

NCC RADIO TEST REPORT

Product name	TWS Bluetooth Headset
Applicant	AUSOUNDS INTELLIGENCE, LLC
Manufacture	AUSOUNDS INTELLIGENCE, LLC
Rating(s)	DC5V (Charging Case) or DC3.7V from battery (Earphones)
Trademark	AUSOUNDS
Model and/or type reference	AU-StreamANC+
Standard	LP0002:2020
Test Result	Pass

Date of receipt : 12-29-2021

Date of Issue : 01-05-2022

Signature :



NCC RADIO TEST REPORT**Report Reference No.**..... M220110N4

Compiled by (+ signature) Kevin Bothmann

Approved by (+ signature) Jay Gandhi




Date of issue 2021-01-05

Applicant's name AUSOUNDS INTELLIGENCE, LLCAddress 929 108TH AVE NE STE 1200, BELLEVUE, WA, 98004-4787,
UNITED STATES**Manufacture's Name** AUSOUNDS INTELLIGENCE, LLCAddress 929 108TH AVE NE STE 1200, BELLEVUE, WA, 98004-4787,
UNITED STATES**Test specification:**

Standard LP0002: 2020

Test procedure EIA 603、ANSI、FCC/47 CFR/2.1046、2.1047、2.1049、2.1051、2.1053
and 2.1055

Non-standard test method... N/A

Test item description

Product name : TWS Bluetooth Headset

Trademark : AUSOUNDS

Model and/or type reference : AU-StreamANC+

Rating(s) : DC5V (Charging Case) or DC3.7V from battery (Earphones)

Testing Laboratory information

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Testing.....

Date of receipt of test item Dec. 29, 2021

Date (s) of performance of tests Dec. 27, 2021~ Jan. 04, 2022

Date of Issue Jan. 05, 2022

Test Result **Pass**

GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Electro Magnetic Test, Inc., which is an independent testing and consulting firm. The test report is based on testing performed Electro Magnetic Test, Inc. personnel according to the measurement procedure described in the test specification given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced in any form unless done so in full.

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Federal Government.

Electro Magnetic Test, Inc. is recognized by the following agencies for performing EMI/EMC testing:

COUNTRY	AGENCY	IDENTIFYING #
USA	Federal Communications Commission (FCC) (EMT's test site is recognized by the FCC)	Registration Number: 90576
USA, Canada, TAUSOUNDSn, Australia/New Zealand, European Community	National Voluntary Lab Accreditation Program (NVLAP) (EMT is accredited by NVLAP. A copy of the NVLAP Scope Of Accreditation is available upon request.)	Lab Code: 200147-0
Canada	Industry Canada	File No.: IC 2804
Japan	Voluntary Control Council For Interference (VCCI)	See Below
	Open Field Test Site "A"	R-589
	Mains Conducted Emissions Test Site "A"	C-604
	Telecom Conducted Emissions Test Site "A"	T-1655
	3 Meter Semi-Anechoic Chamber Site "E"	R-3227
	3 Meter Semi-Anechoic Chamber Site "E" (1GHz – 6GHz)	G-219
	Mains Conducted Emissions Test Site "E"	C-35793
	Telecom Conducted Emissions Test Site "E"	T-1715
Korea	Ministry of Information and Communication's Radio Research Laboratory (RRL) under the Asia Pacific Economic Cooperation (APEC) Mutual Recognition Arrangement (A copy of the Scope Of Accreditation is available upon request)	US0036
TAUSOUNDSn	Bureau Of Standards, Metrology and Inspection (BSMI)	Reference Number: SL2-IN-E-1024
Australia / New Zealand	Australian Communications Authority (AUSTEL)	*

***THESE AGENCIES DO NOT ISSUE AN IDENTIFYING NUMBER TO TEST LABS.**

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1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

LP0002 : 2020			
Standard Section	Test Item	Judgment	Remark
3.3	Conducted Emission	PASS	None
4.10.1.5/3.6	Radiated Spurious Emission	PASS	None
4.10.1.2	Peak Output Power	PASS	None
4.10.1.6	Occupied Bandwidth	PASS	None
4.10.1.6	Hopping Channel Separation	PASS	None
4.10.1.6	Number of Hopping Frequency	PASS	None
4.10.1.6	Dwell Time	PASS	None
4.10.1.5/3.6	Restricted Bands	PASS	None
4.10.1.3	Antenna Requirement	PASS	None

NOTE:

(1) "N/A" denotes test is not applicable in this Test Report.

1.1 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement $y \pm U$, where expanded uncertainty U is based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Conducted Emission Test	1.38dB
2	Radiated Emission Test	3.17dB
3	RF power,conducted	0.16dB
4	Spurious emissions,conducted	0.21dB
5	All emissions,radiated(<1G)	4.68dB
6	All emissions,radiated(>1G)	4.89dB

2. GENERAL INFORMATION

2.1 GENERAL DESCRIPTION OF EUT

Equipment	TWS Bluetooth Headset	
Trade Name	AUSOUNDS	
Model Name	AU-StreamANC+	
Serial Model Name	N/A	
Model Difference	N/A	
Product Description	The EUT is a TWS Bluetooth Headset	
	Operation Frequency:	2402~2480 MHz
	Modulation Type:	GFSK(1Mbps) π/4 DQPSK(2Mbps) 8QPSKA(3Mbps)
	Number Of Channel	79 CH
	Antenna Designation:	Please see Note 3.
	Antenna Gain(Peak)	3.57dBi
	Output Power:	Left: 1Mbps Mode: 2.91 dBm (Max.) 2Mbps Mode: 2.61 dBm (Max.) 3Mbps Mode: 2.74 dBm(Max.) Right: 1Mbps Mode: 2.71 dBm (Max.) 2Mbps Mode: 2.56dBm (Max.) 3Mbps Mode: 2.67 dBm(Max.)
Channel List	Please refer to the Note 2.	
Power Rating	DC5V (Charging Case) or DC3.7V from battery (Earphones)	
Connecting I/O Port(s)	Please refer to the User's Manual	
Products Covered	N/A	
EUT Modification(s)	N/A	
Model difference	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

2.

Channel List					
Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
00	2402	27	2429	54	2456
01	2403	28	2430	55	2457
02	2404	29	2431	56	2458
03	2405	30	2432	57	2459
04	2406	31	2433	58	2460
05	2407	32	2434	59	2461
06	2408	33	2435	60	2462
07	2409	34	2436	61	2463
08	2410	35	2437	62	2464
09	2411	36	2438	63	2465
10	2412	37	2439	64	2466
11	2413	38	2440	65	2467
12	2414	39	2441	66	2468
13	2415	40	2442	67	2469
14	2416	41	2443	68	2470
15	2417	42	2444	69	2471
16	2418	43	2445	70	2472
17	2419	44	2446	71	2473
18	2420	45	2447	72	2474
19	2421	46	2448	73	2475
20	2422	47	2449	74	2476
21	2423	48	2450	75	2477
22	2424	49	2451	76	2478
23	2425	50	2452	77	2479
24	2426	51	2453	78	2480
25	2427	52	2454		
26	2428	53	2455		

3.

Table for Filed Antenna

	Mfr/Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	深圳市益智飛科 技有限公司	SN0639	FPC	N/A	3.57dBi

2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

Pretest Mode	Description
Mode 1	1Mbps
Mode 2	2Mbps
Mode 3	3Mbps
Mode 4	RX
Mode 5	CHARGE

For Conducted Emission	
Final Test Mode	Description
Mode 1	CH00 /CH39 /CH78
Mode 5	CHARGE

For Radiated Emission	
Final Test Mode	Description
Mode 1	CH00 /CH39 /CH78
Mode 3	CH00 /CH39 /CH78
Mode 4	RX
Mode 5	CHARGE

Note:

- (1) The measurements are performed at the highest, middle, lowest available channels.
- (2) This test was performed with EUT in X, Y, Z position and the worst case was found when EUT in X position.
- (3) For all tests the worst-case was selected as the table above, the data of the worst-case is shown in the report.
- (4) The highest internal source of the EUT is less than 108MHz in charging mode.

2.3 TABLE OF PARAMETERS OF TEXT SOFTWARE SETTING

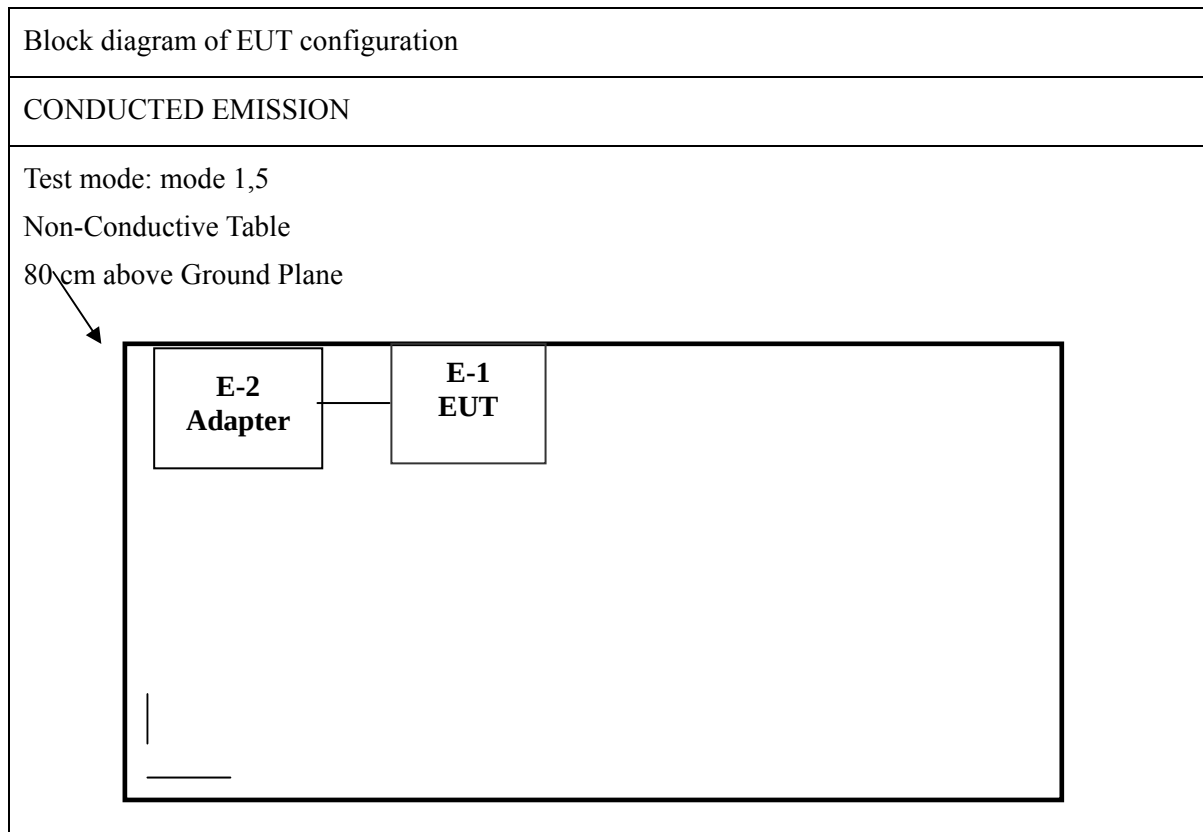
During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

1. Connect the EUT to the computer with " USB TO TTL" ;
2. Open the " FCC_assist "test software after the connection,select the Transport port and Device to connect ;
3. Select the parameters and click Execute.

Note:

Test software Version	5.3.1.16	Test program:	RTLBTAPP
Frequency	2402 MHz	2441 MHz	2480 MHz
Parameters(1Mbps)	38	38	38
Parameters(2Mbps)	39	39	39
Parameters(3Mbps)	39	39	39

2.4 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED



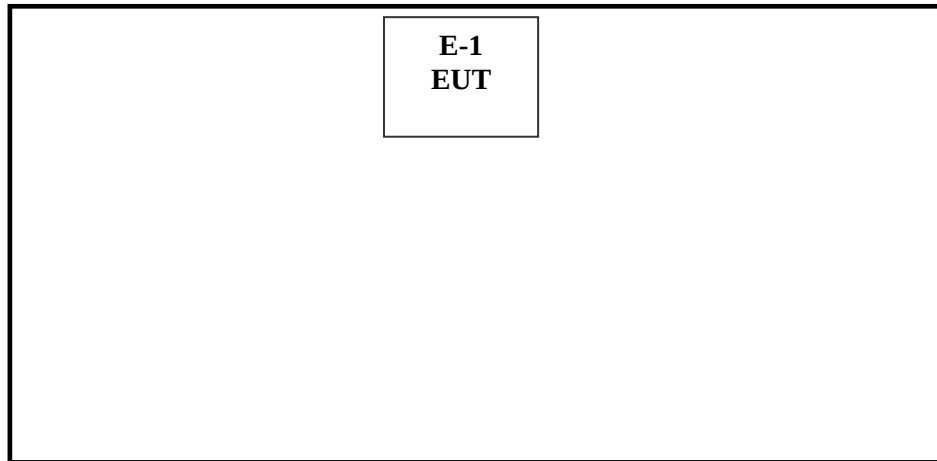
Block diagram of EUT configuration

RADIATED EMISSION

Test mode: mode 1, 2, 3,4

Non-Conductive Table

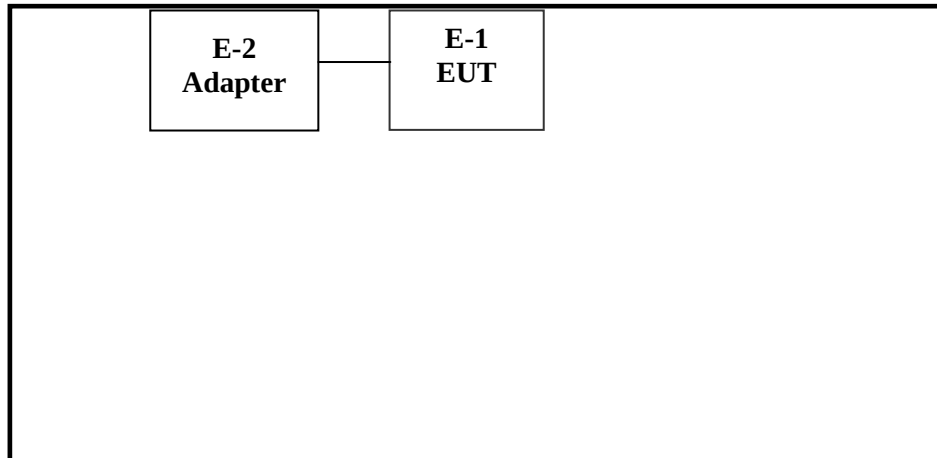
80/150 cm above Ground Plane



Test mode: mode 5

Non-Conductive Table

80 cm above Ground Plane



2.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	FCC ID	Series No.	Note
E-1	TWS Bluetooth Headset	AUSOUNDS	AU-StreamANC+	N/A	N/A	EUT
E-2	Adapter	NOKIA	AD-10WU	N/A	N/A	Test Accessory*

Item	Equipment	Mfr/Brand	Model/Type No.	Note
1	USB Line	AUSOUNDS	AU-StreamANC+	EUT
2	Charging Case	AUSOUNDS	AU-StreamANC+	EUT

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.
- (3) “YES” means “shielded” or “with ferrite core”; “NO” means “unshielded” or “without ferrite core”
- (4) “*”: In this report, the applicant did not provide the accompanying accessories with the equipment. The accessories were provided by the laboratory (or the applicant) and inspected simultaneously.

2.6 EQUIPMENTS LIST FOR ALL TEST ITEMS

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
Spectrum Analyzer	Keysight	N9020A	MY53300466	April 29, 2021	1 Year
RF Preselector	Hewlett Packard	85685A	3010A01157	April 29, 2021	1 Year
Quasi-Peak Adapter	Hewlett Packard	85650	2521A00584	April 29, 2021	1 Year
Preamplifier	Com Power	PA-102	1482	April 29, 2021	1 Year
RF Attenuator	Mini-Circuits	CAT-10	Asset #1000	December 08, 2021	1 Year
LISN	Com Power	LI-200	12012	September 09, 2021	1 Year
LISN	Com Power	LI-200	12214	September 09, 2021	1 Year
LISN	Com Power	LI-200	1767	September 09, 2021	1 Year
LISN	Com Power	LI-200	1768	September 09, 2021	1 Year
Biconical Antenna	Com Power	AB-100	01557	December 29, 2020	1 Year
Log Periodic Antenna	Com Power	AL-100	16037	December 22, 2021	1 Year
Horn Antenna	Com Power	AHA-118	711054	December 22, 2021	1 Year
Antenna Mast	Com Power	AM-400	N/A	N/A	N/A
Turntable	Com Power	TT-100	N/A	N/A	N/A
Computer	Dell, Inc.	DHS	DNSV641	N/A	N/A

EMI Test Equipment (Continued)

EQUIPMENT TYPE	MANU-FACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. CYCLE
EMI Receiver	Rohde & Schwarz	ESU40	100127	June 12, 2021	1 Year
BiConiLog Antenna	ETS-Lindgren	3142D	00102183	August 13, 2021	1 Year
Horn Antenna (1GHz-18GHz)	ETS-Lindgren	3117	00109294	May 6, 2021	1 Year
Horn Antenna (15GHz-40GHz)	SCHWARZBECK	BBHA 9170	BBHA9170242	May 6, 2021	1 Year
Preamplifier	Rohde & Schwarz	TS-PR18	100056	June 12, 2021	1 Year
Pre-Amplifier	Agilent	8449B	3008A00409	June 12, 2021	1 Year
Antenna Mast	ETS-Lindgren	2175	00095727	N/A	N/A
Turntable	ETS-Lindgren	2187-3.0	00118231	N/A	N/A
Computer	Acer	Aspire 8930	85100050123	N/A	N/A
Multi-Function Controller	ETS-Lindgren	2090	00102270	N/A	N/A
Loop Antenna	ARA	PLA-1030/B	1029	May 19, 2021	1 Year

3. EMC EMISSION TEST

3.1 CONDUCTED EMISSION MEASUREMENT

3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

FREQUENCY (MHz)	Class A (dBuV)		Class B (dBuV)		Standard
	Quasi-peak	Average	Quasi-peak	Average	
0.15 -0.5			66 - 56 *	56 - 46 *	CISPR
0.50 -5.0			56.00	46.00	CISPR
5.0 -30.0			60.00	50.00	CISPR

0.15 -0.5			66 - 56 *	56 - 46 *	LP0002
0.50 -5.0			56.00	46.00	LP0002
5.0 -30.0			60.00	50.00	LP0002

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of " * " marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

Receiver Parameters	Setting
Attenuation	10 dB
Start Frequency	0.15 MHz
Stop Frequency	30 MHz
IF Bandwidth	9 kHz

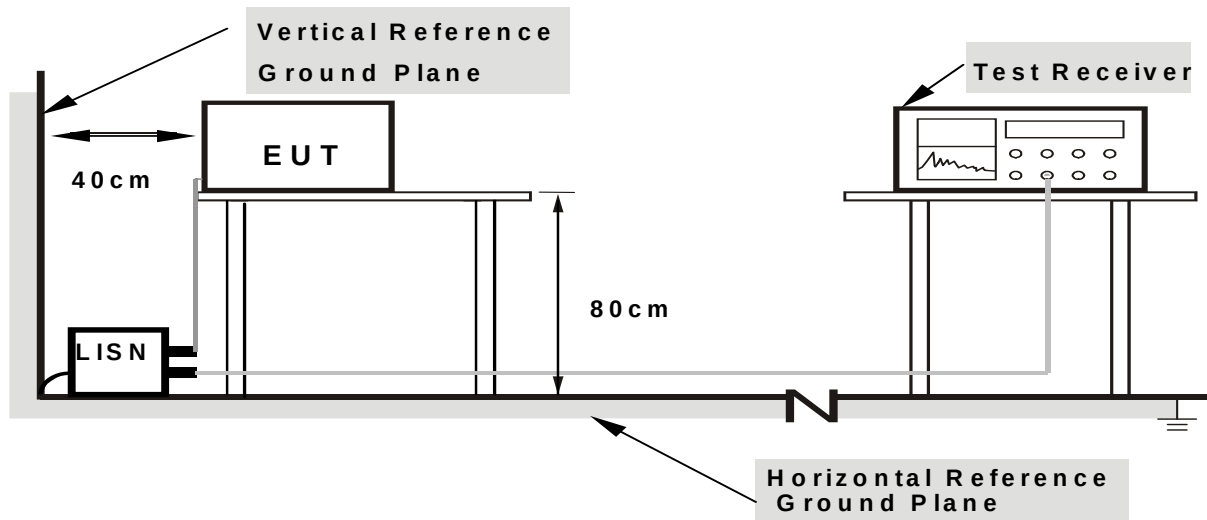
3.1.2 TEST PROCEDURE

- The EUT was placed 0.4 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN at least 80 cm from nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

3.1.3 DEVIATION FROM TEST STANDARD

No deviation

3.1.4 TEST SETUP



Note: 1.Support units were connected to second LISN.

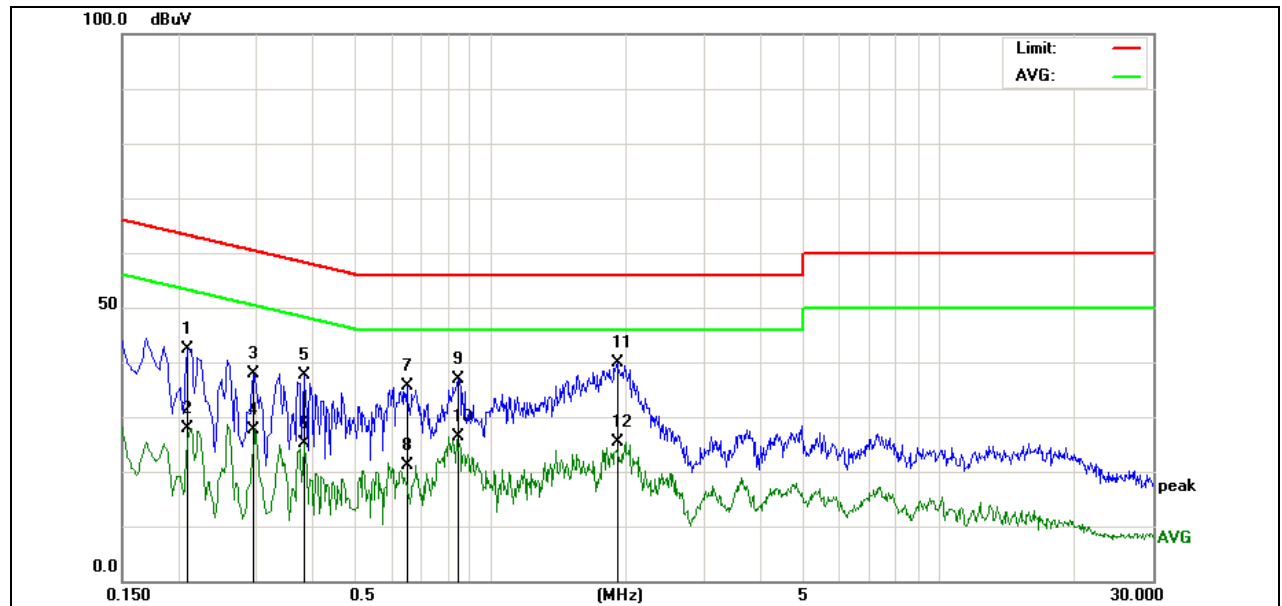
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

3.1.5 TEST RESULTS

Note:

Pre-scan all test modes, found worst case at GFSK 2402MHz, and so only show the test result of GFSK 2402MHz.

EUT :	TWS Bluetooth Headset	Model Name. :	AU-StreamANC+
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Phase :	L
Test Voltage :	AC 110V/60Hz for Adapter		

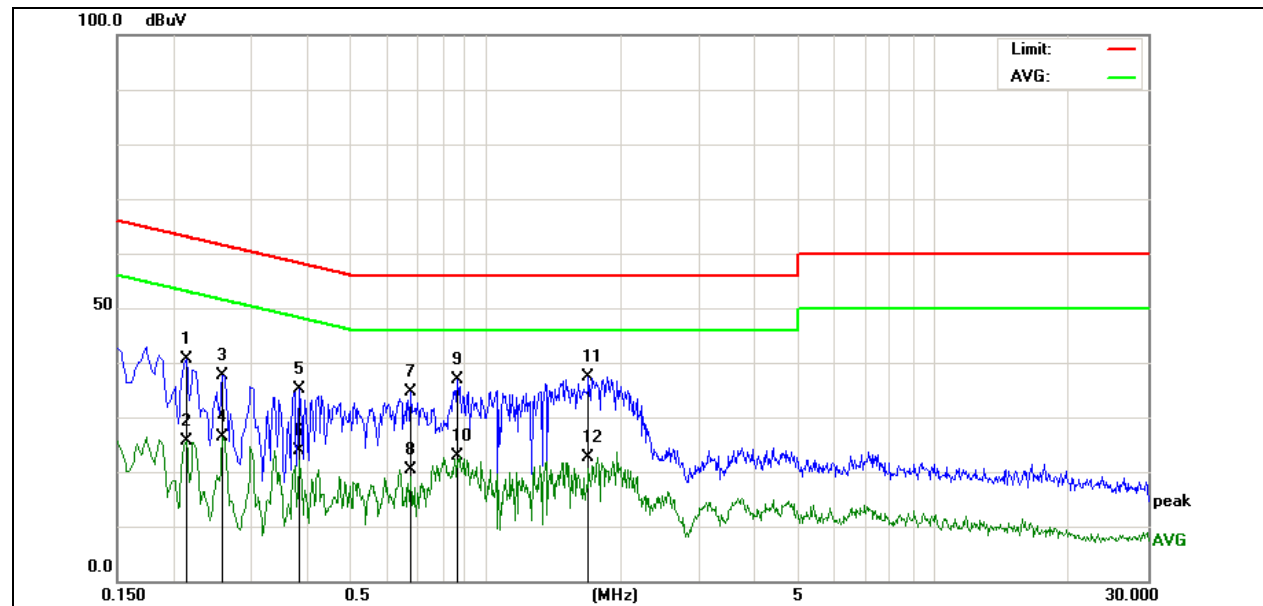


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '*' means the worst case

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector
1		0.2100	31.30	11.06	42.36	63.20	-20.84	QP
2		0.2100	16.81	11.06	27.87	53.20	-25.33	AVG
3		0.2939	27.39	10.38	37.77	60.41	-22.64	QP
4		0.2939	17.17	10.38	27.55	50.41	-22.86	AVG
5		0.3820	27.43	10.14	37.57	58.23	-20.66	QP
6		0.3820	14.98	10.14	25.12	48.23	-23.11	AVG
7		0.6500	25.55	9.99	35.54	56.00	-20.46	QP
8		0.6500	11.05	9.99	21.04	46.00	-24.96	AVG
9		0.8460	26.86	9.94	36.80	56.00	-19.20	QP
10		0.8460	16.46	9.94	26.40	46.00	-19.60	AVG
11	*	1.9100	29.84	9.99	39.83	56.00	-16.17	QP
12		1.9100	15.33	9.99	25.32	46.00	-20.68	AVG

EUT :	TWS Bluetooth Headset	Model Name. :	AU-StreamANC+
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Phase :	N
Test Voltage :	AC 110V/60Hz for Adapter		

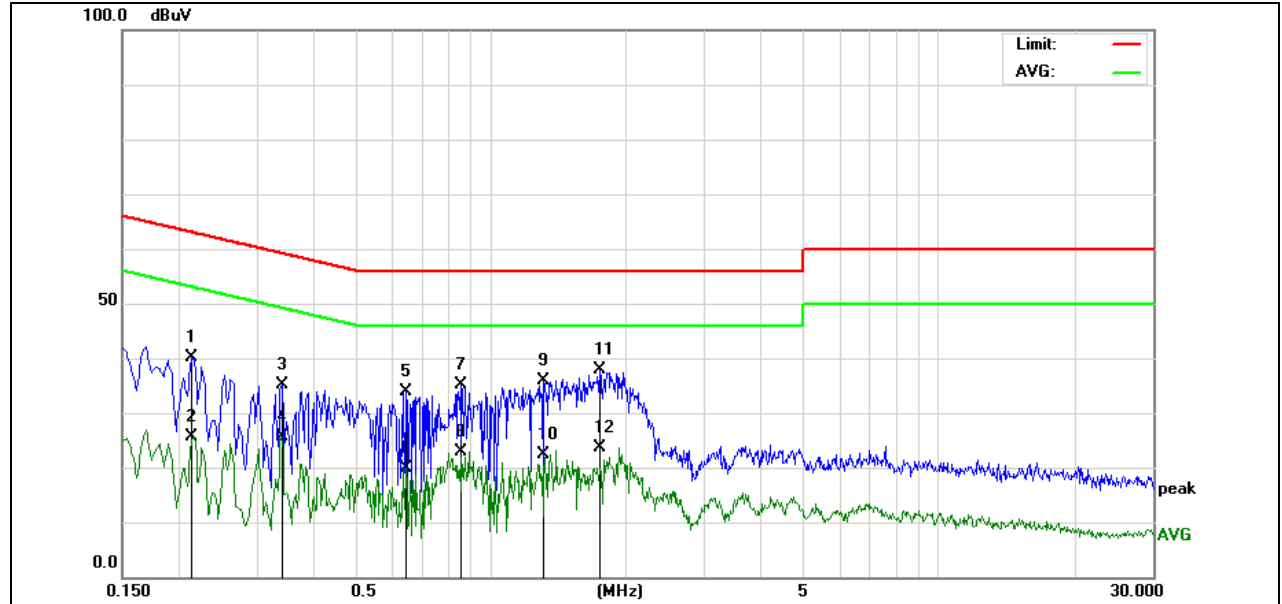


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '*' means the worst case

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2140	29.65	11.03	40.68	63.04	-22.36	QP
2		0.2140	14.54	11.03	25.57	53.04	-27.47	AVG
3		0.2580	26.83	10.87	37.70	61.49	-23.79	QP
4		0.2580	15.43	10.87	26.30	51.49	-25.19	AVG
5		0.3820	24.97	10.14	35.11	58.23	-23.12	QP
6		0.3820	13.82	10.14	23.96	48.23	-24.27	AVG
7		0.6780	24.65	9.98	34.63	56.00	-21.37	QP
8		0.6780	10.51	9.98	20.49	46.00	-25.51	AVG
9		0.8659	26.92	9.93	36.85	56.00	-19.15	QP
10		0.8659	12.93	9.93	22.86	46.00	-23.14	AVG
11	*	1.6940	27.30	9.97	37.27	56.00	-18.73	QP
12		1.6940	12.76	9.97	22.73	46.00	-23.27	AVG

EUT :	TWS Bluetooth Headset	Model Name. :	AU-StreamANC+
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2022-01-03
Test Mode :	Mode 5	Phase :	L
Test Voltage :	AC 110V/60Hz for Adapter		

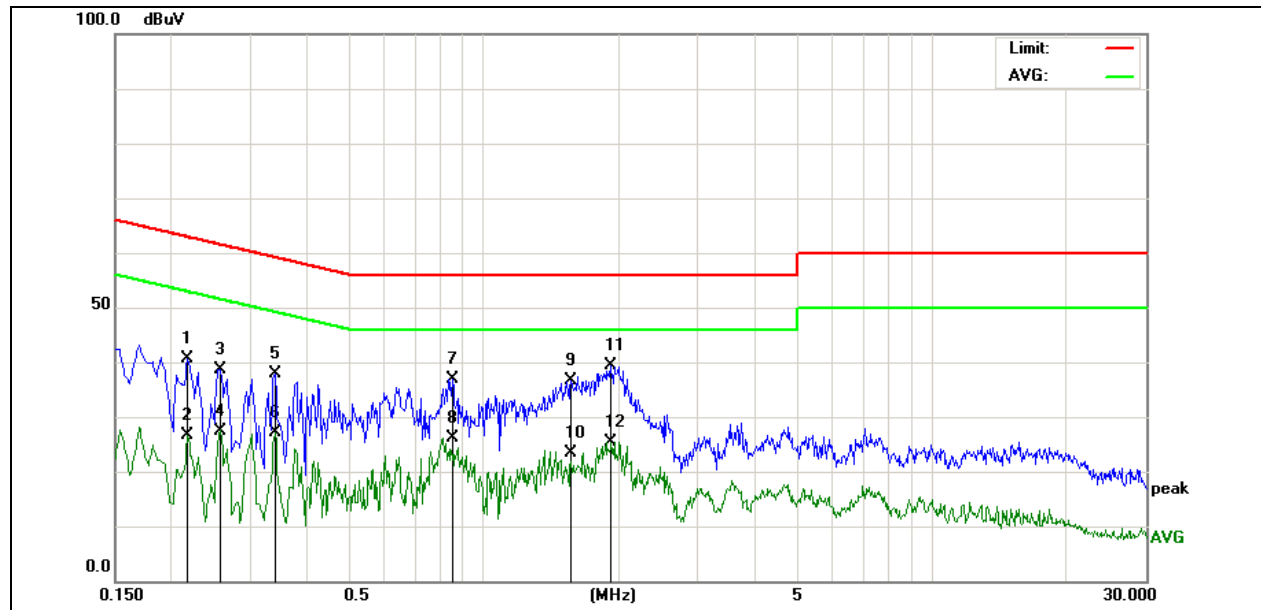


Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '*' means the worst case

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2140	28.99	11.03	40.02	63.04	-23.02	QP
2		0.2140	14.48	11.03	25.51	53.04	-27.53	AVG
3		0.3420	24.92	10.17	35.09	59.15	-24.06	QP
4		0.3420	15.39	10.17	25.56	49.15	-23.59	AVG
5		0.6460	24.01	9.99	34.00	56.00	-22.00	QP
6		0.6460	9.98	9.99	19.97	46.00	-26.03	AVG
7		0.8540	25.29	9.94	35.23	56.00	-20.77	QP
8		0.8540	12.87	9.94	22.81	46.00	-23.19	AVG
9		1.3099	25.94	9.96	35.90	56.00	-20.10	QP
10		1.3099	12.53	9.96	22.49	46.00	-23.51	AVG
11	*	1.7460	27.79	9.97	37.76	56.00	-18.24	QP
12		1.7460	13.57	9.97	23.54	46.00	-22.46	AVG

EUT :	TWS Bluetooth Headset	Model Name. :	AU-StreamANC+
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1010hPa	Test Date :	2022-01-03
Test Mode :	Mode 5	Phase :	N
Test Voltage :	AC 110V/60Hz for Adapter		



Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss + Pulse limit.
3. '*' means the worst case

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2180	29.58	11.00	40.58	62.89	-22.31	QP
2		0.2180	15.68	11.00	26.68	52.89	-26.21	AVG
3		0.2580	27.85	10.87	38.72	61.49	-22.77	QP
4		0.2580	16.63	10.87	27.50	51.49	-23.99	AVG
5		0.3420	27.59	10.17	37.76	59.15	-21.39	QP
6		0.3420	16.96	10.17	27.13	49.15	-22.02	AVG
7		0.8500	27.06	9.94	37.00	56.00	-19.00	QP
8		0.8500	16.12	9.94	26.06	46.00	-19.94	AVG
9		1.5660	26.62	9.97	36.59	56.00	-19.41	QP
10		1.5660	13.50	9.97	23.47	46.00	-22.53	AVG
11	*	1.9180	29.30	9.99	39.29	56.00	-16.71	QP
12		1.9180	15.46	9.99	25.45	46.00	-20.55	AVG

Test result: The unit does meet the NCC requirements.

3.2 RADIATED EMISSION MEASUREMENT

3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 3.5, then the 3.6 limit in the table below has to be followed.

Frequencies (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

LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

FREQUENCY (MHz)	LIMITS (at 3M)	
	PEAK	AVERAGE
Above 1000	74	54

Notes:

- (1) The limit for radiated test was performed according to LP0002.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

FREQUENCY RANGE OF RADIATED MEASUREMENT (For unintentional radiators)

Frequency measurement range:

- 1, The spectrum shall be measured from the lowest radio frequency signal generated in the device (without going below 9 kHz), and the upper limit of the measurement range shall be decided according to the maximum operating frequency.
 - 1.1 Maximum operating frequency less than 10 GHz: to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.
 - 1.2 Maximum operating frequency between 10 GHz~30 GHz: to the fifth harmonic of the highest fundamental frequency or to 100 GHz, whichever is lower.
 - 1.3 Maximum operating frequency over 30 GHz: to the fifth harmonic of the highest fundamental frequency or to 200 GHz, whichever is lower.
- 2 Particular attention should be paid to harmonics and subharmonics of the carrier frequency as well as to those frequencies removed from the carrier by multiples of the oscillator frequency. Radiation at the frequencies of multiplier stages should also be checked.

Spectrum Parameter		Setting	
Attenuation		Auto	
Start Frequency		1000 MHz	
Stop Frequency		10th carrier harmonic	
Measurement	Duty cycle	RBW	Video B/W
PK	Any	1MHz	3MHz
AV	≥98%	1MHz	10Hz
	< 98%	1MHz	1/T

NOTE: KDB 558074 Zero-Span Spectrum Analyzer Method

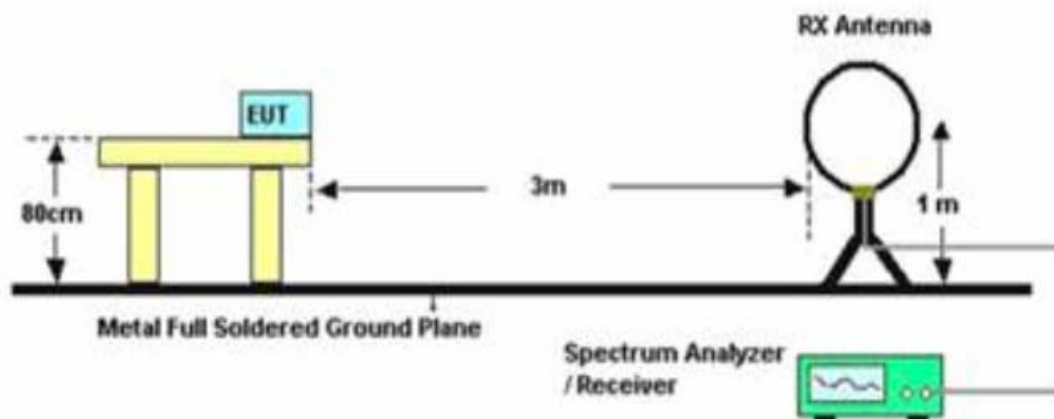
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RB 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RB 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RB 120kHz for QP

3.2.2 TEST PROCEDURE

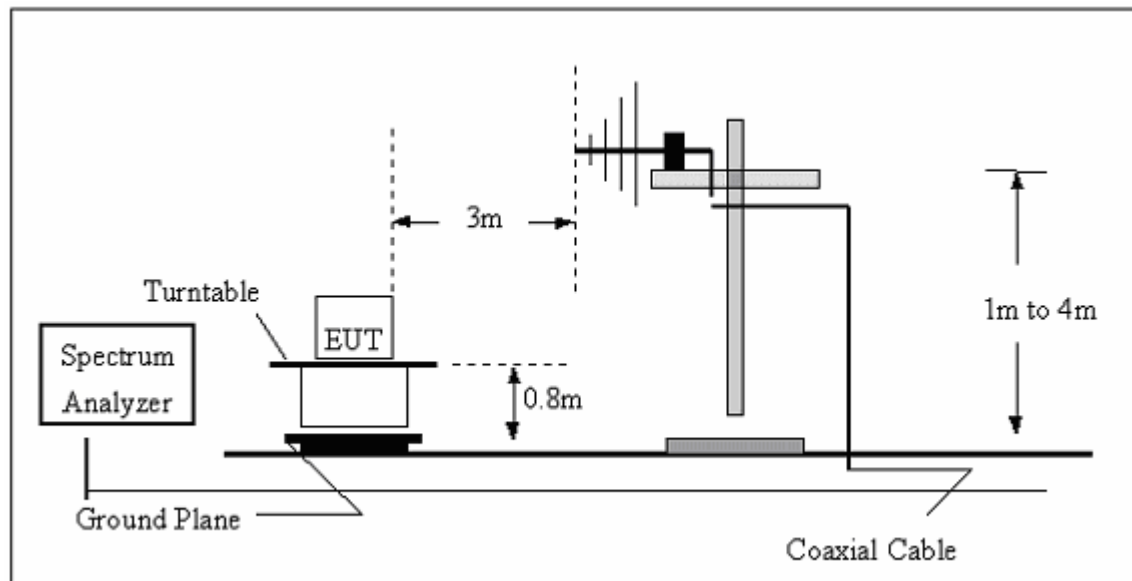
- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 meters (For frequencies above 1GHz, table 1.5 meters) above the ground at a 3 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.
- Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis which it is worse case.

