	42
17.3	TEST DATA	43
18	DWELL TIME	44
18.1	LIMITS	44
18.2	BLOCK DIAGRAM OF TEST SETUP	44
18.3	TEST DATA	45
19	HOPPING CHANNEL NUMBER	46
19.1	LIMITS	46
19.2	BLOCK DIAGRAM OF TEST SETUP	46
19.3	TEST DATA	46
20	CARRIER FREQUENCIES SEPARATION	47
20.1	LIMITS	47
20.2	BLOCK DIAGRAM OF TEST SETUP	47
20.3	TEST DATA	47
21	APPENDIX	48
	APPENDIX A: PHOTOGRAPHS OF TEST SETUP	97
	APPENDIX B: PHOTOGRAPHS OF EUT	99

1 TEST SUMMARY

Test item	Test Requirement	Test Method	Class/Severity	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass
20dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.7	47 CFR Part 15, Subpart C 15.247(a)(1)	Pass
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.5	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.8 & Section 11.13.3.2	47 CFR Part 15, Subpart C 15.247(d)	Pass
Dwell Time	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.4	47 CFR Part 15, Subpart C 15.247a(1)(iii)	Pass
Hopping Channel Number	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.3	47 CFR Part 15, Subpart C 15.247a(1)(iii)	Pass
Carrier Frequencies Separation	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 7.8.2	47 CFR Part 15, Subpart C 15.247a(1)	Pass

2 GENERAL INFORMATION

Applicant	Shenzhen RB-LINK Intelligent Technology Co., Ltd
Address	Room 401, Building C , Runhe Industrial Park, Zhentou Road,Nandong,Huangpu Community,Xinqiao Street , Baoan District ,Shenzhen
Manufacturer	Shenzhen RB-LINK Intelligent Technology Co., Ltd
Address	Room 401, Building C , Runhe Industrial Park, Zhentou Road,Nandong,Huangpu Community,Xinqiao Street , Baoan District ,Shenzhen
Factory	Shenzhen RB-LINK Intelligent Technology Co., Ltd
Address	Room 401, Building C , Runhe Industrial Park, Zhentou Road,Nandong,Huangpu Community,Xinqiao Street , Baoan District ,Shenzhen
Product Name	True wireless earbuds
Test Model No.	A21
Extension model	A21 Plus, A21 Pro, A20+, A20, A20 Plus, A20 Pro, A22, A22 Plus, A22 Pro, M2, M2 Plus, M2 Pro
Note	All above models are identical in the same PCB layout, interior structure and electrical circuits. The differences are model name for commercial purpose.

3 GENERAL DESCRIPTION OF E.U.T.

Hardware Version	A21_L_V1.0_BT8926B_20221027 A21_R_V1.0_BT8926B_20221027 A21-ZR_PowerPack_V3.2_20221027
Software Version	RBZN-A20GQ-BT8926B2(A21)-20221122-6E6CE7D0_41CB4557_C40_M P1
Operation Frequency:	2402MHz-2480MHz
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK
Channel Spacing:	1MHz
Number of Channels:	79
Antenna Type:	Chip Antenna
Antenna Gain:	3.12dBi (Provided by the applicant)

4 TEST ENVIRONMENT

Environment	Temperature	Voltage
Normal	25°C	3.7Vdc

5 TEST MODE

TEST MODE	TEST MODE DESCRIPTION
Transmitting mode	Keep the EUT in continuously transmitting mode with modulation. (hopping and non hopping mode all have been tested, non hopping mode is worse case for RE)
Remark: Full battery is used during all test except ac conducted emission, DH1, DH3, DH5 all have been tested, during the test, GFSK, Pi/4QPSK, 8-DPSK modulation were all pre-scanned only GFSK worse case is reported.	

6 MEASUREMENT UNCERTAINTY

Parameter	Expanded Uncertainty (Confidence of 95%)
Radiated Emission(9kHz-30MHz)	±4.34dB
Radiated Emission(30Mz-1000MHz)	±4.24dB
Radiated Emission(1GHz-18GHz)	±4.68dB
AC Power Line Conducted Emission(150kHz-30MHz)	±3.45dB

7 DESCRIPTION OF SUPPORT UNIT

Device Type	Manufacturer	Model Name	Serial No.	Remark
AC Adapter	UGREEN	CD112	N/A	N/A

8 LABORATORY LOCATION

All tests were performed at:
BlueAsia Technical Services(Shenzhen) Co.,Ltd.
No.41, South of Beihuan Road, Shangwu Community, Shiyao Subdistrict, Bao'an District,
Shenzhen,Guangdong ,China
Telephone: TEL: +86-755-28682673 FAX: +86-755-28682673

