

# FCC Test Report

# Report No.: AGC13729250401FR02

FCC ID	:	2AT8X-FOKUSAMADEUS
APPLICATION PURPOSE	:	Original Equipment
PRODUCT DESIGNATION	:	TRUE WIRELESS STEREO EARPHONE
BRAND NAME	:	Noble
MODEL NAME	:	FoKus Amadeus
APPLICANT	:	Noble Hifi. LLC
DATE OF ISSUE	:	Apr. 27, 2025
STANDARD(S)	:	FCC Part 15 Subpart C §15.247
<b>REPORT VERSION</b>	:	V1.0







# **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes	
V1.0	/	Apr. 27, 2025	Valid	Initial Release	



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# 1. General Information

Applicant	Noble Hifi. LLC		
Address	109 State Hwy. 110 S Whitehouse, Texas 75791, United States		
Manufacturer	THE DARK HORSE ACOUSTICS TECHNOLOGY CO., LTD		
Address	501, No.1, Sports Road 2, Pinghuan Community, MaRuan Street, Pingshan District, SHENZHEN, 518118, CHINA		
Factory	THE DARK HORSE ACOUSTICS TECHNOLOGY CO., LTD		
Address	501, No.1, Sports Road 2, Pinghuan Community, MaRuan Street, Pingshan District, SHENZHEN, 518118, CHINA		
Product Designation	TRUE WIRELESS STEREO EARPHONE		
Brand Name	Noble		
Test Model	FoKus Amadeus		
Series Model	N/A		
Declaration of Difference	N/A		
Date of receipt of test item	Apr. 03 , 2025		
Date of Test	Apr. 08, 2025~ Apr. 14, 2025		
Deviation from Standard	No any deviation from the test method		
Condition of Test Sample	Normal		
Test Result	Pass		
Test Report Form No	AGCER-FCC-BLE-V1		

Note: The test results of this report relate only to the tested sample identified in this report.

XCI Li Prepared By Cici Li Apr. 27, 2025 (Project Engineer) Caliin Lin **Reviewed By** Calvin Liu Apr. 27, 2025 (Reviewer) Approved By

Angela Li (Authorized Officer)

Apr. 27, 2025



# 2. Product Information

# **2.1 Product Technical Description**

Technology Type	Bluetooth Low Energy
Frequency Band	2400MHz-2483.5MHz
Operation Frequency Range	2402MHz-2480MHz
Bluetooth Version	V5.4
Modulation Type	BLE GFSK 1Mbps GFSK 2Mbps
Number of channels	40
Carrier Frequency of Each Channel	40 Channels (37 Data channels + 3 Advertising channels)
Channel Separation	2 MHz
Maximum Transmitter Power	Bluetooth LE (1Mbps): 2.757dBm Bluetooth LE (2Mbps): 2.811dBm
Hardware Version	V1.0
Software Version	DZ-2501A_20250412_V0.0.3
Antenna Designation	FPC Antenna
Antenna Gain	Right Earphone:-2.52dBi; Left Earphone:-2.22dBi
Power Supply	DC 3.6V by battery
Note:	

The EUT comprises left and right channel earphones, both are the same. The RF output power of each earphone has been tested and recorded in the report. For other test items, the right earphone has been tested and recorded in this report, which is the worst case.

# 2.2 Test Frequency List

Frequency Band	Channel Number	Test Frequency			
2400~2483.5MHz	0	2402 MHz			
	1	2404 MHz			
	:	:			
	19	2440MHz			
	:	:			
	38	2478 MHz			
	39	2480 MHz			
Note: f = 2402 + 2*k MHz, k = 0,, 39 f is the operating frequency (MHz); k is the operating channel.					



# 2.3 Related Submittal(S) / Grant (S)

This submittal(s) (test report) is intended for FCC ID: **2AT8X-FOKUSAMADEUS**, filing to comply with Part 2, Part 15 of the Federal Communication Commission rules.

# 2.4 Test Methodology

The tests were performed according to following standards:

No.	Identity	Document Title
1	FCC 47 CFR Part 2	Frequency allocations and radio treaty matters; general rules and regulations
2	FCC 47 CFR Part 15	Radio Frequency Devices
3	ANSI C63.10-2013	American National Standard for Testing Unlicensed Wireless Devices
4	KDB 558074 D01 15.247 Meas Guidance v05r02	Guidance for compliance measurements on Digital Transmission Systems, Frequency Hopping Spread Spectrum system, and Hybrid system devices operating under Section 15.247 of the FCC rules

#### 2.5 Special Accessories

Not available for this EUT intended for grant.

#### **2.6 Equipment Modifications**

Not available for this EUT intended for grant.

#### 2.7 Antenna Requirement

Standard Requirement

#### 15.203 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 a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

# 15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi

#### EUT Antenna

The non-detachable antenna inside the device cannot be replaced by the user at will. The gain of the antenna is -2.52dbi for right earphone and -2.22dbi for left earphone.



# 3. Test Environment

## 3.1 Address of the Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

# 3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories).

#### A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

#### FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

#### IC-Registration No.: 24842 (CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.



# **3.3 Environmental Conditions**

	Normal Conditions
Temperature range ( $^\circ \! \mathbb{C}$ )	15 - 35
Relative humidity range	20 % - 75 %
Pressure range (kPa)	86 - 106
Power supply	DC 3.7V

#### **3.4 Measurement Uncertainty**

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

Item	Measurement Uncertainty	
Uncertainty of Conducted Emission for AC Port	$U_c = \pm 2.9 \text{ dB}$	
Uncertainty of Radiated Emission below 1GHz	$U_c = \pm 3.9 \text{ dB}$	
Uncertainty of Radiated Emission above 1GHz	$U_c = \pm 4.9 \text{ dB}$	
Uncertainty of total RF Power, Conducted	$U_c = \pm 0.8 \text{ dB}$	
Uncertainty of RF Power Density, Conducted	$U_c = \pm 2.6 \text{ dB}$	
Uncertainty of Spurious Emissions, Conducted	$U_c = \pm 2 \%$	
Uncertainty of Occupied Channel Bandwidth	$U_c = \pm 2 \%$	
Uncertainty of Dwell Time	$U_c = \pm 2 \%$	



## 3.5 List of Equipment Use

• F	RF Conducted Test System							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)	
$\boxtimes$	AGC-ER-E036	Spectrum Analyzer	Agilent	N9020A	MY49100060	2024-05-24	2025-05-23	
$\boxtimes$	AGC-ER-E062	Power Sensor	Agilent	U2021XA	MY54110007	2025-01-14	2026-01-13	
$\boxtimes$	AGC-ER-E063	Power Sensor	Agilent	U2021XA	MY54110009	2025-01-14	2026-01-13	
	AGC-ER-A007	6dB Fixed Attenuator	Mini circuits	BW-S6-2W263A+	N/A	2025-01-30	2026-01-29	
$\boxtimes$	AGC-ER-E083	Signal Generator	Agilent	E4421B	US39340815	2024-05-23	2025-05-22	
$\boxtimes$	N/A	RF Connection Cable	N/A	1#	N/A	Each time	N/A	
	N/A	RF Connection Cable	N/A	2#	N/A	Each time	N/A	
_								
<ul> <li>Radiated Spurious Emission</li> </ul>								
llsed	Equipment No	Test Equipment	Manufacture	r Model No	Serial No	Last Cal. Date	Next Cal. Date	

Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
$\square$	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	100096	2025-01-14	2026-01-13
$\boxtimes$	AGC-EM-E116	EMI Test Receiver	R&S	ESCI	100034	2024-05-24	2025-05-23
$\boxtimes$	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2024-05-28	2025-05-27
$\boxtimes$	AGC-EM-E086	Loop Antenna	ZHINAN	ZN30900C	18051	2024-03-05	2026-03-04
$\boxtimes$	AGC-EM-E001	Wideband Antenna	SCHWARZBECK	VULB9168	D69250	2025-03-14	2027-03-13
$\boxtimes$	AGC-EM-E029	Broadband Ridged Horn Antenna	ETS	3117	00034609	2024-05-24	2025-05-23
$\boxtimes$	AGC-EM-E082	Horn Antenna	SCHWARZBECK	BBHA 9170	#768	2023-09-24	2025-09-23
$\boxtimes$	AGC-EM-E146	Pre-amplifier	ETS	3117-PA	00246148	2024-07-24	2026-07-23
$\boxtimes$	AGC-EM-A119	2.4G Filter	SongYi	N/A	N/A	2024-05-23	2025-05-22
$\boxtimes$	AGC-EM-A138	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2023-06-09	2025-06-08
	AGC-EM-A139	6dB Attenuator	Eeatsheep	LM-XX-6-5W	N/A	2023-06-09	2025-06-08

• A	AC Power Line Conducted Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)	
$\boxtimes$	AGC-EM-E045	EMI Test Receiver	R&S	ESPI	101206	2024-05-28	2025-05-27	
$\boxtimes$	AGC-EM-A130	6dB Attenuator	Eeatsheep	LM-XX-6-5W	DC-6GZ	2023-06-09	2025-06-08	
$\square$	AGC-EM-E023	AMN	R&S	100086	ESH2-Z5	2024-05-28	2025-05-27	



Test Software						
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information	
	AGC-EM-S001	CE Test System	R&S	ES-K1	V1.71	
	AGC-EM-S003	RE Test System	FARA	EZ-EMC	VRA-03A	
	AGC-EM-S004	RE Test System	Tonscend	TS+Ver2.1(JS32-RE)	4.0.0.0	
	AGC-ER-S012	BT/WIFI Test System	Tonscend	JS1120-2	2.6	
	AGC-EM-S011	RSE Test System	Tonscend	TS+-Ver2.1(JS36-RSE)	4.0.0.0	



# **4.System Test Configuration**

## 4.1 EUT Configuration

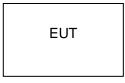
The EUT configuration for testing is installed on RF field strength measurement to meet the Commission's requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

# 4.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

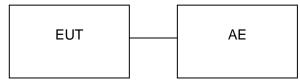
# 4.3 Configuration of Tested System

Radiated Emission Configure:



Conducted Emission Configure:

2



# 4.4 Equipment Used In Tested System

The following peripheral devices and interface cables were connected during the measurement:

<u> </u>								
No	Equipme nt	Manufactu rer	Model No.	Spe	cification Information	Cable		
1	Control Box	RISYM	USB-TTL					
2	Adapter	Huawei	HW-200440 C00	Input(AC):100V-240V 50/60Hz 2.4A Output(DC):USB-C(5V/3A;9V/3A;10V/4A;11V/6A;12V/3A;1 5V/3A;20V4.4A) USB-A(5V/2A;10V/4A;11V/6A;20V/4.4A)		1.0m unshielded		
	Test Accessories Come From The Manufacturer							
No	o. Equipment		Manufacturer	Model No. Specification Information		Cable		
1								

I Test Accessories Come From The Laboratory

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

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## 4.5 Summary of Test Results

Item	FCC Rules	Description of Test	Result
1	§15.203&15.247(b)(4)	Antenna Equipment	Pass
2	§15.247 (b)(3)	RF Output Power	Pass
3	§15.247 (a)(2)	6 dB Bandwidth	Pass
4	§15.247 (e)	Power Spectral Density	Pass
5	§15.247 (d)	Conducted Band Edge and Out-of-Band Emissions	Pass
6	§15.209	Radiated Emission& Band Edge	Pass
7	§15.207	AC Power Line Conducted Emission	Pass



# 5. Description of Test Modes

	Summary Table of Test Cases
Test litere	Data Rate / Modulation
Test Item	Bluetooth–LE(1Mbps/2Mbps)/GFSK
	Mode 1: Bluetooth Tx CH00_2402 MHz_1Mbps(Battery powered or AC/DC adapter)
	Mode 2: Bluetooth Tx CH19_2440 MHz_1Mbps(Battery powered or AC/DC adapter)
Radiated & Conducted	Mode 3: Bluetooth Tx CH39_2480 MHz_1Mbps(Battery powered or AC/DC adapter)
Test Cases	Mode 4: Bluetooth Tx CH00_2402 MHz_2Mbps(Battery powered or AC/DC adapter)
	Mode 5: Bluetooth Tx CH19_2440 MHz_2Mbps(Battery powered or AC/DC adapter)
	Mode 6: Bluetooth Tx CH39_2480 MHz_2Mbps(Battery powered or AC/DC adapter)
AC Conducted Emission	Mode 1: Bluetooth Link + Battery + USB Cable (Charging from AC Adapter)

Note:

- 1. Only the result of the worst case was recorded in the report, if no other cases.
- The battery is full-charged during the test.
- 2. 3. For Radiated Emission, 3axis were chosen for testing for each applicable mode.
- 4. For Conducted Test method, a temporary antenna connector is provided by the manufacture.

#### Software Setting Diagram

Test Commands ENABLE DUT MODE BLE TEST TX BLE TEST RX BLE TEST END Set Freq. Trims Set FIO Read PIO Read ADC	Test Argu Channel Length ( Bit patt PHY	0-39) 0 255) 37	In 9 V	Close Help Execute Reset	
Test Results Save to file C:\Users\AGC-dian ET firmware verss Audio firmware ve Apps1 firmware ve Disable Applicati Disable Applicati BLE TEST TX succe BLE TEST TX succe	chi\AppData\Local\Q chi\AppData\Local\Q ersion 33581. ersion 3064. ersion 1741862834 ion successful essful essful essful PHY option is not arios, as per the sting should not	supported for ch BT specification	plog.txt	, product	*



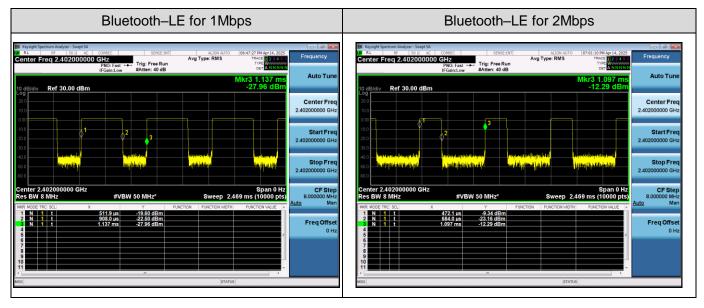
# 6. Duty Cycle Measurement

The maximum achievable duty cycles for all modes were determined based on measurements performed on a spectrum analyzer in zero-span mode with RBW = 8MHz, VBW = 50MHz, and detector = Peak. The RBW and VBW were both greater than 50/T, where T is the minimum transmission duration, and the number of sweep points across T was greater than 100. The duty cycles are as follows:

Operating mode	T(µs)	Duty Cycle (%)	Duty Cycle Factor (dB)	1/ T Minimum VBW (kHz)
BLE_1Mbps	396.1	63.37	1.98	0.63
BLE_2Mbps	211.9	33.91	4.7	0.62

Remark:

- 1. Duty Cycle factor = 10 \* log (1/ Duty cycle)
- 2. The duty cycle of each frequency band mode reflects the determination requirements of the low channel measurement value
- The test plots as follows:





# 7. RF Output Power Measurement

## 7.1 Provisions Applicable

For DTSs employing digital modulation techniques operating in the bands 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1 W.

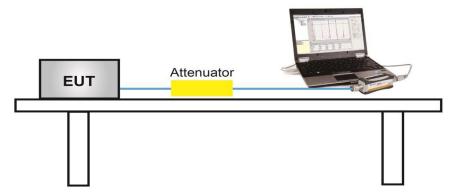
## 7.2 Measurement Procedure

For Peak Power, the testing follows ANSI C63.10 Section 11.9.1.1 Method Max peak power:

- 1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator
- 2. Set the RBW≥DTS bandwidth
- 3. Set the VBW≥[3 × RBW].
- 4. Span≥[3 × RBW].
- 5. Sweep= auto couple.
- 6. Detector Function= Peak.
- 7. Trace mode= Max hold.
- 8. Allow trace to stabilize. Use the marker-to-peak function to set the marker to the peak of the emission. The indicated level is the peak output power, after any corrections for external attenuators and cables.
- For Average power, the testing follows ANSI C63.10 Section 11.9.2.3.2 Method AVGPM-G:
- 1. The RF output of EUT was connected to the power meter by RF cable and attenuator.
- 2. The path loss was compensated to the results for each measurement.
- 3. Set to the maximum power setting and enable the EUT transmit continuously.
- 4. Measure the conducted output power and record the results in the test report.