3.2.3 TEST SETUP

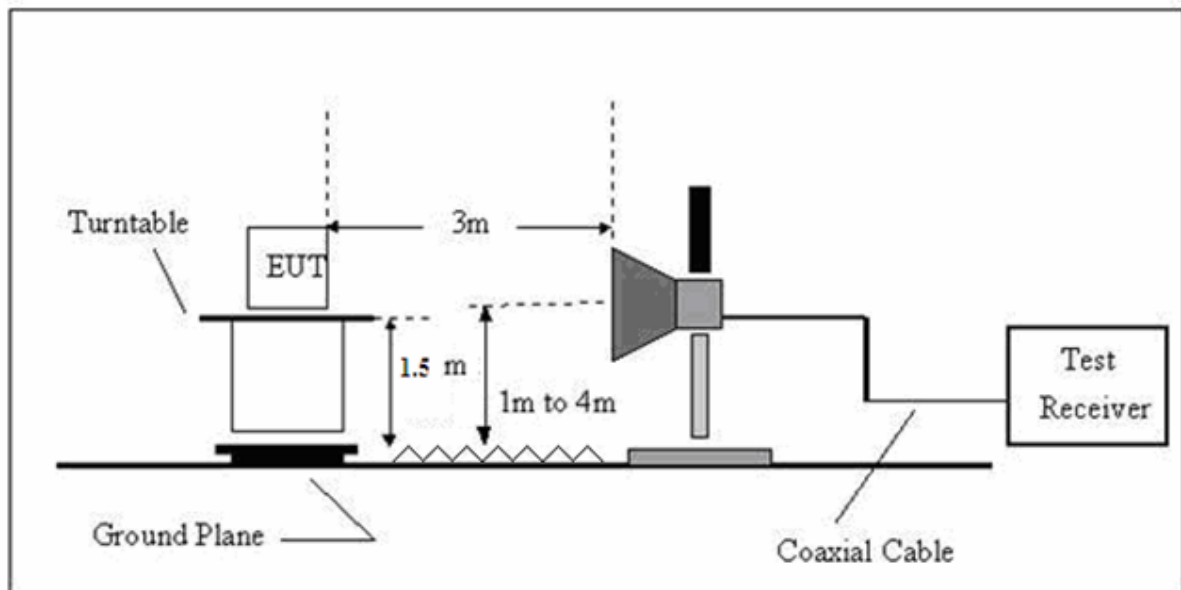
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz



3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

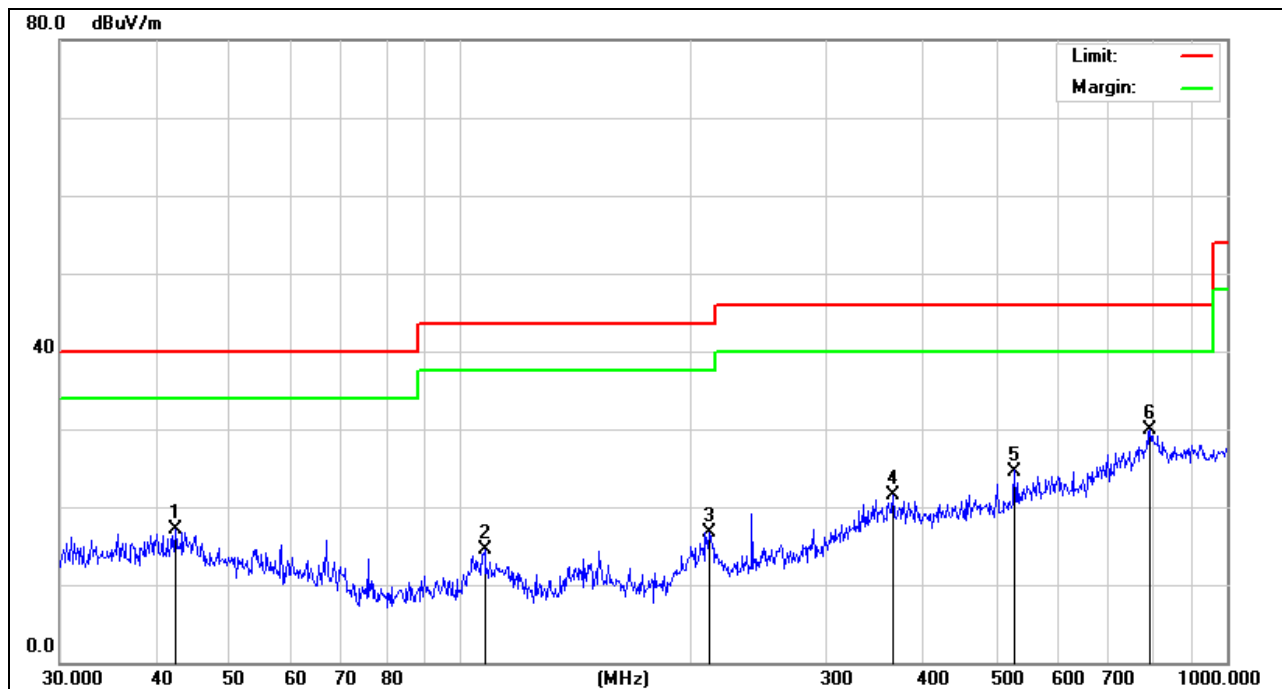
3.2.5 TEST RESULTS (BLOW 30 MHZ)

There is no detected blow 30MHz

3.2.6 TEST RESULTS (BETWEEN30 – 1000 MHZ)

Note:Pre-scan all test modes, found worst case at GFSK 2402MHz, and so only show the test result of GFSK 2402MHz.

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

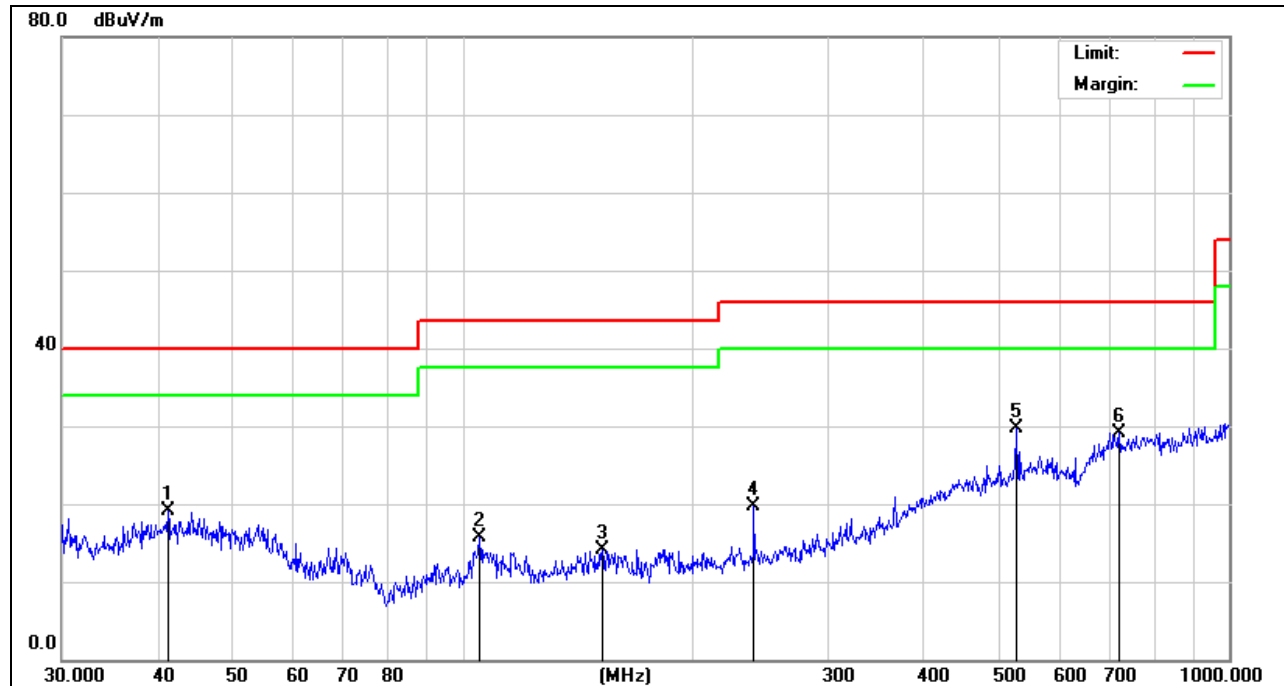


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		42.4508	21.54	-4.40	17.14	40.00	-22.86	QP
2		107.5101	22.37	-7.82	14.55	43.50	-28.95	QP
3		210.7860	20.90	-4.16	16.74	43.50	-26.76	QP
4		366.8231	21.99	-0.57	21.42	46.00	-24.58	QP
5		528.2458	24.65	-0.05	24.60	46.00	-21.40	QP
6	*	793.3960	23.11	6.83	29.94	46.00	-16.06	QP

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

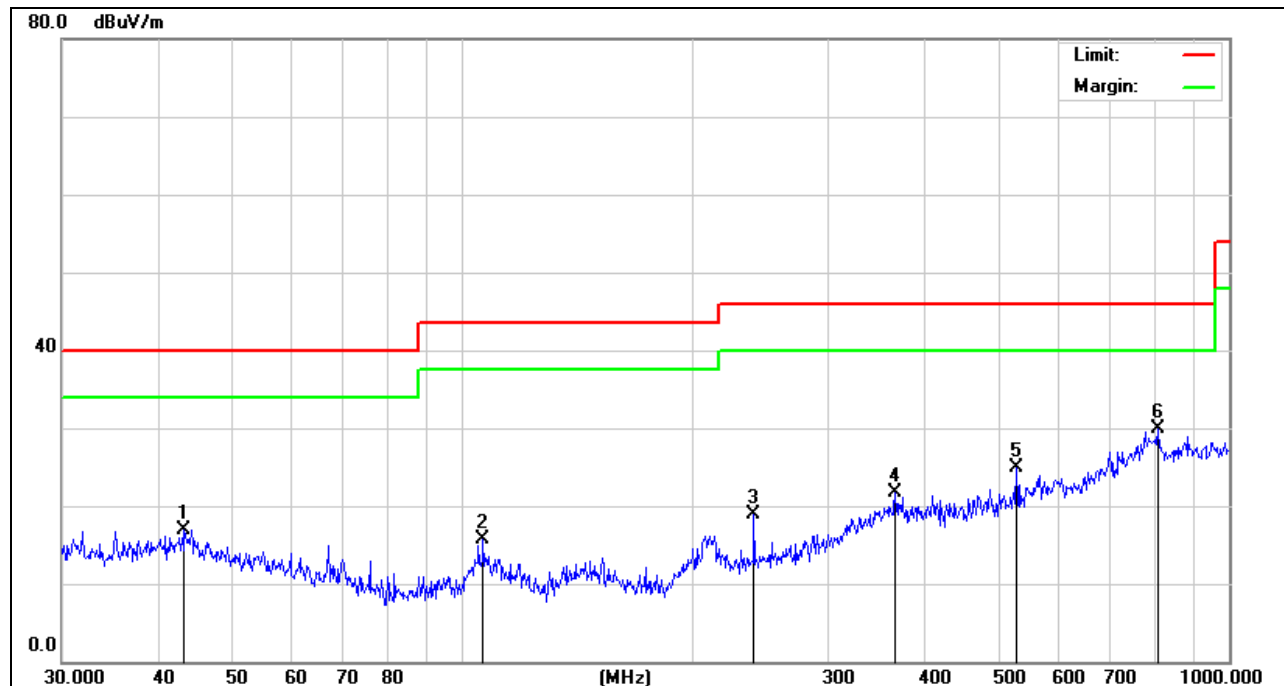


Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		41.2765	21.09	-1.93	19.16	40.00	-20.84	QP
2		105.2718	23.10	-7.32	15.78	43.50	-27.72	QP
3		152.1297	20.93	-6.81	14.12	43.50	-29.38	QP
4		239.9874	26.47	-6.78	19.69	46.00	-26.31	QP
5	*	528.2458	26.23	3.46	29.69	46.00	-16.31	QP
6		719.1995	22.63	6.53	29.16	46.00	-16.84	QP

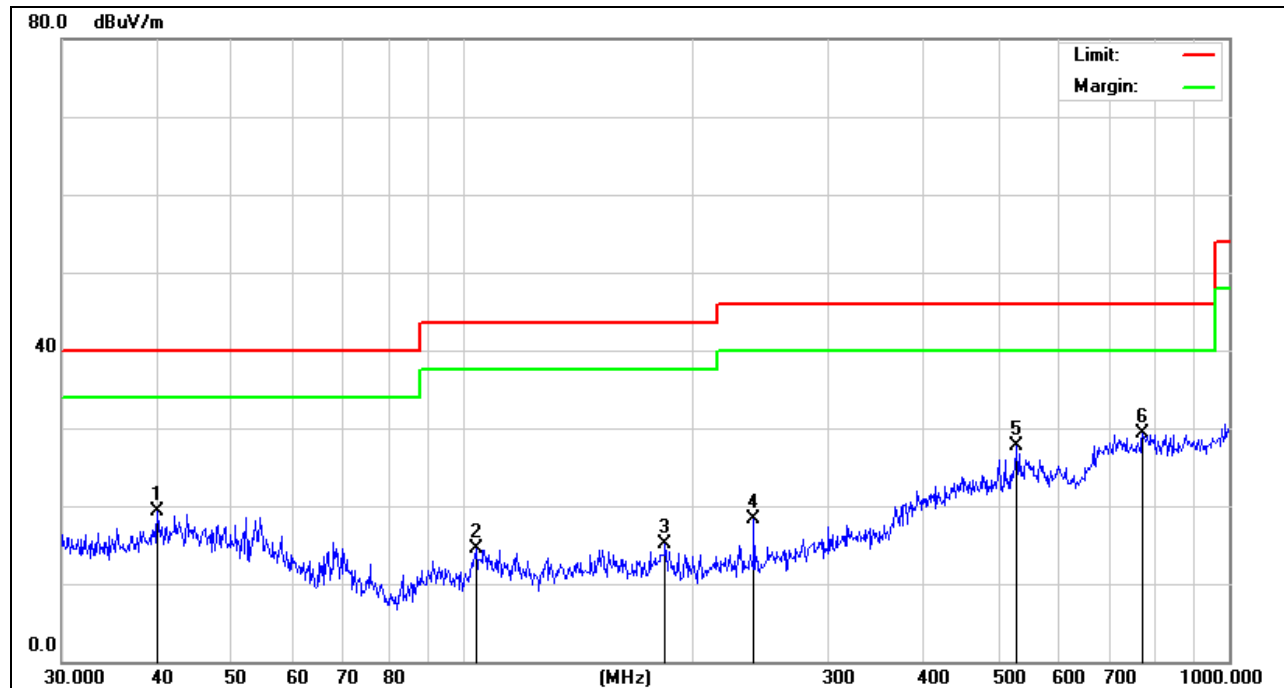
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	RX	Polarization :	Vertical
Test Power :	DC3.7V from battery		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector
1		43.3534	21.37	-4.45	16.92	40.00	-23.08	QP
2		106.3850	23.49	-7.86	15.63	43.50	-27.87	QP
3		239.9874	25.78	-6.78	19.00	46.00	-27.00	QP
4		366.8231	22.20	-0.57	21.63	46.00	-24.37	QP
5		528.2458	24.96	-0.05	24.91	46.00	-21.09	QP
6	*	807.4291	23.11	6.70	29.81	46.00	-16.19	QP

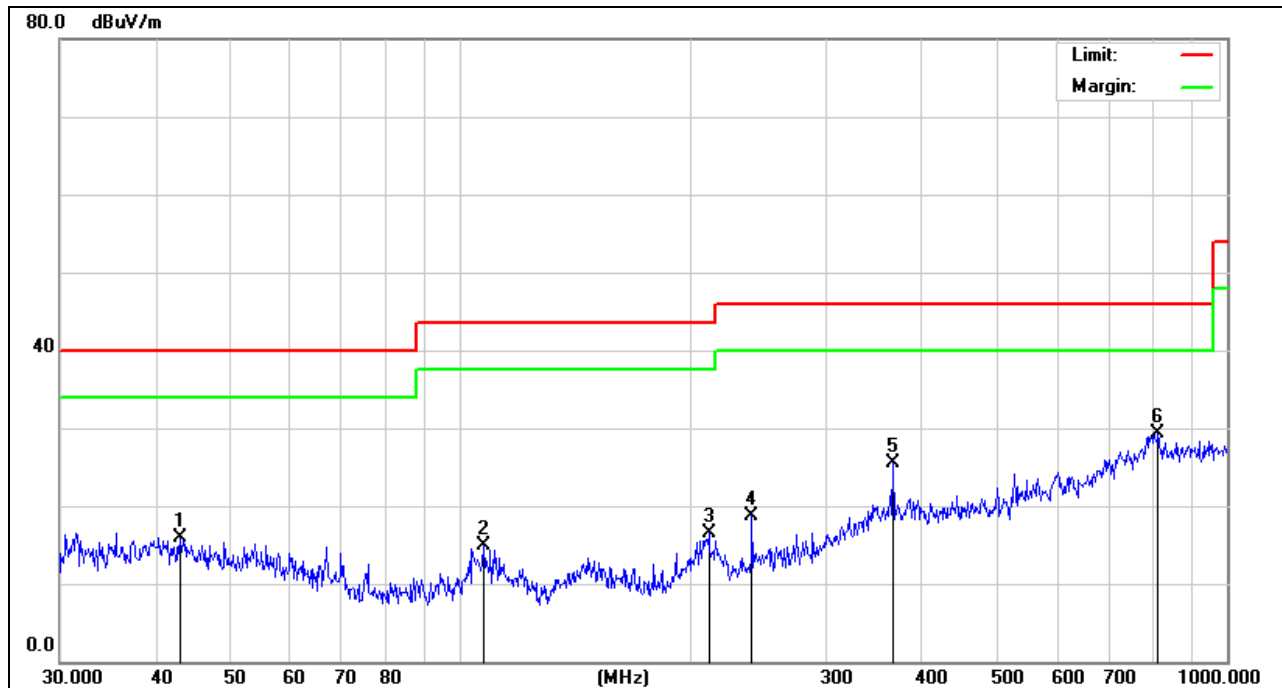
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	RX	Polarization :	Horizontal
Test Power :	DC3.7V from battery		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		39.9942	21.35	-1.96	19.39	40.00	-20.61	QP
2		104.1701	21.94	-7.42	14.52	43.50	-28.98	QP
3		183.8440	20.73	-5.71	15.02	43.50	-28.48	QP
4		239.9874	25.08	-6.78	18.30	46.00	-27.70	QP
5		528.2458	24.23	3.46	27.69	46.00	-18.31	QP
6	*	771.4486	22.81	6.45	29.26	46.00	-16.74	QP

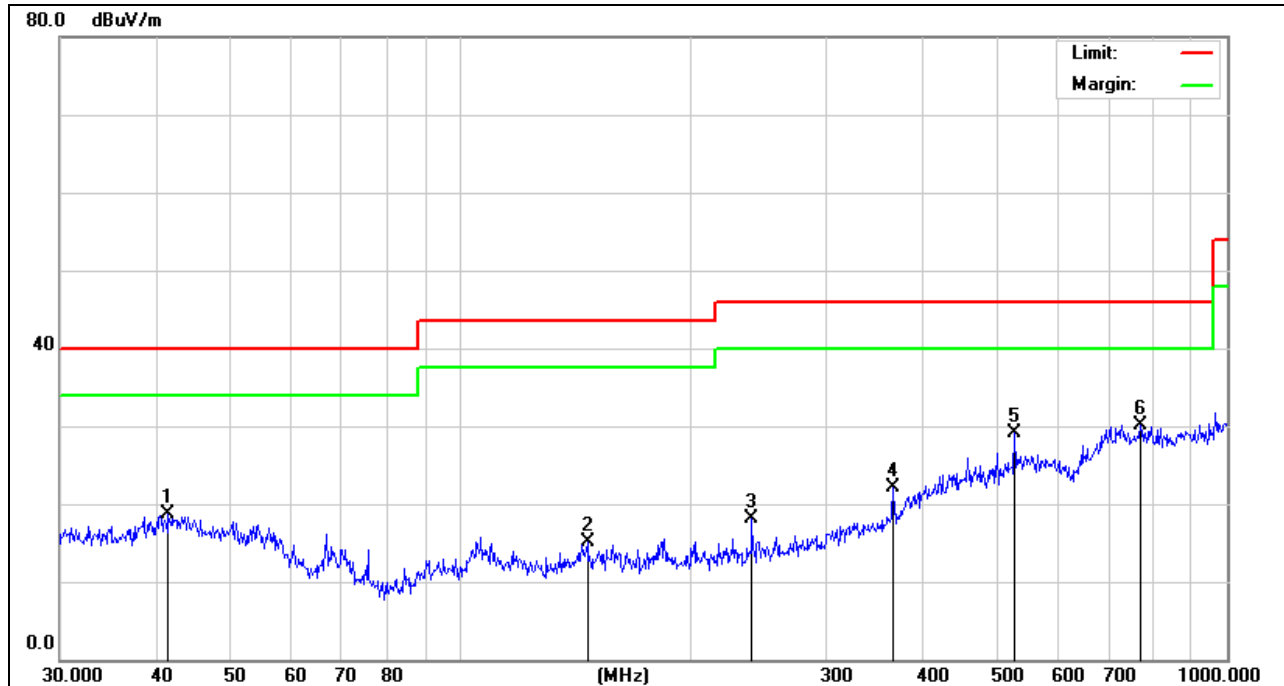
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	Mode 5	Polarization :	Vertical
Test Power :	DC5V from adapter		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		43.0505	20.36	-4.43	15.93	40.00	-24.07	QP
2		107.1337	22.64	-7.83	14.81	43.50	-28.69	QP
3		210.7860	20.58	-4.16	16.42	43.50	-27.08	QP
4		239.9874	25.51	-6.78	18.73	46.00	-27.27	QP
5		366.8231	26.07	-0.57	25.50	46.00	-20.50	QP
6	*	813.1115	23.03	6.22	29.25	46.00	-16.75	QP

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	Mode 5	Polarization :	Horizontal
Test Power :	DC5V from adapter		



Remark: Factor = Antenna Factor + Cable Loss – Pre-amplifier.

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		41.5670	20.59	-1.93	18.66	40.00	-21.34	QP
2		146.3735	21.93	-6.87	15.06	43.50	-28.44	QP
3		239.9874	24.88	-6.78	18.10	46.00	-27.90	QP
4		366.8231	24.37	-2.35	22.02	46.00	-23.98	QP
5		528.2458	25.68	3.46	29.14	46.00	-16.86	QP
6	*	771.4486	23.67	6.45	30.12	46.00	-15.88	QP

Test result: The unit does meet the NCC requirements.

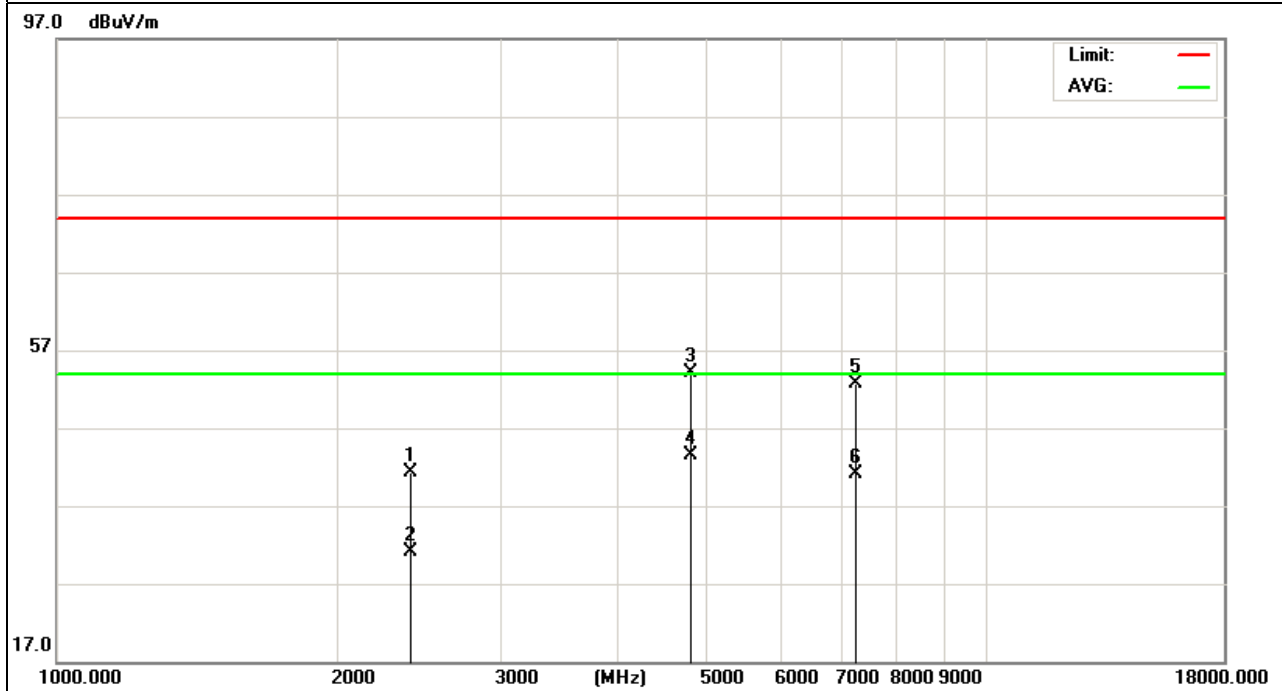
3.2.7 TEST RESULTS (FRENQUENCY RANGE 1000-25000 MHZ)

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2400.000	46.90	-5.70	41.20	74.00	-32.80	peak
2400.000	36.74	-5.70	31.04	54.00	-22.96	AVG
4804.000	49.03	5.06	54.09	74.00	-19.91	peak
4804.000	38.41	5.06	43.47	54.00	-10.53	AVG
7206.000	45.63	7.03	52.66	74.00	-21.34	peak
7206.000	34.03	7.03	41.06	54.00	-12.94	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

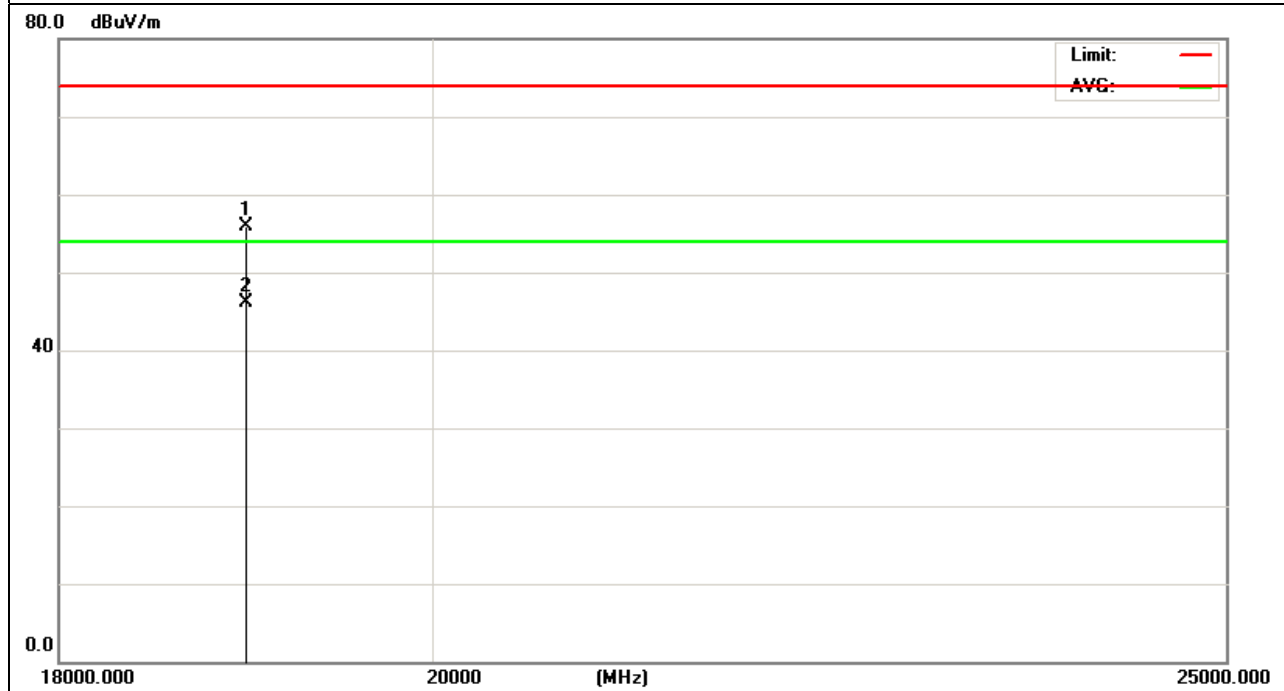


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18976.000	39.42	16.39	55.81	74.00	-18.19	peak
18976.000	29.63	16.39	46.02	54.00	-7.98	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

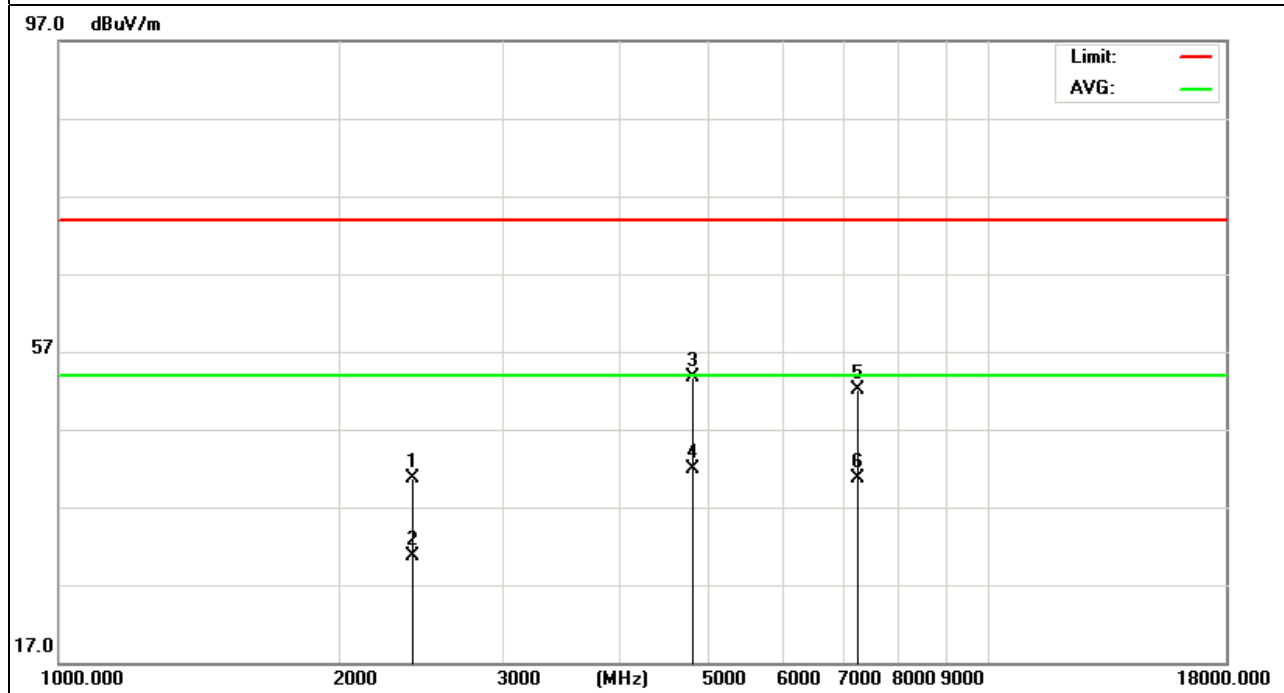


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2400.000	46.35	-5.70	40.65	74.00	-33.35	peak
2400.000	36.49	-5.70	30.79	54.00	-23.21	AVG
4804.000	48.74	5.06	53.80	74.00	-20.20	peak
4804.000	36.79	5.06	41.85	54.00	-12.15	AVG
7206.000	45.03	7.03	52.06	74.00	-21.94	peak
7206.000	33.64	7.03	40.67	54.00	-13.33	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

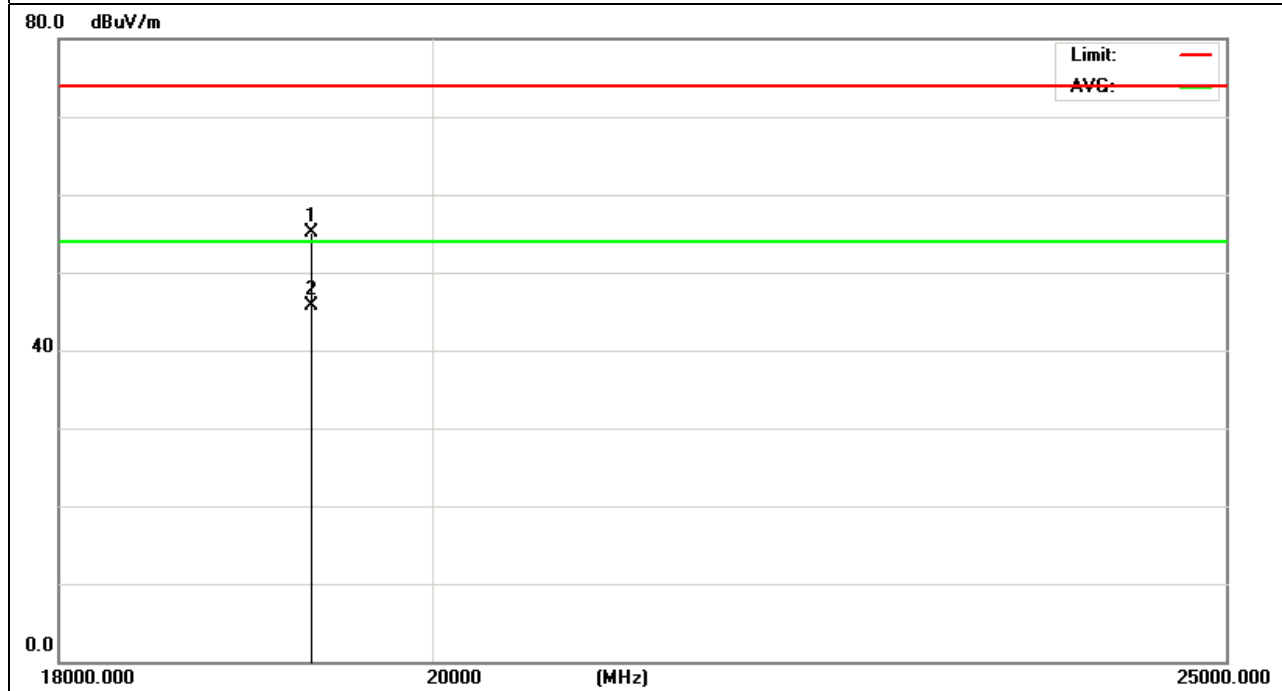


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19324.000	38.63	16.46	55.09	74.00	-18.91	peak
19324.000	29.24	16.46	45.70	54.00	-8.30	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

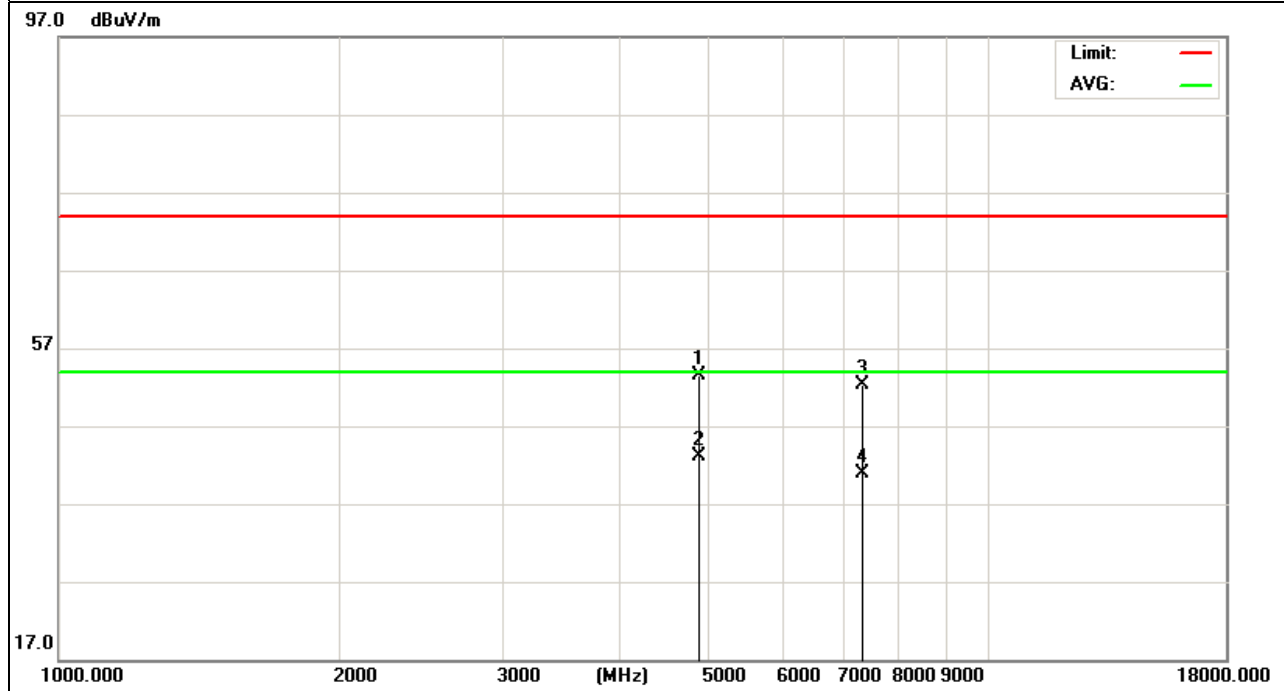


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4882.000	48.35	5.14	53.49	74.00	-20.51	peak
4882.000	37.96	5.14	43.10	54.00	-10.90	AVG
7323.000	44.67	7.54	52.21	74.00	-21.79	peak
7323.000	33.45	7.54	40.99	54.00	-13.01	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

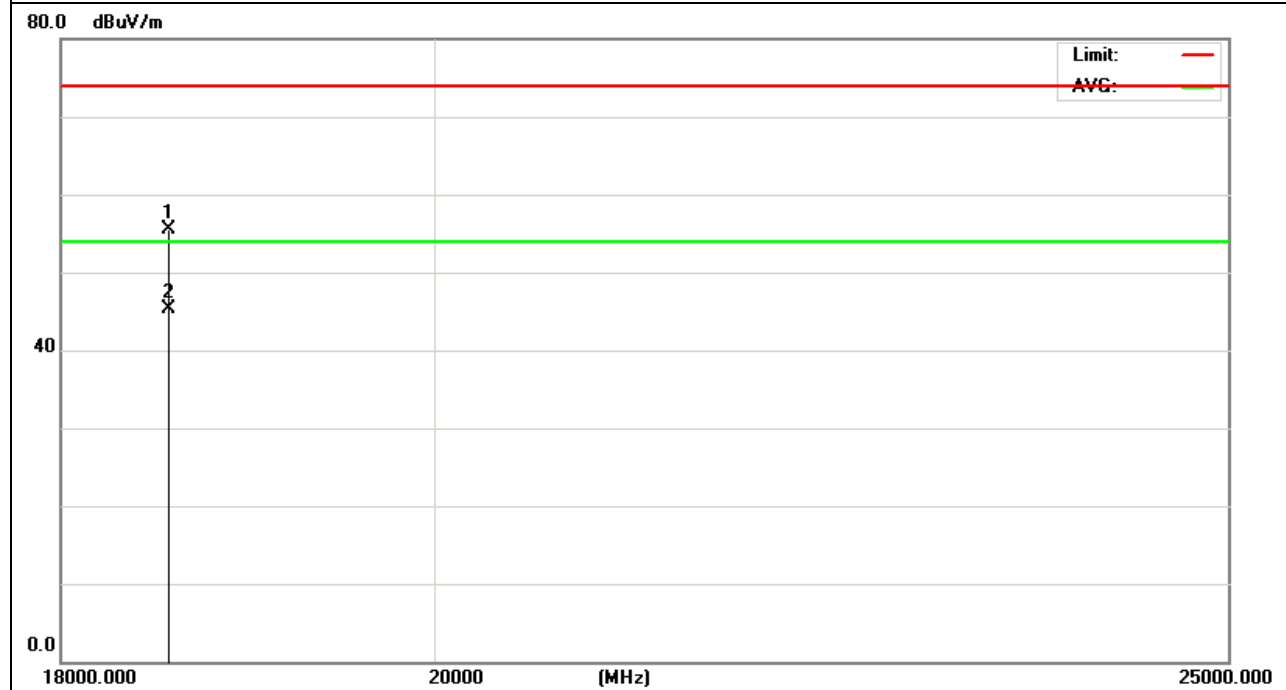


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18558.000	39.63	15.96	55.59	74.00	-18.41	
18558.000	29.41	15.96	45.37	54.00	-8.63	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