9 TEST INSTRUMENTS LIST

Test Equipment Of Radiated Spurious Emissions					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Chamber 1	SKET	966	N/A	2020/11/10	2023/11/9
Chamber 2	SKET	966	N/A	2021/07/20	2024/07/19
Spectrum	R&S	FSP40	100817	2022/09/15	2023/09/14
Receiver	R&S	ESR7	101199	2022/09/15	2023/09/14
Receiver	R&S	ESPI7	101477	2022/07/16	2023/07/15
broadband Antenna	Schwarzbeck	VULB9168	00836 P:00227	2022/09/15	2023/09/14
Horn Antenna	Schwarzbeck	BBHA9120D	01892 P:00331	2022/09/13	2025/09/12
Amplifier	SKET	LNPA_30M01G-30	SK2021060801	2022/07/16	2023/07/15
Amplifier	SKET	PA-000318G-45	N/A	2022/09/13	2023/09/12
Amplifier	SKET	LNPA_18G40G-50	SK2022071301	2022/07/14	2023/07/13
Filter group	SKET	2.4G/5G Filter group r	N/A	2022/07/16	2023/07/15
EMI software	EZ	EZ-EMC	EEMC-3A1	N/A	N/A
Loop antenna	SCHNARZBECK	FMZB1519B	00102	2022/9/14	2025/9/13
Controller	SKET	N/A	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-02	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-03	N/A	N/A	N/A
Coaxial Cable	BlueAsia	BLA-XC-01	N/A	N/A	N/A

Test Equipment Of Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Shield room	SKET	833	N/A	2020/11/25	2023/11/24
Receiver	R&S	ESPI3	101082	2022/09/14	2023/09/13
LISN	R&S	ENV216	3560.6550.15	2022/09/14	2023/09/13
LISN	AT	AT166-2	AKK1806000003	2022/09/14	2023/09/13
ISN	TESEQ	ISNT8-cat6	53580	2022/09/14	2023/09/13
Single-channel vehicle artificial power network	Schwarzbeck	NNBM 8124	01045	2022/08/17	2023/08/16
Single-channel vehicle artificial power network	Schwarzbeck	NNBM 8124	01075	2022/08/17	2023/08/16
EMI software	EZ	EZ-EMC	EEMC-3A1	N/A	N/A

Test Equipment Of RF Conducted Test					
Equipment	Manufacturer	Model	S/N	Cal.Date	Cal.Due
Spectrum	R&S	FSP40	100817	2022/09/15	2023/09/14
Spectrum	Agilent	N9020A	MY49100060	2022/09/07	2023/09/06
Spectrum	KEYSIGHT	N9030A	MY52350152	2022/07/01	2023/06/30
Spectrum	KEYSIGHT	N9010A	MY54330814	2022/07/01	2023/06/30
Signal Generator	Agilent	N5182A	MY47420955	2022/09/07	2023/09/06
Signal Generator	Agilent	E8257D	MY44320250	2022/07/01	2023/06/30
Signal Generator	Agilent	N5181A	MY46240904	2022/08/02	2023/08/01
Signal Generator	R&S	CMW500	132429	2022/09/07	2023/09/06
BluetoothTester	Anritsu	MT8852B	06262047872	2022/09/07	2023/09/06
Power probe	DARE	RPR3006W	14I00889SN042	2022/09/07	2023/09/06
DCPowersupply	zhaoxin	KXN-305D	20K305D1221363	2022/09/14	2023/09/13
DCPowersupply	zhaoxin	RXN-1505D	19R1505D050168	2022/09/14	2023/09/13
2.4GHz/5GHz RF Test software	MTS	MTS 8310	Version 2.0.0.0	N/A	N/A
Audio Analyzer	Audioprecision	N/A	ATSI-41094	2022/7/1	2023/6/30

10 ANTENNA REQUIREMENT

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	N/A

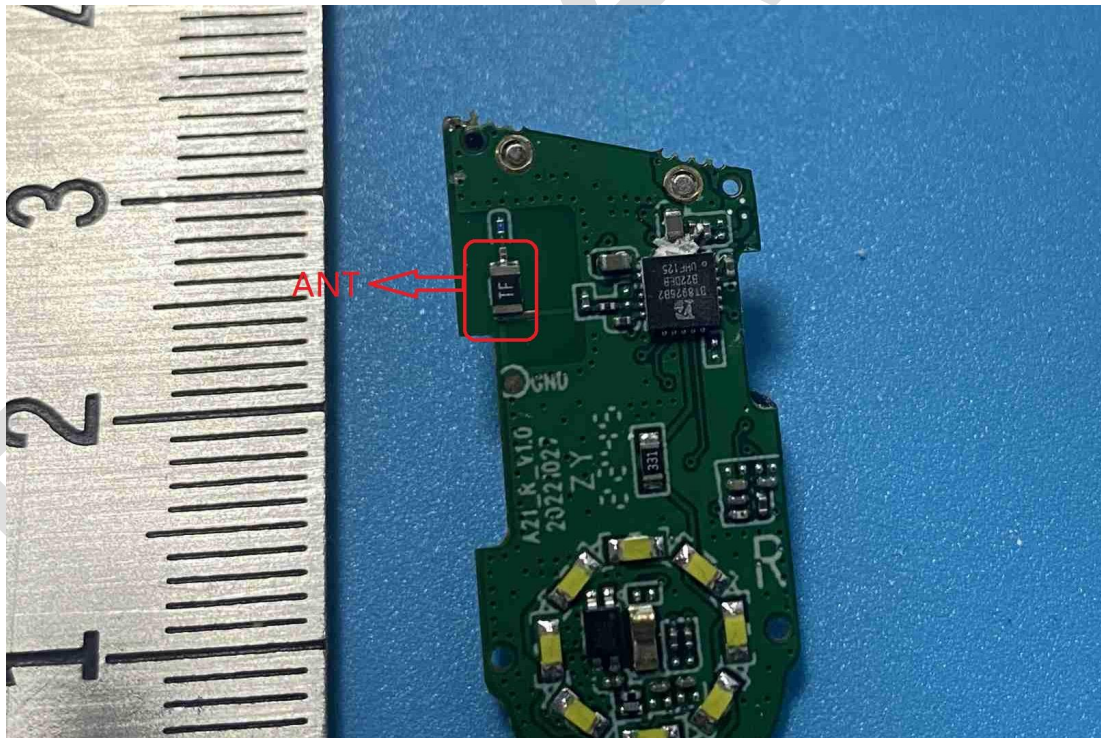
10.1 CONCLUSION

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is 3.12dBi.