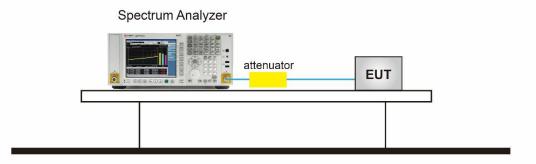
# 7.3 Measurement Setup (Block Diagram of Configuration)

For Average power test setup





## For peak power test setup

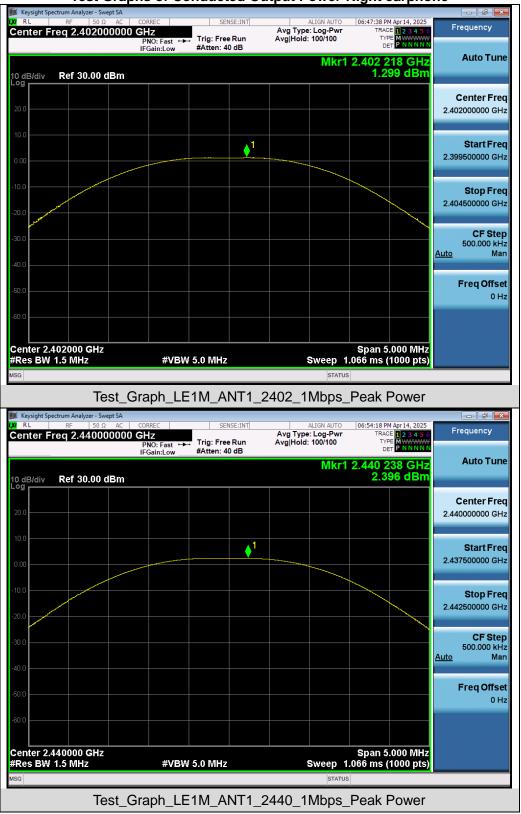


## 7.4 Measurement Result

Test Data of Conducted Output Power-Right earphone					
Test Mode	Test Frequency (MHz)	Peak Power (dBm)	Limits (dBm)	Pass or Fail	
	2402	1.299	≪30	Pass	
GFSK_1Mbps	2440	2.396	≪30	Pass	
	2480	2.757	≪30	Pass	
	2402	1.307	≪30	Pass	
GFSK_2Mbps	2440	2.422	≪30	Pass	
	2480	2.811	≪30	Pass	

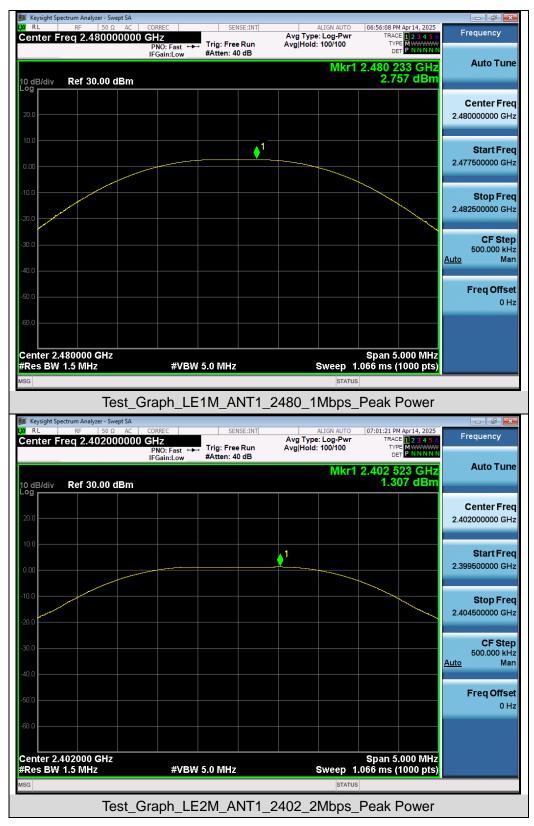
Test Data of Conducted Output Power-Left earphone					
Test Mode	Test Frequency (MHz)			Pass or Fail	
	2402	1.785	≪30	Pass	
GFSK_1Mbps	2440	1.897	≪30	Pass	
	2480	1.442	≪30	Pass	
	2402	1.811	≪30	Pass	
GFSK_2Mbps	2440	1.948	≪30	Pass	
	2480	1.536	≤30	Pass	