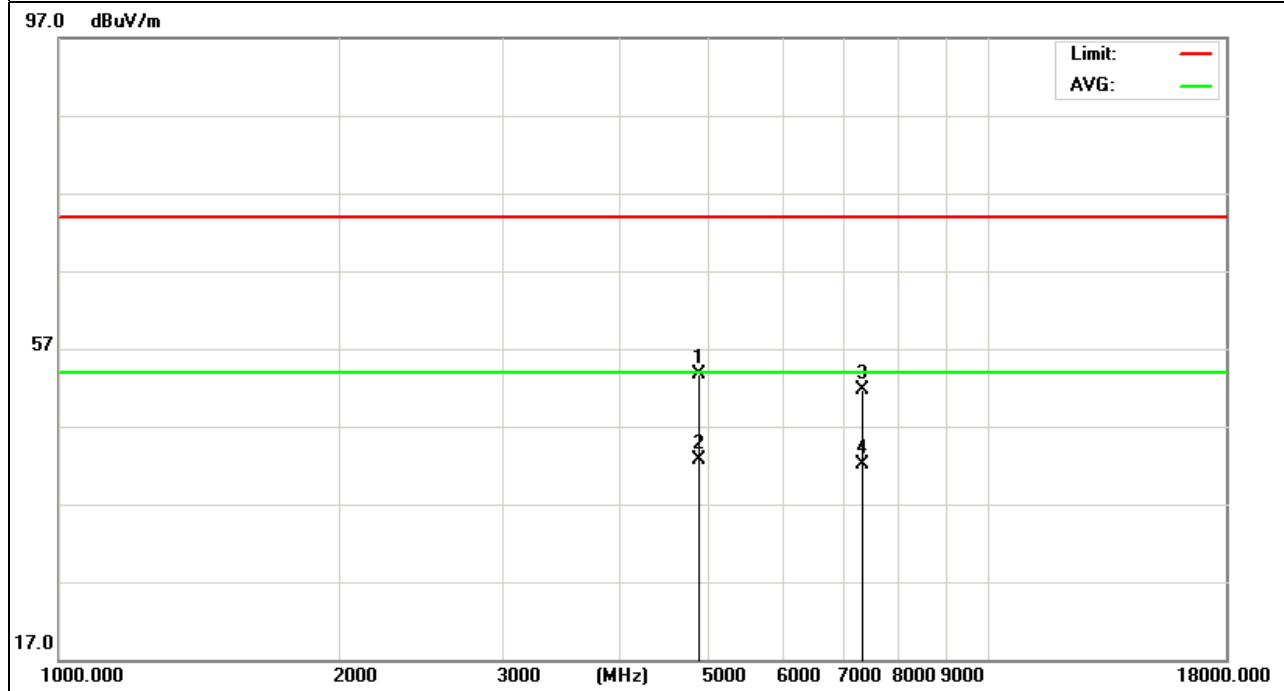


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4882.000	48.64	5.14	53.78	74.00	-20.22	peak
4882.000	37.58	5.14	42.72	54.00	-11.28	AVG
7323.000	44.25	7.54	51.79	74.00	-22.21	peak
7323.000	34.47	7.54	42.01	54.00	-11.99	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

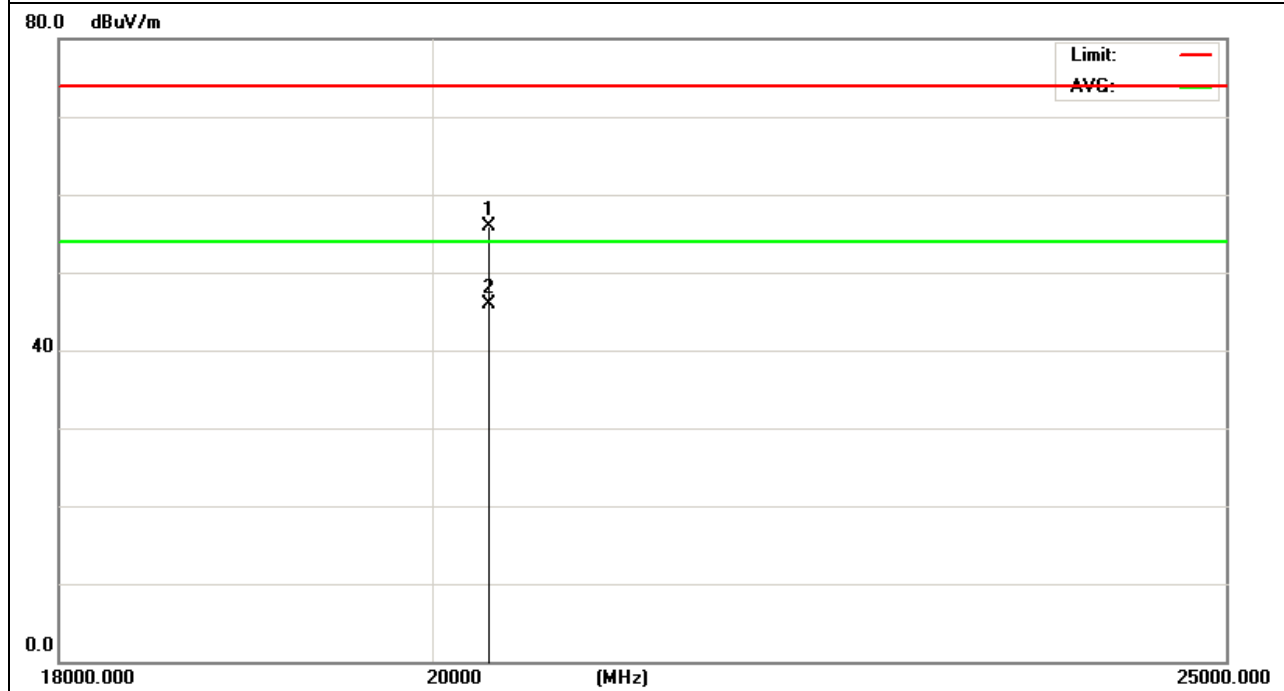


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20320.000	39.24	16.67	55.91	74.00	-18.09	
20320.000	29.33	16.67	46.00	54.00	-8.00	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

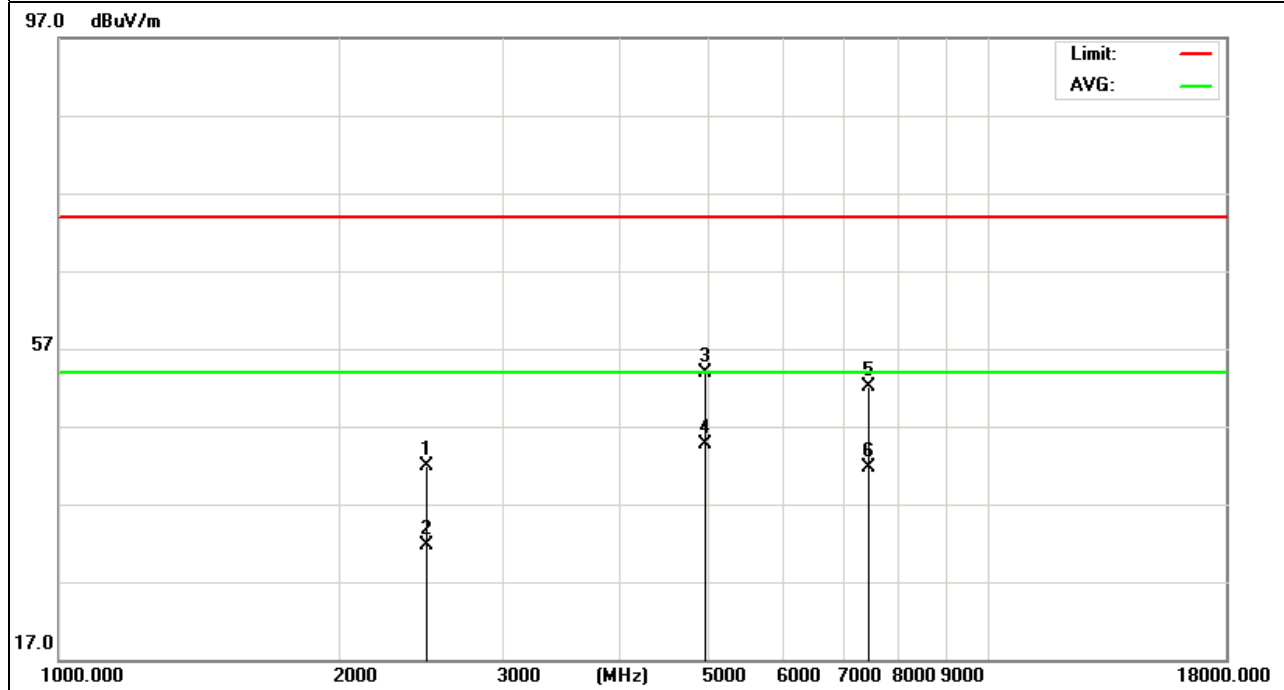


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2483.500	46.85	-4.98	41.87	74.00	-32.13	peak
2483.500	36.74	-4.98	31.76	54.00	-22.24	AVG
4960.000	48.63	5.22	53.85	74.00	-20.15	peak
4960.000	39.52	5.22	44.74	54.00	-9.26	AVG
7440.000	44.03	8.06	52.09	74.00	-21.91	peak
7440.000	33.61	8.06	41.67	54.00	-12.33	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

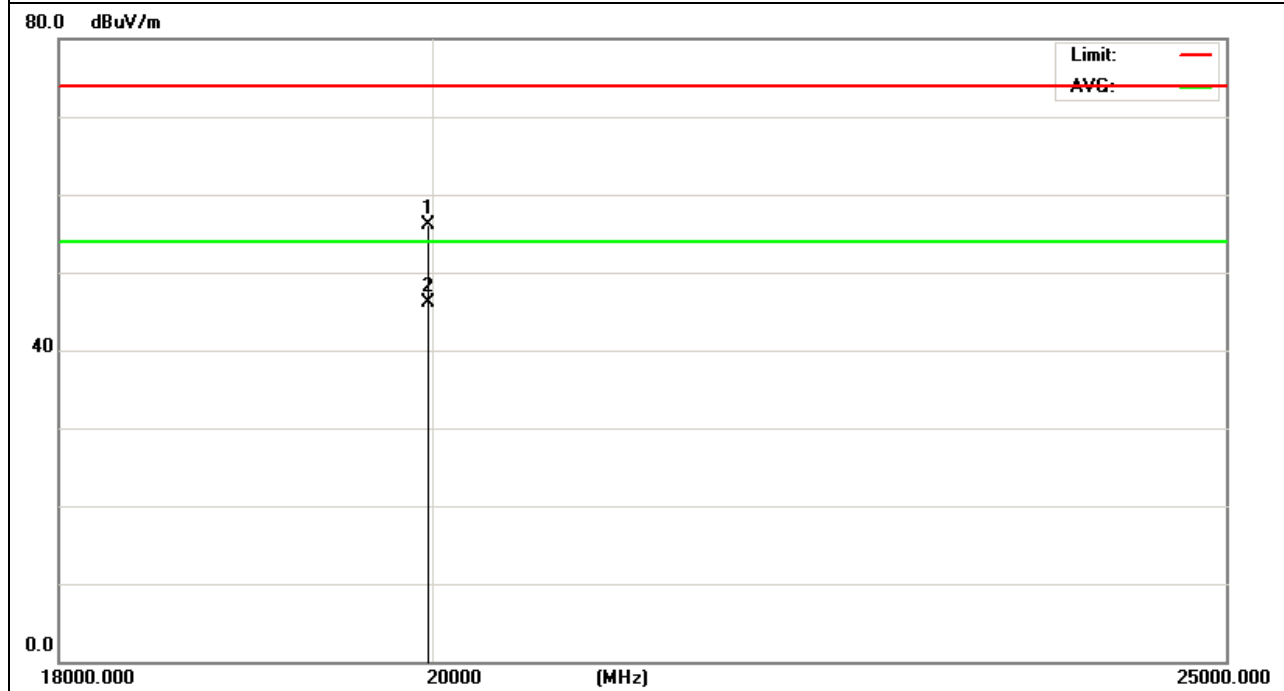


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (1Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19972.000	39.54	16.59	56.13	74.00	-17.87	
19972.000	29.43	16.59	46.02	54.00	-7.98	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

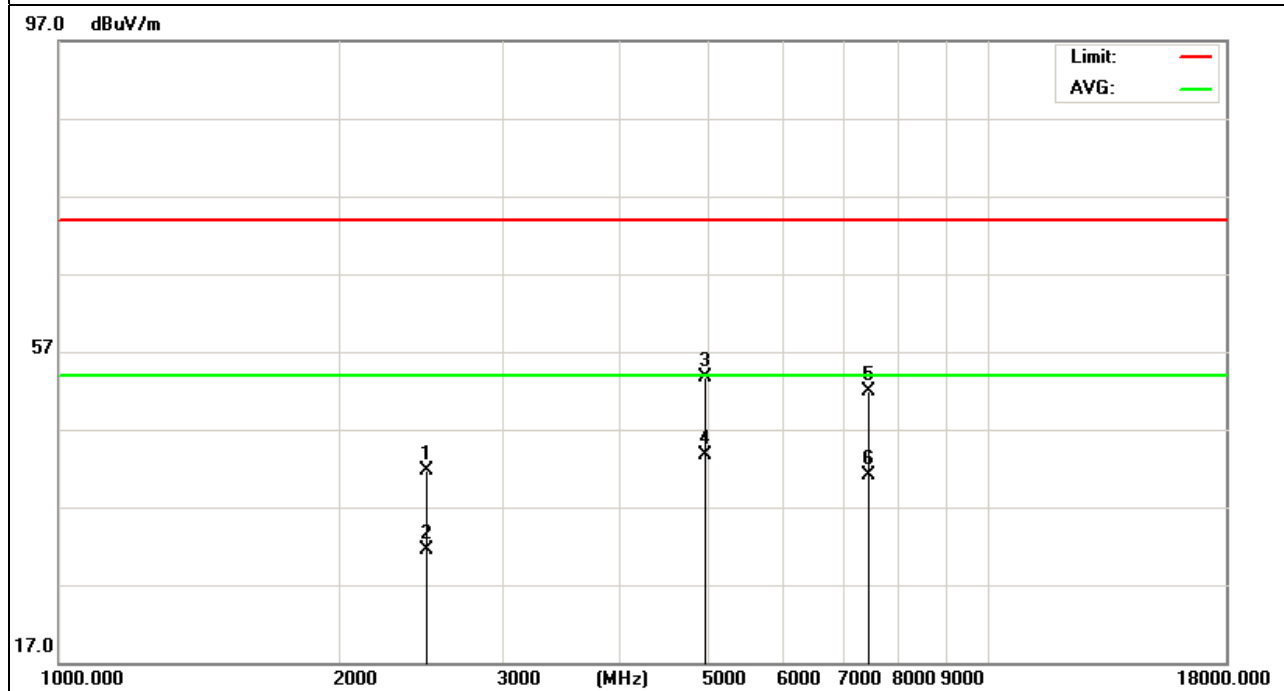


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2483.500	46.62	-4.98	41.64	74.00	-32.36	peak
2483.500	36.47	-4.98	31.49	54.00	-22.51	AVG
4960.000	48.54	5.22	53.76	74.00	-20.24	peak
4960.000	38.49	5.22	43.71	54.00	-10.29	AVG
7440.000	43.78	8.06	51.84	74.00	-22.16	peak
7440.000	32.97	8.06	41.03	54.00	-12.97	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

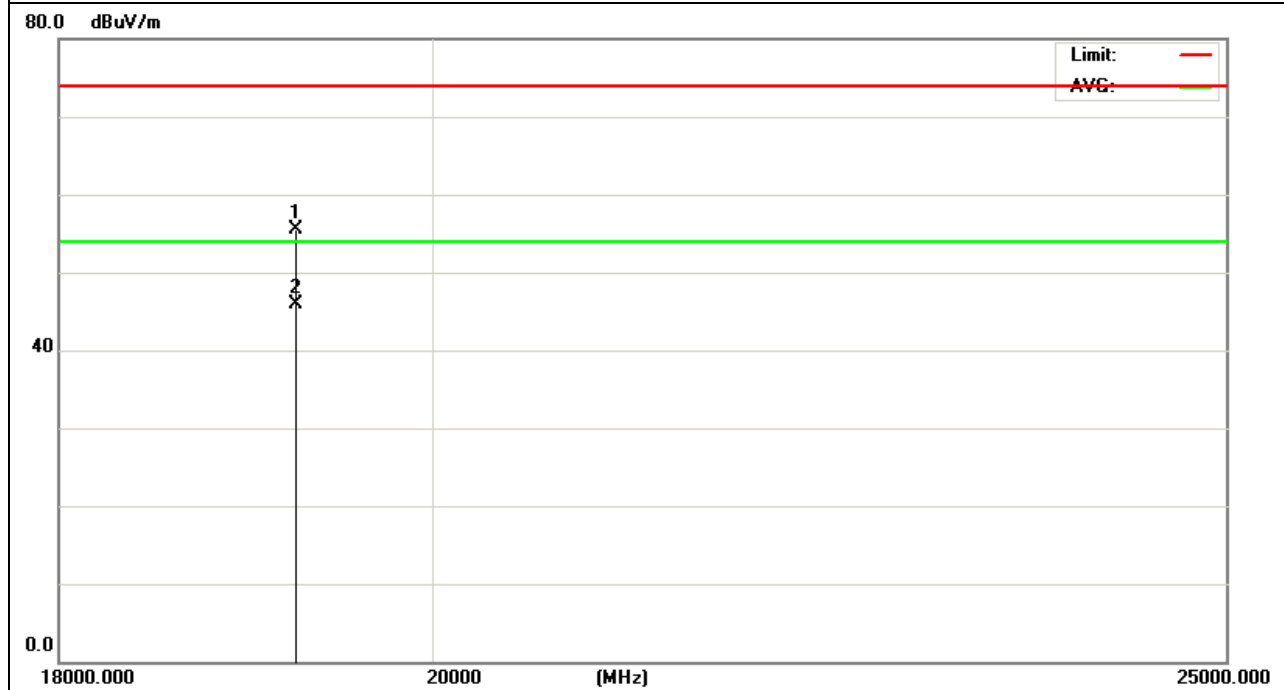


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (1Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19246.000	39.04	16.45	55.49	74.00	-18.51	
19246.000	29.53	16.45	45.98	54.00	-8.02	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

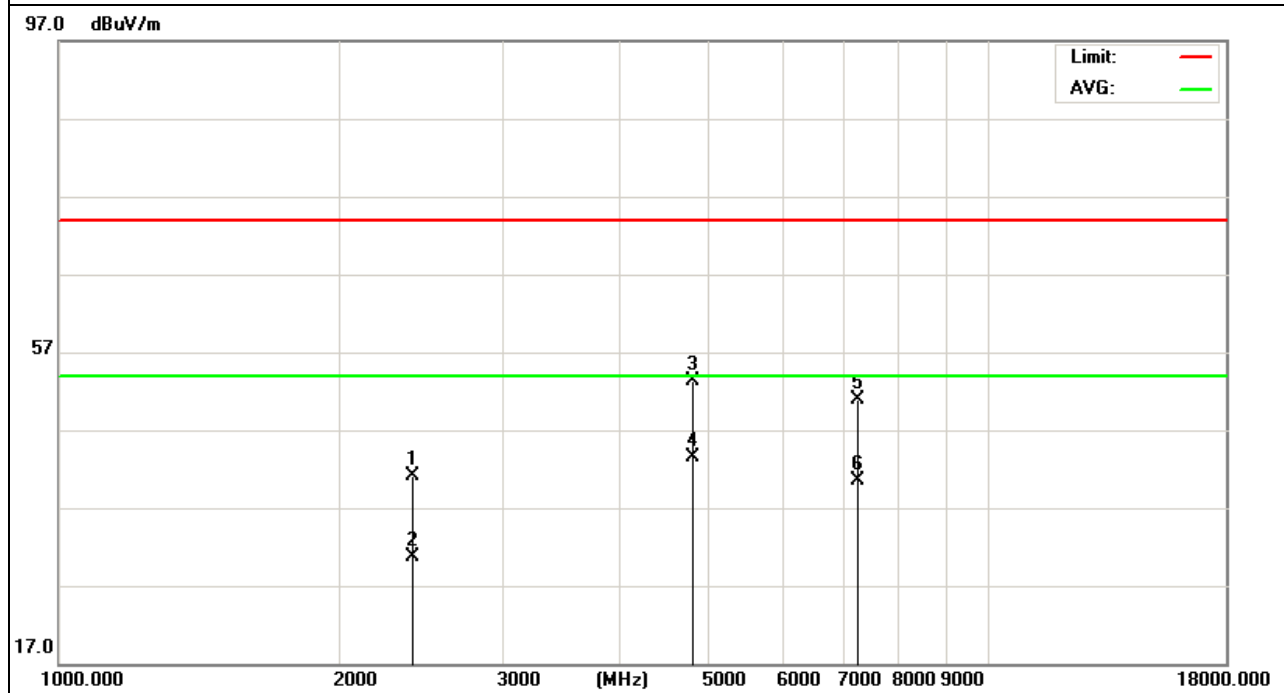


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (3Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2400.000	46.83	-5.70	41.13	74.00	-32.87	peak
2400.000	36.47	-5.70	30.77	54.00	-23.23	AVG
4804.000	48.25	5.06	53.31	74.00	-20.69	peak
4804.000	38.49	5.06	43.55	54.00	-10.45	AVG
7206.000	43.97	7.03	51.00	74.00	-23.00	peak
7206.000	33.54	7.03	40.57	54.00	-13.43	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

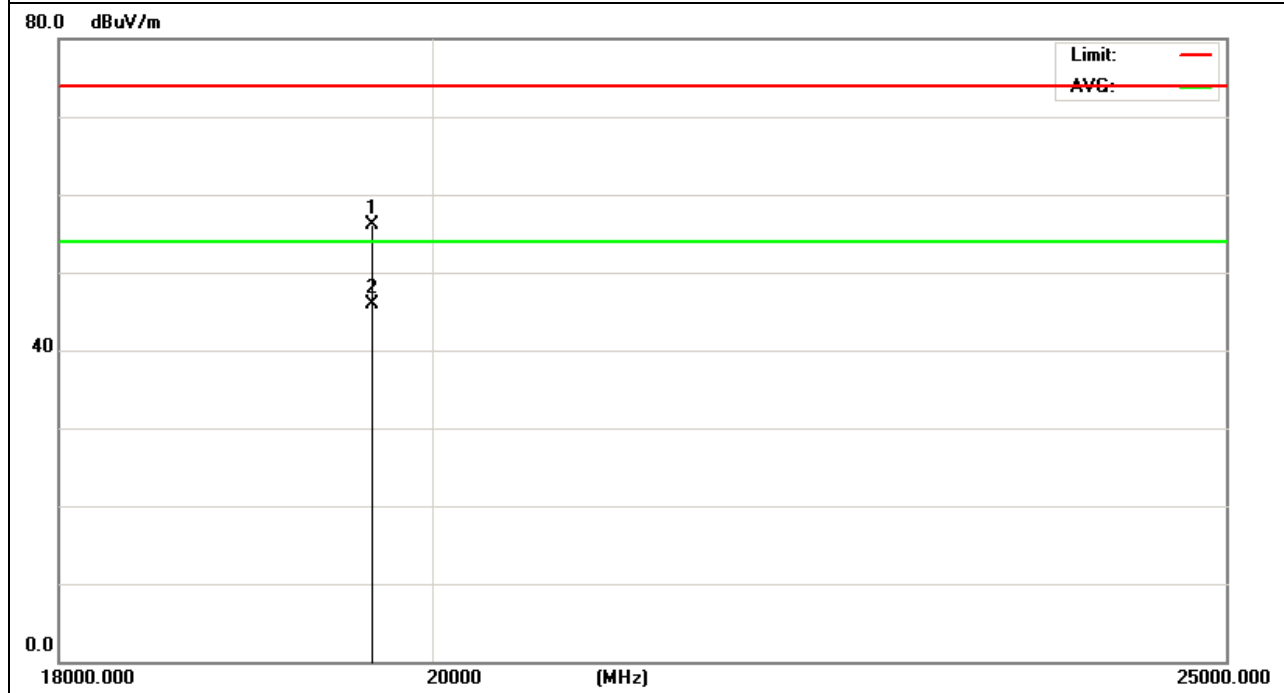


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (3Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19664.000	39.52	16.53	56.05	74.00	-17.95	
19664.000	29.34	16.53	45.87	54.00	-8.13	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

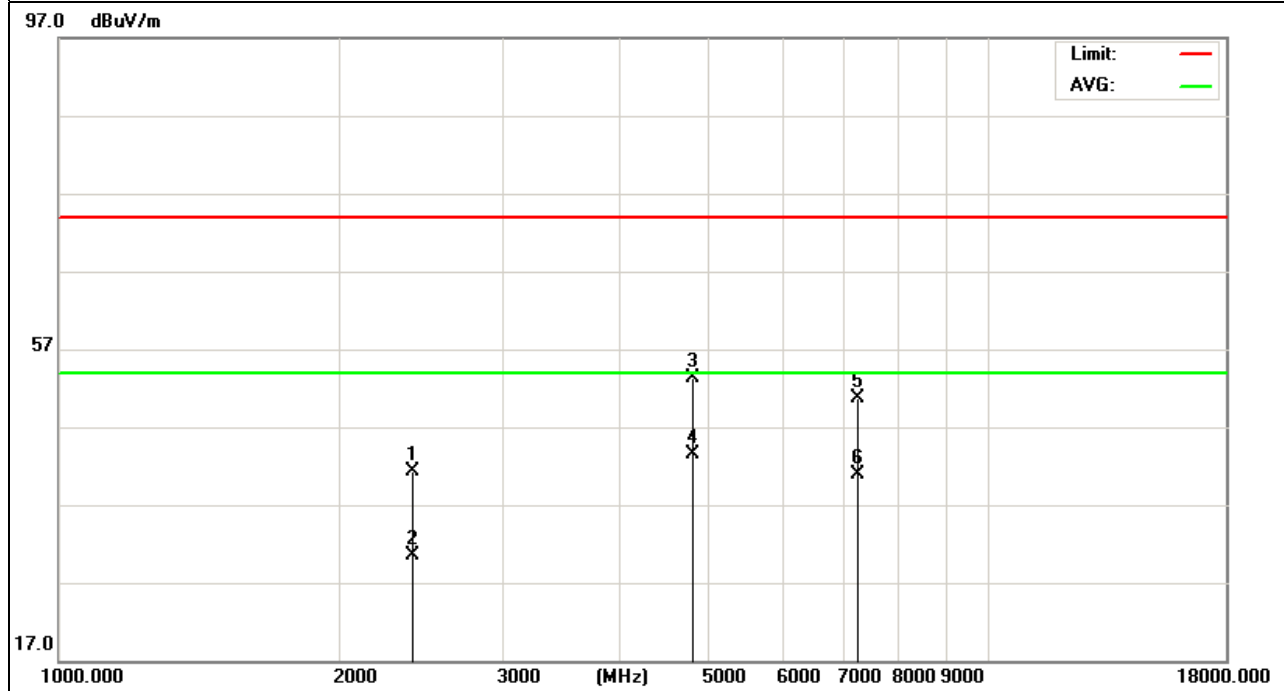


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (3Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2400.000	46.92	-5.70	41.22	74.00	-32.78	peak
2400.000	36.18	-5.70	30.48	54.00	-23.52	AVG
4804.000	48.32	5.06	53.38	74.00	-20.62	peak
4804.00	38.44	5.06	43.50	54.00	-10.50	AVG
7206.000	43.67	7.03	50.70	74.00	-23.30	peak
7206.000	33.88	7.03	40.91	54.00	-13.09	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2402MHz (3Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20143.000	39.34	16.63	55.97	74.00	-18.03	
20143.000	29.78	16.63	46.41	54.00	-7.59	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

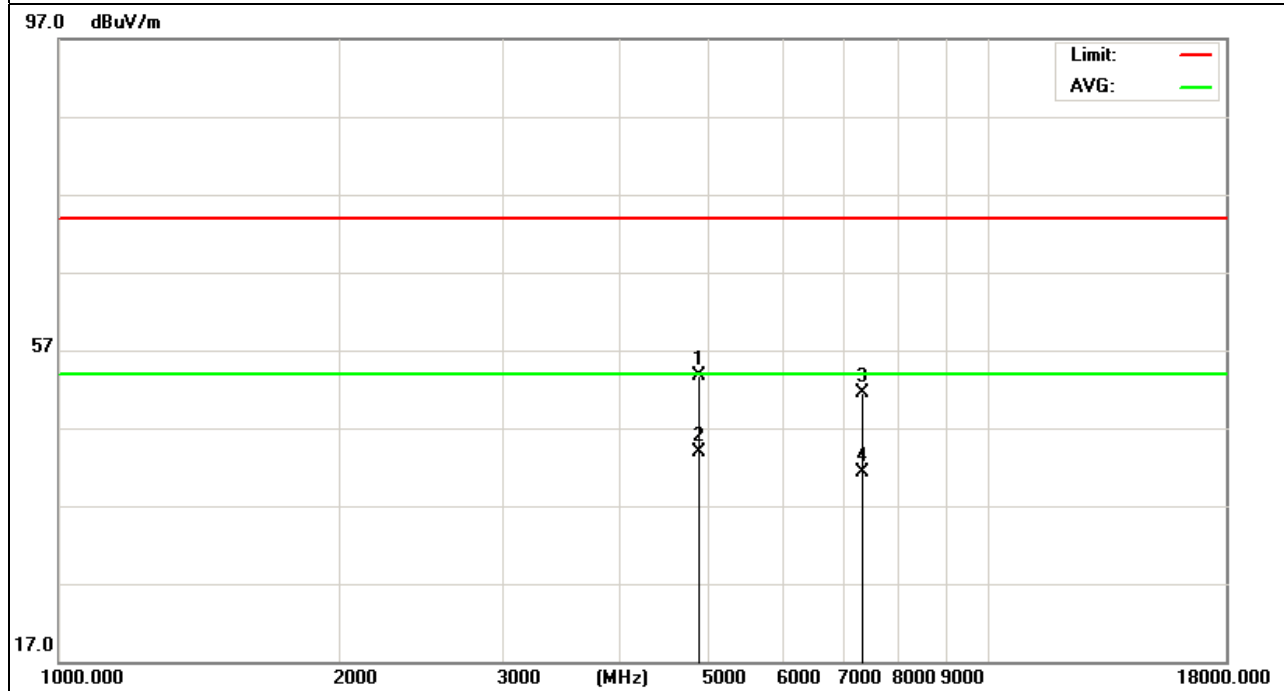


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (3Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4882.000	48.49	5.14	53.63	74.00	-20.37	peak
4882.000	38.67	5.14	43.81	54.00	-10.19	AVG
7323.000	44.05	7.54	51.59	74.00	-22.41	peak
7323.000	33.74	7.54	41.28	54.00	-12.72	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

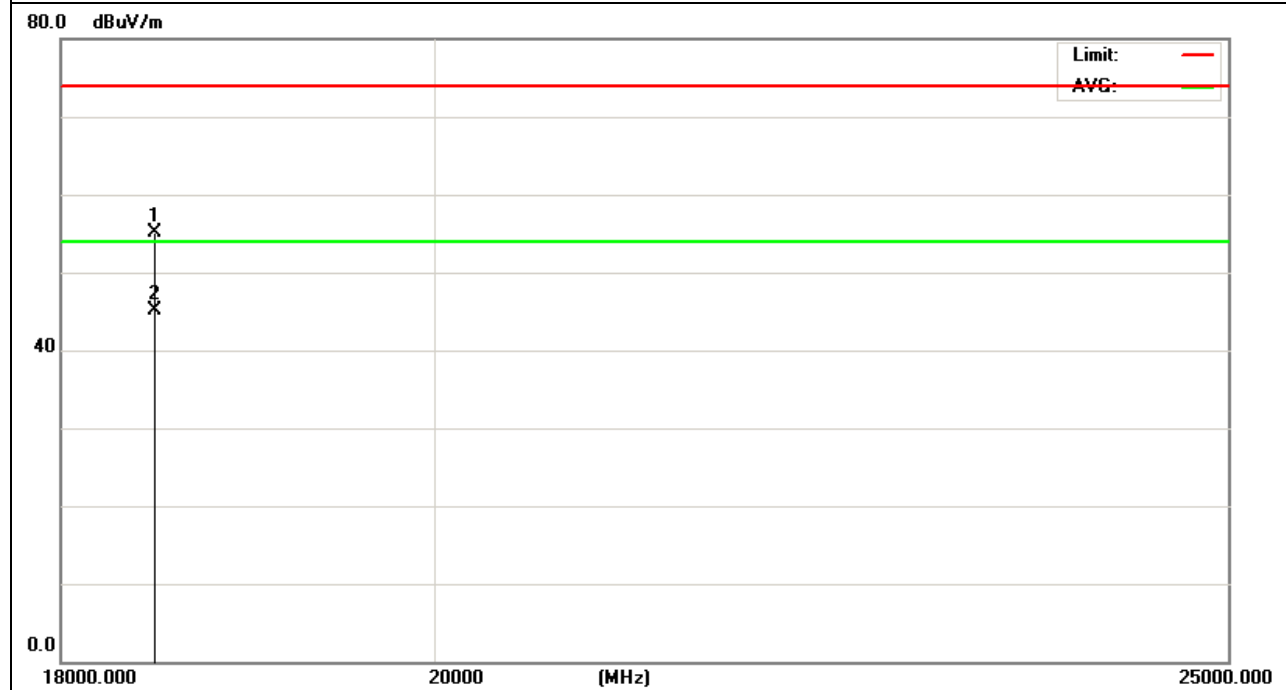


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (3Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
18479.000	39.24	15.88	55.12	74.00	-18.88	
18479.000	29.32	15.88	45.20	54.00	-8.80	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

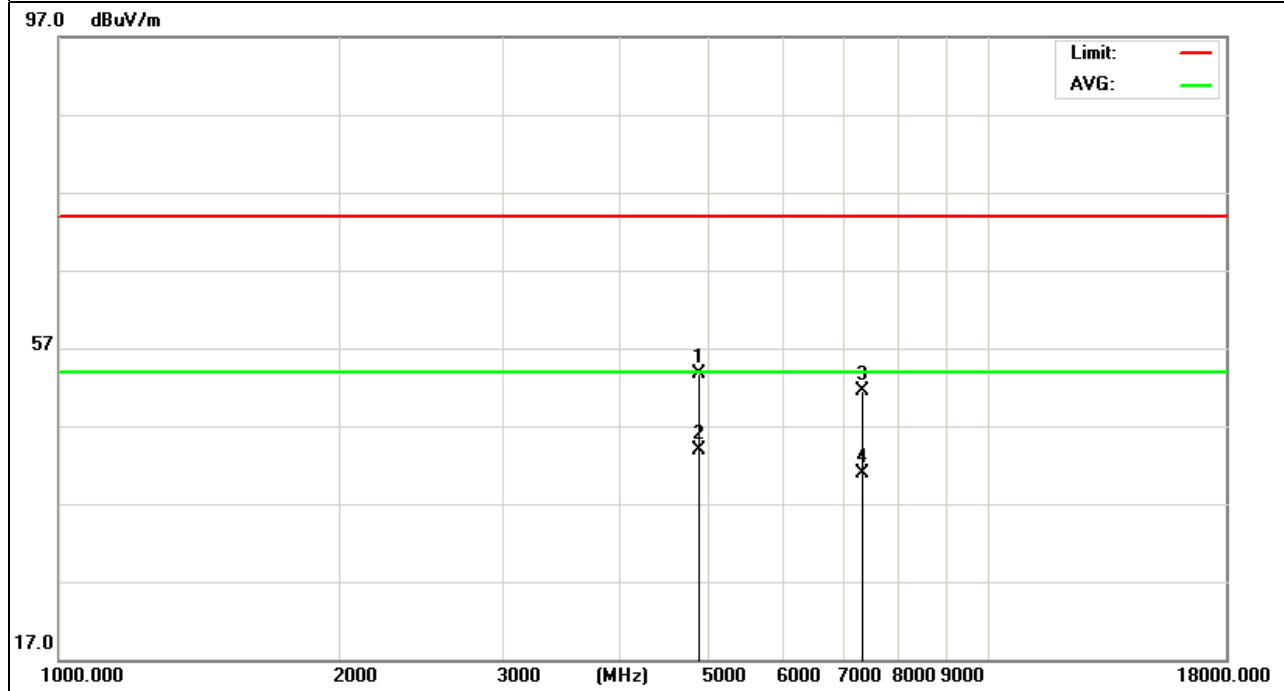


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (3Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
4882.000	48.53	5.14	53.67	74.00	-20.33	peak
4882.000	38.79	5.14	43.93	54.00	-10.07	AVG
7323.000	44.06	7.54	51.60	74.00	-22.40	peak
7323.000	33.42	7.54	40.96	54.00	-13.04	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

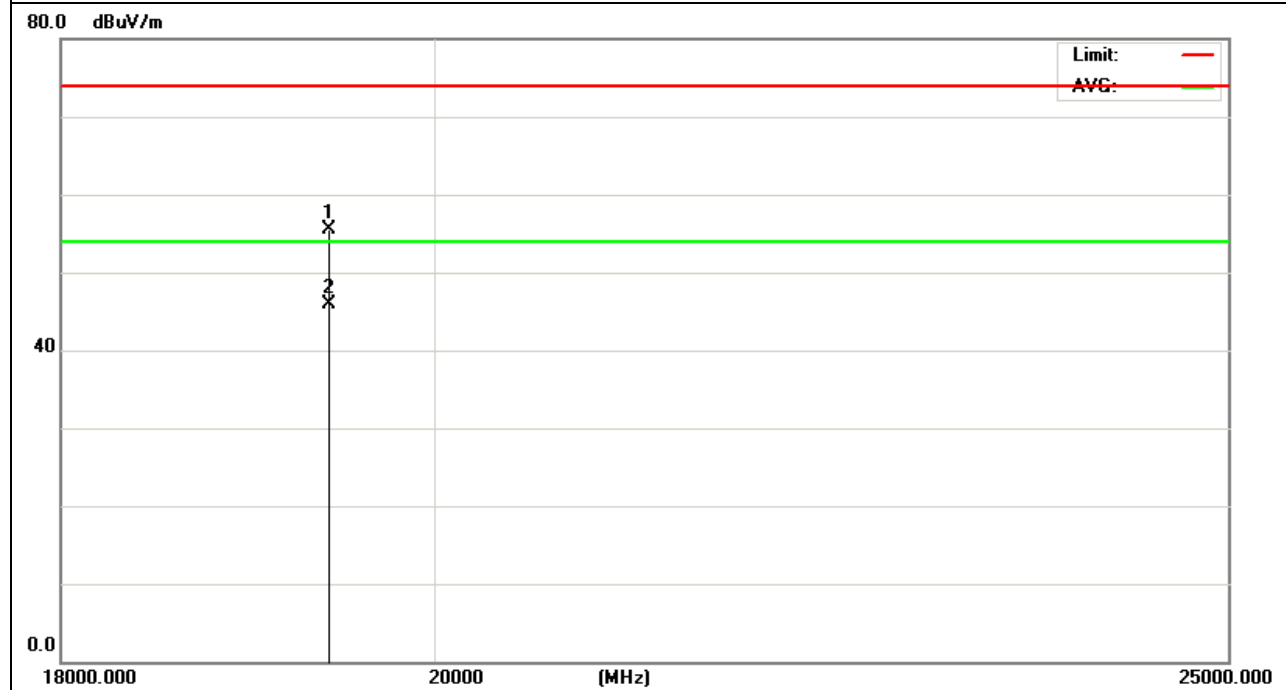


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2441MHz (3Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19411.000	39.06	16.49	55.55	74.00	-18.45	
19411.000	29.42	16.49	45.91	54.00	-8.09	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