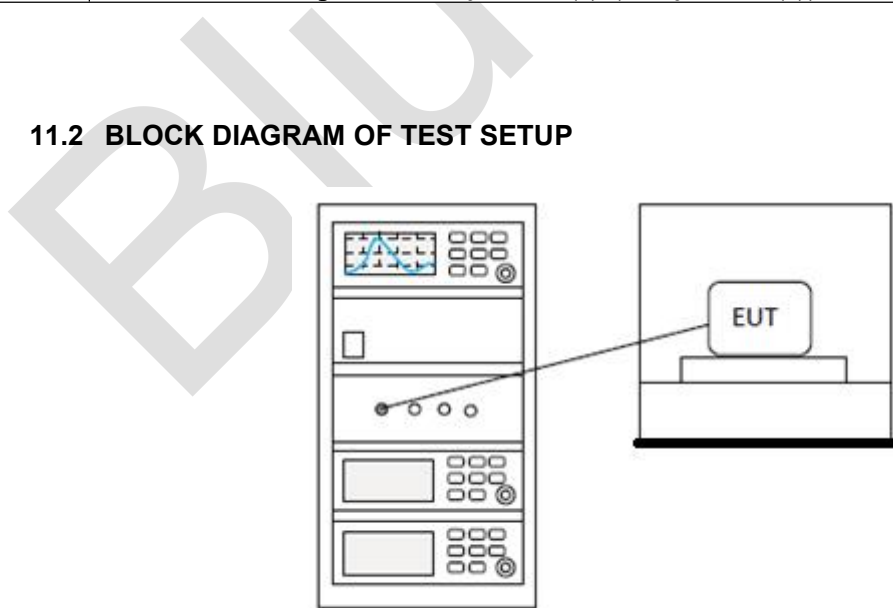
11 CONDUCTED SPURIOUS EMISSIONS

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.6 & Section 11.11
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

11.1 LIMITS

Limit:	<p>In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).</p>
---------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

11.2 BLOCK DIAGRAM OF TEST SETUP



11.3 TEST DATA

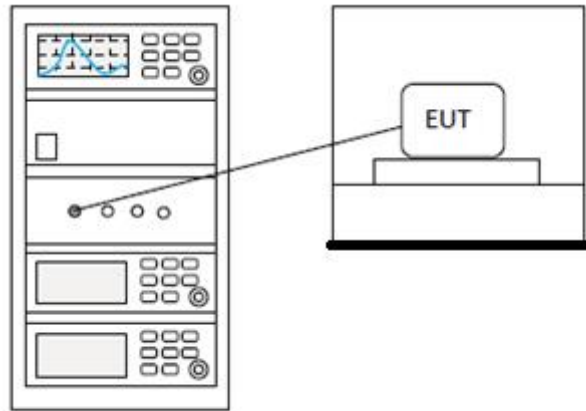
Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

12 20DB BANDWIDTH

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.7
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

12.1 BLOCK DIAGRAM OF TEST SETUP



12.2 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

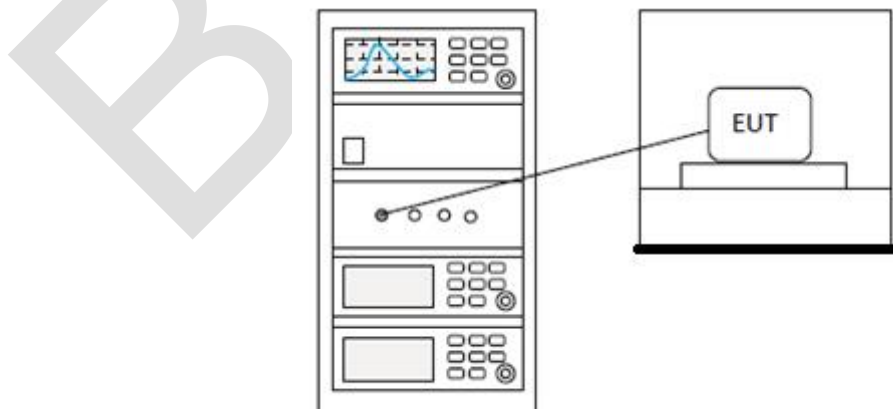
13 CONDUCTED PEAK OUTPUT POWER

Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 7.8.5
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

13.1 LIMITS

Frequency range(MHz)	Output power of the intentional radiator(watt)
902-928	1 for ≥ 50 hopping channels
	0.25 for $25 \leq$ hopping channels < 50
	1 for digital modulation
2400-2483.5	1 for ≥ 75 non-overlapping hopping channels
	0.125 for all other frequency hopping systems
	1 for digital modulation
5725-5850	1 for frequency hopping systems and digital modulation