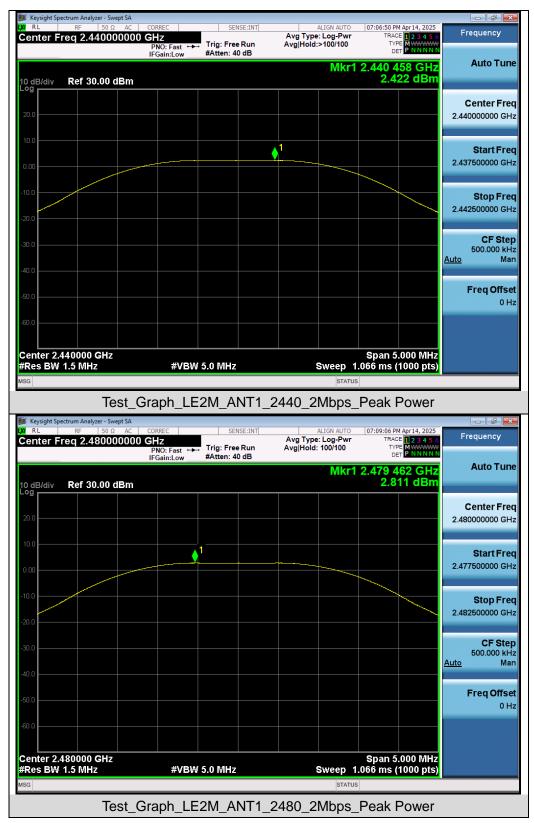


## Test Graphs of Conducted Output Power-Right earphone

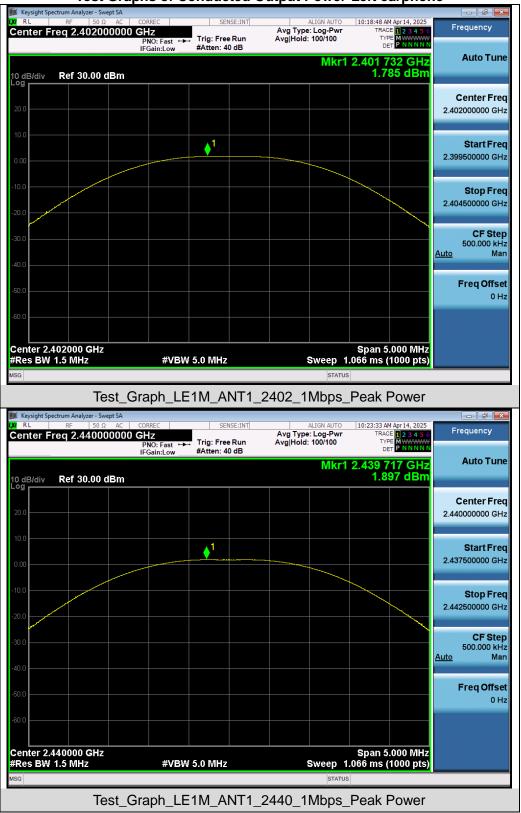






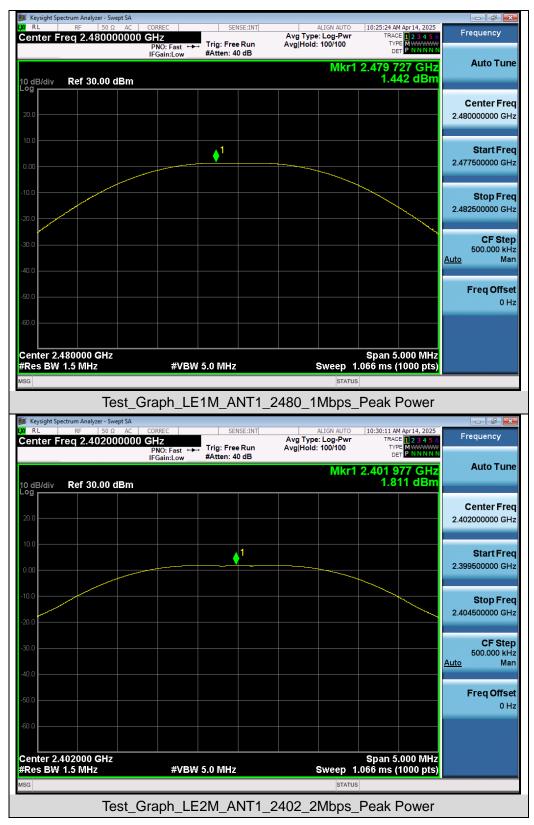




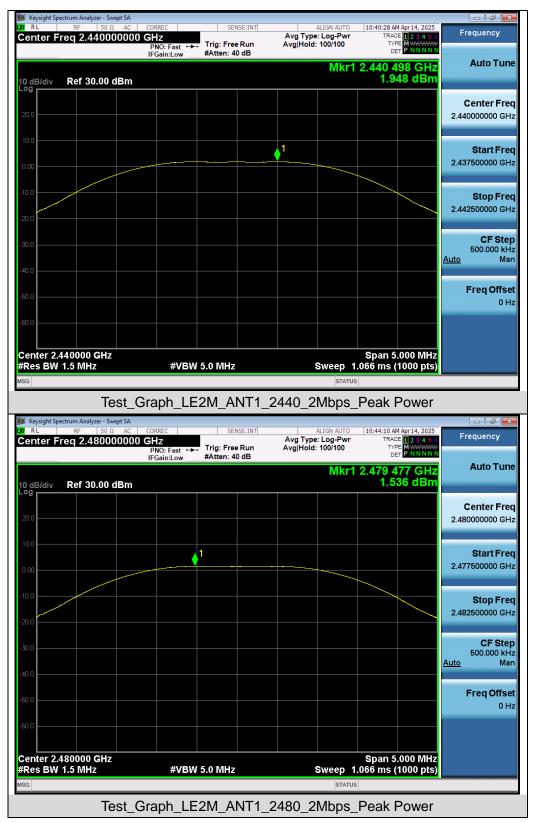


## Test Graphs of Conducted Output Power-Left earphone











# 8. 6dB Bandwidth Measurement

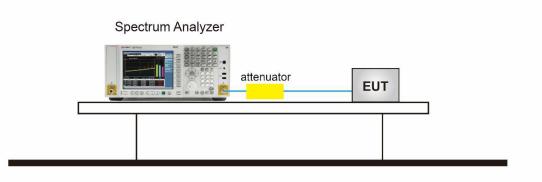
#### 8.1 Provisions Applicable

The minimum 6dB bandwidth shall be 500 kHz.

## 8.2 Measurement Procedure

- The testing follows the ANSI C63.10 Section 6.9.3 (OBW) and 11.8.1 (6dB BW).
- 1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 2. Set to the maximum power setting and enable the EUT transmit continuously.
- 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 100 kHz. Set the Video bandwidth (VBW) = 300 kHz. In order to make an accurate measurement. The 6 dB bandwidth must be greater than 500 kHz.
- For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the OBW and set the Video bandwidth (VBW) ≥ 3 \* RBW.
- 5. Measure and record the results in the test report.

# 8.3 Measurement Setup (Block Diagram of Configuration)

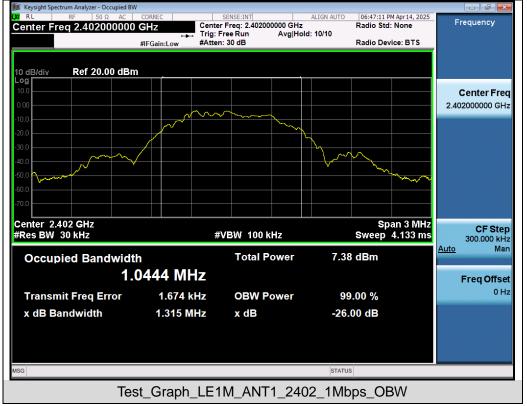




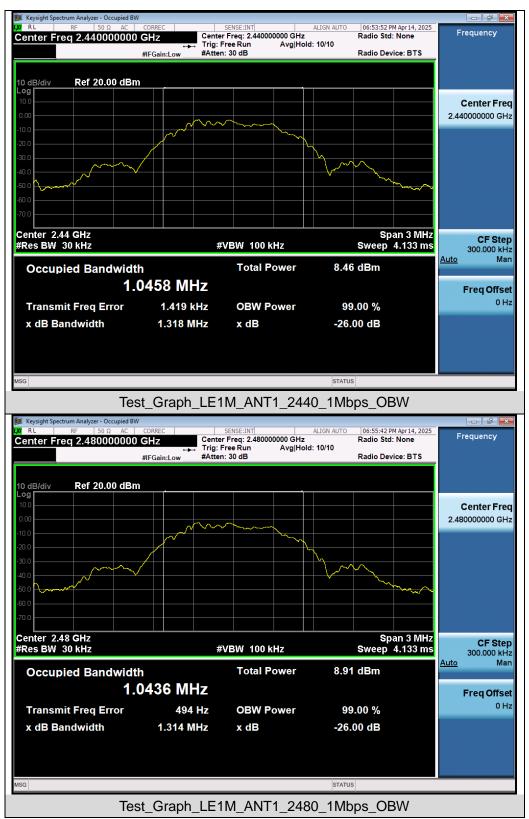
## **8.4 Measurement Results**

Test Data of Occupied Bandwidth and DTS Bandwidth						
Test Mode	Test Frequency (MHz)			DTS BW Limits	Pass or Fail	
	2402	1.044	0.714	≥0.5	Pass	
GFSK_1Mbps	2440	1.046	0.717	≥0.5	Pass	
	2480	1.044	0.715	≥0.5	Pass	
	2402	2.057	1.214	≥0.5	Pass	
GFSK_2Mbps	2440	2.058	1.214	≥0.5	Pass	
	2480	2.055	1.214	≥0.5	Pass	

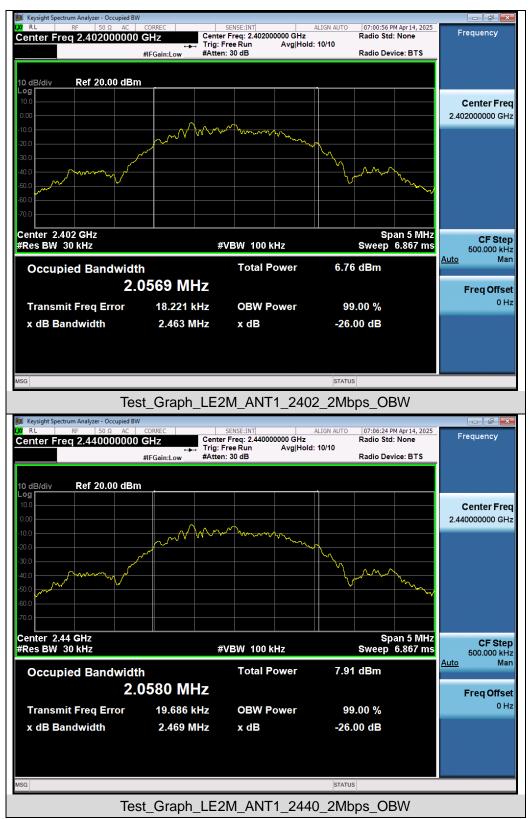
## **Test Graphs of Occupied Bandwidth**