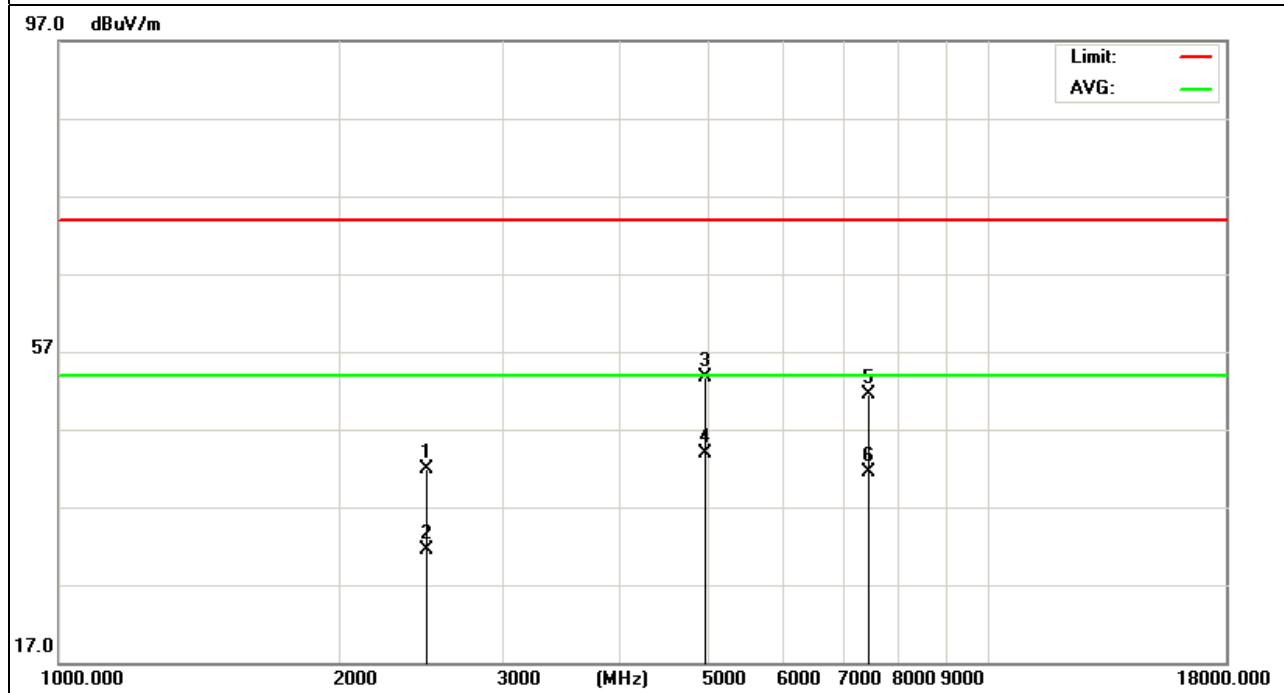


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (3Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2483.500	46.84	-4.98	41.86	74.00	-32.14	peak
2483.500	36.53	-4.98	31.55	54.00	-22.45	AVG
4960.000	48.47	5.22	53.69	74.00	-20.31	peak
4960.000	38.63	5.22	43.85	54.00	-10.15	AVG
7440.000	43.52	8.06	51.58	74.00	-22.42	peak
7440.000	33.46	8.06	41.52	54.00	-12.48	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

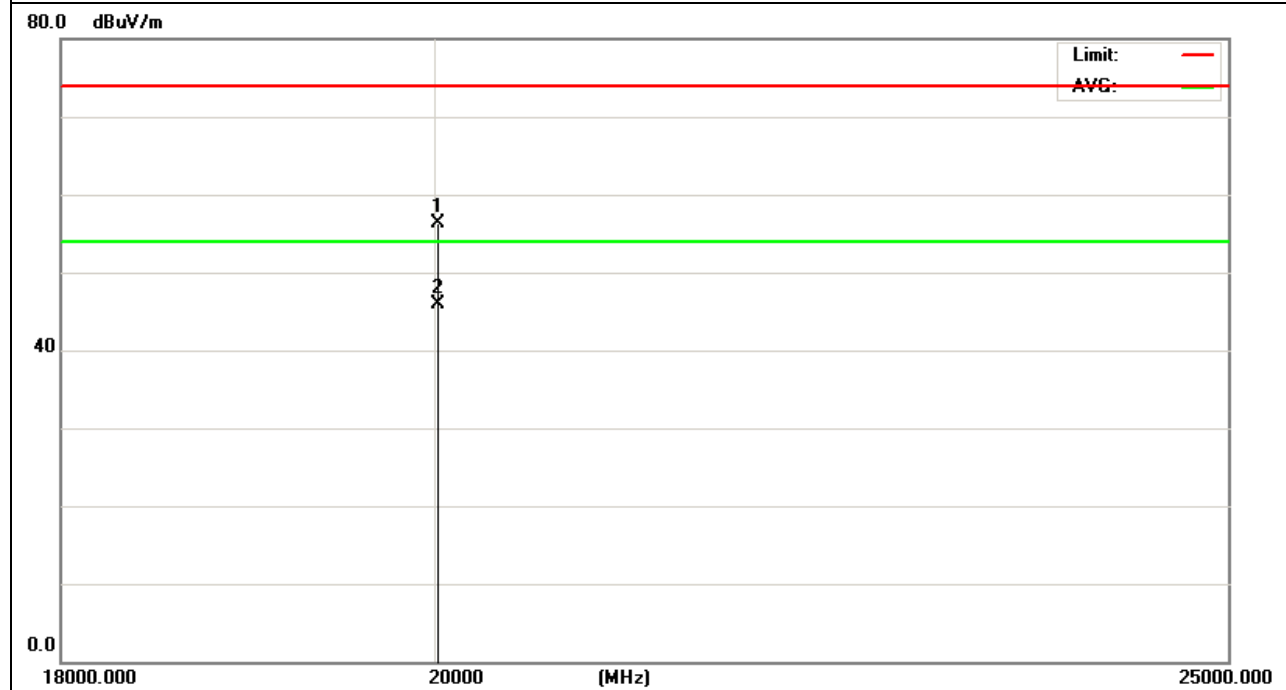


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (3Mbps-worst case)	Polarization :	Horizontal
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
20014.000	39.64	16.61	56.25	74.00	-17.75	
20014.000	29.32	16.61	45.93	54.00	-8.07	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

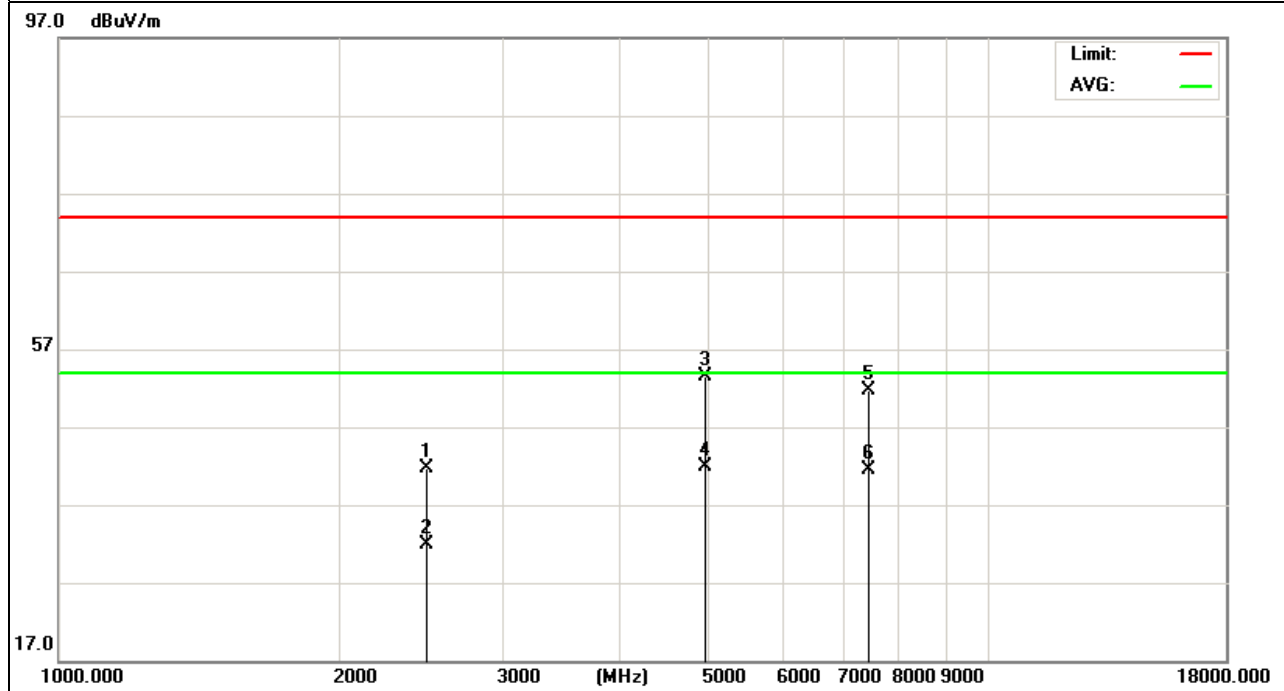


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (3Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
2483.500	46.73	-4.98	41.75	74.00	-32.25	peak
2483.500	36.85	-4.98	31.87	54.00	-22.13	AVG
4960.000	48.24	5.22	53.46	74.00	-20.54	peak
4960.000	36.77	5.22	41.99	54.00	-12.01	AVG
7440.000	43.65	8.06	51.71	74.00	-22.29	peak
7440.000	33.49	8.06	41.55	54.00	-12.45	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

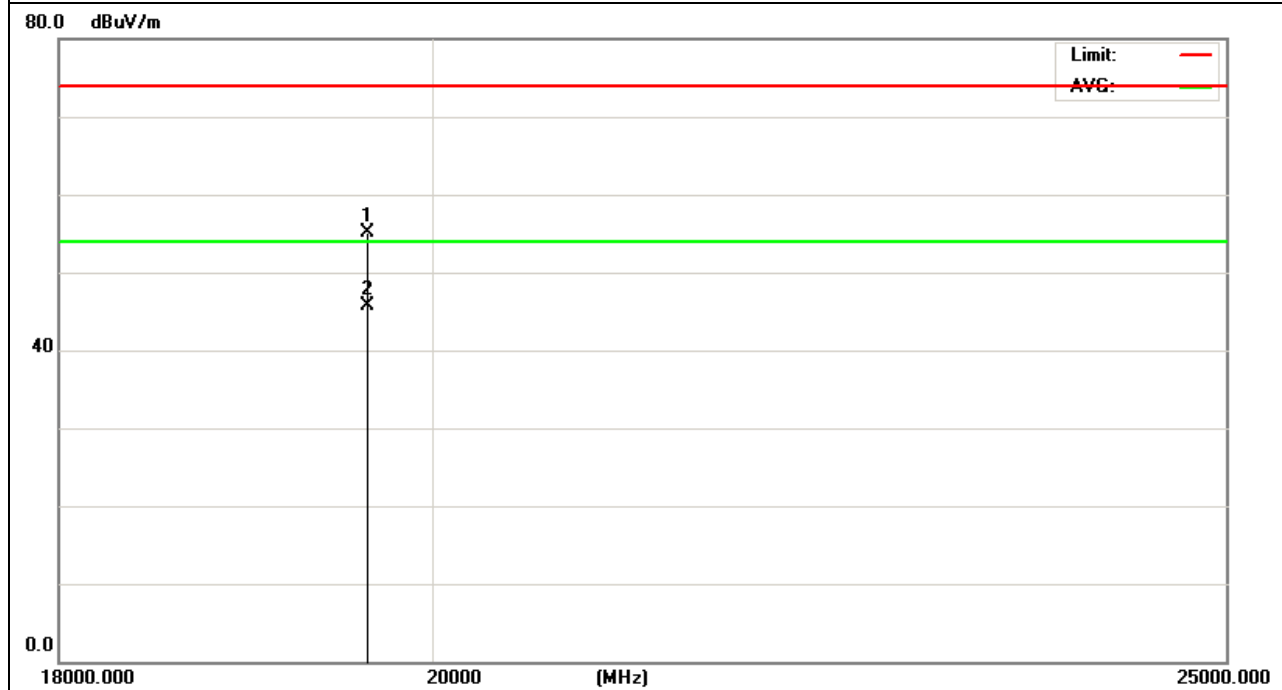


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	TX 2480MHz (3Mbps-worst case)	Polarization :	Vertical
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19635.000	38.49	16.53	55.02	74.00	-18.98	
19635.000	29.24	16.53	45.77	54.00	-8.23	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



Remark:

All the modes had been tested, but only the worst data recorded in the report.

In frequency ranges 1~25GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report.

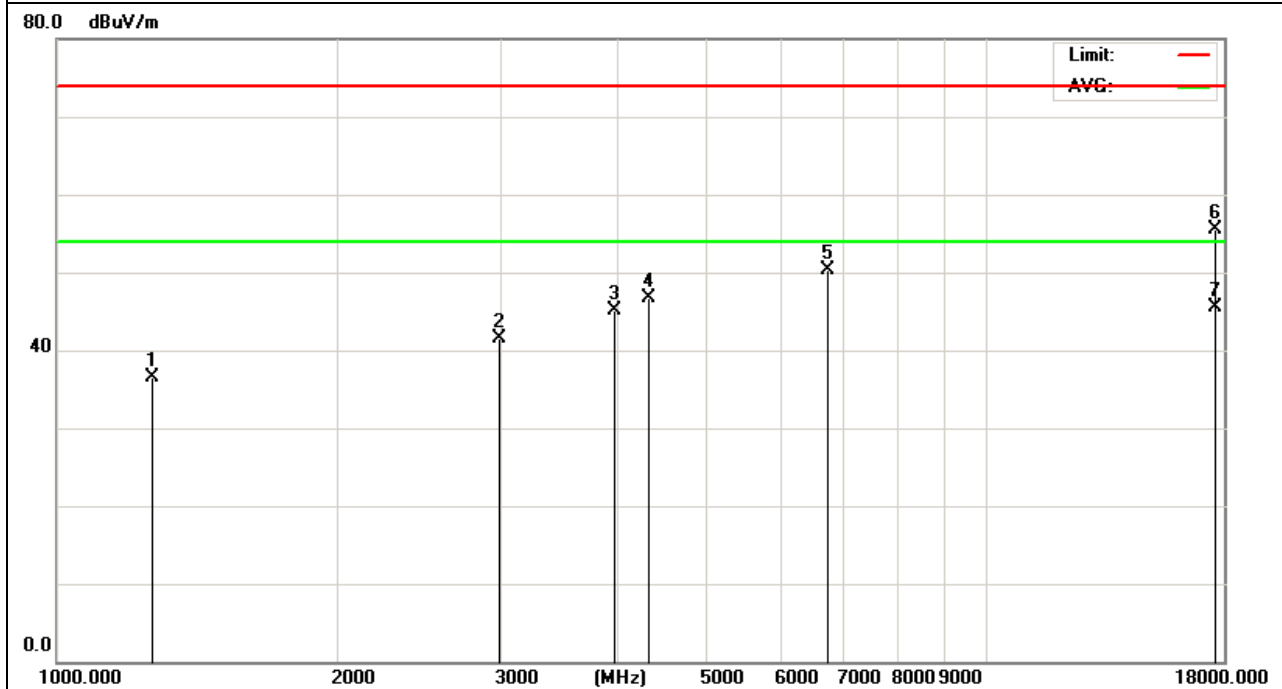
Test result: The unit does meet the NCC requirements.

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	RX (worst case)	Polarization :	Horizontal
Measurement Distance	3 m	Frenqucy Range	1GHz to 18GHz
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
1266.547	46.98	-10.42	36.56	74.00	-37.44	peak
2986.341	43.25	-1.77	41.48	74.00	-32.52	peak
3975.436	41.47	3.66	45.13	74.00	-28.87	peak
4321.175	42.36	4.38	46.74	74.00	-27.26	peak
6754.663	44.25	6.02	50.27	74.00	-23.73	peak
17547.985	30.49	25.00	55.49	74.00	-18.51	peak
17547.985	20.46	25.00	45.46	54.00	-8.54	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

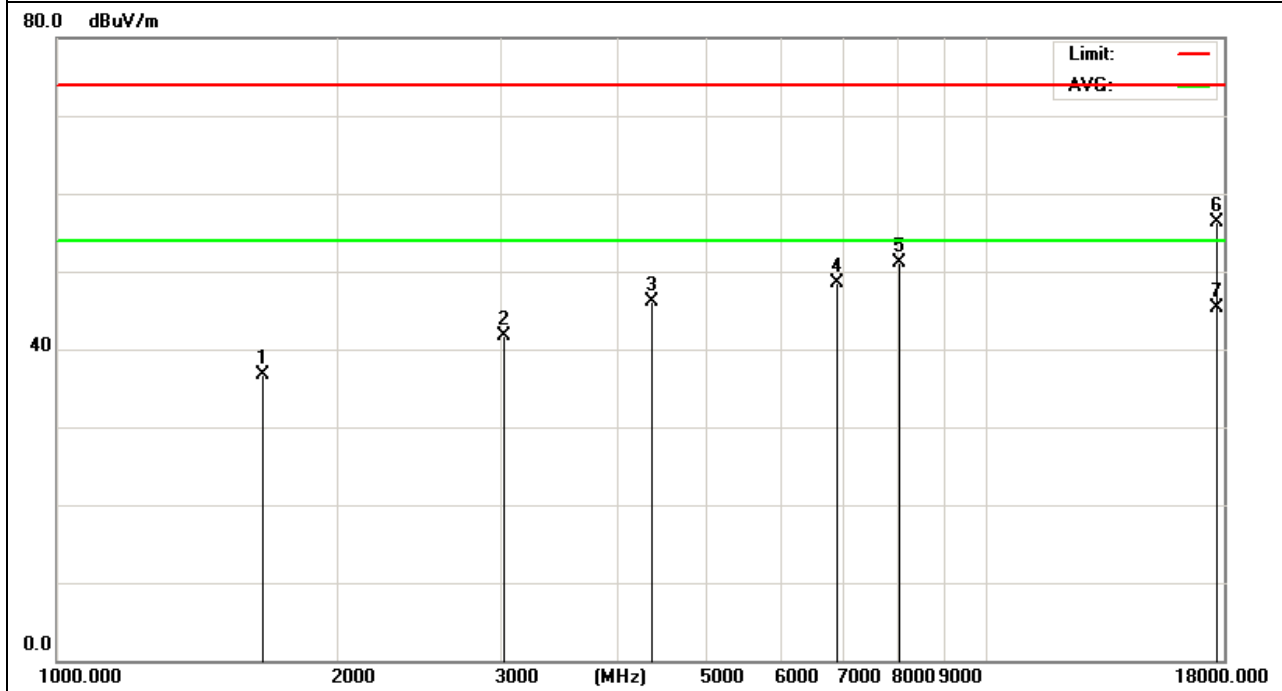


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	RX (worst case)	Polarization :	Vertical
Measurement Distance	3 m	Frenquency Range	1GHz to 18GHz
Test Power :	DC3.7V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
1667.015	46.37	-9.71	36.66	74.00	-37.34	peak
3016.579	43.25	-1.64	41.61	74.00	-32.39	peak
4360.111	41.74	4.45	46.19	74.00	-27.81	peak
6879.875	42.36	6.11	48.47	74.00	-25.53	peak
8042.369	40.58	10.43	51.01	74.00	-22.99	peak
17641.054	31.35	24.93	56.28	74.00	-17.72	peak
17641.054	20.46	24.93	45.39	54.00	-8.61	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

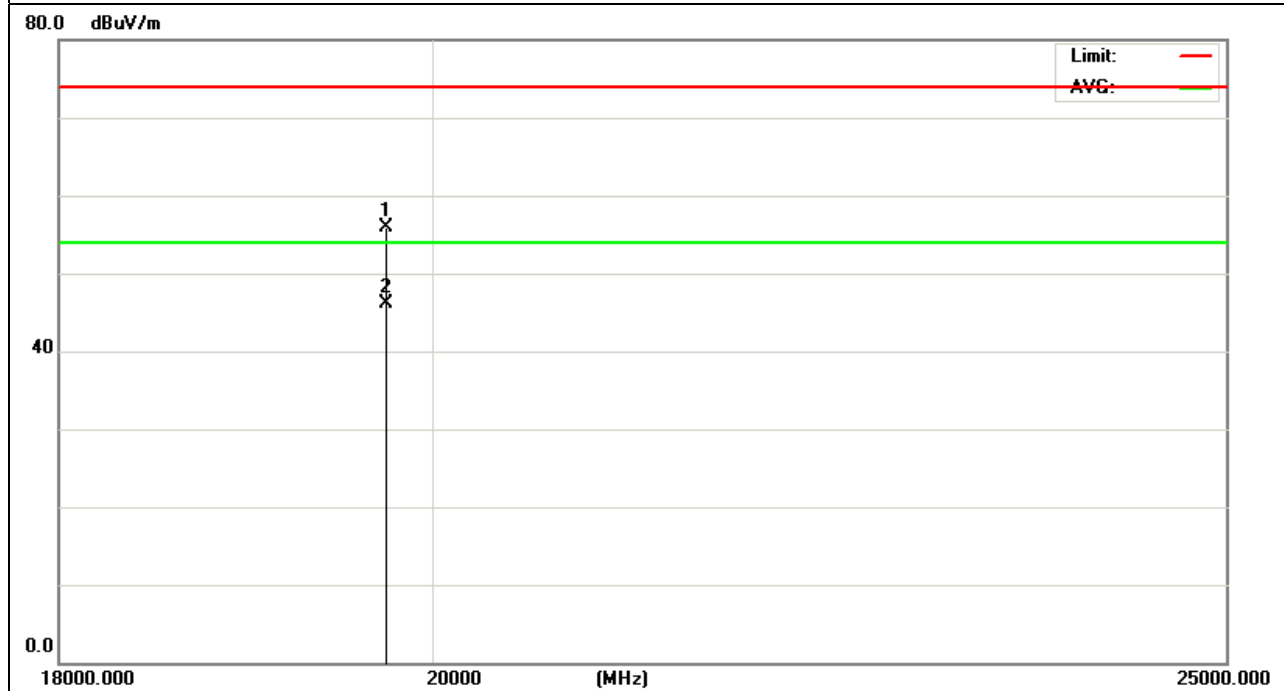


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	RX (worst case)	Polarization :	Horizontal
Measurement Distance	3 m	Frenqucy Range	18GHz to 25GHz
Test Power :	DC3.7V from battery		

Frequency (MHz)	Meter Reading (dBμV)	Factor (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Detector Type
19742.000	39.41	16.55	55.96	74.00	-18.04	peak
19742.00	29.56	16.55	46.11	54.00	-7.89	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.

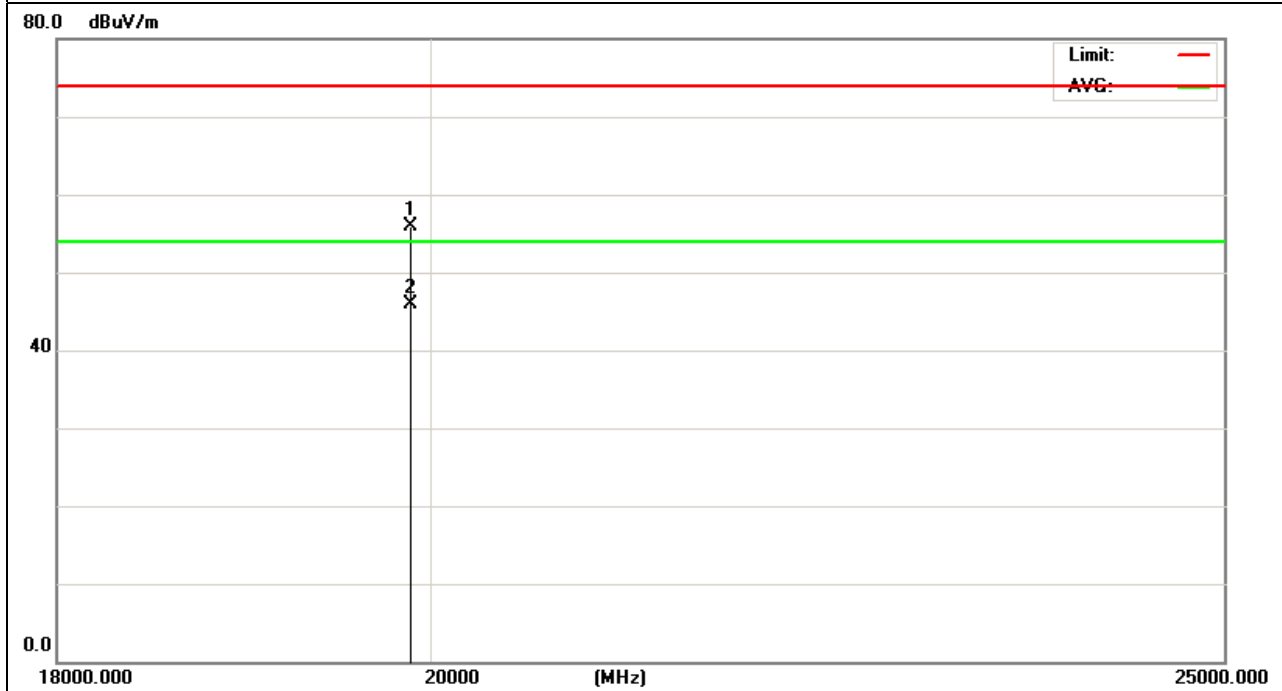


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Date :	2022-01-03
Test Mode :	RX (worst case)	Polarization :	Vertical
Measurement Distance	3 m	Frenqucy Range	18GHz to 25GHz
Test Power :	DC3.7V from battery		

Frequency	Meter Reading	Factor	Emission Level	Limits	Margin	Detector Type
(MHz)	(dBμV)	(dB)	(dBμV/m)	(dBμV/m)	(dB)	
19887.000	39.36	16.58	55.94	74.00	-18.06	peak
19887.00	29.41	16.58	45.99	54.00	-8.01	AVG

Remark:

1. Factor = Antenna Factor + Cable Loss – Pre-amplifier.



Remark:

All the modes had been tested, but only the worst data recorded in the report.

No any other emissions detected which are tested to compliance with the limit. No recording in the test report.

Test result: The unit does meet the NCC requirements.

3.2.8 TEST RESULTS (RESTRICTED BANDS REQUIREMENTS)

TEST PROCEDURES

$$\text{eirp} = p_t \times g_t = (E \times d)^2 / 30$$

Where:

p_t = transmitter output power in watts,

g_t = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m,

d = measurement distance in meters (m).

$$\text{erp} = \text{eirp} / 1.64 = (E \times d)^2 / (30 \times 1.64)$$

Where all terms are as previously defined.

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Remove the antenna from the EUT and then connect to a low loss RF cable from the antenna port to a EMI test receiver, then turn on the EUT and make it operate in transmitting mode. Then set it to Low Channel and High Channel within its operating range, and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 100 kHz with a convenient frequency span including 100kHz bandwidth from band edge, for Radiated emissions restricted band RBW=1MHz, VBW=3MHz for peak detector and RBW=1MHz, VBW=1/T for AV detector.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.
6. Measure the conducted output power (in dBm) using the detector specified by the appropriate regulatory agency for guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
7. Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the EIRP level (see 12.2.5 for guidance on determining the applicable antenna gain)
8. Add the appropriate maximum ground reflection factor to the EIRP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
9. For devices with multiple antenna-ports, measure the power of each individual chain and sum the EIRP of all chains in linear terms (e.g., Watts, mW).
10. Compare the resultant electric field strength level to the applicable regulatory limit.
11. Perform radiated spurious emission test duress until all measured frequencies were complete.

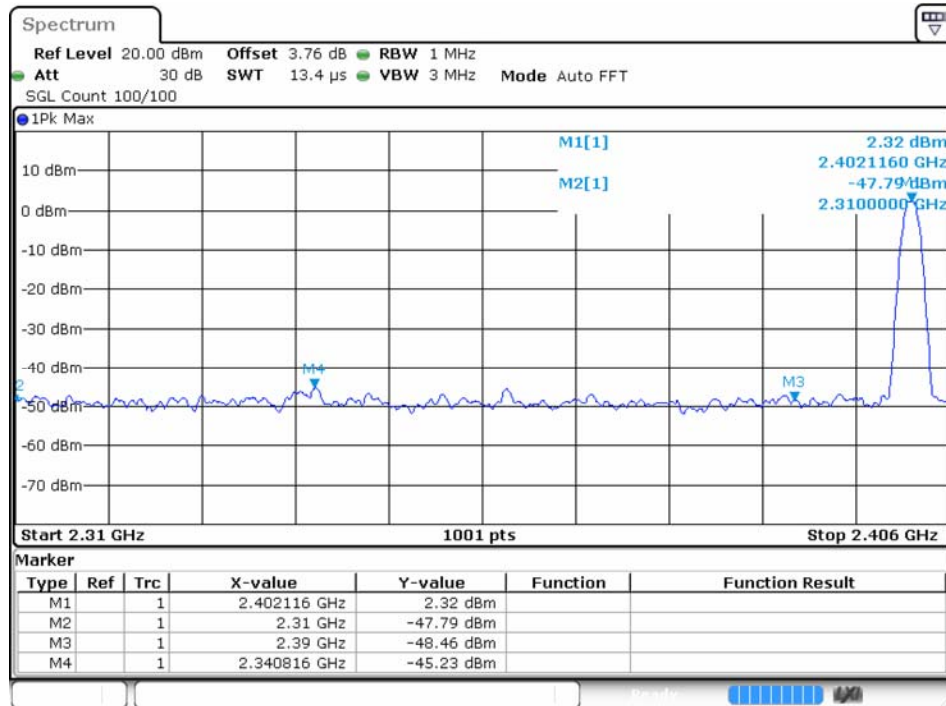
Remark:

1. *Measured at difference Packet Type for each mode and recorded worst case for each mode.*
2. *Worst case data at DH5 for GFSK, 2DH5 for $\pi/4$ DQPSK modulation type;*
3. *Measured at Hopping and Non-Hopping mode, recorded worst at Non-Hopping mode.*
4. *The other emission levels were very low against the limit.*
5. *The average measurement was not performed when the peak measured data under the limit of average detection.*
6. *Detector AV is setting spectrum/receiver. RBW=1MHz/VBW =Auto/Detector=Peak;*
7. *Since the out-of-band characteristics of the EUT transmit antenna will often be unknown, the use of a conservative antenna gain value is necessary. Thus, when determining the EIRP based on the measured conducted power, the upper bound on antenna gain for a device with a single RF output shall be selected as the maximum in-band gain of the antenna across all operating bands, or 2 dBi, whichever is greater. However, for devices that operate in multiple frequency bands while using the same transmit antenna, the highest gain of the antenna within the operating band nearest in frequency to the restricted band emission being measured may be used in lieu of the overall highest gain when the emission is at a frequency that is within 20 percent of the nearest band edge frequency, but in no case shall a value less than 2 dBi be used.*

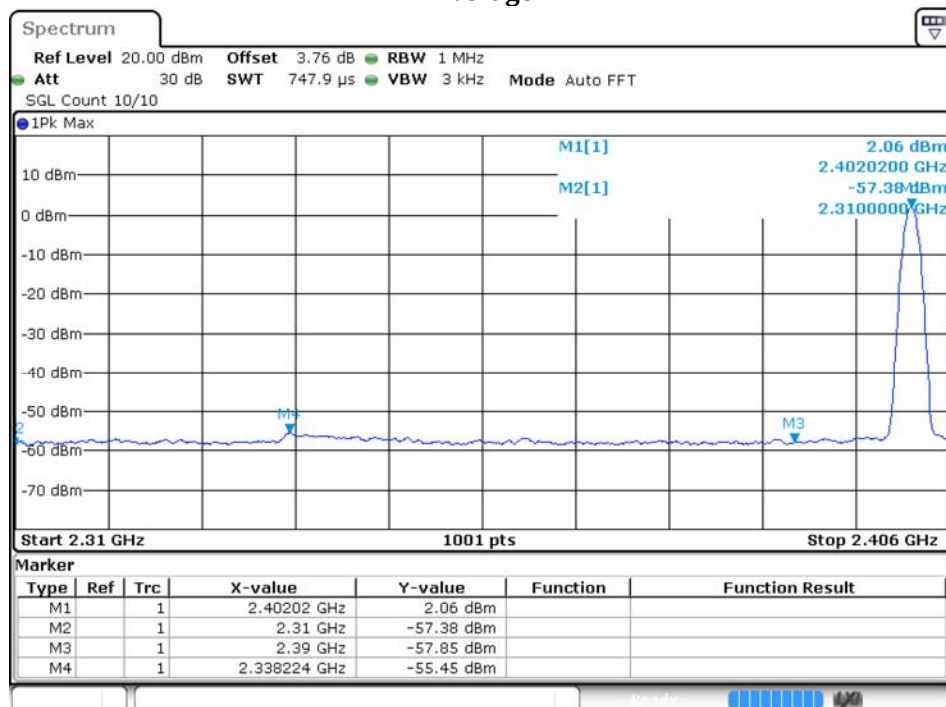
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24 °C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	TX 2402MHz/2480MHz (1Mbps)		
Test Date :	2022-01-03		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH00). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was setup to transmit at the highest channel (CH78). Then the field strength was measured at 2483.5-2500 MHz. 3. The data of 2390MHz and 2483.5MHz was the worst.		

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
1-DH1	2402	2310	-47.78	2	49.48	Peak	74	Pass
1-DH1	2402	2310	-57.38	2	39.88	Average	54	Pass
1-DH1	2402	2340.816	-45.23	2	52.03	Peak	74	Pass
1-DH1	2402	2338.224	-55.45	2	41.81	Average	54	Pass
1-DH1	2402	2390	-48.45	2	48.81	Peak	74	Pass
1-DH1	2402	2390	-57.84	2	39.42	Average	54	Pass
1-DH1	2480	2483.5	-48.07	2	49.19	Peak	74	Pass
1-DH1	2480	2483.5	-56.69	2	40.57	Average	54	Pass
1-DH1	2480	2499.208	-46.4	2	50.86	Peak	74	Pass
1-DH1	2480	2483.512	-56.69	2	40.57	Average	54	Pass
1-DH1	2480	2500	-48.83	2	48.43	Peak	74	Pass
1-DH1	2480	2500	-57.95	2	39.31	Average	54	Pass

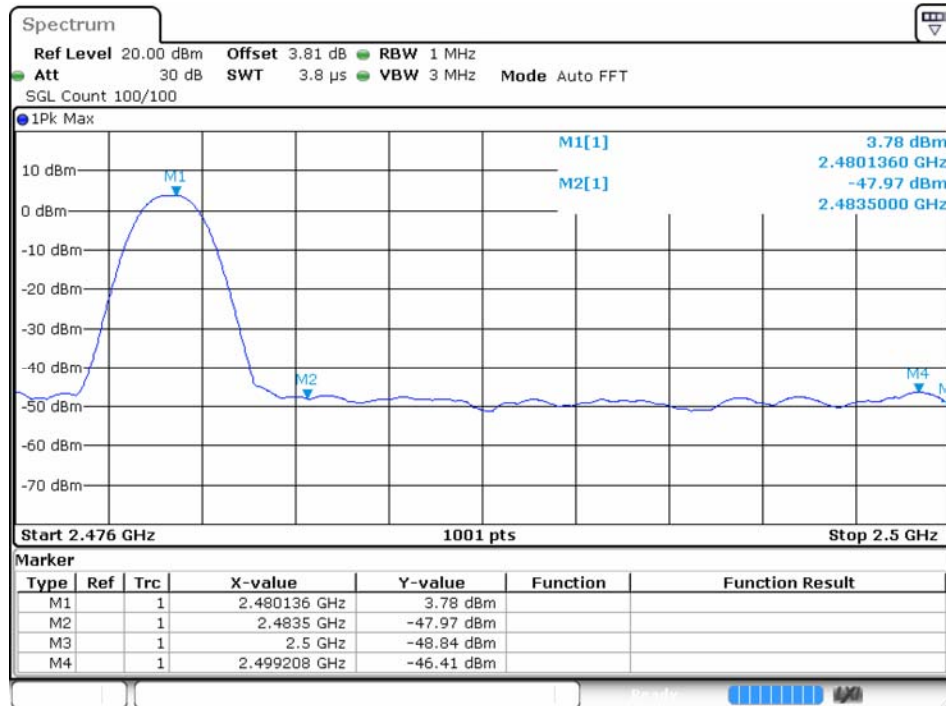
Peak



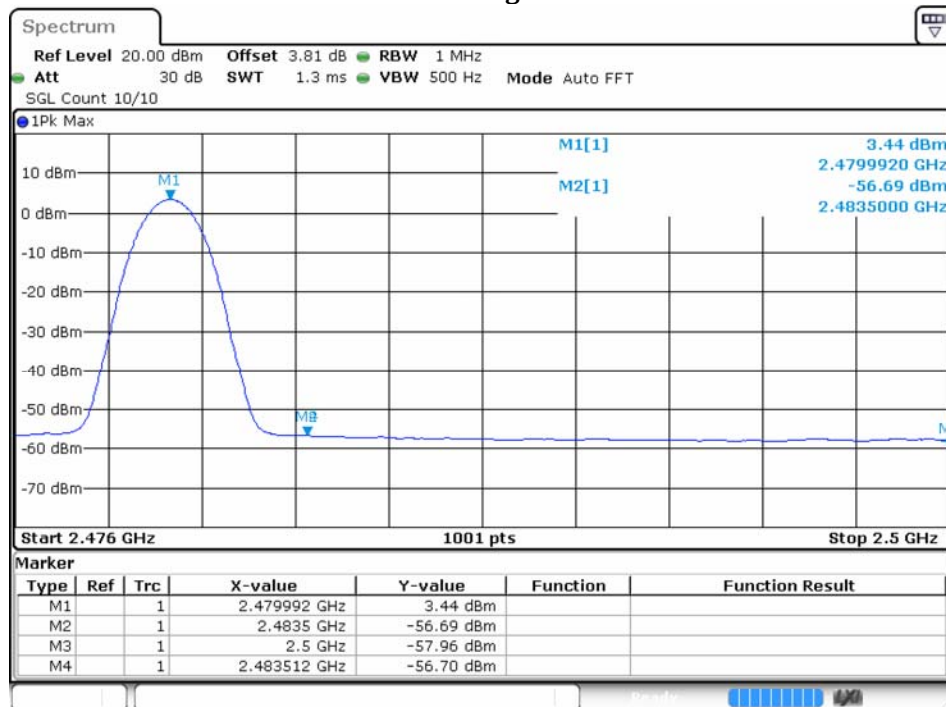
Average



Peak



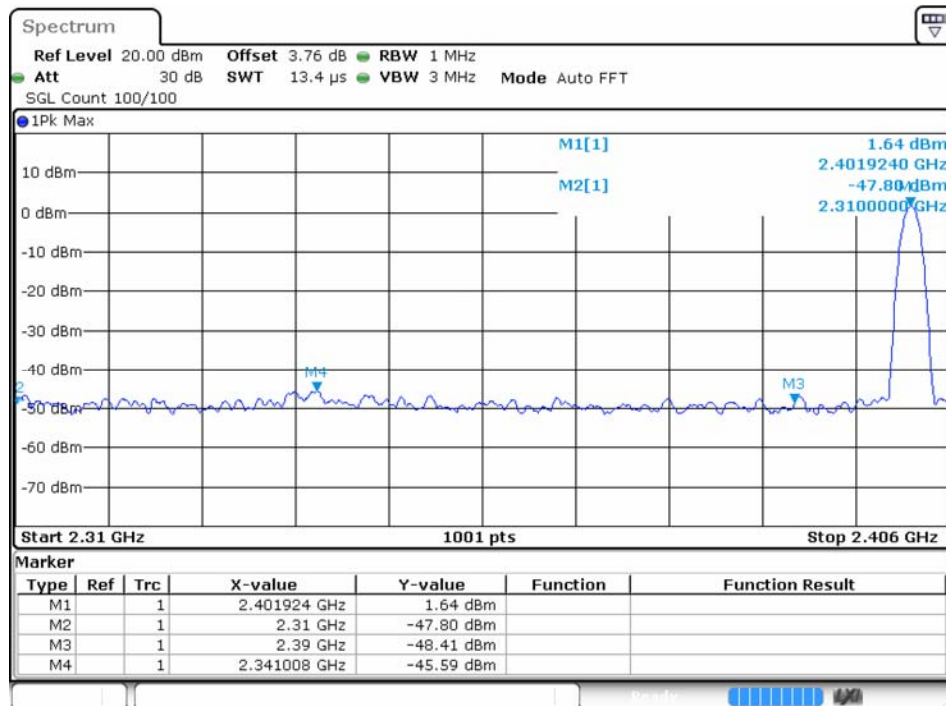
Average



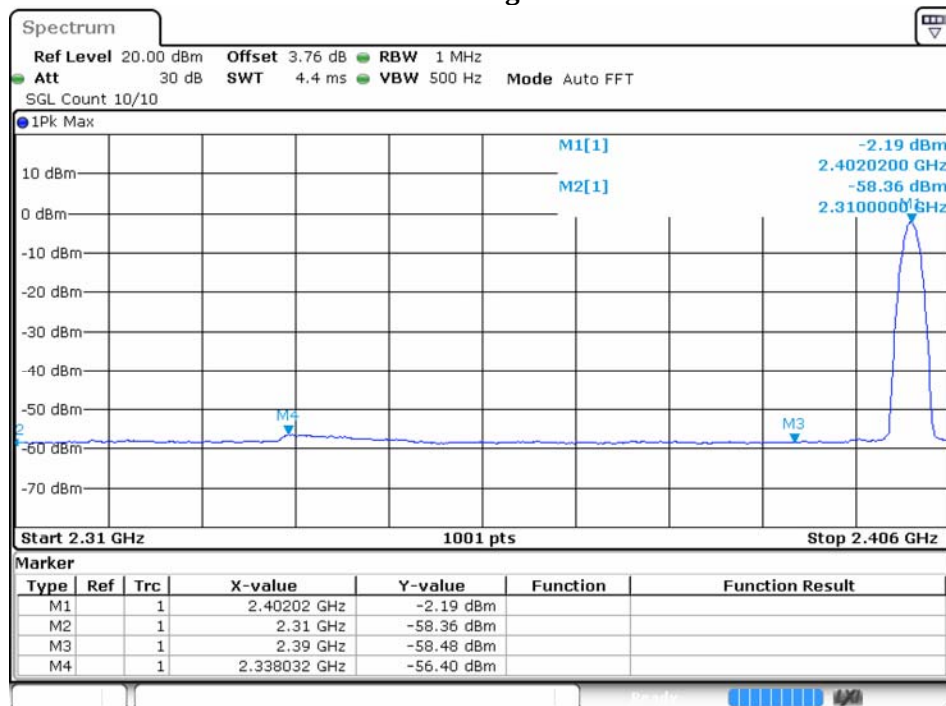
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	24°C	Relative Humidity :	54%
Pressure :	1010 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	TX 2402MHz/2480MHz (3Mbps)		
Test Date :	2022-01-03		
Note :	1. The transmitter was setup to transmit at the lowest channel (CH00). Then the field strength was measured at 2310-2390 MHz. 2. The transmitter was setup to transmit at the highest channel (CH78). Then the field strength was measured at 2483.5-2500 MHz. 3. The data of 2390MHz and 2483.5MHz was the worst.		

Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
3-DH1	2402	2310	-47.79	2	49.47	Peak	74	Pass
3-DH1	2402	2310	-58.36	2	38.9	Average	54	Pass
3-DH1	2402	2341.008	-45.59	2	51.67	Peak	74	Pass
3-DH1	2402	2338.032	-56.4	2	40.86	Average	54	Pass
3-DH1	2402	2390	-48.4	2	48.86	Peak	74	Pass
3-DH1	2402	2390	-58.48	2	38.78	Average	54	Pass
3-DH1	2480	2483.5	-48.64	2	48.62	Peak	74	Pass
3-DH1	2480	2483.5	-56.92	2	40.34	Average	54	Pass
3-DH1	2480	2498.632	-46.09	2	51.17	Peak	74	Pass
3-DH1	2480	2483.512	-56.92	2	40.34	Average	54	Pass
3-DH1	2480	2500	-47.78	2	49.48	Peak	74	Pass
3-DH1	2480	2500	-57.85	2	39.41	Average	54	Pass

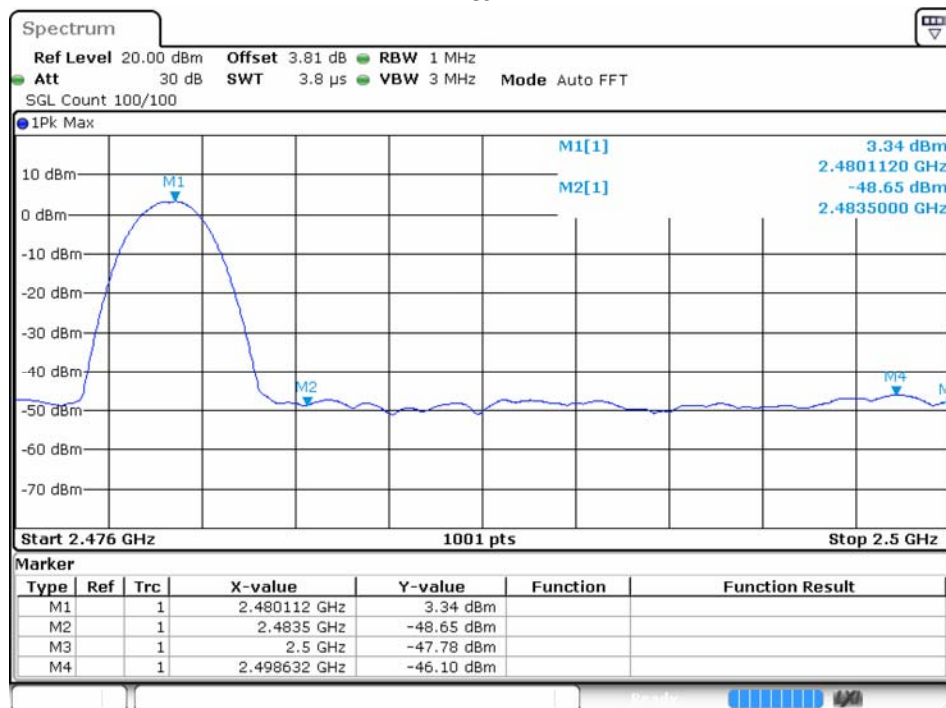
Peak



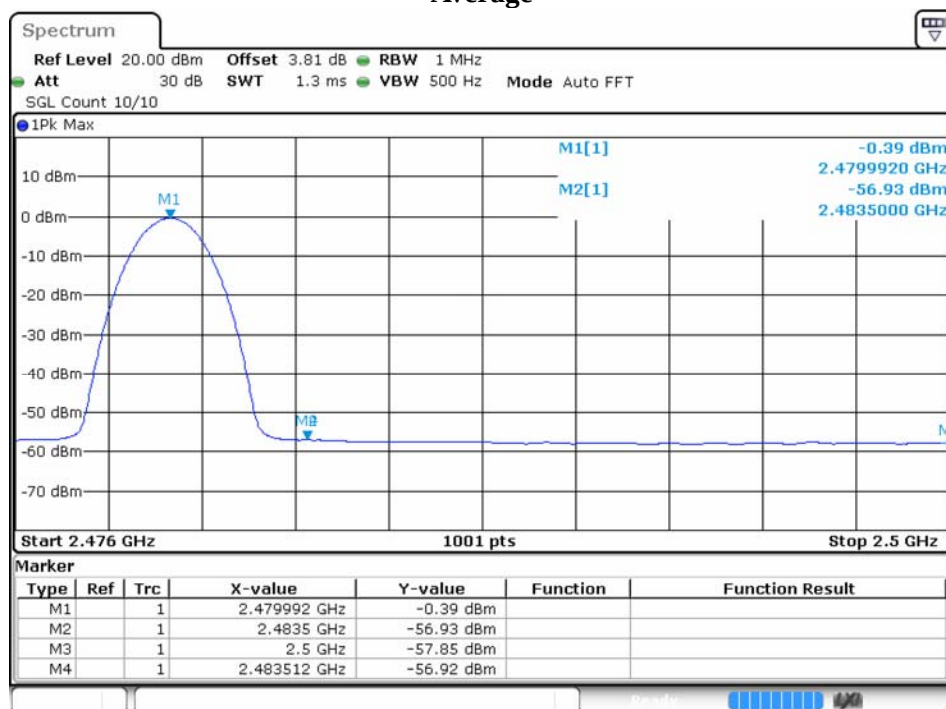
Average



Peak



Average



Test result: The unit does meet the NCC requirements.

4. OCCUPIED BANDWIDTH TEST

4.1 APPLIED PROCEDURES / LIMIT

LP0002				
Section	Test Item	Limit	Frequency Range (MHz)	Result
4.10.1(6.1.1)	Bandwidth	N/A	2402-2480	PASS

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	wide enough to capture the peaks of two adjacent channels.
RB	30 kHz (20dB Bandwidth) / 100 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 300 kHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

4.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting: RBW= 30KHz, VBW=100KHz, Sweep time = Auto, Span=3MHz.

4.1.2 TEST SETUP



4.1.3 EUT OPERATION CONDITIONS

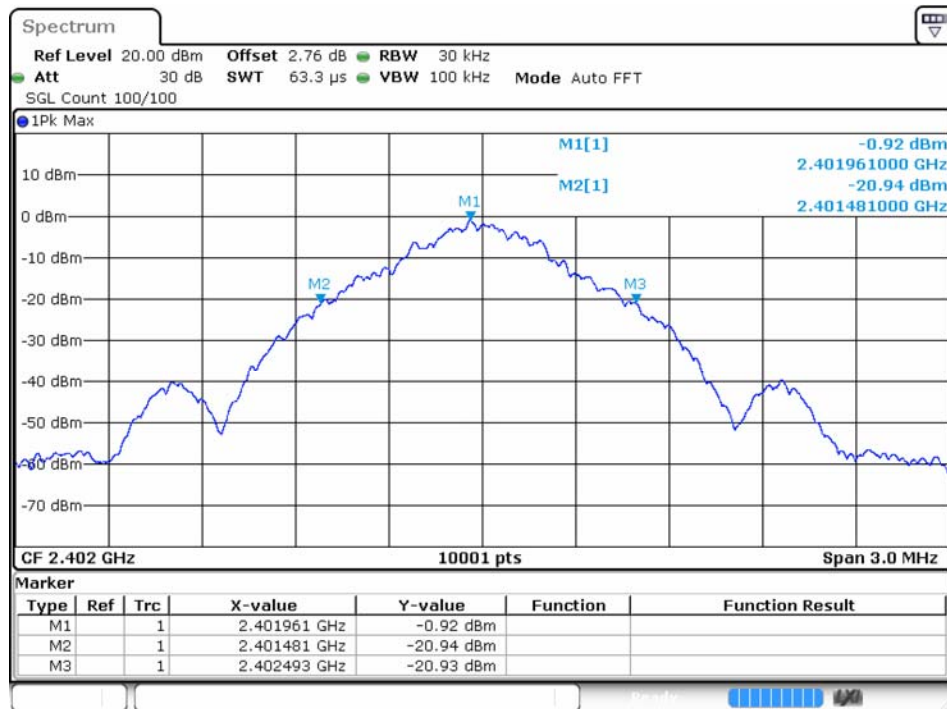
The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

4.1.4 TEST RESULTS

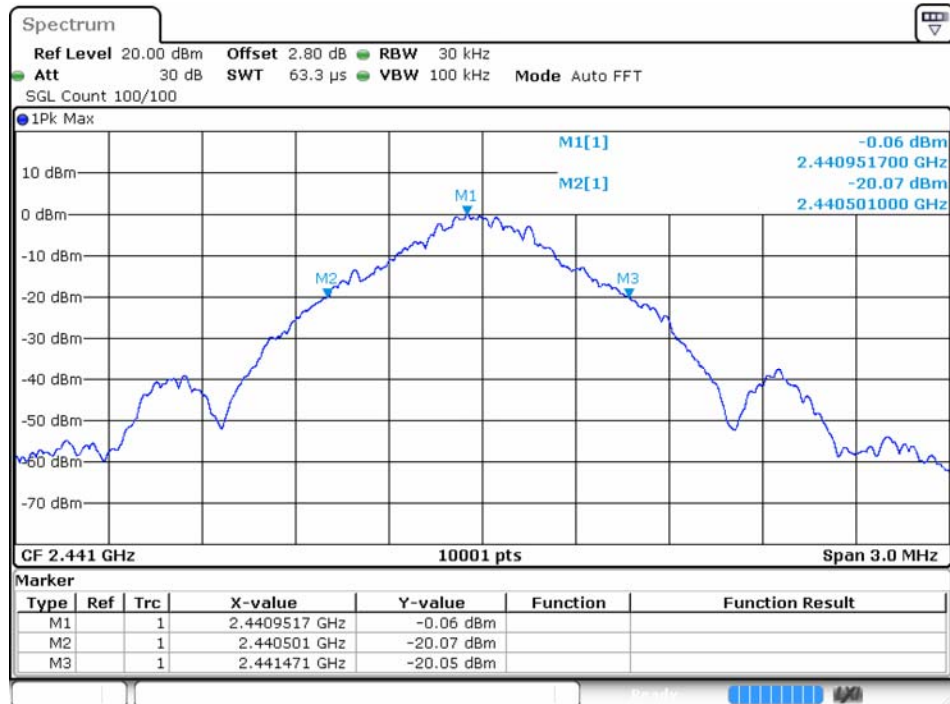
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00 / CH39 /CH78 (1Mbps Mode)		
Test Date :	2022-01-03		

Frequency	20dB Bandwidth (MHz)	Result
2402 MHz	1.011	Pass
2441 MHz	0.97	Pass
2480 MHz	1.009	Pass

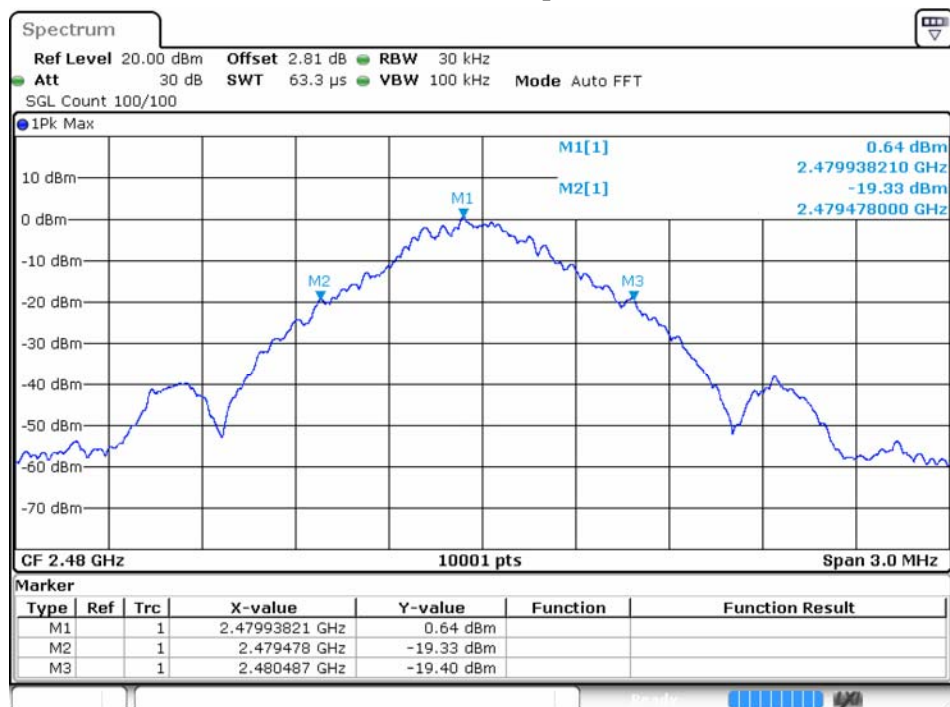
CH 00-1Mbps



CH 39-1Mbps



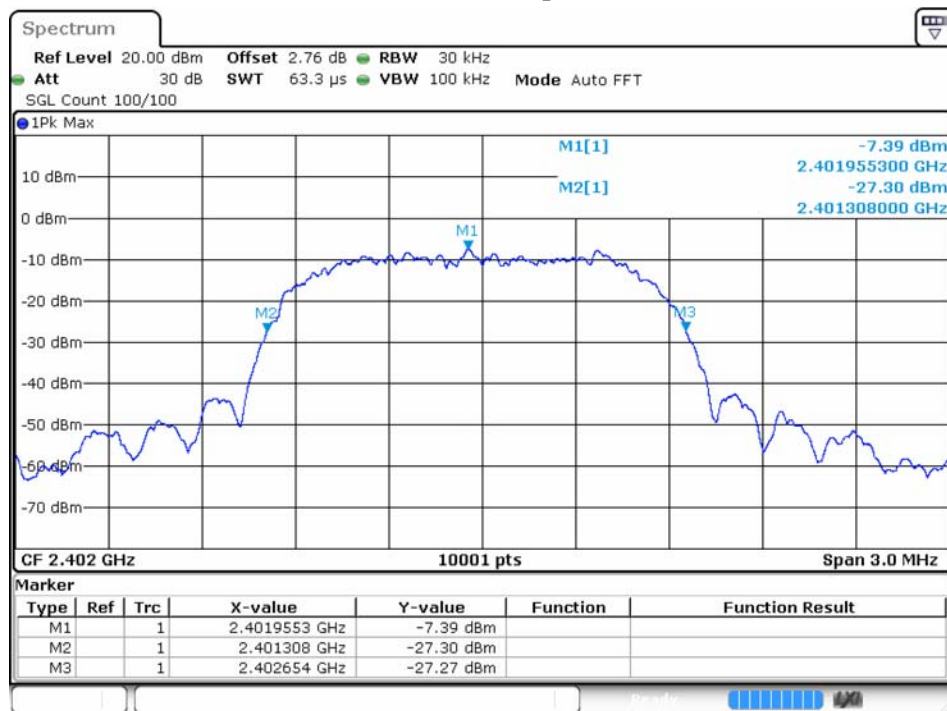
CH 78-1Mbps



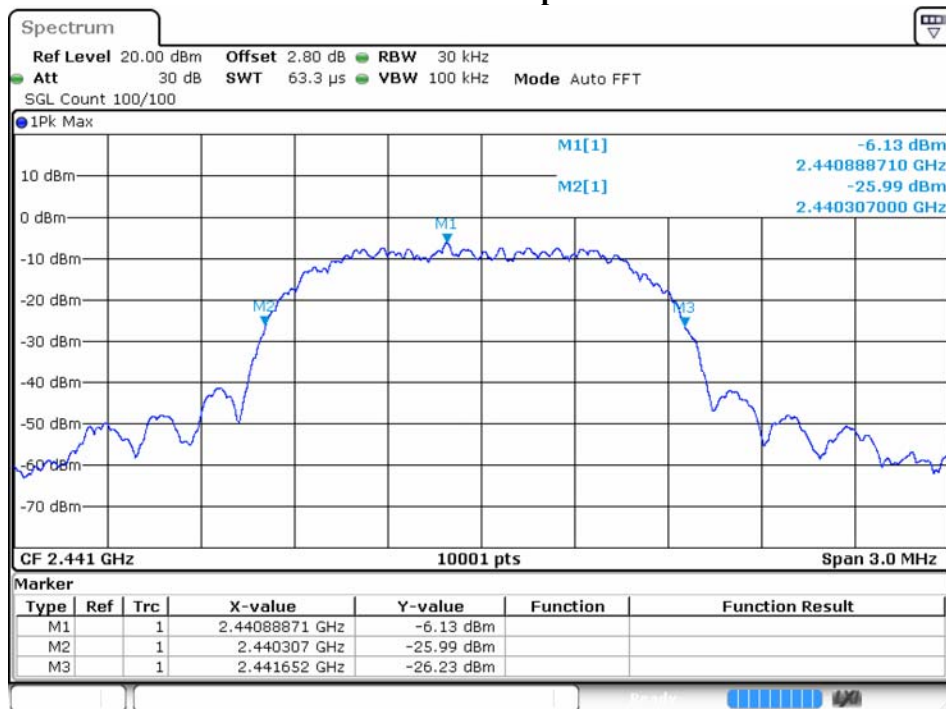
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00 / CH39 /CH78 (3Mbps Mode)		
Test Date :	2022-01-03		

Frequency	20dB Bandwidth (MHz)	Result
2402 MHz	1.347	Pass
2441 MHz	1.345	Pass
2480 MHz	1.357	Pass

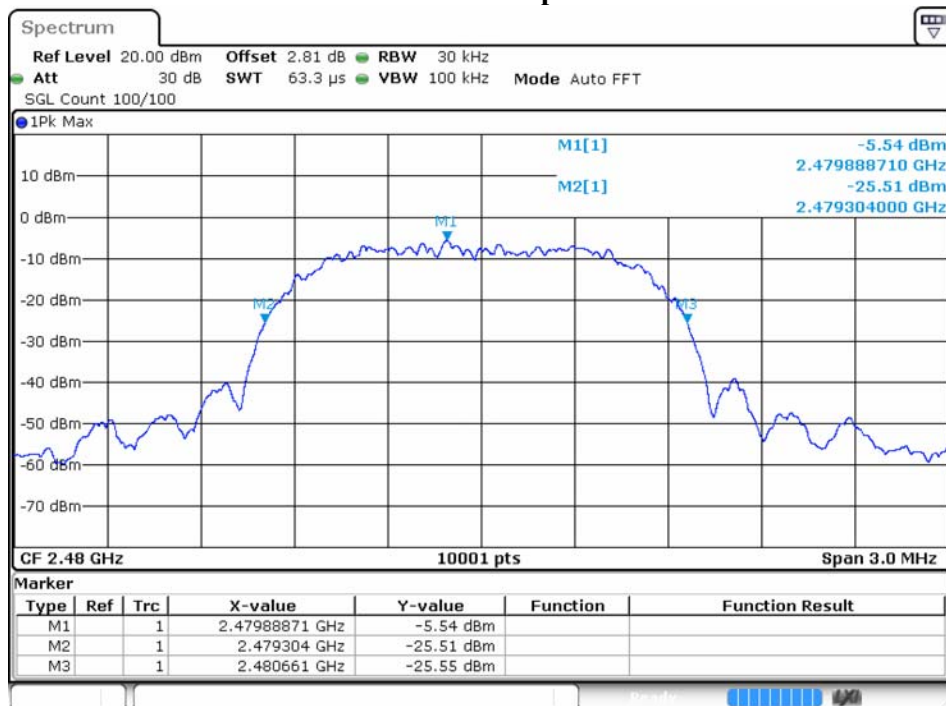
CH 00-3Mbps



CH 39-3Mbps



CH 78-3Mbps



5. NUMBER OF HOPPING CHANNEL

5.1 APPLIED PROCEDURES / LIMIT

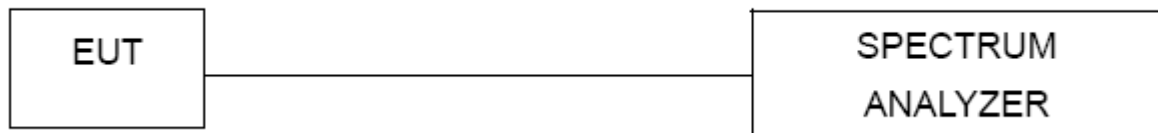
LP0002			
Section	Test Item	Frequency Range (MHz)	Result
4.10.1(6.1.1)	Number of Hopping Channel	2400-2483.5	PASS

Spectrum Parameters	Setting
Attenuation	Auto
Span Frequency	the frequency band of operation
RB	300kHz
VB	1 MHz
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

5.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 300kHz, VBW=1 MHz, Sweep time = Auto.

5.1.2 TEST SETUP



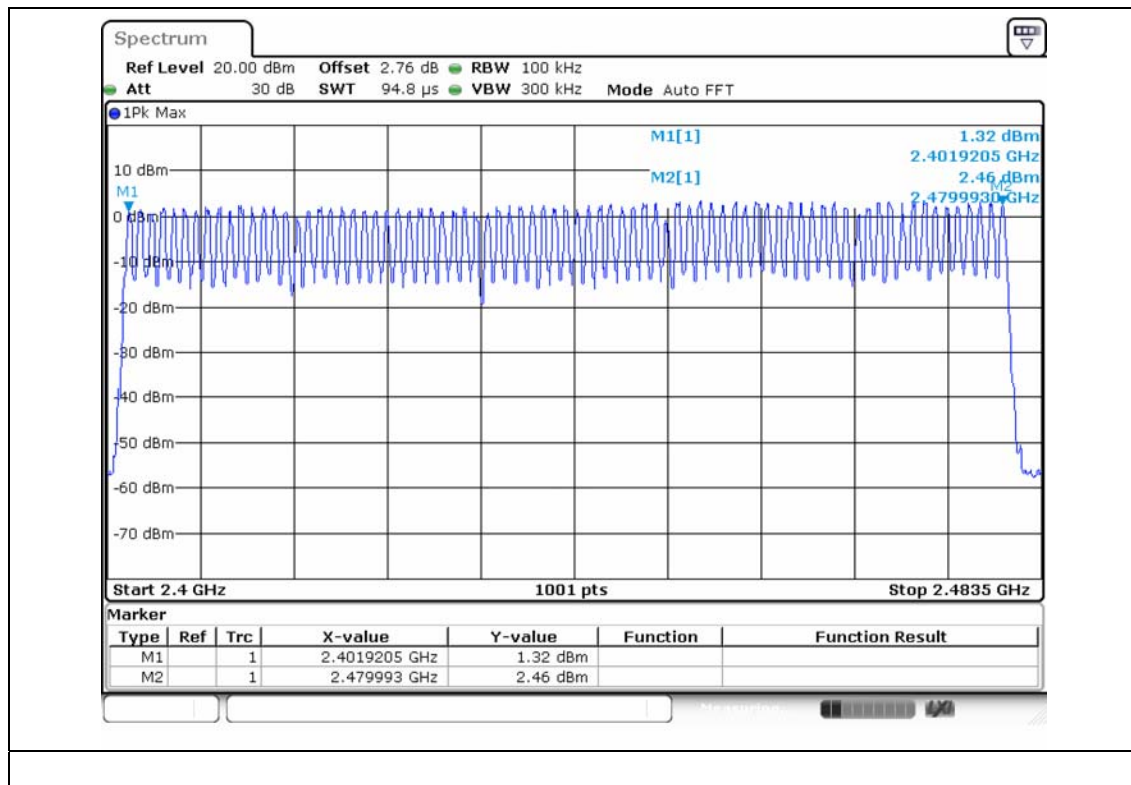
5.1.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

5.1.4 TEST RESULTS

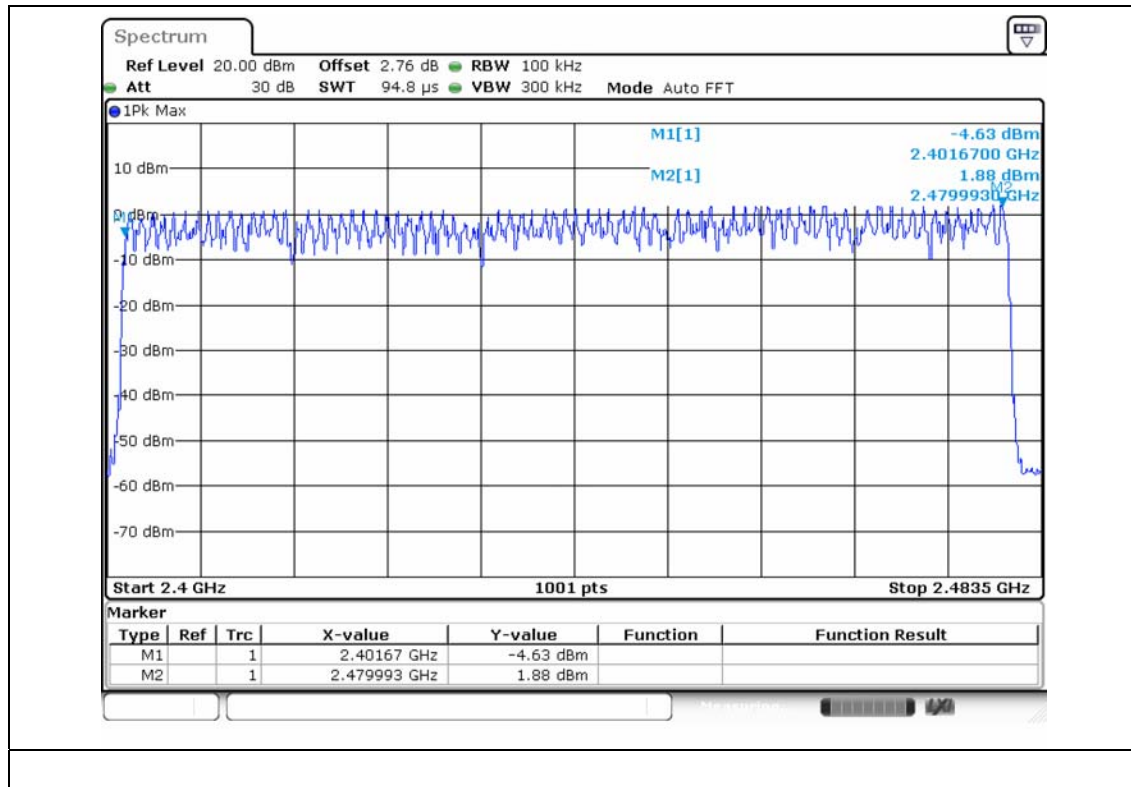
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	Hopping Mode –1Mbps mode		
Test Date :	2022-01-03		

Number of Hopping Channel	79
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EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	Hopping Mode –3Mbps mode		
Test Date :	2022-01-03		

Number of Hopping Channel	79
---------------------------	----



6. AVERAGE TIME OF OCCUPANCY

6.1 APPLIED PROCEDURES / LIMIT

LP0002				
Section	Test Item	Limit	Frequency Range (MHz)	Result
4.10.1(6.1.2)	Average Time of Occupancy	0.4sec	2400-2483.5	PASS

6.1.1 TEST PROCEDURE

- The transmitter output (antenna port) was connected to the spectrum analyzer
- Set RBW of spectrum analyzer to 1MHz and VBW to 1MHz.
- Use a video trigger with the trigger level set to enable triggering only on full pulses.
- Sweep Time is more than once pulse time.
- Set the center frequency on any frequency would be measure and set the frequency span to zero span.
- Measure the maximum time duration of one single pulse.
- Set the EUT for DH5, DH3 and DH1 packet transmitting.
- Measure the maximum time duration of one single pulse.
- DH5 Packet permit maximum $1600 / 79 / 6 = 3.37$ hops per second in each channel (5 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $3.37 \times 31.6 = 106.6$ within 31.6 seconds.
- DH3 Packet permit maximum $1600 / 79 / 4 = 5.06$ hops per second in each channel (3 time slots RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $5.06 \times 31.6 = 160$ within 31.6 seconds.
- DH1 Packet permit maximum $1600 / 79 / 2 = 10.12$ hops per second in each channel (1 time slot RX, 1 time slot TX). So, the dwell time is the time duration of the pulse times $10.12 \times 31.6 = 320$ within 31.6 seconds.

6.1.2 TEST SETUP



6.1.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

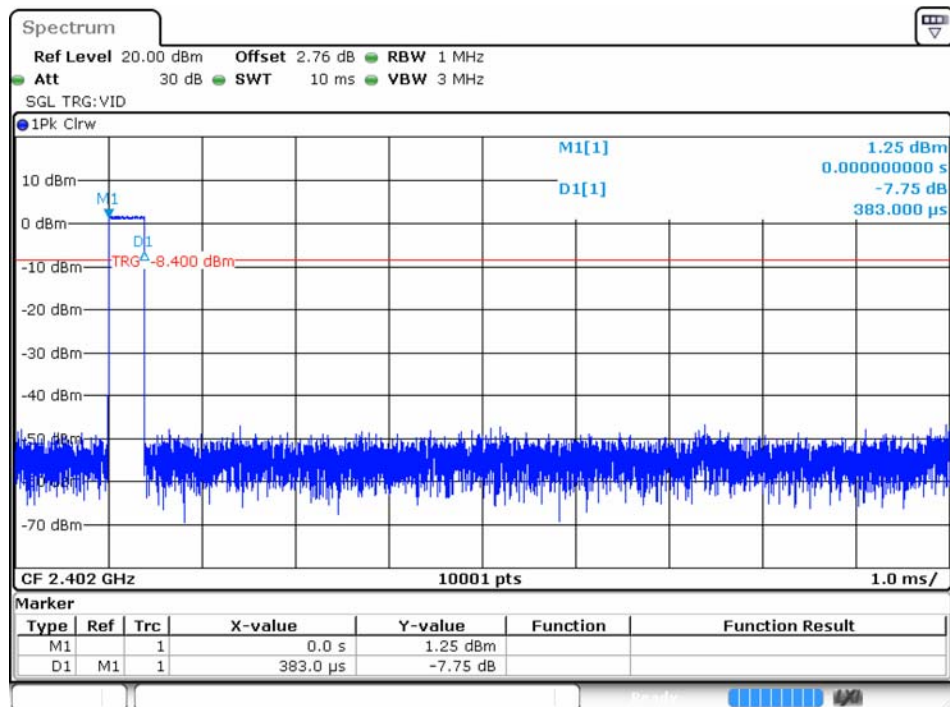
6.1.4 TEST RESULTS

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00-DH1/DH3/DH5 (1Mbps Mode)		
Test Date :	2022-01-03		

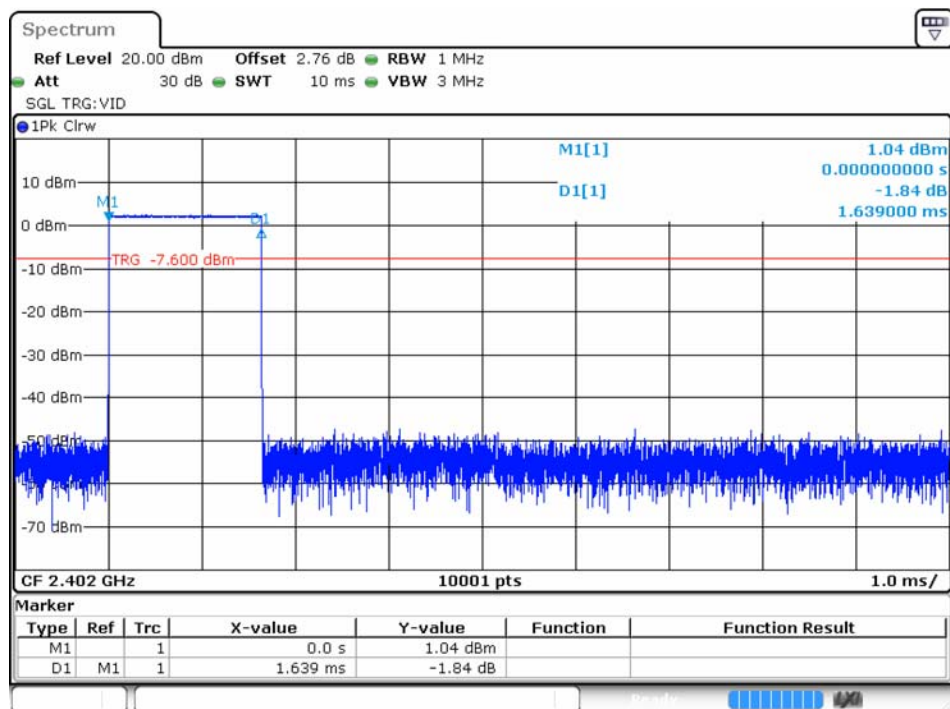
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (ms)	Limits (s)
DH1	2402 MHz	0.383	122.560	0.4000
DH3	2402 MHz	1.639	262.240	0.4000
DH5	2402 MHz	2.887	307.947	0.4000

Data Packet	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	10log(1/x)Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
DH1	100	100	1	100	0.00	0.01

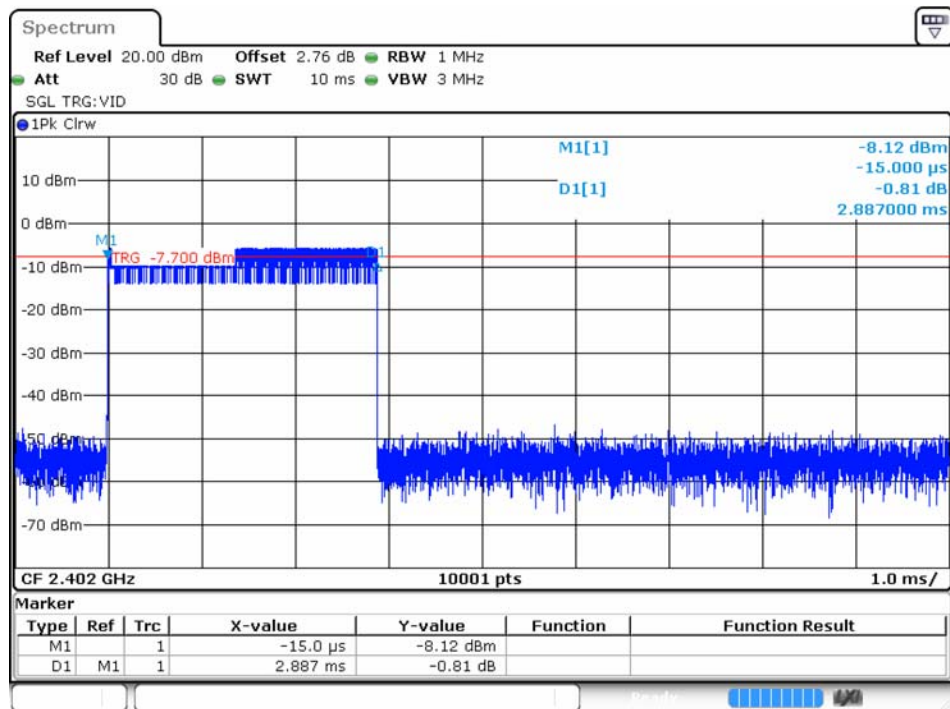
CH 00- DH1



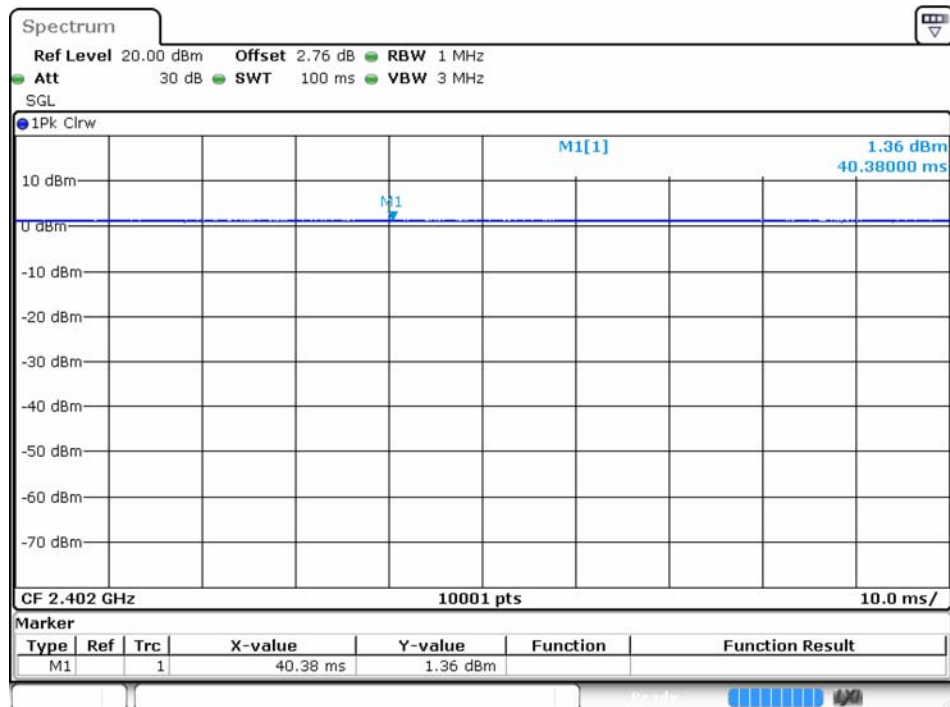
CH 00- DH3



CH 00- DH5



CH 00- DH1

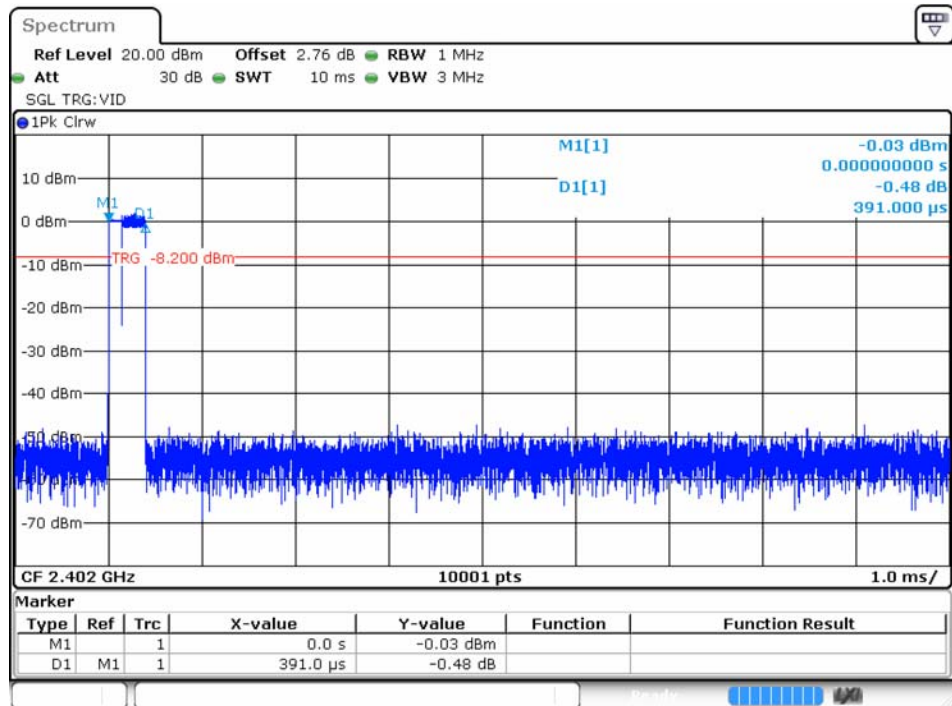


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00-DH1/DH3/DH5 (3Mbps Mode)		
Test Date :	2022-01-03		