13.2 BLOCK DIAGRAM OF TEST SETUP



13.3 TEST DATA

Pass: Please Refer To Appendix: Appendix1 For Details

BlueAsia

14 CONDUCTED EMISSIONS AT AC POWER LINE (150KHZ-30MHZ)

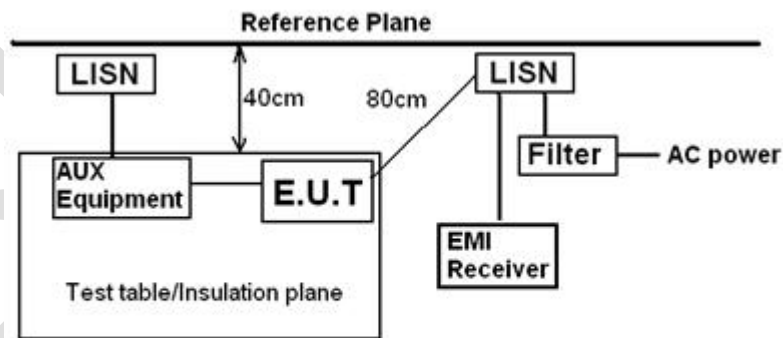
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.2
Test Mode (Pre-Scan)	BT mode
Test Mode (Final Test)	BT mode
Tester	Jozu
Temperature	25°C
Humidity	60%

14.1 LIMITS

Frequency of emission(MHz)	Conducted limit(dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

14.2 BLOCK DIAGRAM OF TEST SETUP



Remark:
 E.U.T: Equipment Under Test
 LISN: Line Impedance Stabilization Network
 Test table height=0.8m

14.3 PROCEDURE

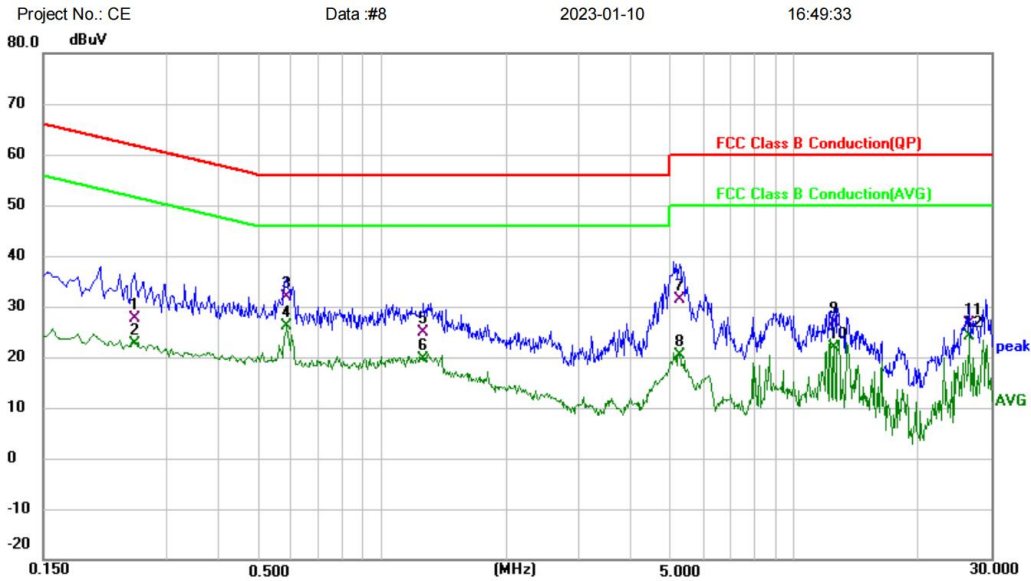
- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50H + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
 - 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
 - 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.
- Remark: LISN=Read Level+ Cable Loss+ LISN Factor

BlueAsia

[TestMode: BT mode]; [Line: Nutral] ;[Power:AC120V/60Hz]

Conducted Emission Measurement



Site: Phase: **N** Temperature: (C)
 Limit: FCC Class B Conduction(QP) Power: Humidity: %RH
 EUT: True wireless earbuds
 M/N: A21
 Mode: TX mode
 Note:

No. Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measurement dBuV	Limit dBuV	Over dB	Detector	Comment
1	0.2500	16.95	10.57	27.52	61.76	-34.24	QP	
2	0.2500	12.17	10.57	22.74	51.76	-29.02	AVG	
3	0.5860	21.95	10.04	31.99	56.00	-24.01	QP	
4 *	0.5860	15.99	10.04	26.03	46.00	-19.97	AVG	
5	1.2579	14.74	10.04	24.78	56.00	-31.22	QP	
6	1.2579	9.49	10.04	19.53	46.00	-26.47	AVG	
7	5.2500	21.57	9.81	31.38	60.00	-28.62	QP	
8	5.2500	10.45	9.81	20.26	50.00	-29.74	AVG	
9	12.5020	16.85	9.99	26.84	60.00	-33.16	QP	
10	12.5020	11.77	9.99	21.76	50.00	-28.24	AVG	
11	26.6100	16.80	9.93	26.73	60.00	-33.27	QP	
12	26.6100	14.30	9.93	24.23	50.00	-25.77	AVG	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level =Receiver Read level + LISN Factor + Cable Loss.