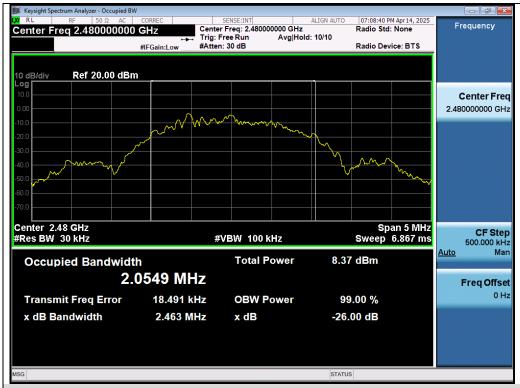










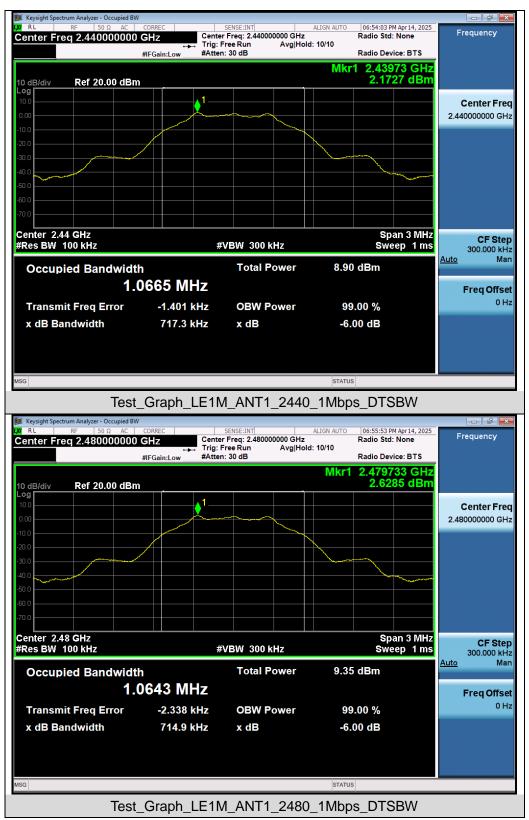


Test\_Graph\_LE2M\_ANT1\_2480\_2Mbps\_OBW

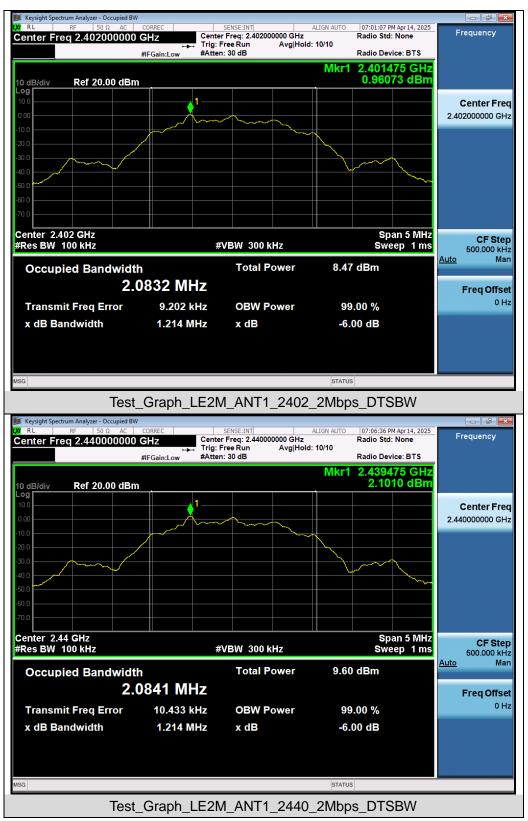
Test Graphs of DTS Bandwidth

















# 9. Power Spectral Density Measurement

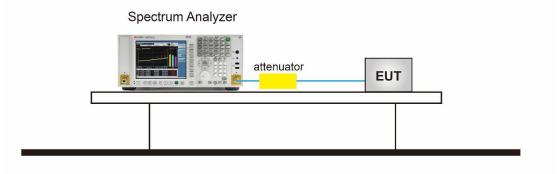
# 9.1 Provisions Applicable

The transmitter power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

# 9.2 Measurement Procedure

- The testing follows the ANSI C63.10 Section 11.10.2 Method PKPSD.
- 1. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
- 2. Set to the maximum power setting and enable the EUT transmit continuously.
- 3. Make the measurement with the spectrum analyzer's resolution bandwidth (RBW) = 3 kHz. Video bandwidth VBW = 10 kHz in order to make an accurate measurement, set the span to 1.5 times DTS Channel Bandwidth. (6dB BW)
- 4. Detector = peak, Sweep time = auto couple, Trace mode = max hold, Allow trace to fully stabilize. Use the peak marker function to determine the maximum power level.
- 5. Measure and record the results in the test report.
- 6. The Measured power density (dBm)/ 100kHz is a reference level and used as 20dBc down limit line for Conducted Band Edges and Conducted Spurious Emission.

# 9.3 Measurement Setup (Block Diagram of Configuration)

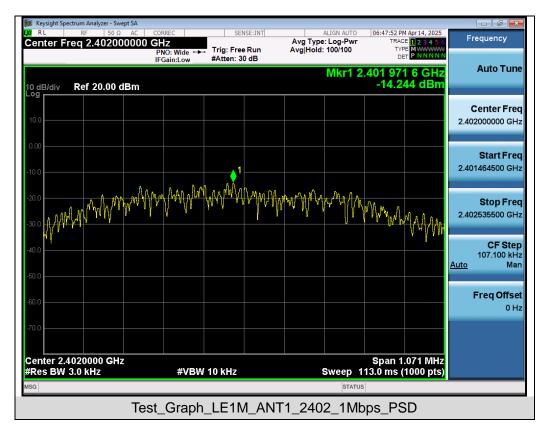




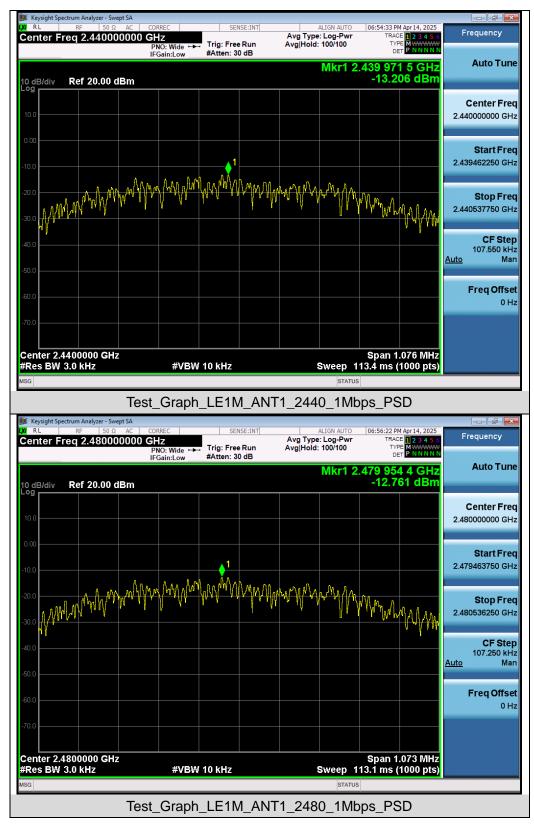
#### 9.4 Measurement Results

Test Data of Conducted Output Power Spectral Density					
Test Mode Test Frequency (MHz)		Power density (dBm/3kHz)	Limit (dBm/3kHz)	Pass or Fail	
GFSK_1Mbps	2402	-14.244	≪8	Pass	
	2440	-13.206	≪8	Pass	
	2480	-12.761	≪8	Pass	
	2402	-17.816	≪8	Pass	
GFSK_2Mbps	2440	-16.706	≪8	Pass	
	2480	-16.268	≪8	Pass	