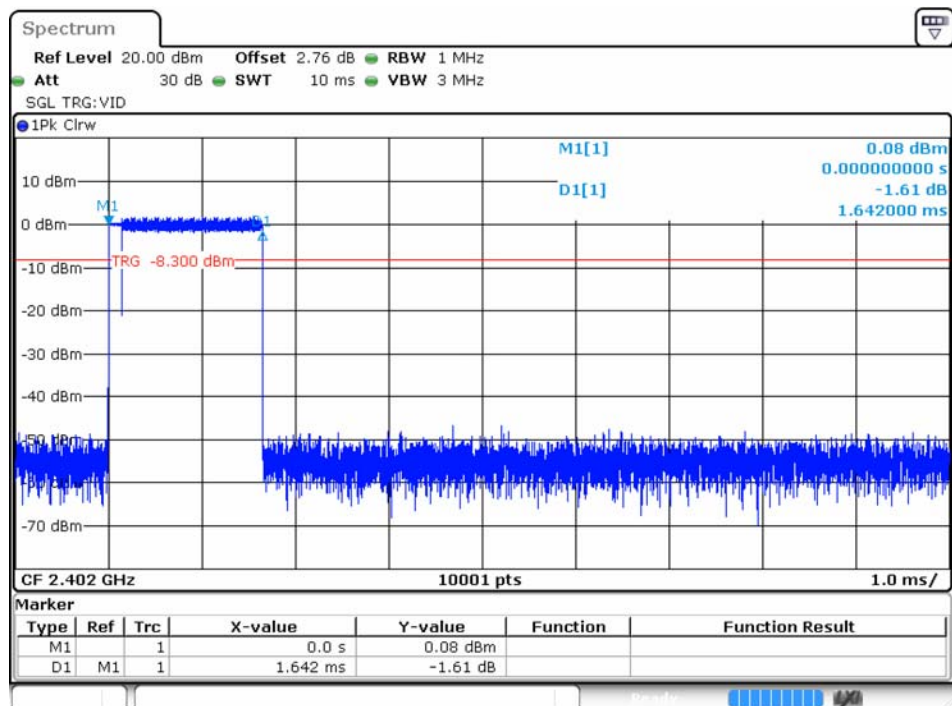
Data Packet	Frequency	Pulse Duration (ms)	Dwell Time (ms)	Limits (s)
DH1	2402 MHz	0.391	125.120	0.4000
DH3	2402 MHz	1.642	262.720	0.4000
DH5	2402 MHz	2.893	308.587	0.4000

Data Packet	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	10log(1/x)Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
DH1	100	100	1	100	0.00	0.01

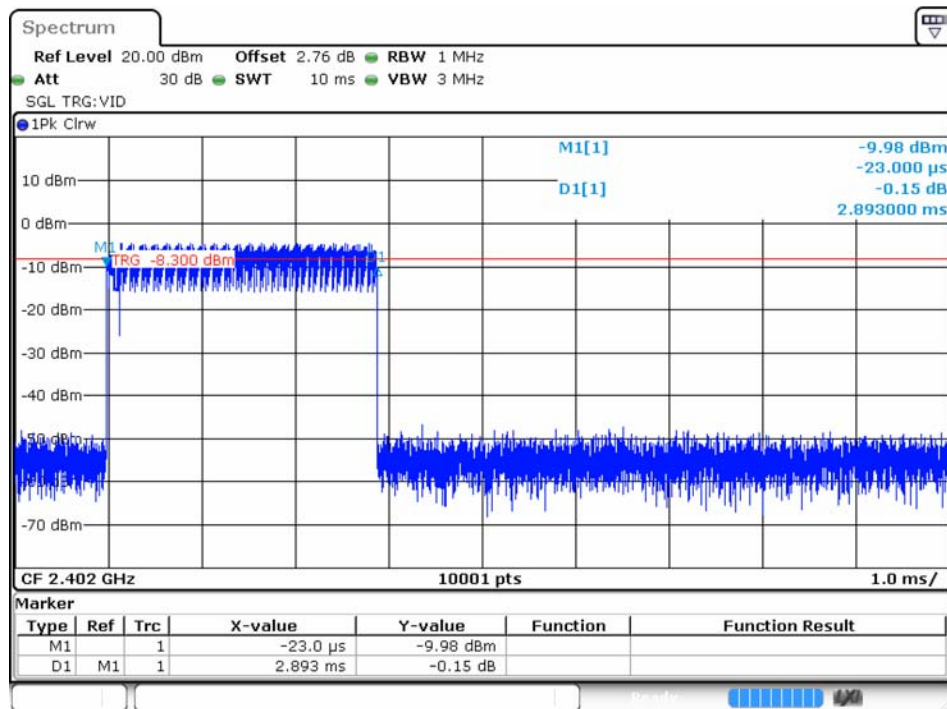
CH 00- DH1



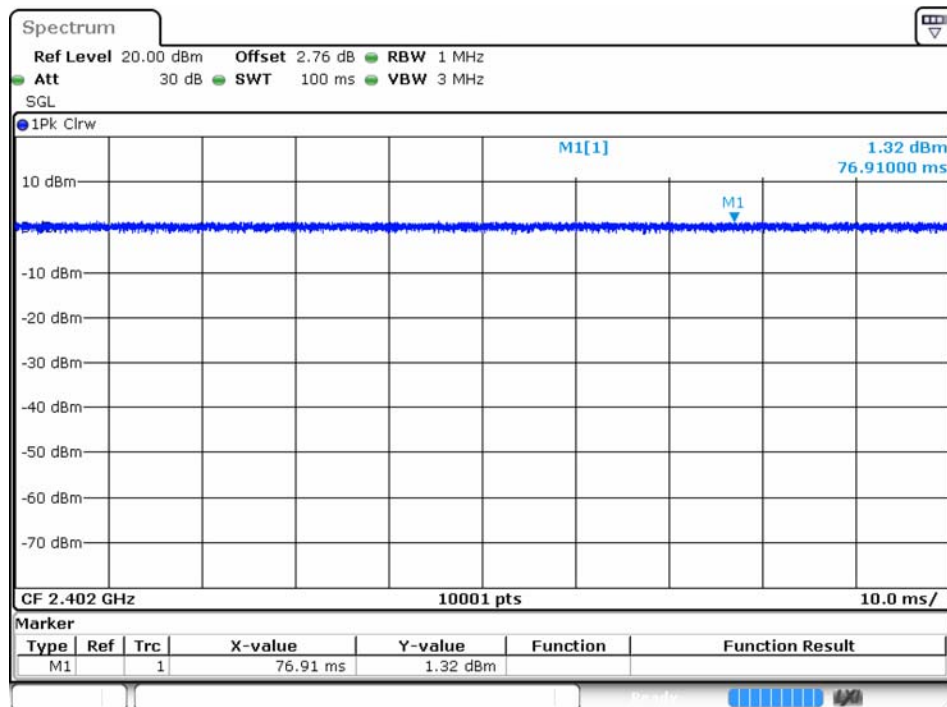
CH 00- DH3



CH 00- DH5



CH 00- DH1



7. HOPPING CHANNEL SEPARATION MEASUREMENT

7.1 APPLIED PROCEDURES / LIMIT

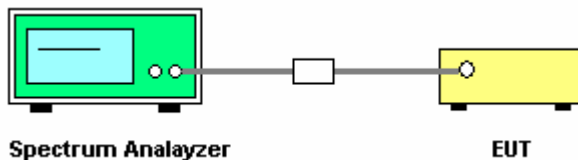
Frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	> Measurement Bandwidth or Channel Separation
RB	30 kHz (20dB Bandwidth) / 300 kHz (Channel Separation)
VB	100 kHz (20dB Bandwidth) / 1MHz (Channel Separation)
Detector	Peak
Trace	Max Hold
Sweep Time	Auto

7.1.1 TEST PROCEDURE

- The transmitter output (antenna port) was connected to the spectrum analyser in peak hold mode.
- The resolution bandwidth of 30 kHz and the video bandwidth of 100 kHz were utilised for 20 dB bandwidth measurement.
- The resolution bandwidth of 300 kHz and the video bandwidth of 1MHz were utilised for channel separation measurement.

7.1.2 TEST SETUP



7.1.3 EUT OPERATION CONDITIONS

The EUT was programmed to be in continuously transmitting mode.

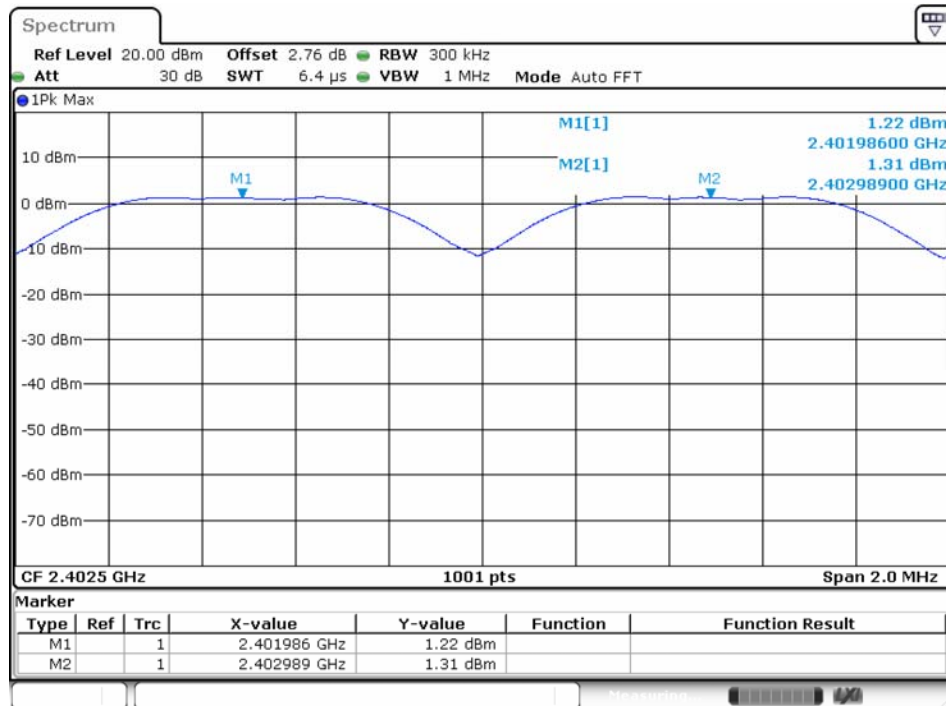
7.1.4 TEST RESULTS

EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00 / CH39 /CH78 (1Mbps Mode)		
Test Date :	2022-01-03		

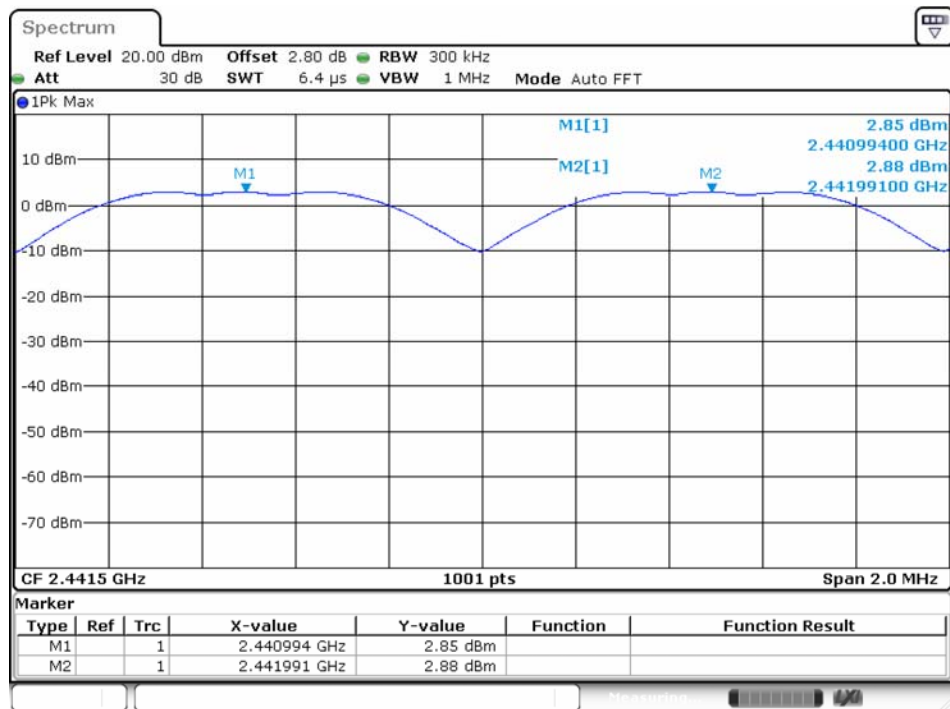
Frequency	Ch. Separation (MHz)	Limit 2/3(20dB bandwidth) (MHz)	Result
2402 MHz	1.003	0.674	PASS
2441 MHz	0.997	0.647	PASS
2480 MHz	1	0.673	PASS

Ch. Separation >2/3(20dB bandwidth)

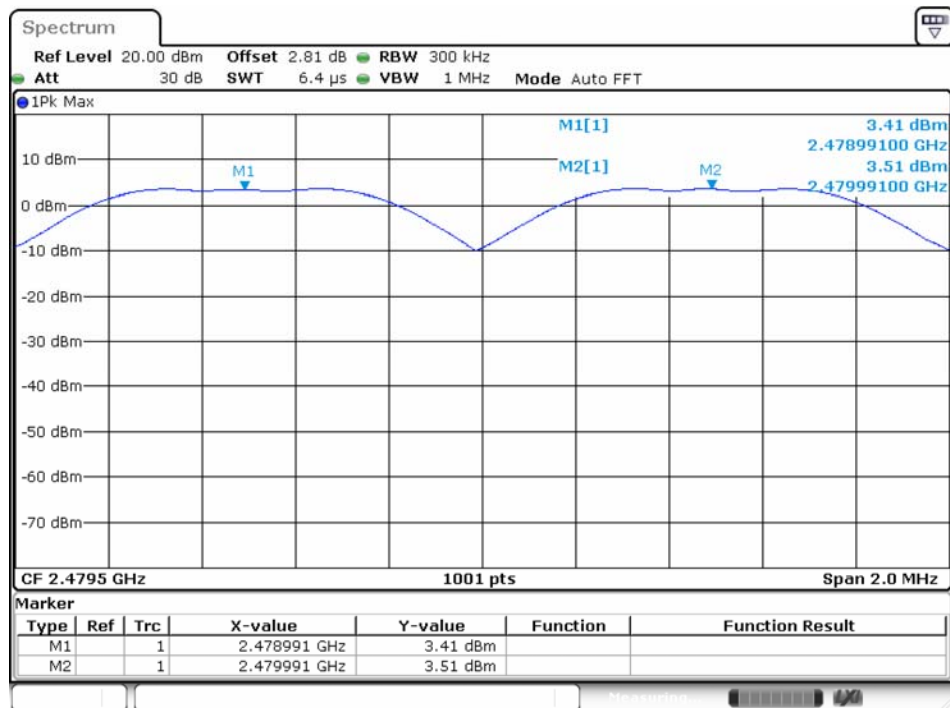
CH 00-1Mbps



CH 39-1Mbps



CH 78-1Mbps

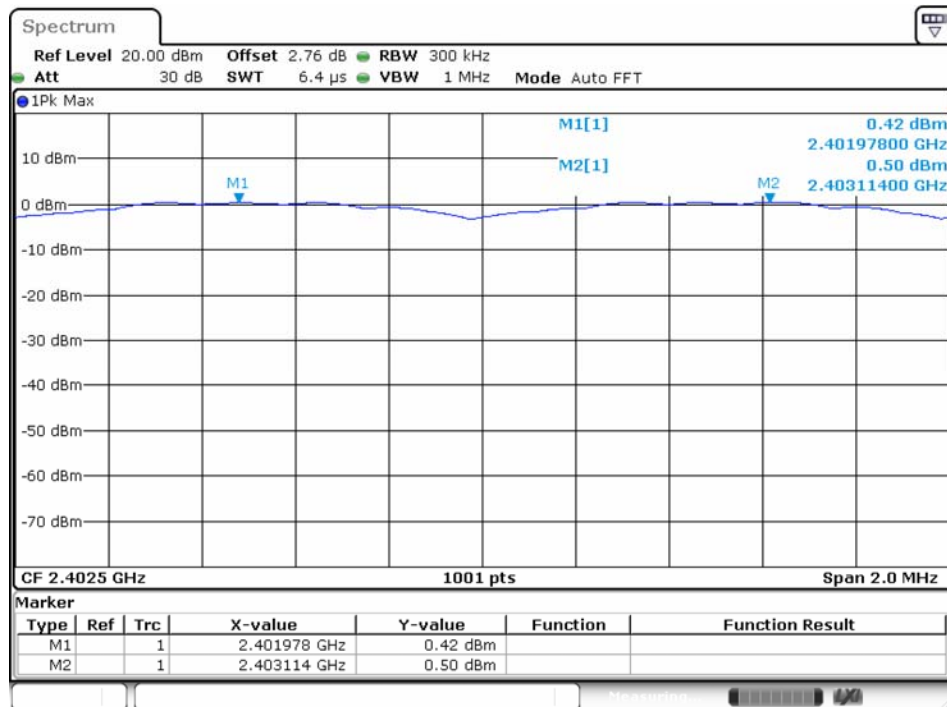


EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00 / CH39 /CH78 (3Mbps Mode)		
Test Date :	2022-01-03		

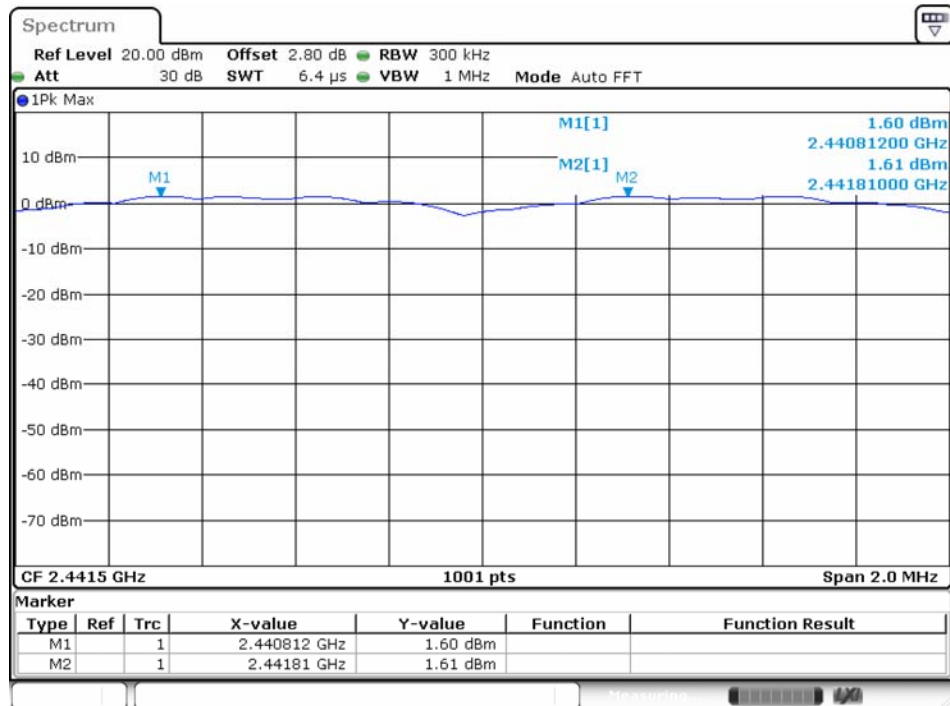
Frequency	Ch. Separation (MHz)	Limit 2/3(20dB bandwidth) (MHz)	Result
2402 MHz	1.136	0.898	PASS
2441 MHz	0.998	0.897	PASS
2480 MHz	1	0.905	PASS

Ch. Separation >2/3(20dB bandwidth)

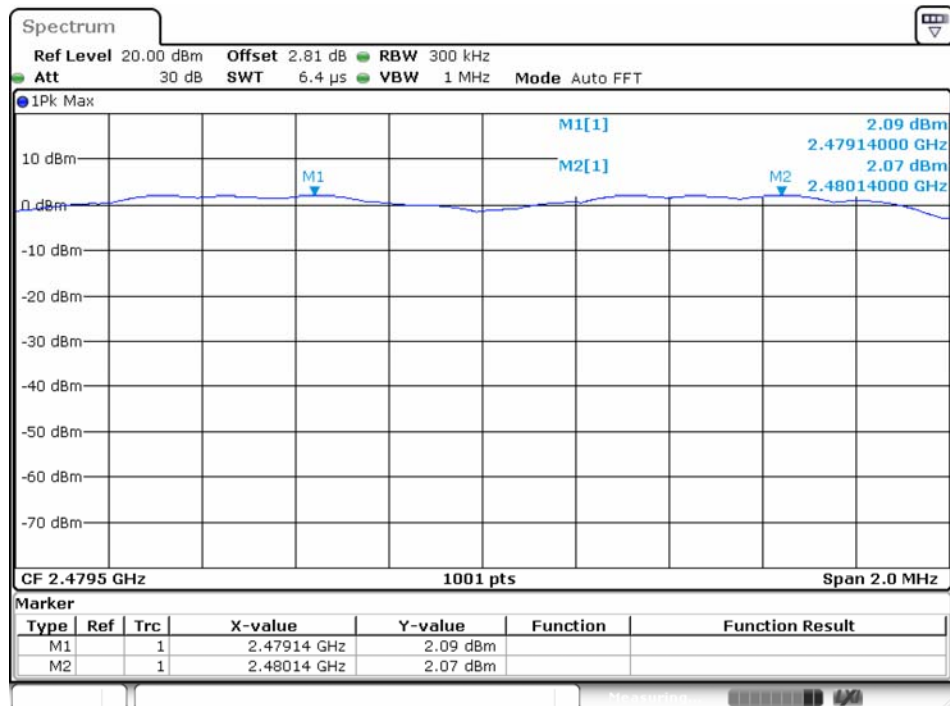
CH 00-3Mbps



CH 39-3Mbps



CH 78-3Mbps



8. PEAK OUTPUT POWER TEST

8.1 APPLIED PROCEDURES / LIMIT

LP0002				
Section	Test Item	Limit	Frequency Range (MHz)	Result
4.10.1(2)	Peak Output Power	0.125 watt or 21dBm	2400-2483.5	PASS

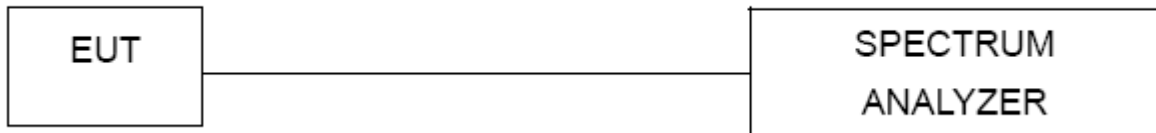
8.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : (1Mbps)RBW= 2MHz, VBW= 2MHz, Sweep time = Auto, Span= 7.5MHz.
(2Mbps)RBW= 3MHz, VBW= 10MHz, Sweep time = Auto, Span= 7.5MHz..
(2Mbps)RBW= 3MHz, VBW= 10MHz, Sweep time = Auto, Span= 7.5MHz..

8.1.2 DEVIATION FROM STANDARD

No deviation.

8.1.3 TEST SETUP



8.1.4 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.5 TEST RESULTS

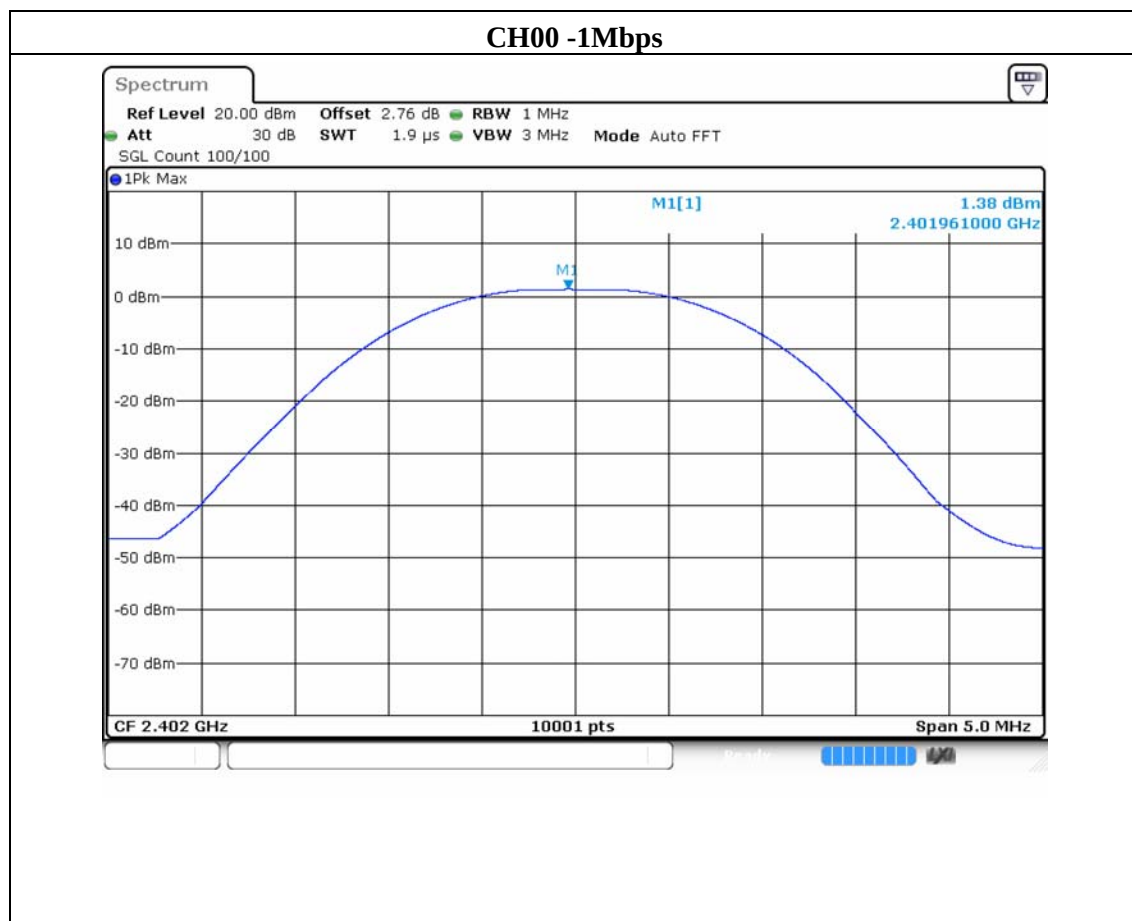
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00/ CH39 /CH78 (1Mbps Mode)		
Test Date :	2022-01-03		

Left:

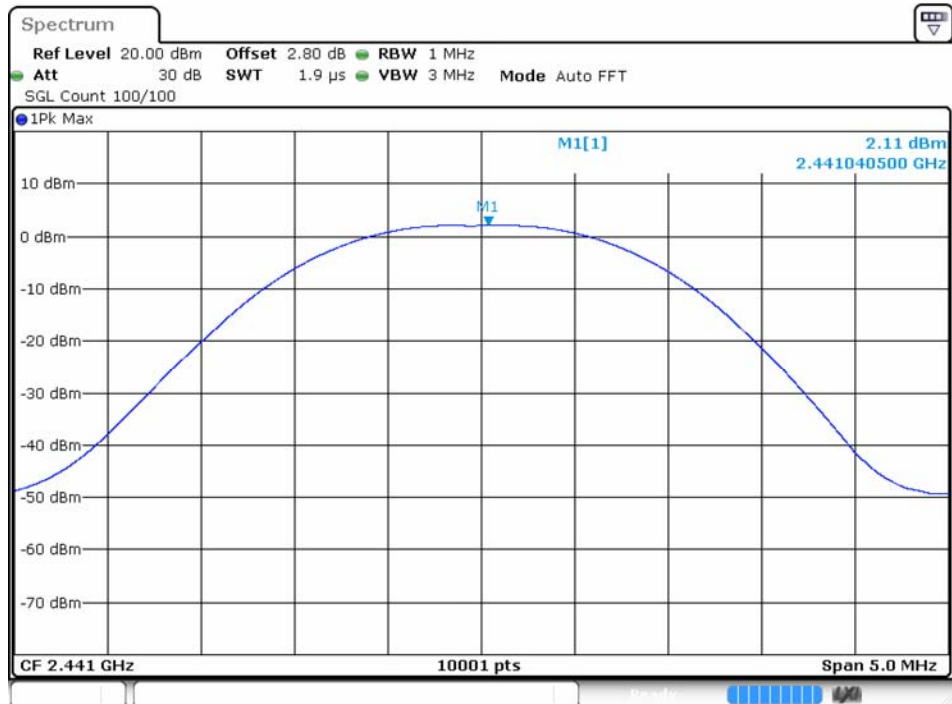
Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2402	1.38	21	0.125
2441	2.11	21	0.125
2480	2.91	21	0.125

Right:

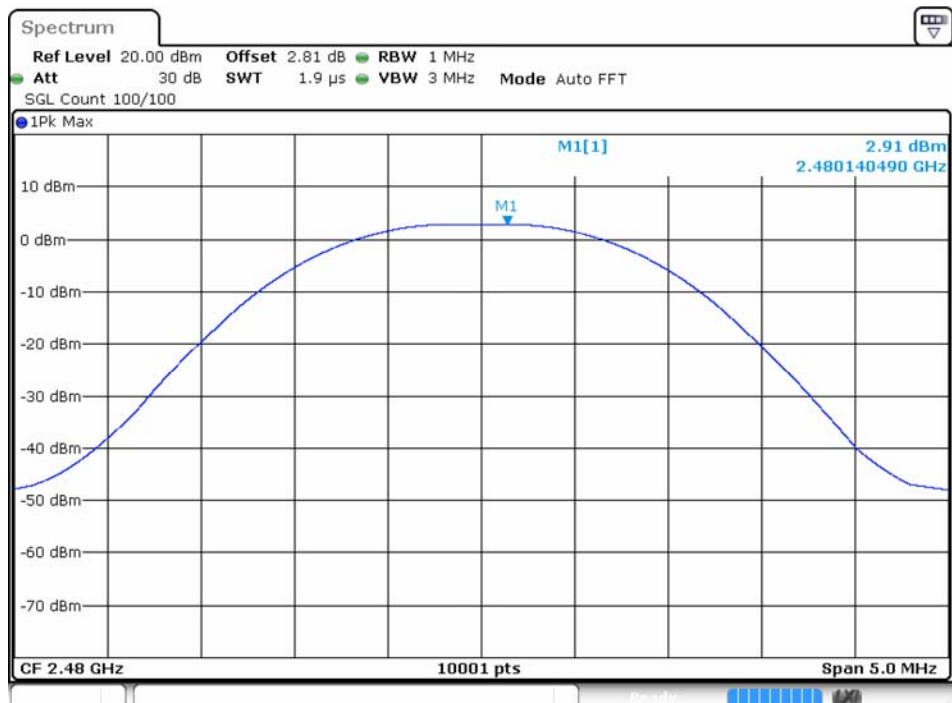
Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2402	1.33	21	0.125
2441	2.26	21	0.125
2480	2.71	21	0.125



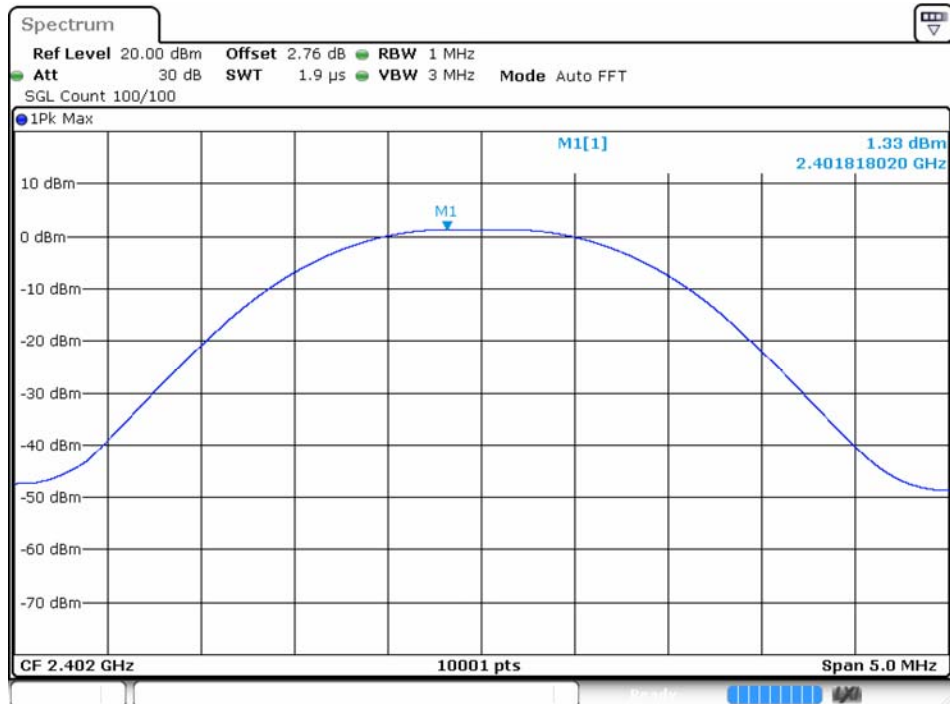
CH39 -1Mbps



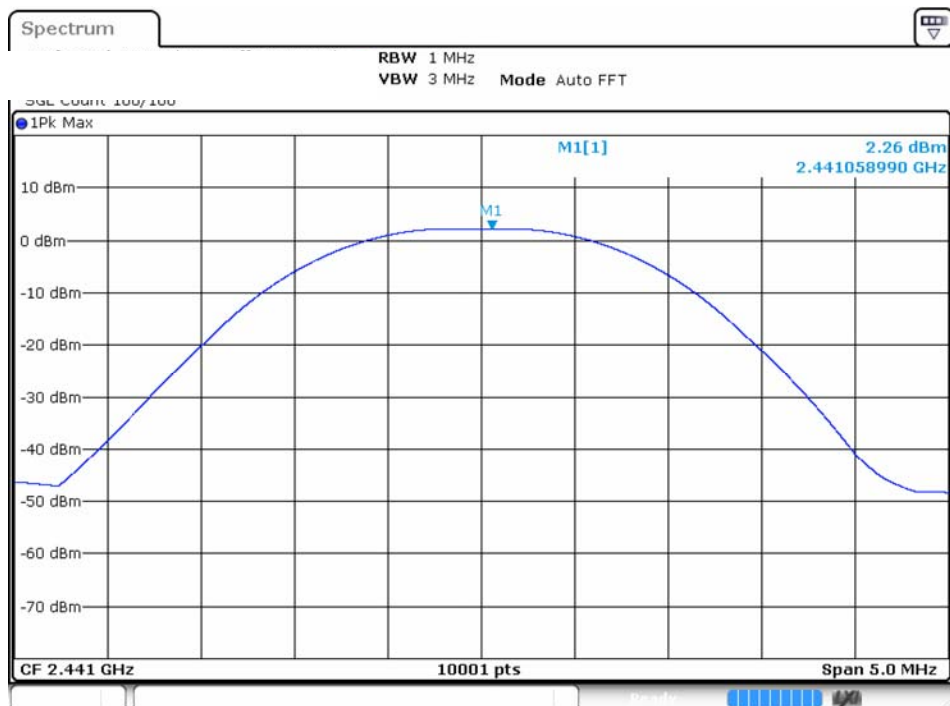
CH78 -1Mbps



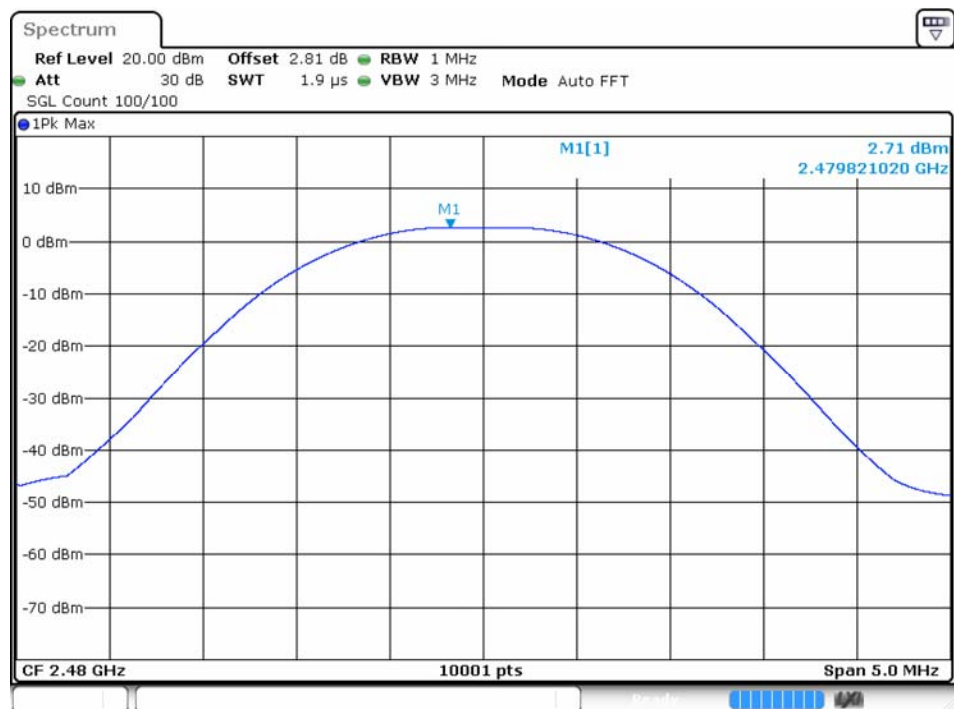
CH00 -1Mbps



CH39 -1Mbps



CH78 -1Mbps



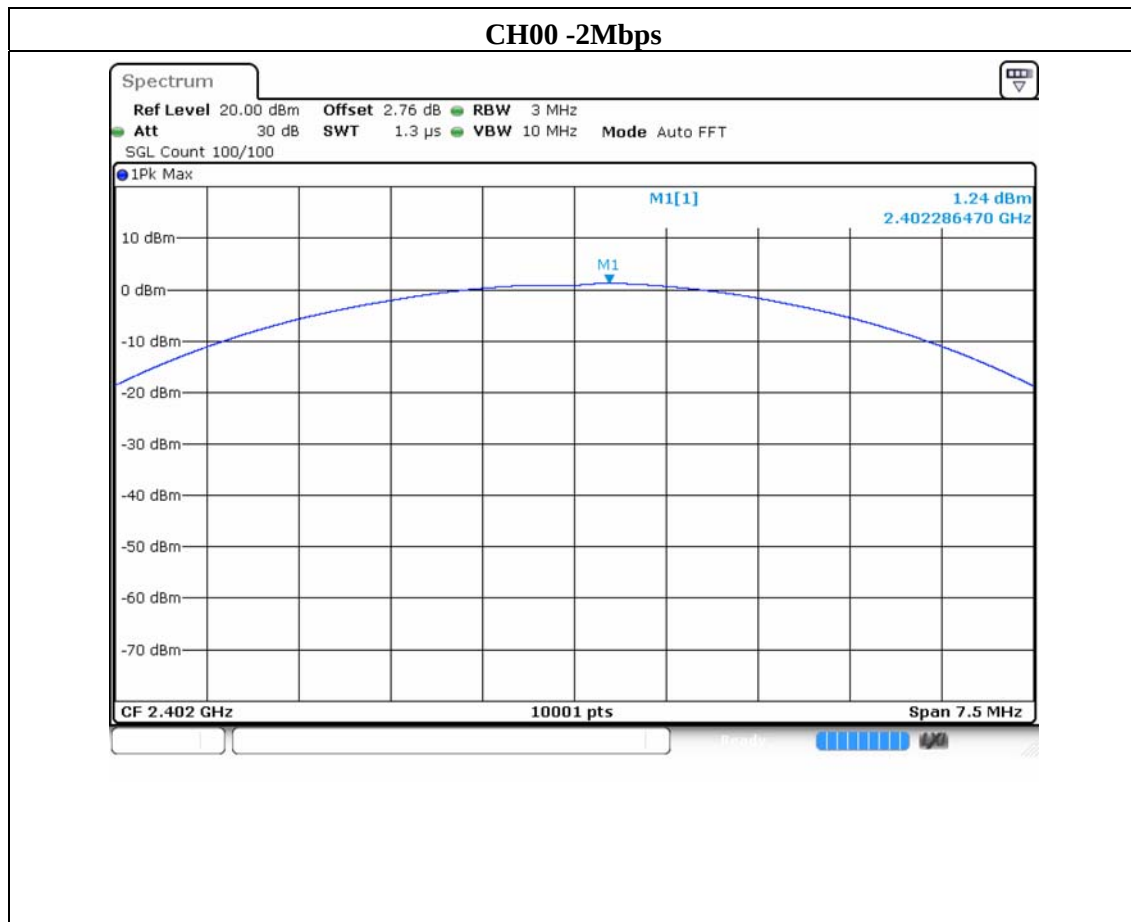
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00/ CH39 /CH78 (2Mbps Mode)		
Test Date :	2022-01-03		