BlueAsia

15 RADIATED SPURIOUS EMISSIONS

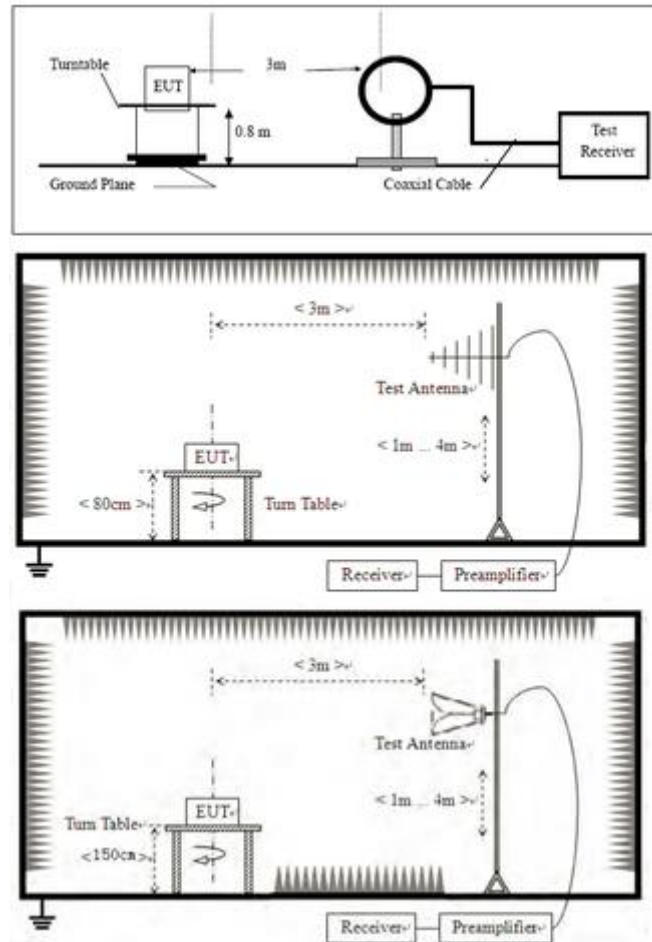
Test Standard	47 CFR Part 15, Subpart C 15.247
Test Method	ANSI C63.10 (2013) Section 6.4,6.5,6.6
Test Mode (Pre-Scan)	TX
Test Mode (Final Test)	TX
Tester	Jozu
Temperature	25°C
Humidity	60%

15.1 LIMITS

Frequency(MHz)	Field strength(microvolts/meter)	Measurement distance(meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

Remark: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

15.2 BLOCK DIAGRAM OF TEST SETUP



15.3 PROCEDURE

- For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter fully-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

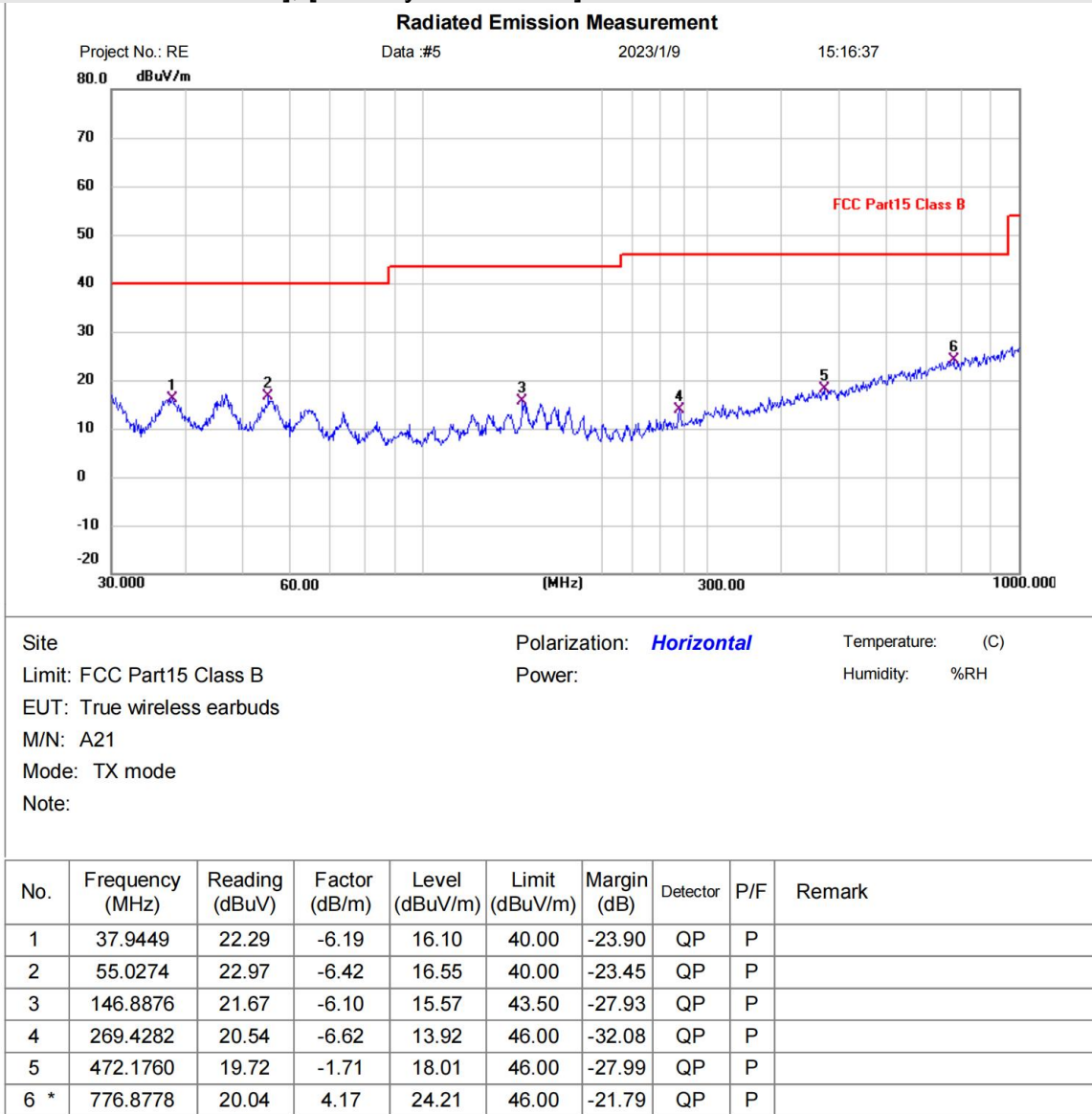
- h. Test the EUT in the lowest channel, the middle channel, the Highest channel.
- i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, and found the X axis positioning which it is the worst case.
- j. Repeat above procedures until all frequencies measured was complete.