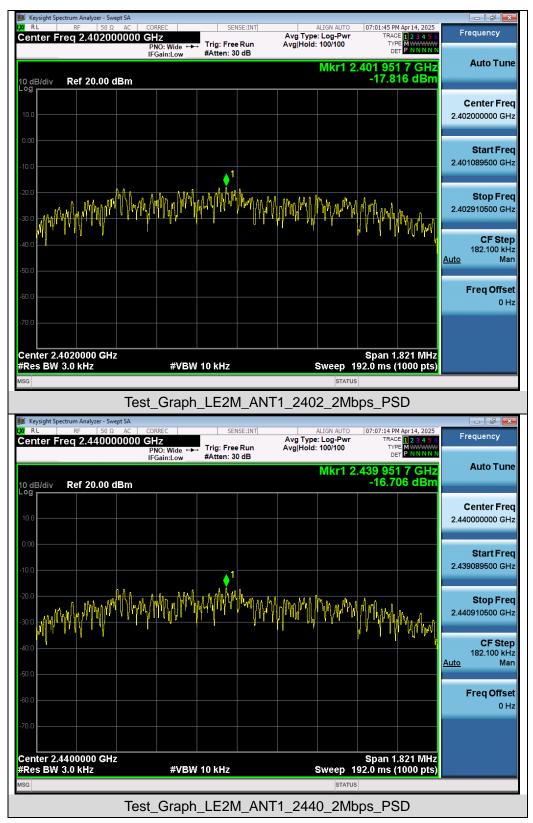
#### Test Graphs of Conducted Output Power Spectral Density













Keysight Spectrum Analyzer - Swept SA									x
RL RF 50 Ω AC Center Freq 2.480000000	GHz		SE:INT	Avg Type	LIGN AUTO	TRAC	Apr 14, 2025	Frequency	
	PNO: Wide	Trig: Free #Atten: 30		Avg Hold:		DE			
					Mkr1 2	.479 95	1 7 GHz 68 dBm	Auto Tu	ne
10 dB/div Ref 20.00 dBm						-10.2			
10.0								Center Fr	
10.0								2.480000000 G	iΗ
0.00								Otart Fr	
10.0								Start Fr 2.479089500 G	
10.0		↓ <sup>1</sup>							
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	VIIWI'''	heading		<u>ן</u> מייון,	· WAYAR MA	MANA.	Mard .	2.480910500 G	
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40.0						<u> </u>	Y	CF St 182.100 k	
								<u>Auto</u> M	
50.0									
60.0								Freq Offs 0	
								U	'
70.0									
Center 2.4800000 GHz						Enon 1	.821 MHz		
Res BW 3.0 kHz	#VBW	10 kHz		:	Sweep 1	92.0 ms (	.821 MH2 1000 pts)		
ISG					STATUS	ĺ			
Tes	st_Graph	LE2M	1 ANT	1 248	0 2Mb	ps PS	SD		



# 10. Conducted Band Edge and Out-of-Band Emissions

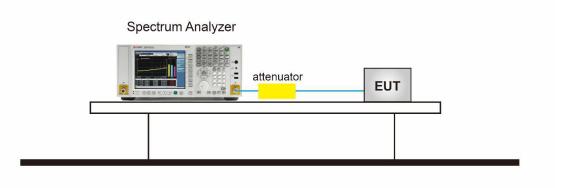
#### **10.1 Provisions Applicable**

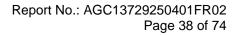
The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100kHz bandwidth per the PSD procedure.

#### **10.2 Measurement Procedure**

- Reference level measurement
- 1. Set instrument center frequency to DTS channel center frequency
- 2. Set the span to  $\geq$  1.5 times the DTS bandwidth
- 3. Set the RBW = 100 kHz
- 4. Set the VBW  $\ge$  3 x RBW
- 5. Detector = peak
- 6. Sweep time = auto couple
- 7. Trace mode = max hold
- 8. Allow trace to fully stabilize
- Emission level measurement
- 1. Set the center frequency and span to encompass frequency range to be measured
- 2. RBW = 100kHz
- 3. VBW = 300kHz
- 4. Detector = Peak
- 5. Trace mode = max hold
- 6. Sweep time = auto couple
- 7. The trace was allowed to stabilize