Left:

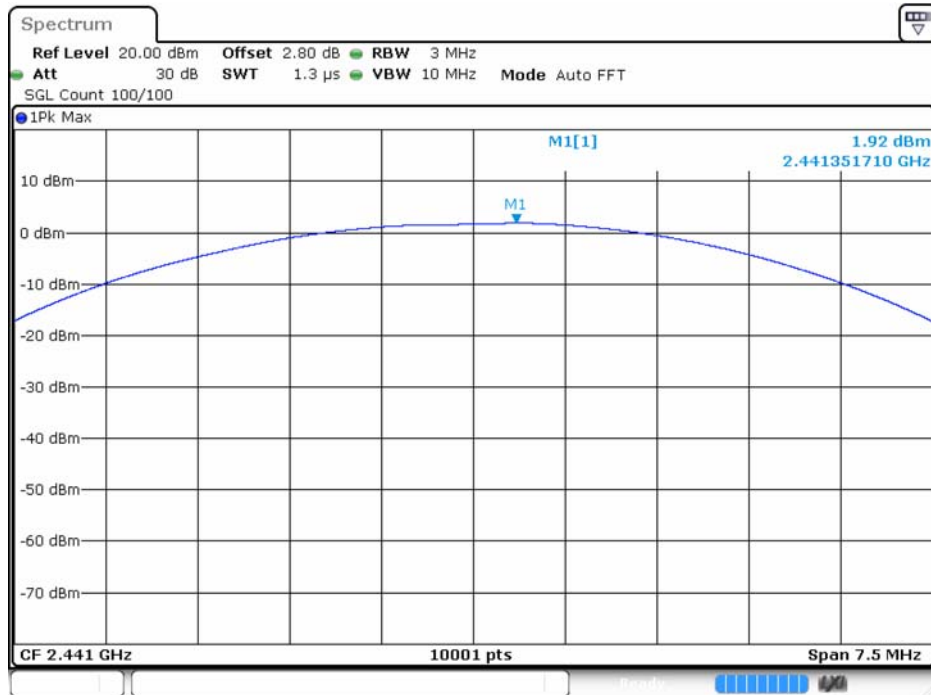
Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2402	1.24	21	0.125
2441	1.92	21	0.125
2480	2.61	21	0.125

Ritght:

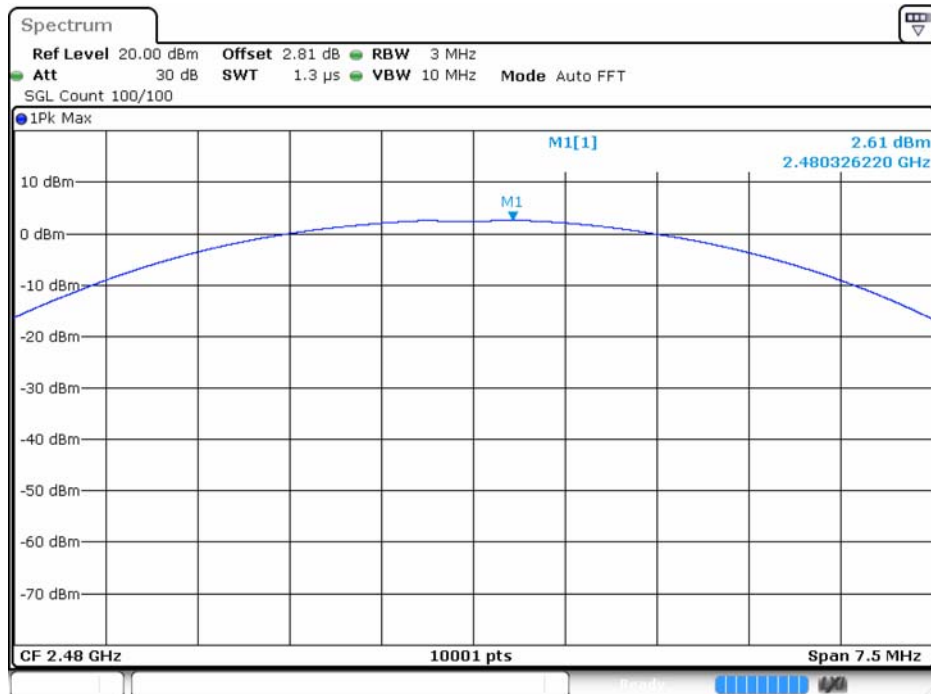
Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2402	0.98	21	0.125
2441	1.57	21	0.125
2480	2.56	21	0.125



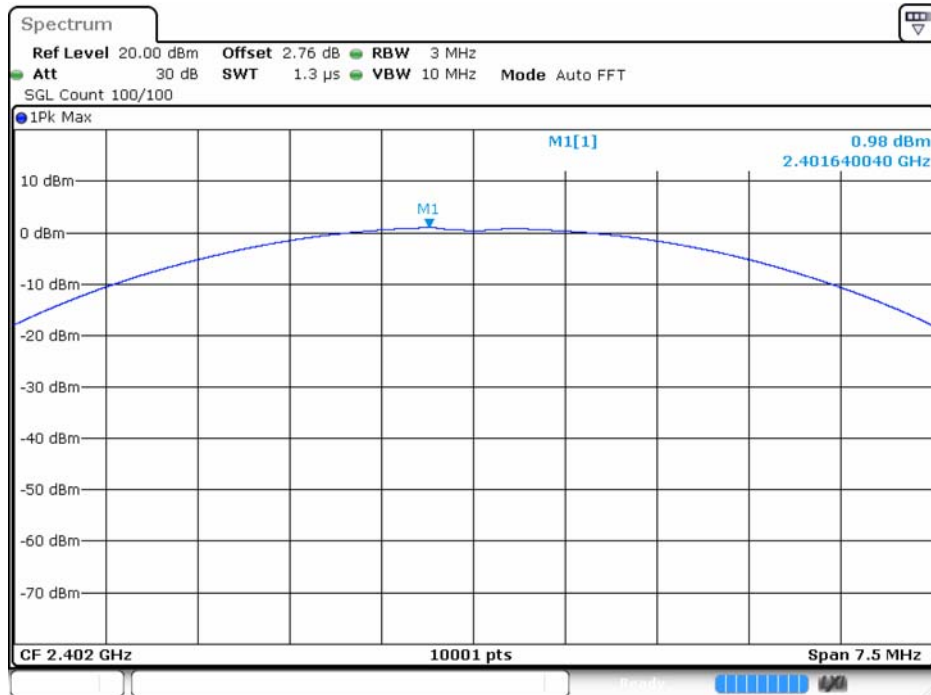
CH39 -2Mbps



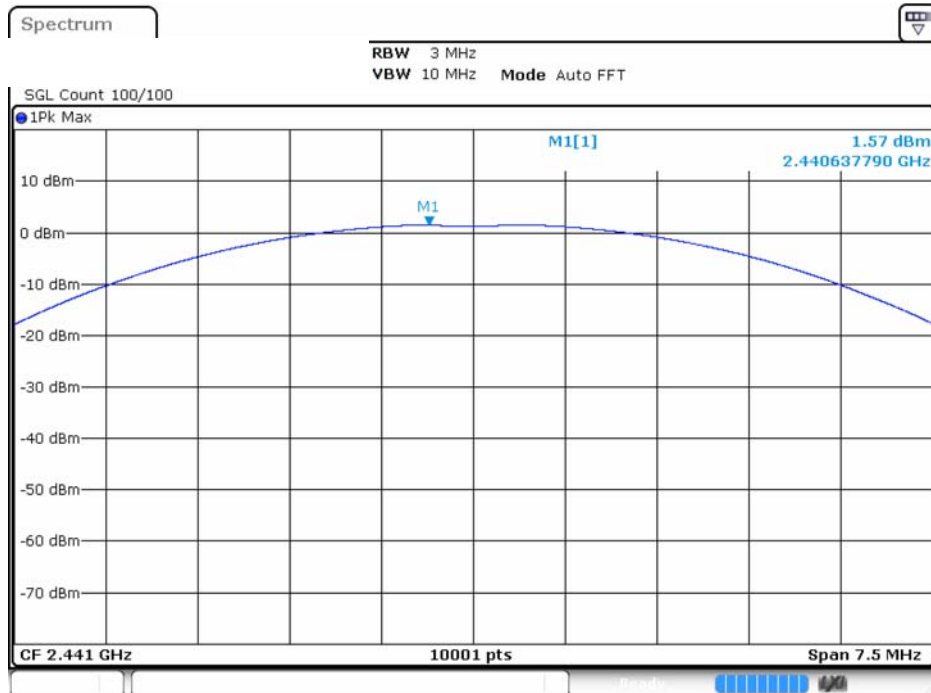
CH78 -2Mbps



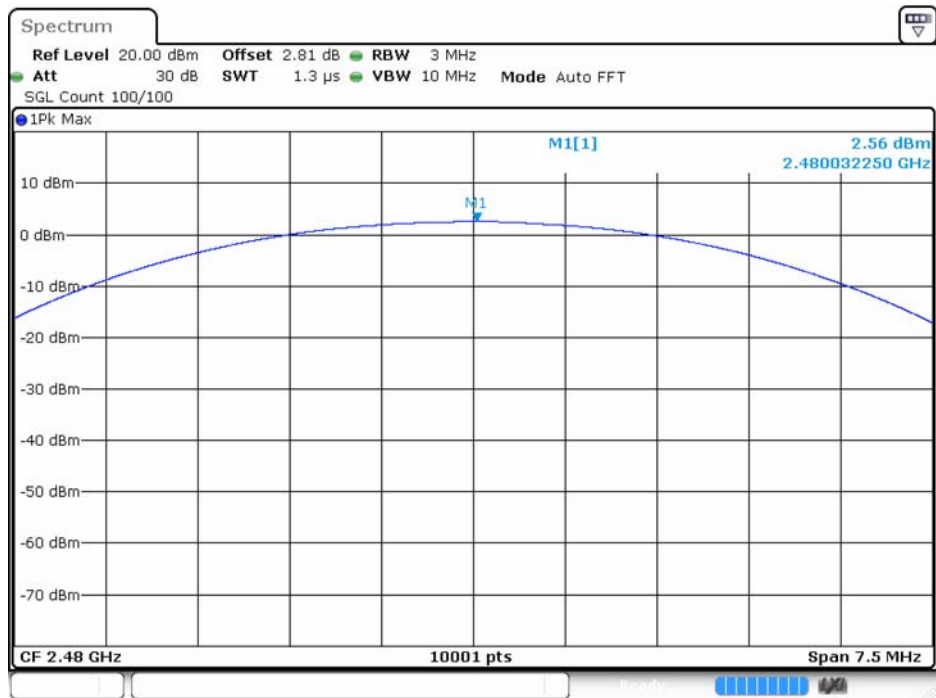
CH00 -2Mbps



CH39 -2Mbps



CH78 -2Mbps



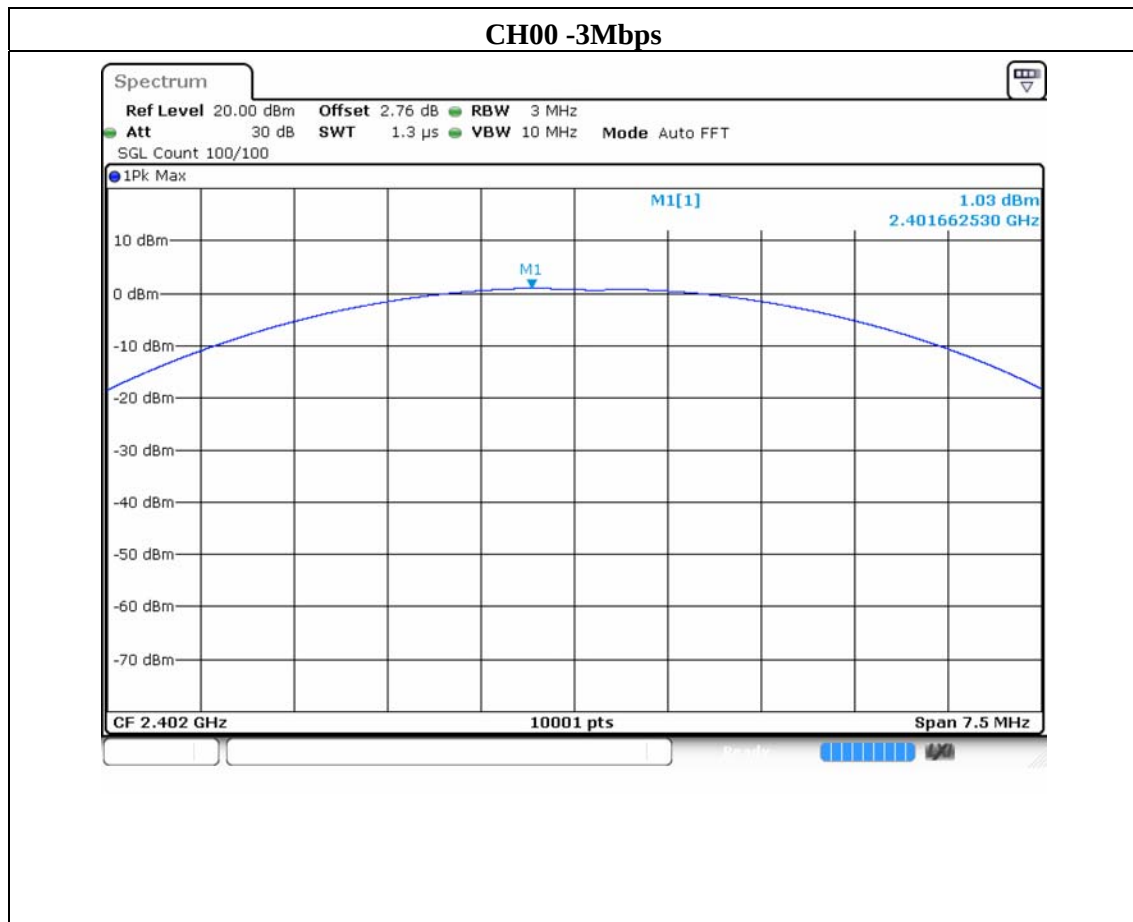
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00/ CH39 /CH78 (3Mbps Mode)		
Test Date :	2022-01-03		

Left:

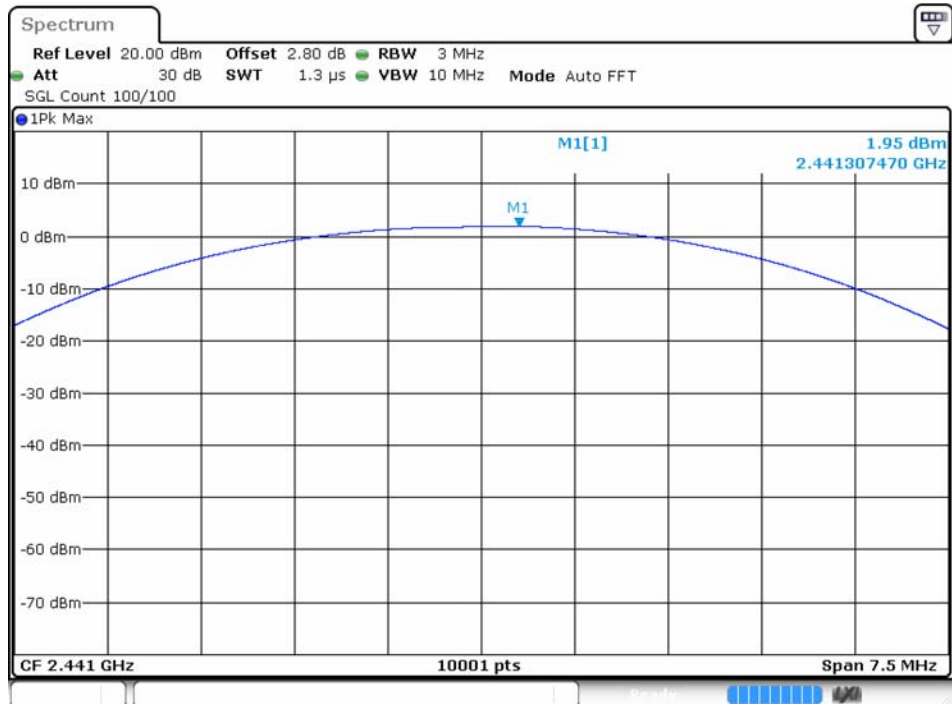
Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2402	1.03	21	0.125
2441	1.95	21	0.125
2480	2.74	21	0.125

Ritght:

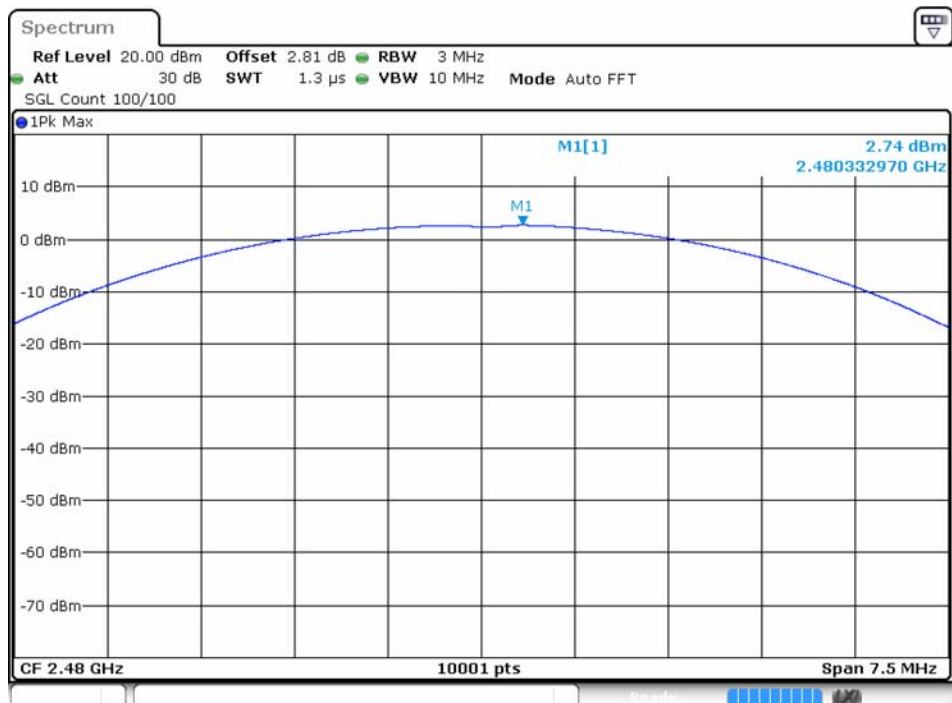
Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2402	1.2	21	0.125
2441	2.09	21	0.125
2480	2.67	21	0.125



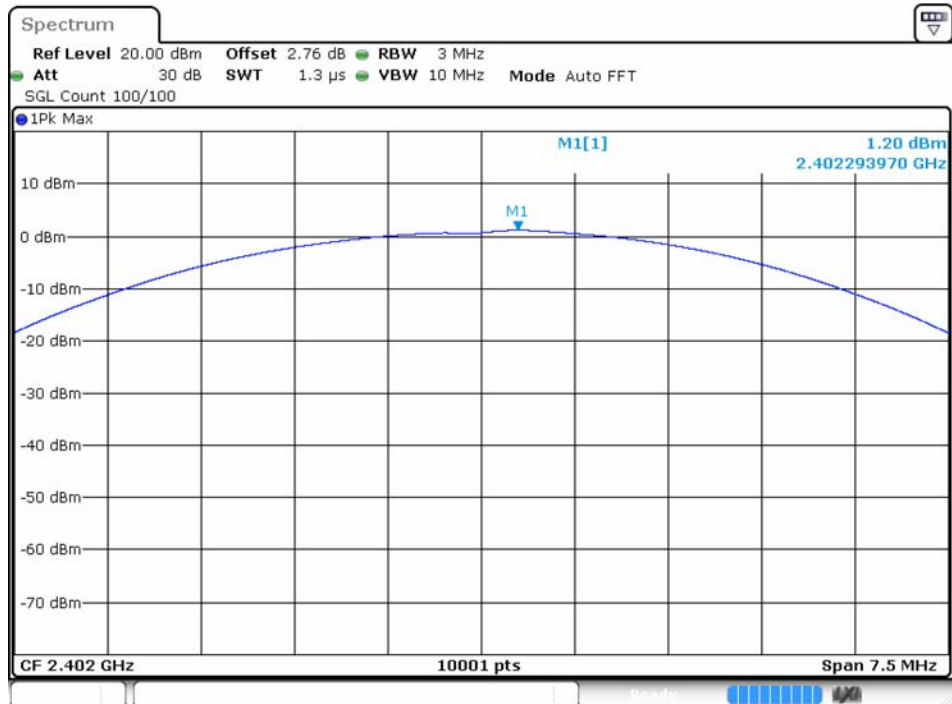
CH39 -3Mbps



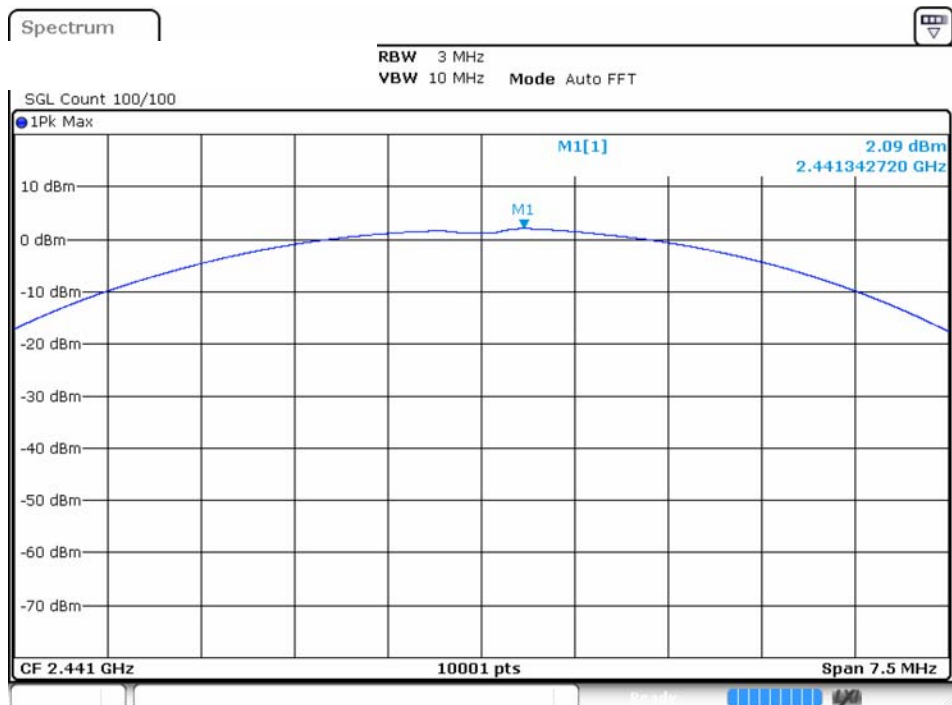
CH78 -3Mbps



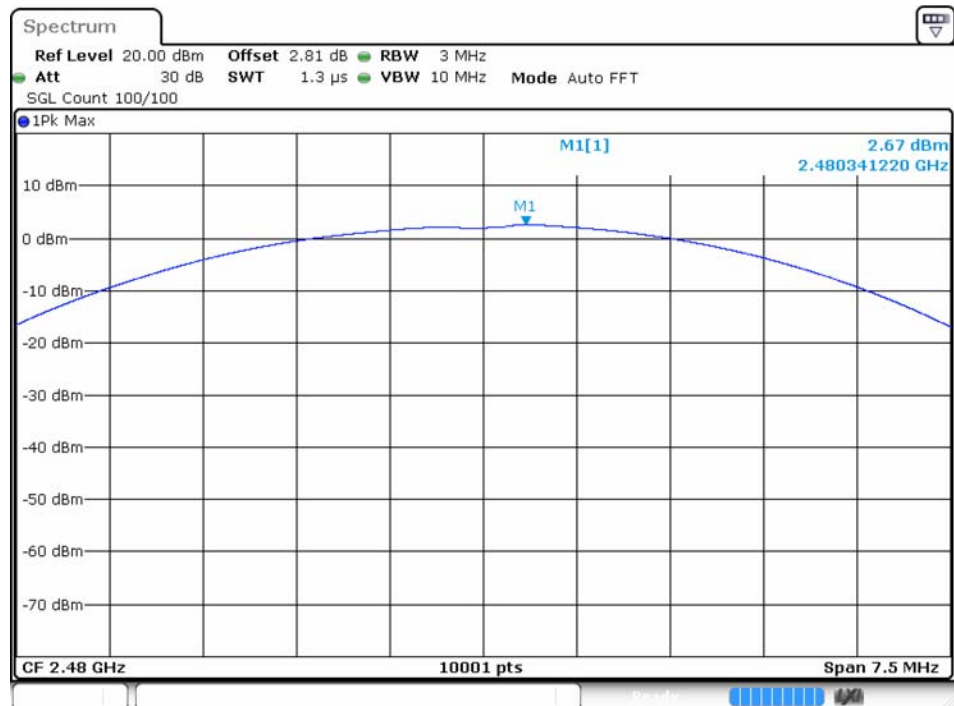
CH00 -3Mbps



CH39 -3Mbps



CH78 -3Mbps



9. ANTENNA CONDUCTED SPURIOUS EMISSION

9.1 APPLIED PROCEDURES / LIMIT

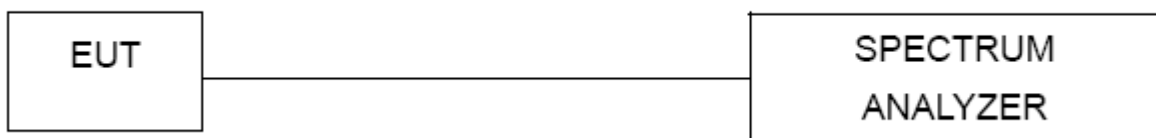
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the modulation products of the spreading sequence, the information sequence and the carrier frequency shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power or shall not exceed the general levels specified in Section 3.6.

Frequencies (MHz)	Field Strength (micorvolts/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

9.1.1 TEST PROCEDURE

- The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
- Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = Auto.

9.1.2 TEST SETUP



9.1.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

9.1.4 TEST RESULTS

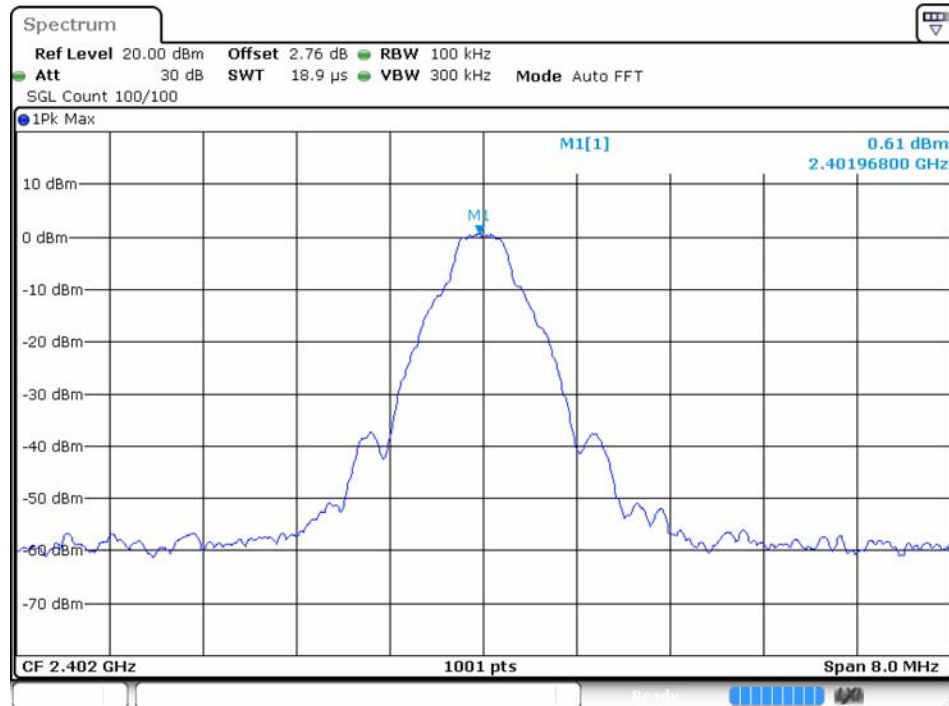
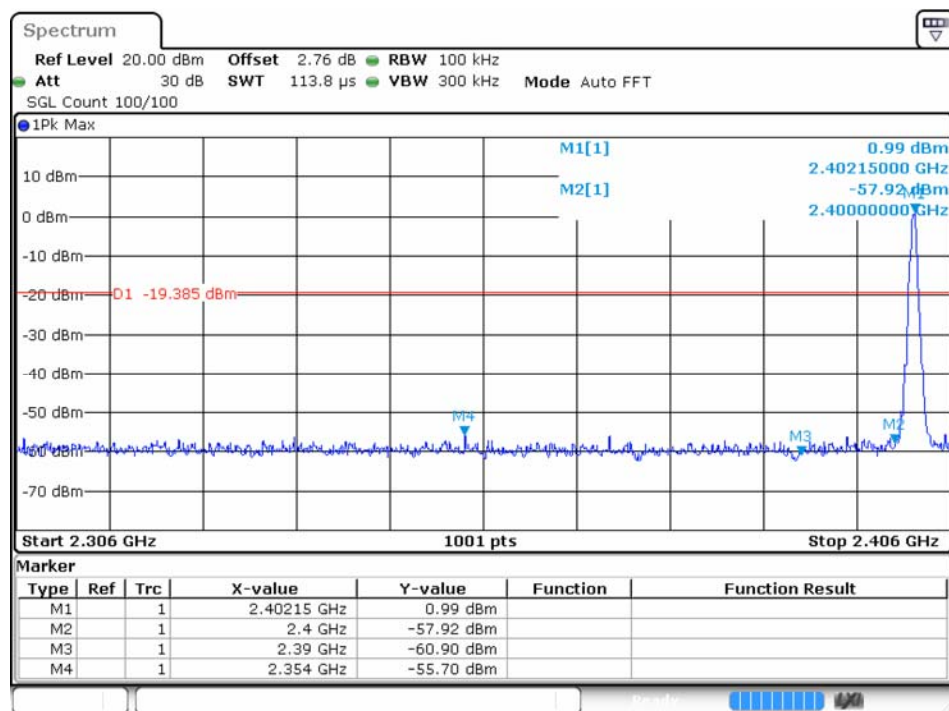
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00 / CH78 (1Mbps)		
Test Date :	2022-01-03		

in any 100kHz bandwidth outside the low frequency band	in any 300 kHz bandwidth outside the high frequency band
Pass	Pass
Result	
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 300kHz bandwidth within the band that contains the highest level of the desired power.	

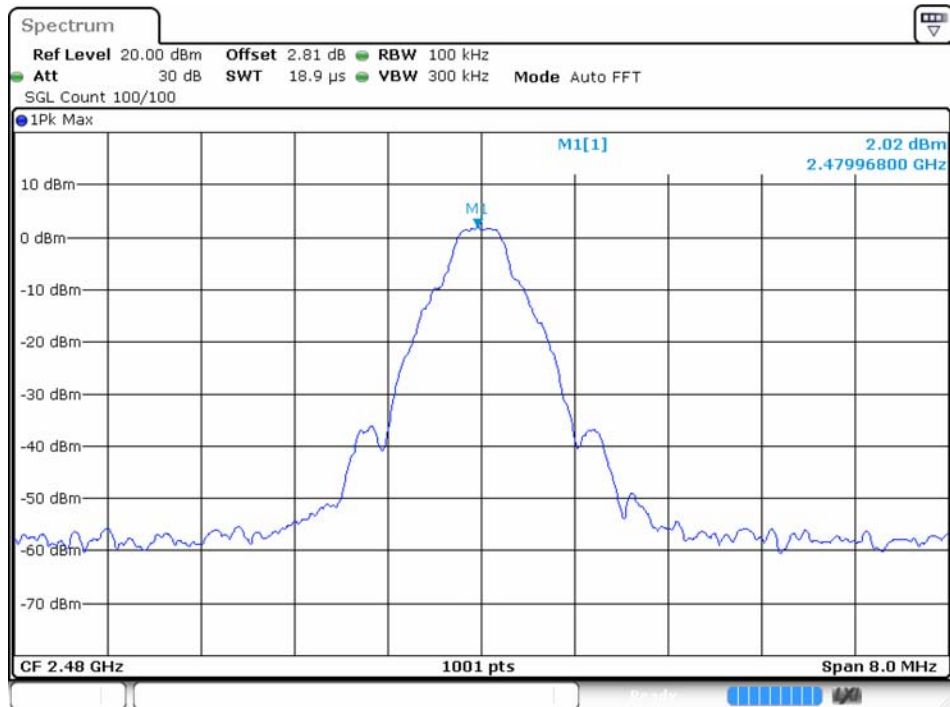
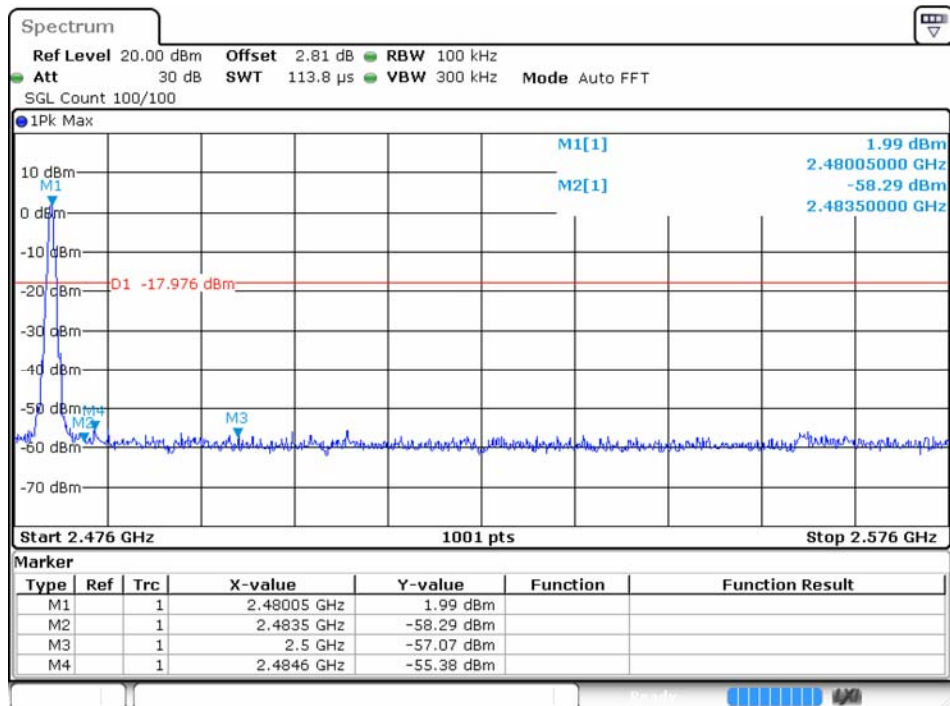
Remark :

- (1) Hopping enabled and disabled have evaluated, and the worst data was reported

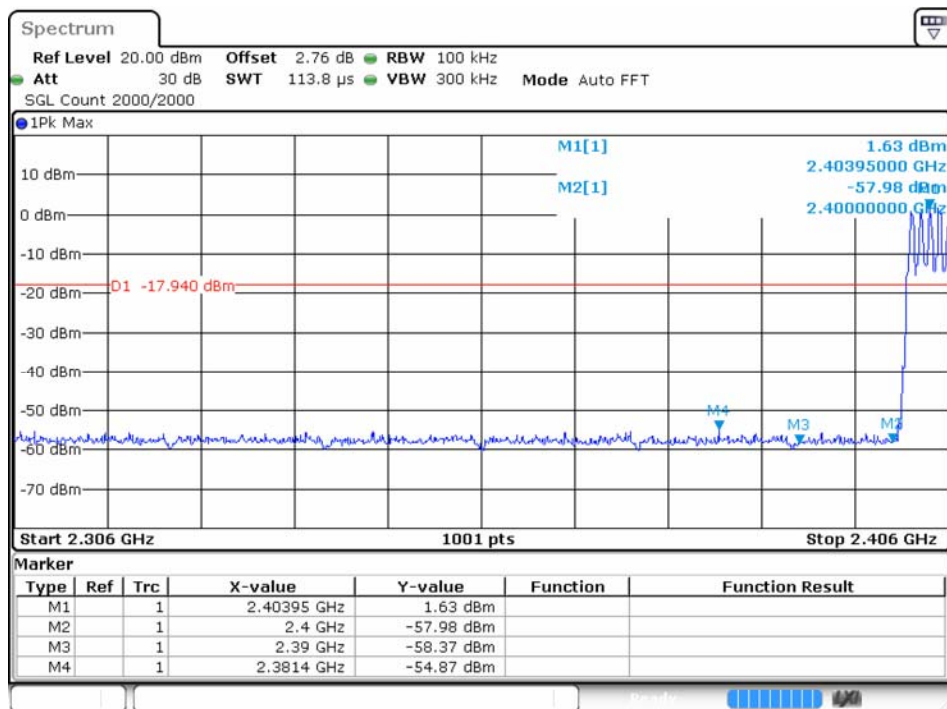
CH00 (Lower) Data rate 1Mbps



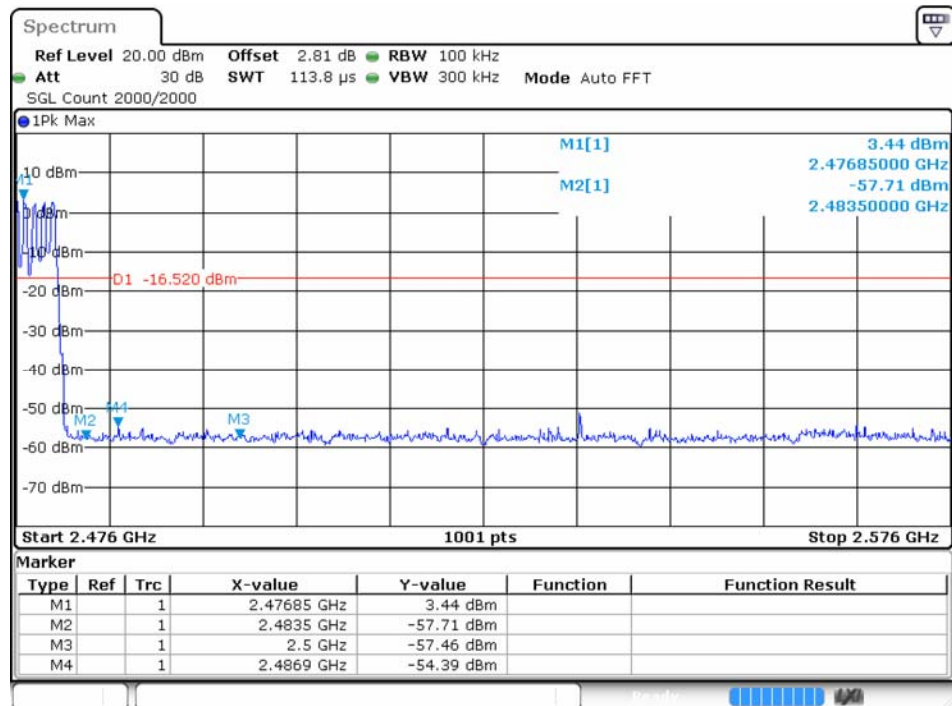
CH 78 (Upper) Data rate 1Mbps



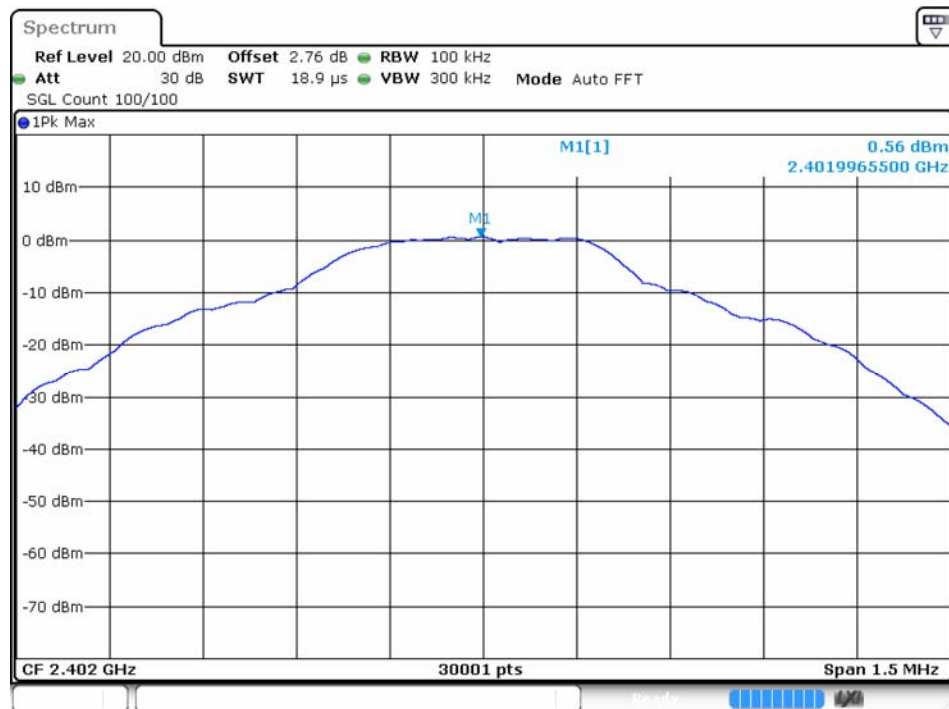
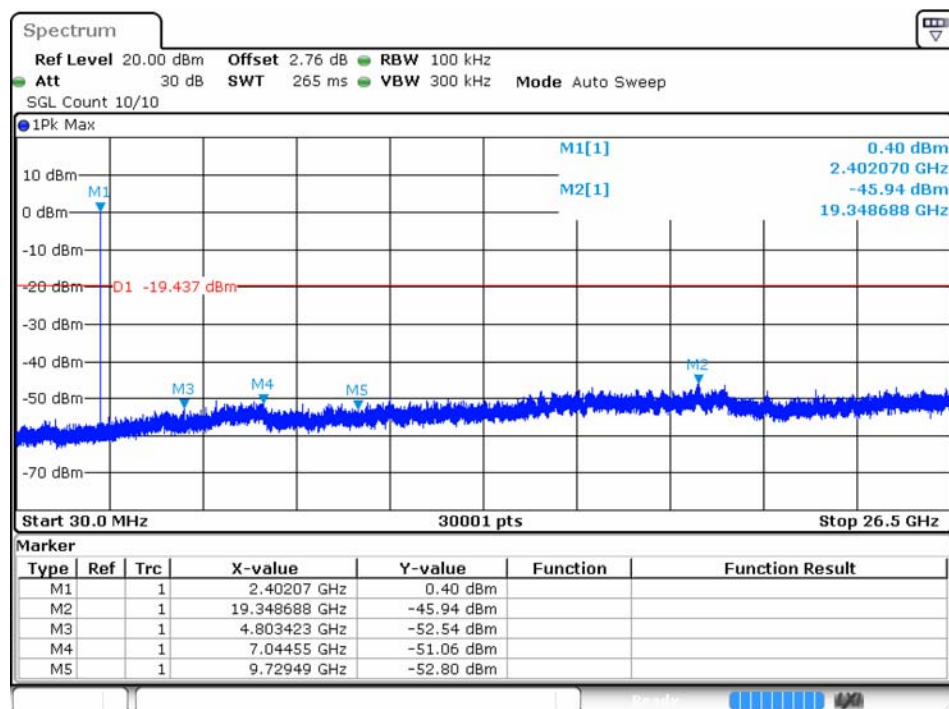
CH00 (Lower) Data rate 1Mbps