Remark:

- 1) For emission below 1GHz, through pre-scan found the worst case is the lowest channel. Only the worst case is recorded in the report.
- 2) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor
- 3) Scan from 9kHz to 25GHz, the disturbance above 12.75GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported. fundamental frequency is blocked by filter, and only spurious emission is shown.
- 4) For frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. For the emissions whose peak level is lower than the average limit, only the peak measurement is shown in the report.

15.4 TEST DATA

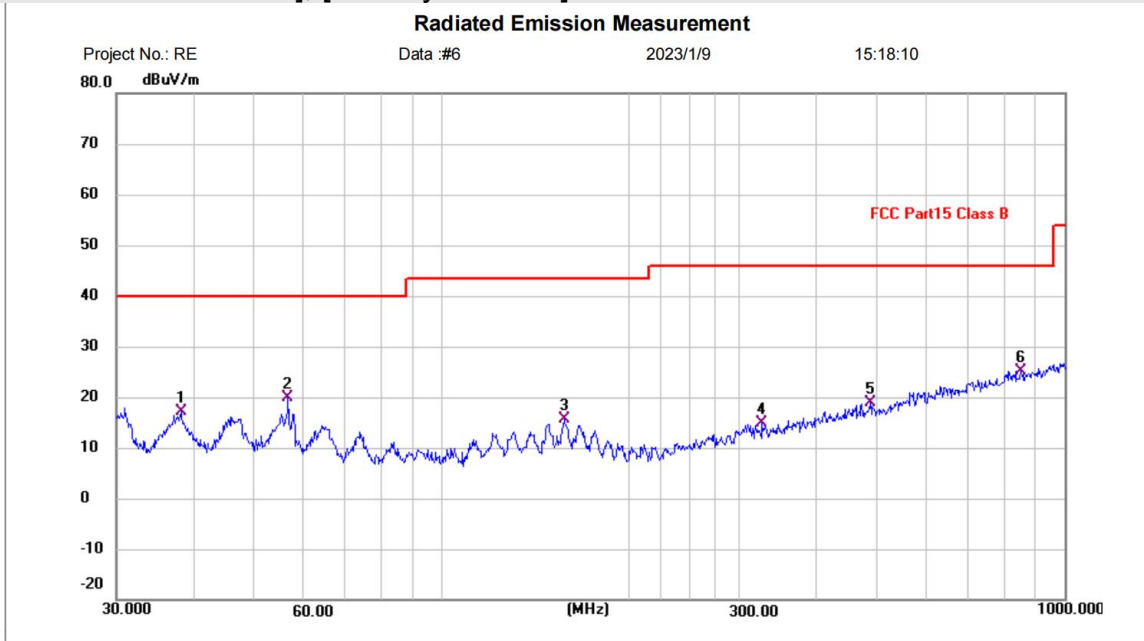
[TestMode: TX below 1G]; [Polarity: Horizontal]



*:Maximum data x:Over limit !:over margin

Test Result: Pass

[TestMode: TX below 1G]; [Polarity: Vertical]



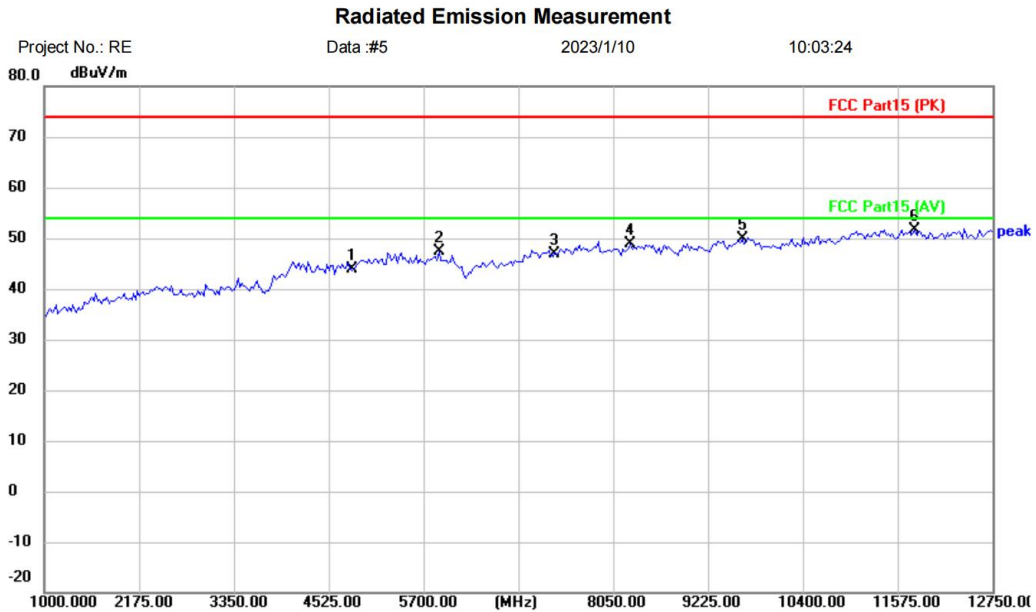
Site: Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 Class B Power: Humidity: %RH
 EUT: True wireless earbuds
 M/N: A21
 Mode: TX mode
 Note:

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	38.0783	23.23	-6.19	17.04	40.00	-22.96	QP	P	
2 *	56.5929	26.57	-6.58	19.99	40.00	-20.01	QP	P	
3	157.0074	21.34	-5.70	15.64	43.50	-27.86	QP	P	
4	326.7395	19.77	-4.92	14.85	46.00	-31.15	QP	P	
5	487.3151	20.38	-1.45	18.93	46.00	-27.07	QP	P	
6	851.0353	20.22	4.98	25.20	46.00	-20.80	QP	P	

*:Maximum data x:Over limit !:over margin

Test Result: Pass

[TestMode: TX low channel]; [Polarity: Horizontal]



Site	Polarization: Horizontal	Temperature: (C)
Limit: FCC Part15 (PK)	Power:	Humidity: %RH
EUT: True wireless earbuds		
M/N: A21		
Mode: TX-L		
Note:		

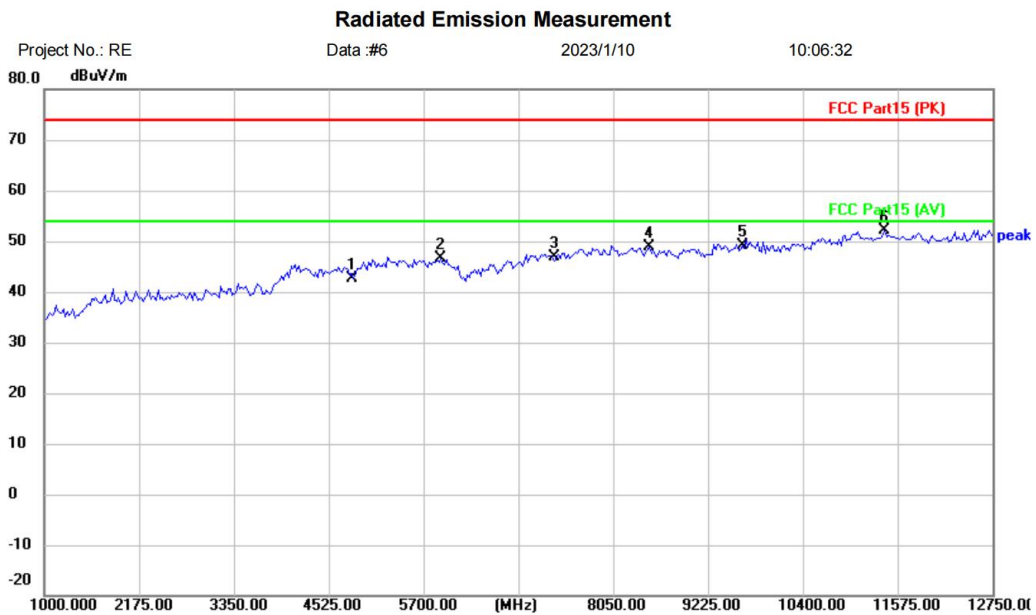
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB		
1		4824.000	39.74	4.13	43.87	74.00	-30.13	peak	
2		5888.000	40.47	6.82	47.29	74.00	-26.71	peak	
3		7326.000	38.57	8.21	46.78	74.00	-27.22	peak	
4		8261.500	39.86	9.02	48.88	74.00	-25.12	peak	
5		9648.000	38.78	11.01	49.79	74.00	-24.21	peak	
6	*	11786.500	37.88	13.81	51.69	74.00	-22.31	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX low channel]; [Polarity: Vertical]



Site: Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: True wireless earbuds
 M/N: A21
 Mode: TX-L
 Note:

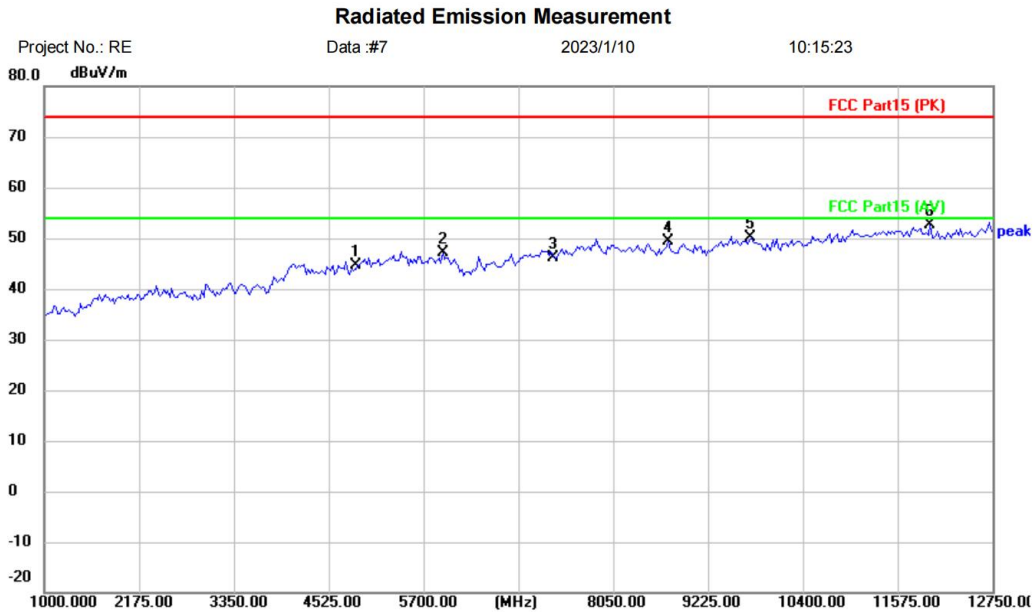
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4824.000	38.57	4.13	42.70	74.00	-31.30	peak	
2		5911.500	39.72	6.85	46.57	74.00	-27.43	peak	
3		7326.000	38.78	8.21	46.99	74.00	-27.01	peak	
4		8496.500	39.64	9.12	48.76	74.00	-25.24	peak	
5		9648.000	38.17	11.01	49.18	74.00	-24.82	peak	
6	*	11410.500	38.49	13.63	52.12	74.00	-21.88	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX mid channel]; [Polarity: Horizontal]



Site: Polarization: **Horizontal** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: True wireless earbuds
 M/N: A21
 Mode: TX-M
 Note:

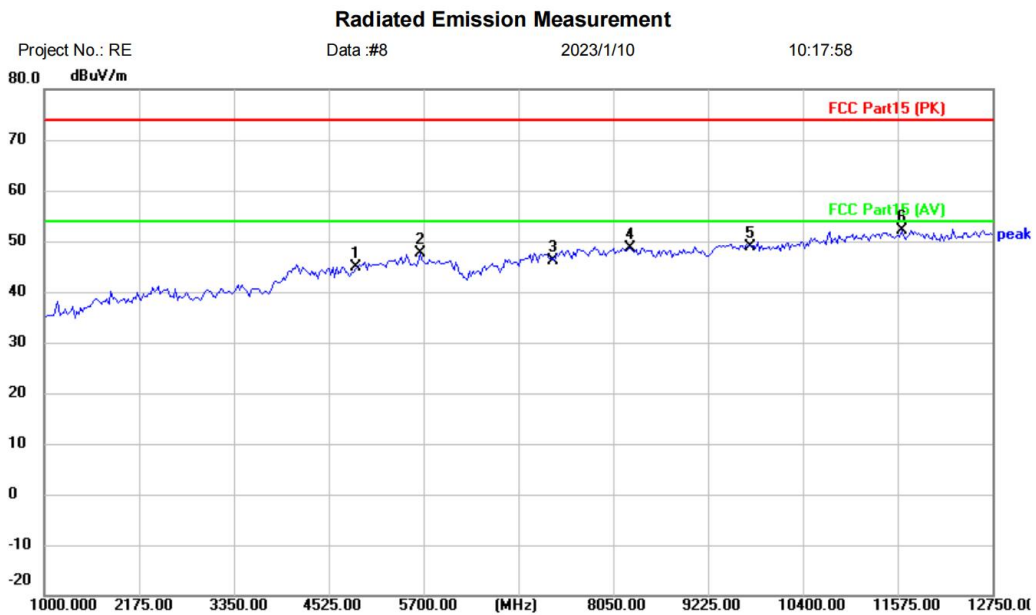
No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	40.24	4.32	44.56	74.00	-29.44	peak	
2		5935.000	40.16	6.91	47.07	74.00	-26.93	peak	
3		7311.000	37.92	8.18	46.10	74.00	-27.90	peak	
4		8731.500	40.05	9.23	49.28	74.00	-24.72	peak	
5		9748.000	38.91	11.26	50.17	74.00	-23.83	peak	
6	*	11974.500	38.69	13.89	52.58	74.00	-21.42	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass

[TestMode: TX mid channel]; [Polarity: Vertical]



Site: Polarization: **Vertical** Temperature: (C)
 Limit: FCC Part15 (PK) Power: Humidity: %RH
 EUT: True wireless earbuds
 M/N: A21
 Mode: TX-M
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Comment
1		4874.000	40.59	4.32	44.91	74.00	-29.09	peak	
2		5653.000	40.99	6.76	47.75	74.00	-26.25	peak	
3		7311.000	37.99	8.18	46.17	74.00	-27.83	peak	
4		8261.500	39.56	9.02	48.58	74.00	-25.42	peak	
5		9748.000	37.67	11.26	48.93	74.00	-25.07	peak	
6	*	11622.000	38.39	13.73	52.12	74.00	-21.88	peak	

*:Maximum data x:Over limit !:over margin

(Reference Only)

Test Result: Pass