#### 10.3 Measurement Setup (Block Diagram of Configuration)





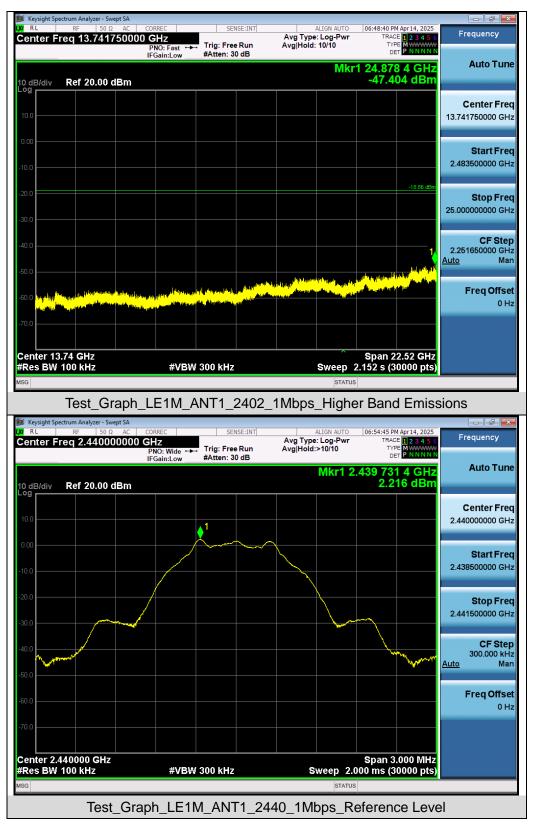


#### **10.4 Measurement Results**

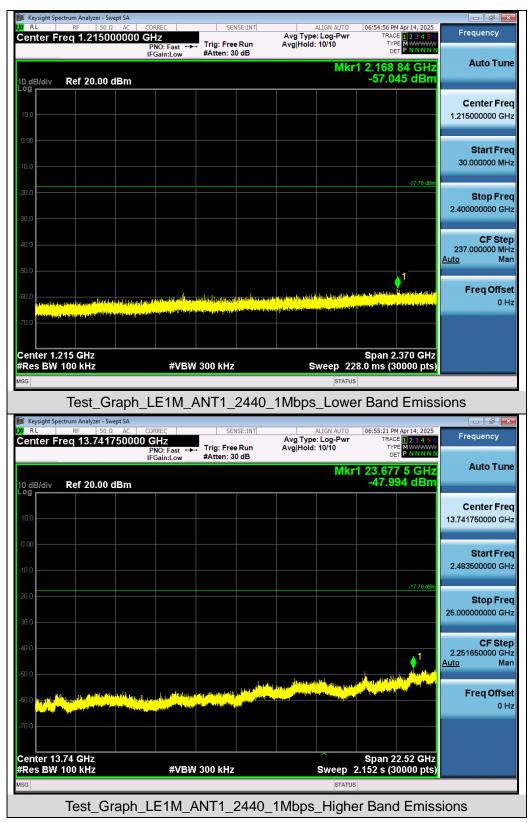


#### Test Graphs of Spurious Emissions in Non-Restricted Frequency Bands

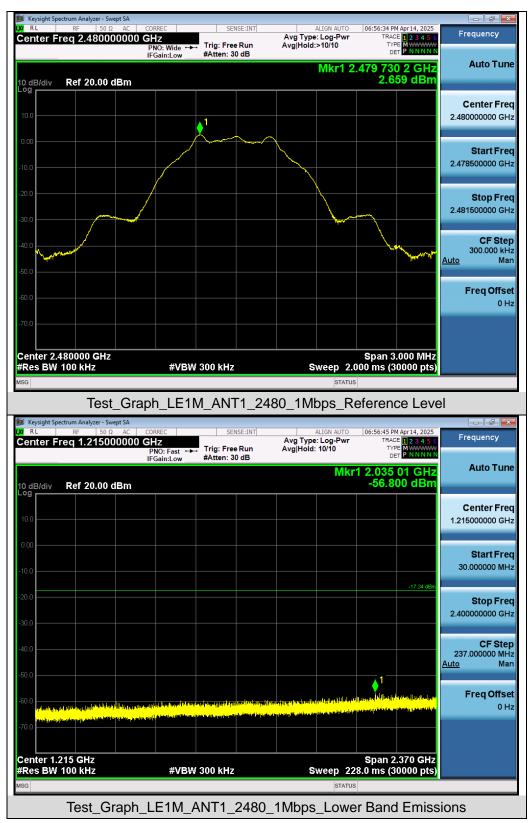




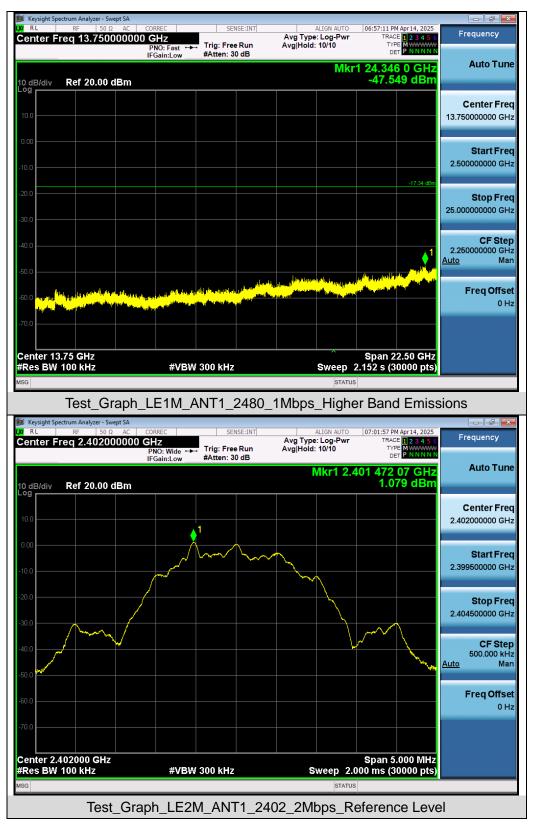




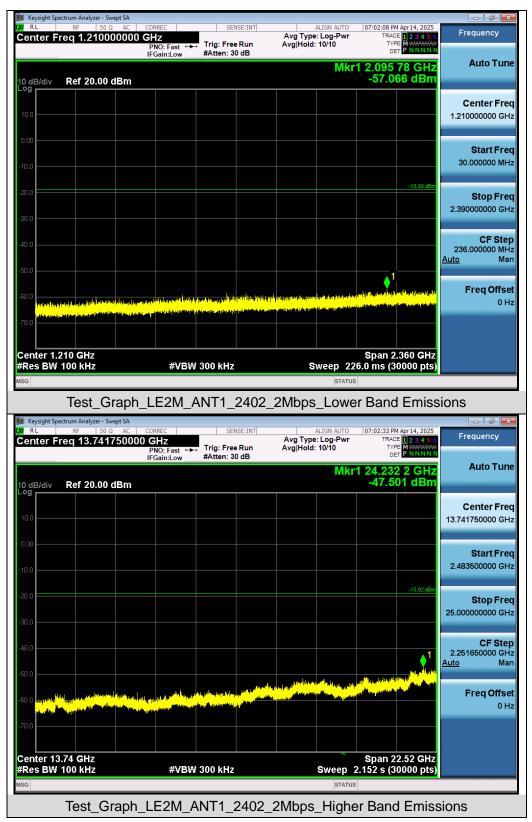




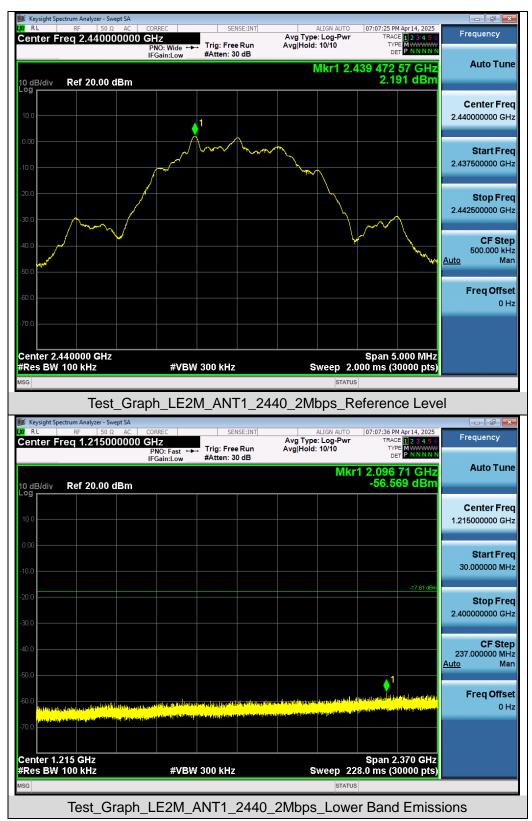




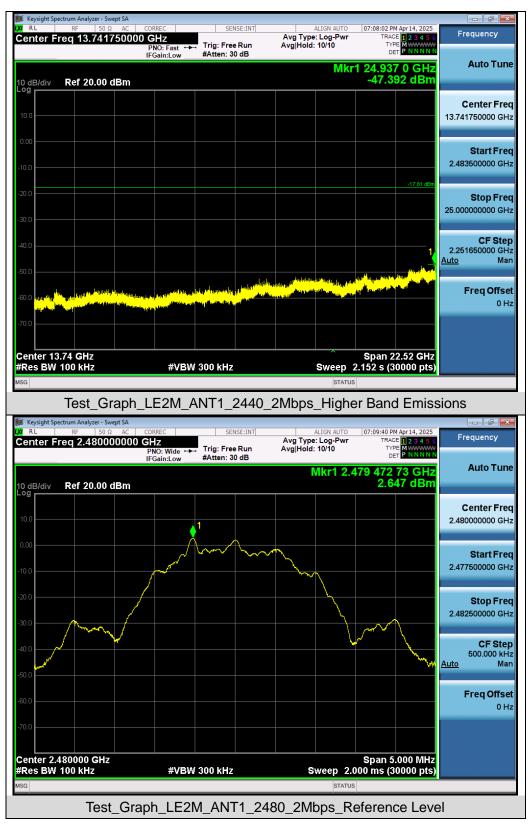




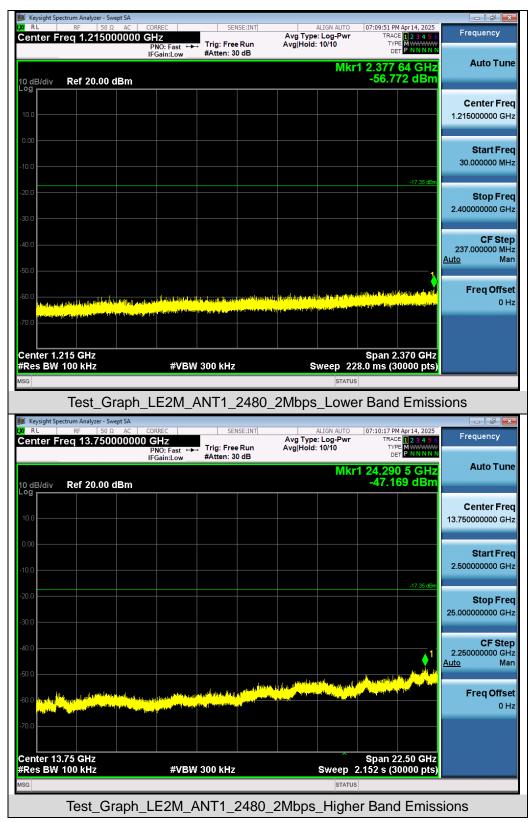


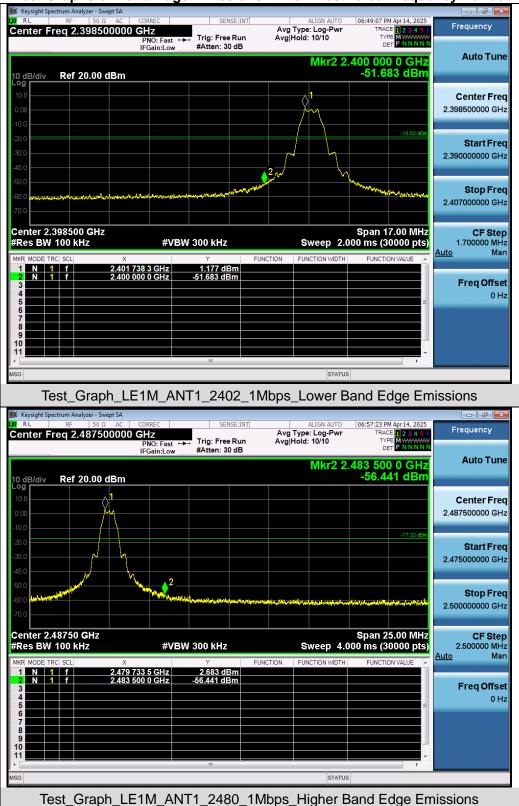






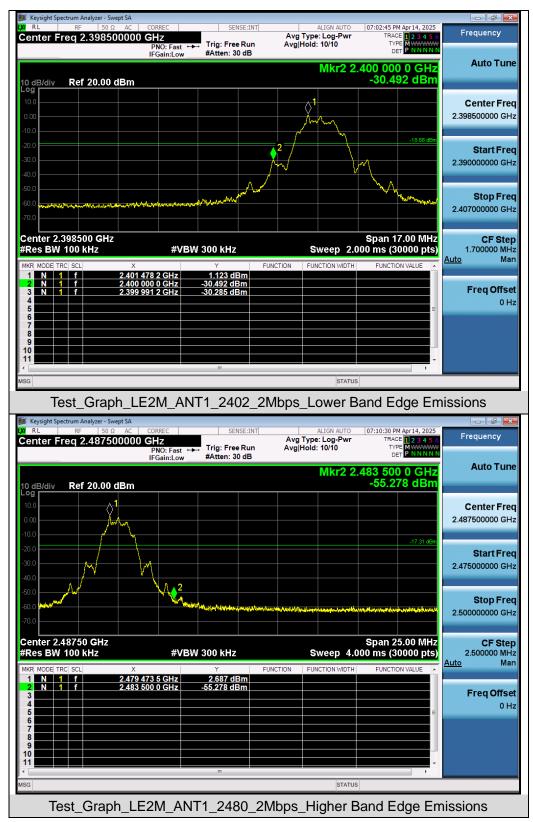






## Test Graphs of Band Edge Emissions in Non-Restricted Frequency Bands







# **11. Radiated Spurious Emission**

### 11.1 Measurement Limit

• FCC Part 15.209 Limit in the below table 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

Note: All modes were tested for restricted band radiated emission, the test records reported below are the worst result compared to other modes.

#### **11.2 Measurement Procedure**

- 1. The EUT was placed on the top of the turntable 0.8 or 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 3 meters far away from the turntable.
- 2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
- 3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
- 4. For each suspected emission, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
- 5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
- 6. For emissions above 1GHz, use 1MHz RBW and 3MHz VBW for peak reading. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response. The measurement antenna may have to be higher or lower than the EUT, depending on the radiation pattern of the emission and staying aimed at the emission source for receiving the maximum signal. The final measurement antenna elevation shall be that which maximizes the emissions. The measurement antenna elevation for maximum emissions shall be restricted to a range of heights of from 1 m to 4 m above the ground or reference ground plane.
- 7. When the radiated emissions limits are expressed in terms of the average value of the emissions, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds.



- 8. As an alternative (provided the transmitter operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum values.
- 9. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
- 10. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
- 11. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High Low scan is not required in this case.