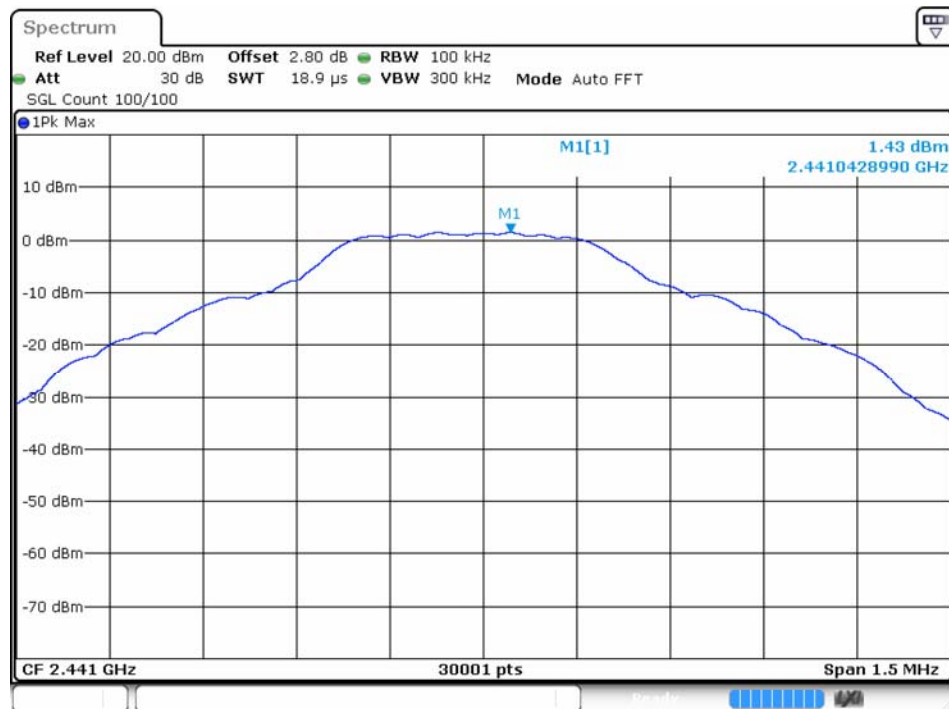
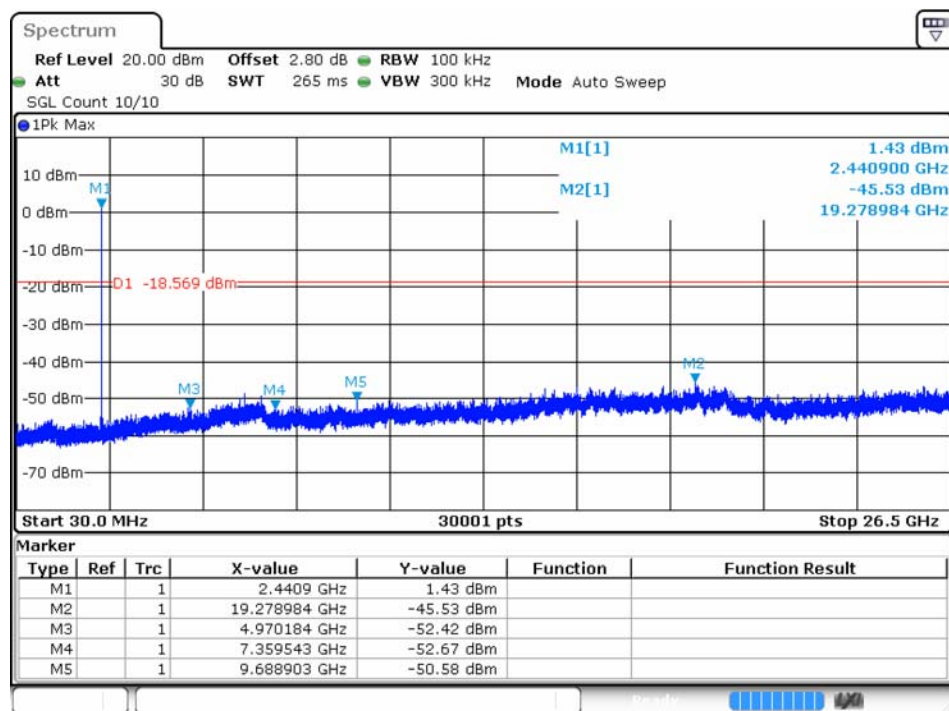
CH 78 (Upper) Data rate 1Mbps



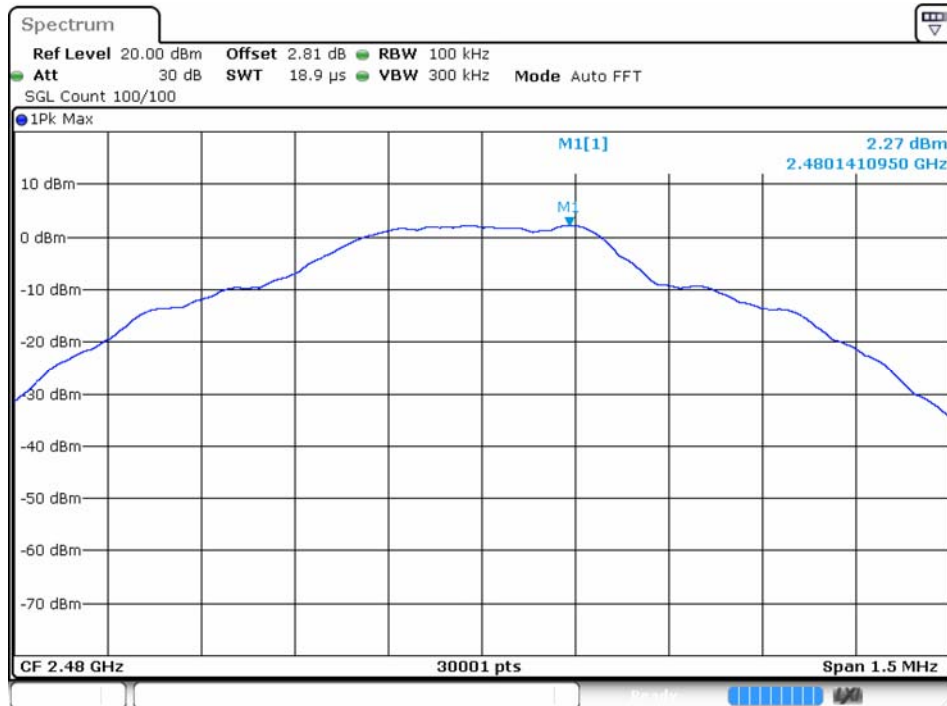
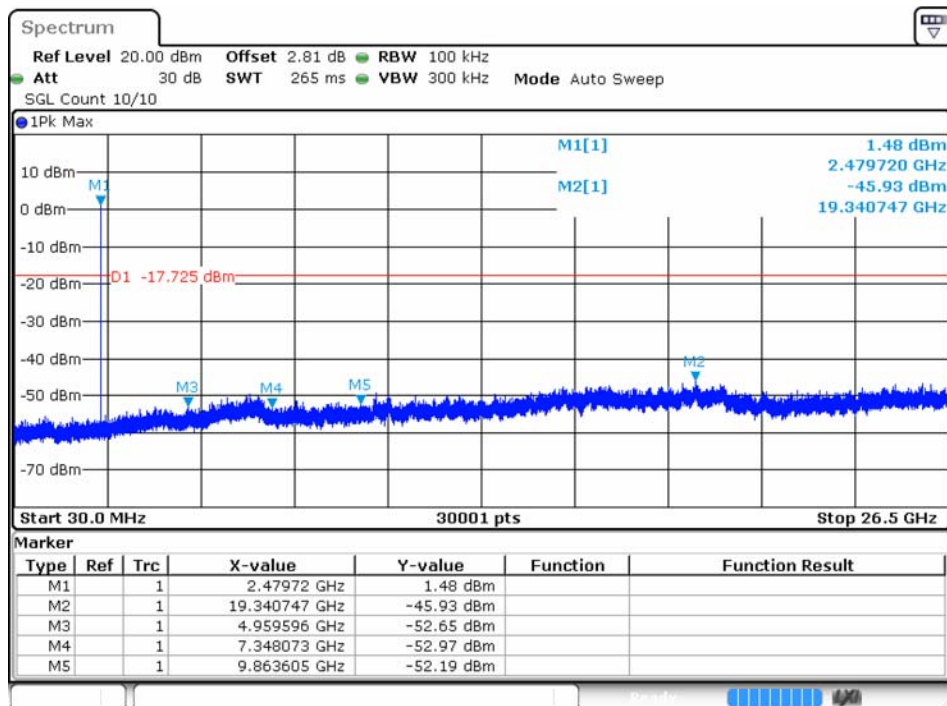
CH01



CH39



CH78



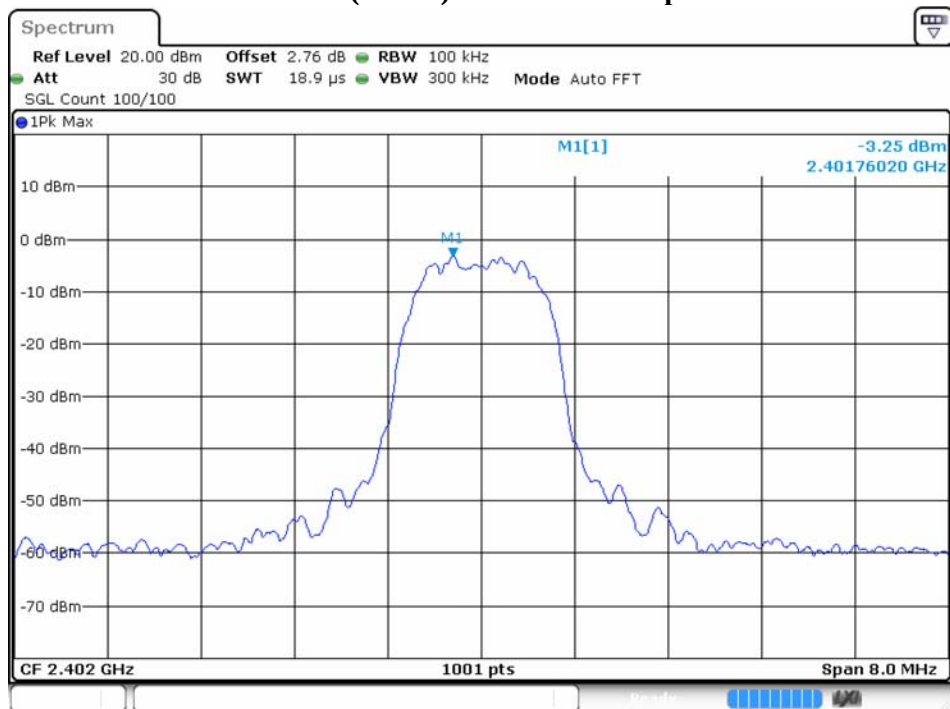
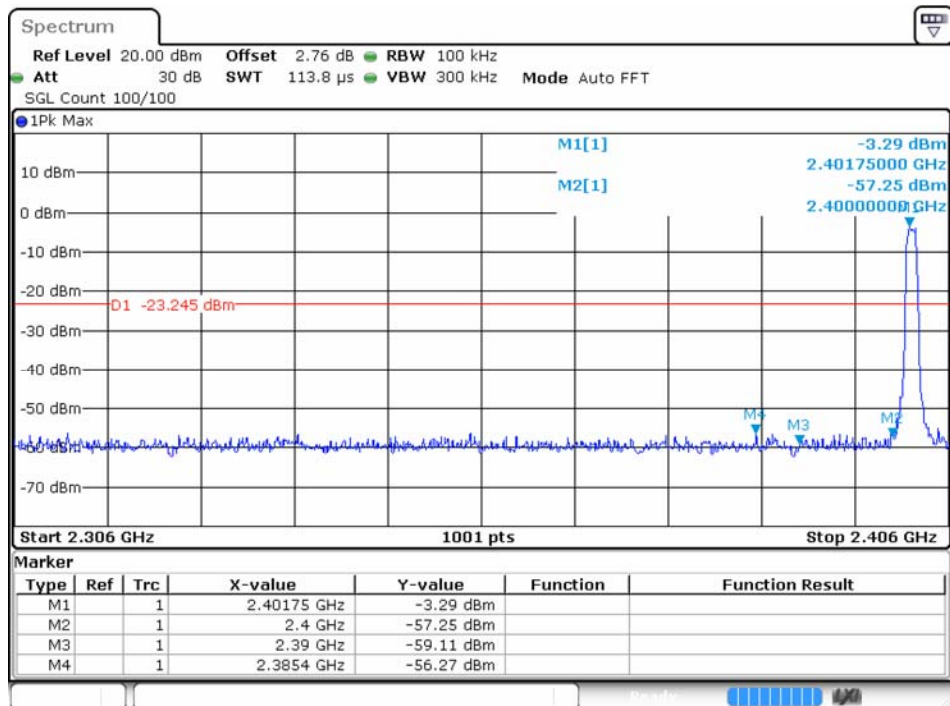
EUT :	TWS Bluetooth Headset	Model Name :	AU-StreamANC+
Temperature :	25 °C	Relative Humidity :	60%
Pressure :	1012 hPa	Test Voltage :	DC3.7V from battery
Test Mode :	CH00 / CH78 (3Mbps)		
Test Date :	2022-01-03		

in any 100kHz bandwidth outside the low frequency band	in any 100 kHz bandwidth outside the high frequency band
Pass	Pass
Result	
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power.	

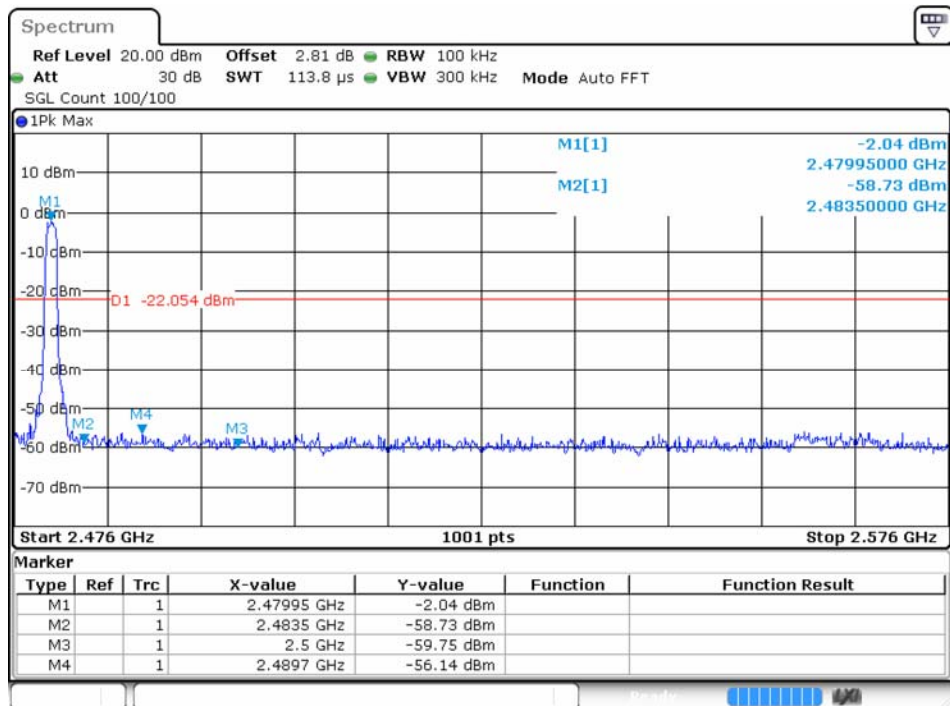
Remark :

- (1) Hopping enabled and disabled have evaluated,and the worrest data was reported

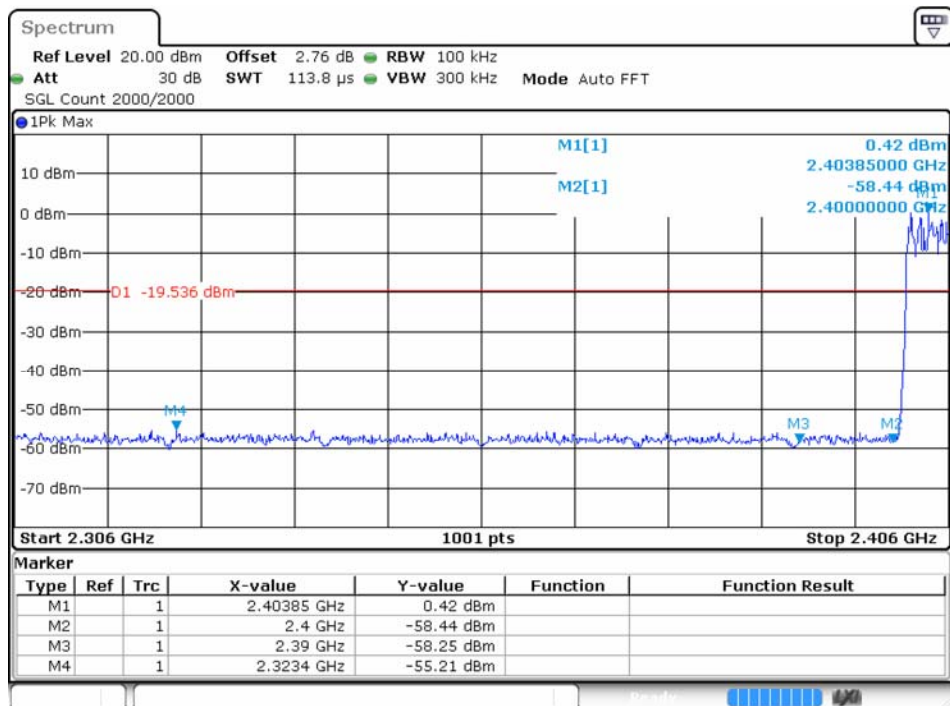
CH00 (Lower) Data rate 3Mbps



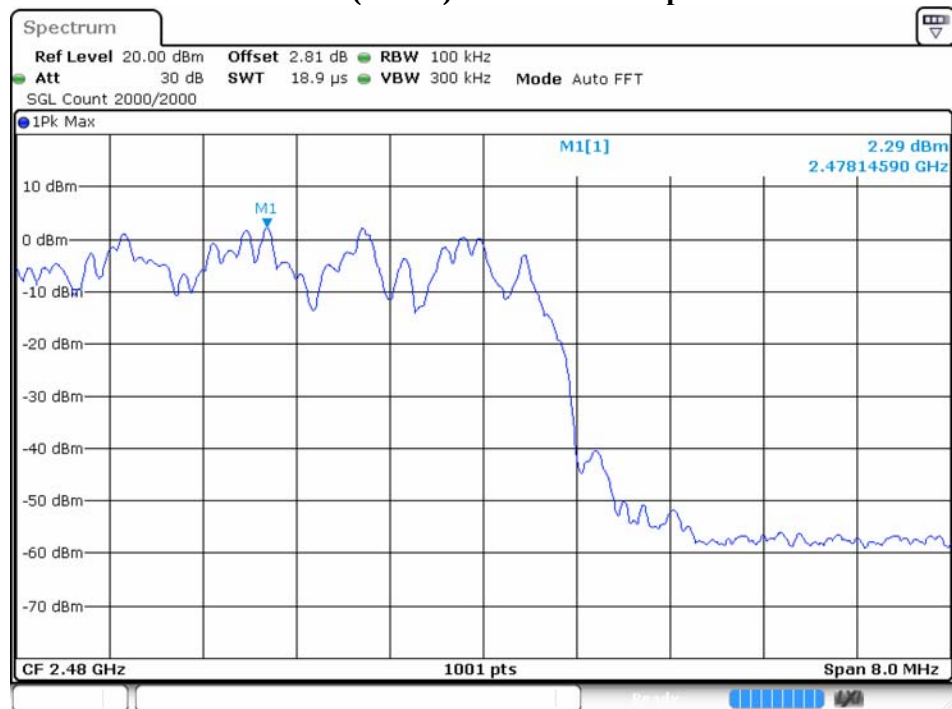
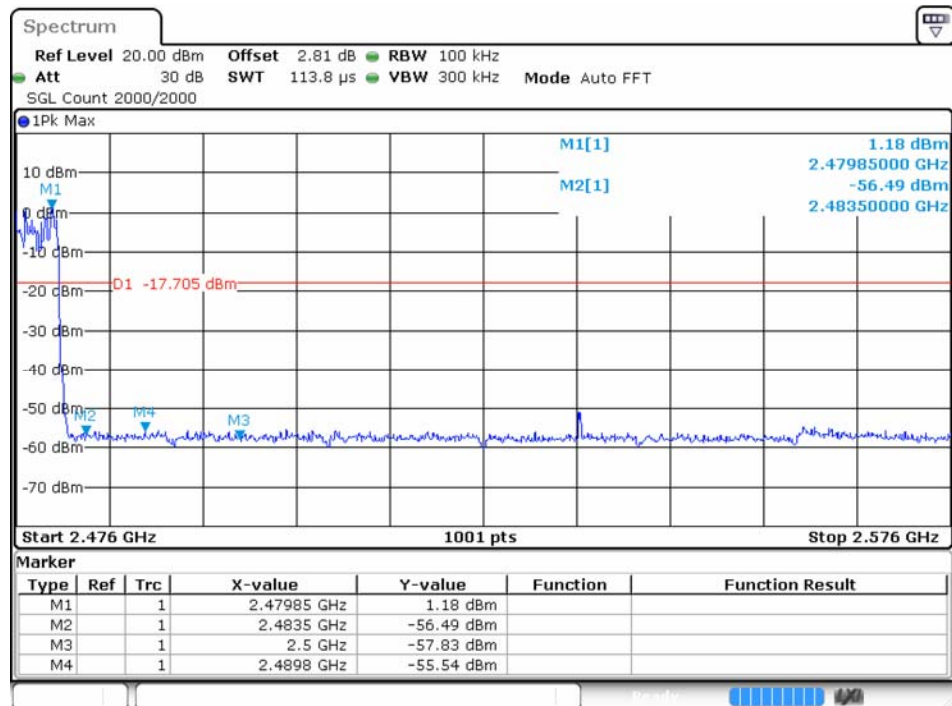
CH 78 (Upper) Data rate 3Mbps



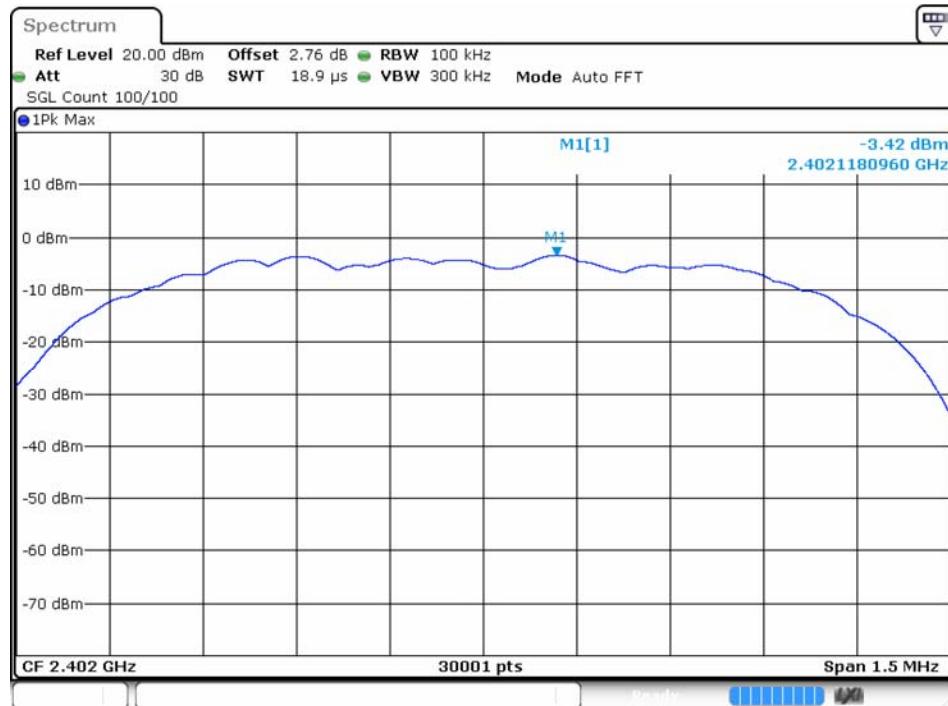
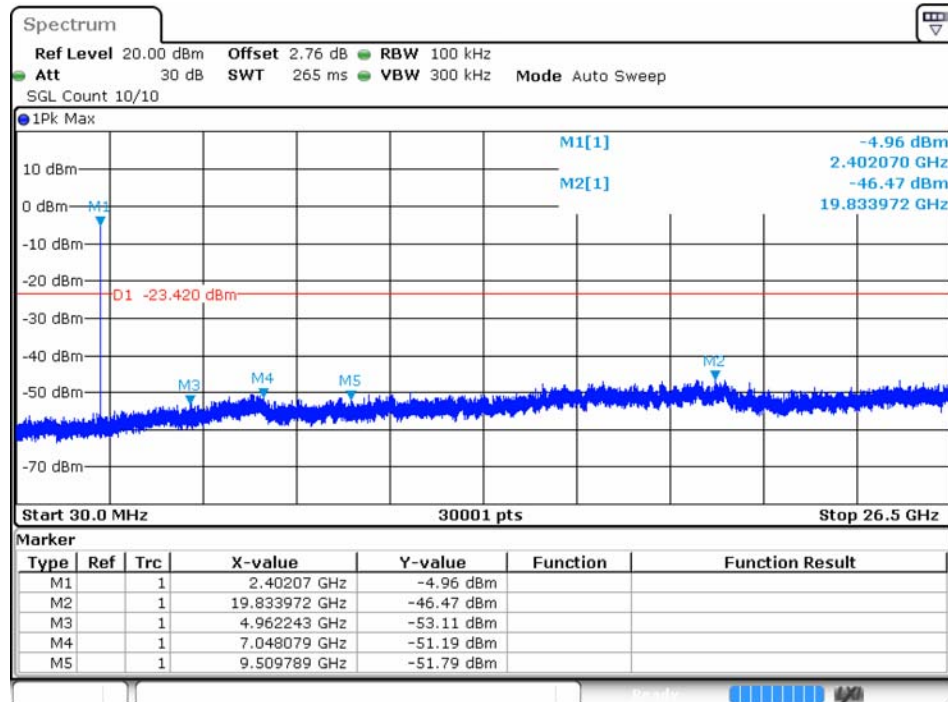
CH00 (Lower) Data rate 3Mbps



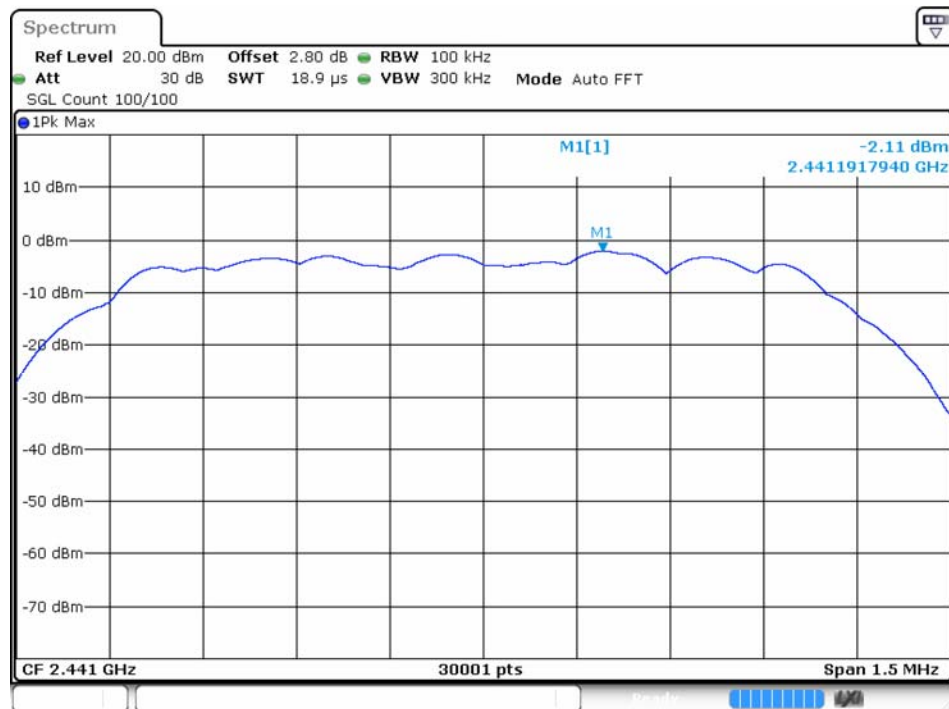
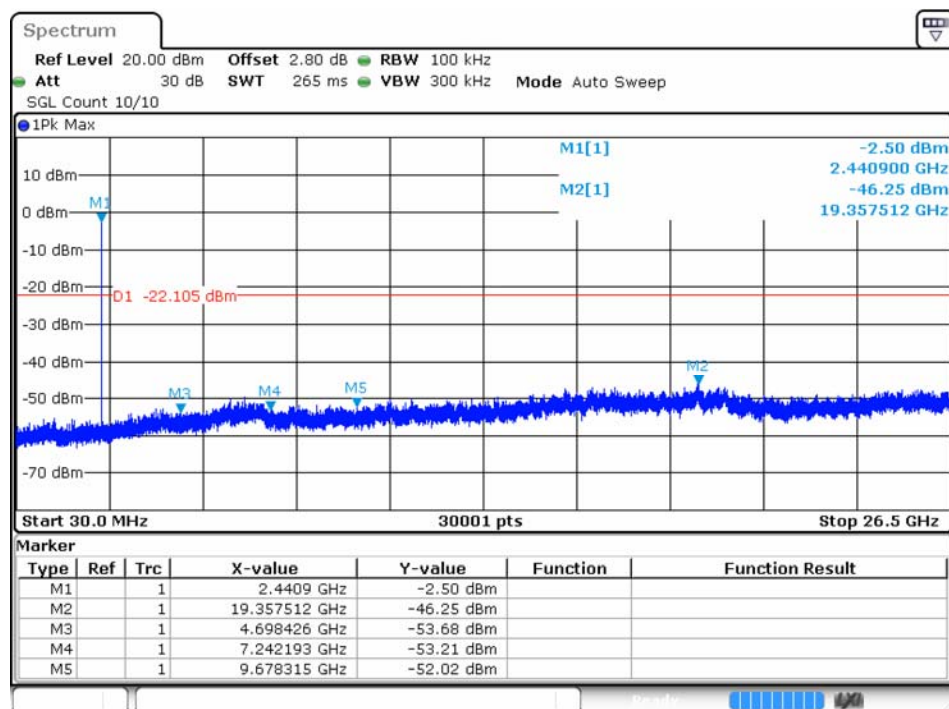
CH78 (Lower) Data rate 3Mbps



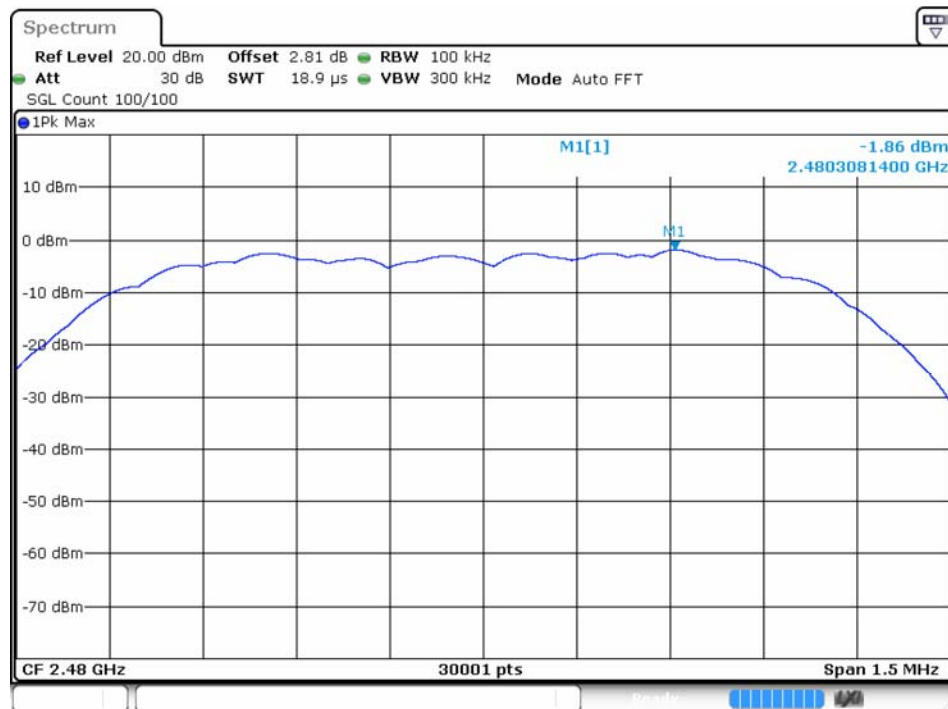
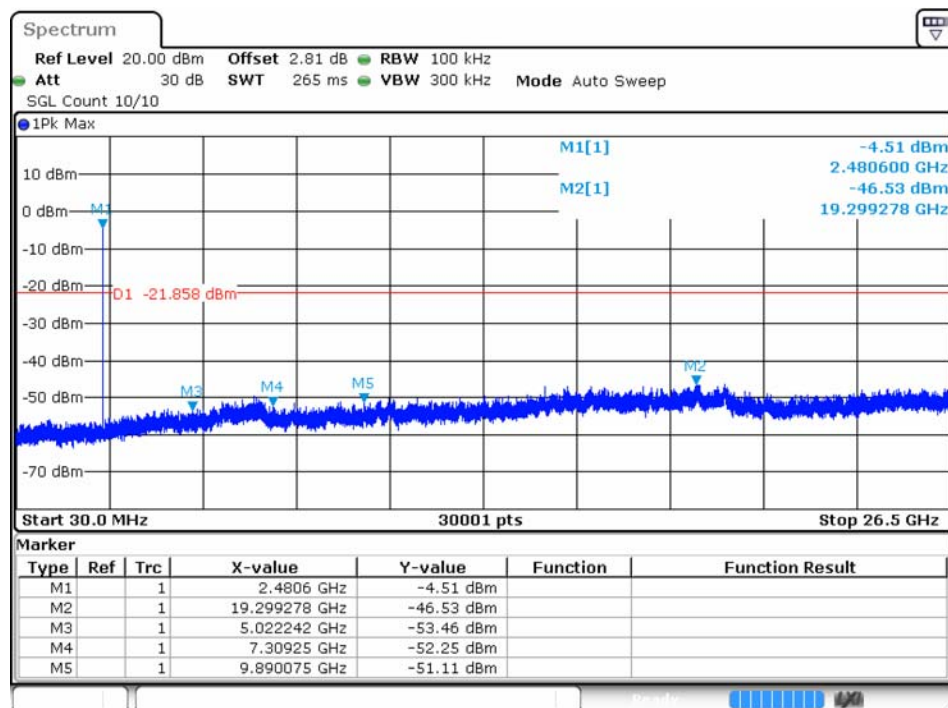
CH01



CH39



CH78



10. ANTENNA REQUIREMENT

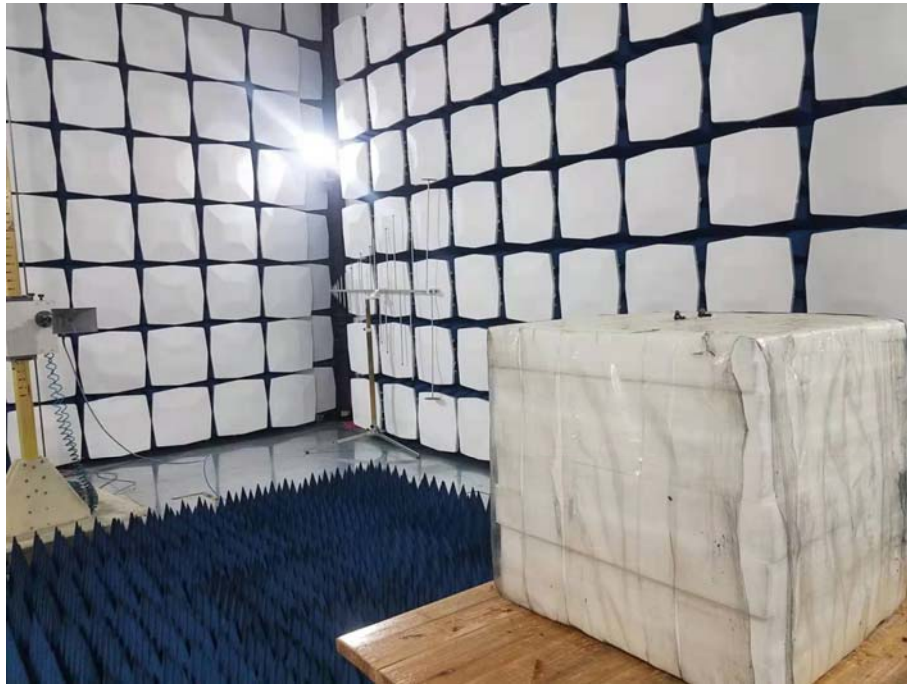
10.1 STANDARD REQUIREMENT

4.10.3.1.1 requirement: Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

10.2 EUT ANTENNA

The antenna is a FPC antenna and no consideration of replacement. Antenna max gain is 3.57 dB from 2.4GHz to 2.5GHz.

11. EUT TEST PHOTO**Radiated Measurement Photos
30MHz-1GHz**

**Radiated Measurement Photos
Above 1GHz****Conducted Measurement Photos**

****End of the report****