Spectrum ParameterSettingStart ~Stop Frequency9kHz~150kHz/RB 200Hz for QPStart ~Stop Frequency150kHz~30MHz/RB 9kHz for QPStart ~Stop Frequency30MHz~1000MHz/RB 120kHz for QPStart ~Stop Frequency1GHz~26.5GHzStart ~Stop Frequency1MHz/3MHz for Peak, 1MHz/3MHz for Average

The following table is the setting of spectrum analyzer and receiver.

Receiver Parameter	Setting
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



### Quasi-Peak Measurements below 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = as shown in the table above
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

### • Peak Measurements above 1GHz

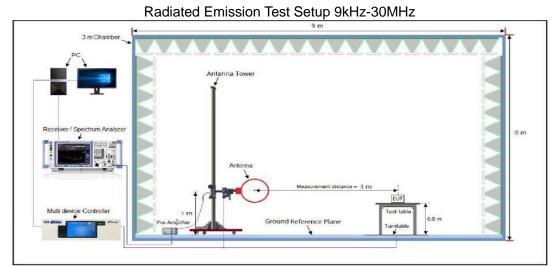
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

### <u>Average Measurements above 1GHz</u>

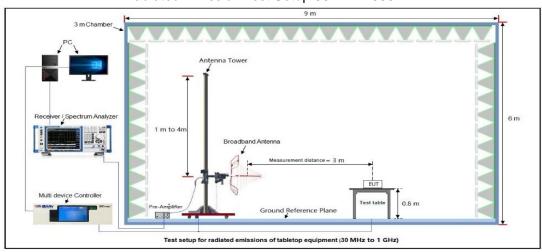
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3.  $VBW \ge [3 \times RBW]$
- 4. Detector = Power averaging (rms)
- 5. Averaging type = power (i.e., rms)
- 6. Sweep time = auto
- 7. Perform a trace average of at least 100 traces.
- 8. The applicable correction factor is [10\*log (1 / D)], where D is the duty cycle. The factor had been edited in the "Input Correction" of the Spectrum Analyzer.



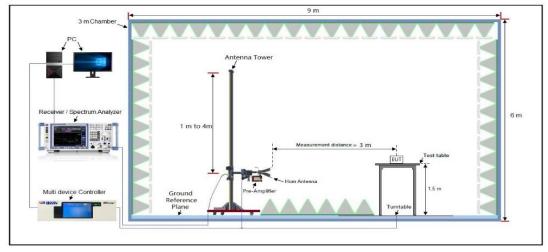
### 11.3 Measurement Setup (Block Diagram of Configuration)



Radiated Emission Test Setup 30MHz-1000MHz



#### Radiated Emission Test Setup Above 1000MHz





### **11.4 Measurement Result**

### Radiated Emission Below 30MHz

The amplitude of spurious emissions from 9kHz to 30MHz which are attenuated more than 20 dB below the permissible value need not be reported.

				Rad	liated E	Emiss	ion Test Re	sults	at 301	MHz-	1GH	z					
EUT N	lame	True	Wirele	ss St	ereo Ea	arpho	ne	Ν	lodel	Nam	ne		I	FoK	lus Ar	nadeus	6
Tempe	erature	21.2	°C					F	Relative Humidity 65			65.6	8 %				
Press	ure	960	nPa					Т	est V	Voltage DC 3.6V			3.6V	by batt	ery		
Test N	lode	Mod	e 6					A	Anten	na Po	olari	ty	ł	Hori	zonta	al	
	72.0	dBuV/m															
	32					, un your state.	man shared the start of the sta		MUNUM Munu	and and	*	4					
	-8	)0 4	0 50	60	70 80		(MHz)		300	4	100	500	600	700	1000.	000	
Final D	Data List																
NO.	Freq [MHz		Lev (dBµ\			ctor IB]	Limit [dBµV/m]	N	largin [dB]	1		eight cm]			ngle [°]	Pc	olarity
1	45.855	53	19. <sup>-</sup>	10	13	.42	40.00		20.9		1	00		1	40	Hor	izontal
2	111.34	68	21.8	88	16	.31	43.50	2	21.62		1	00		1	60	Hor	izontal
3	443.29	43	29.0	68	24	.98	46.00		16.32		1	00		ξ	30	Hor	izontal
4	545.18	26	31.3	38	23	.98	46.00		14.62		1	00		2	30	Hor	izontal
5	614.21	42	30.4	46	25	.17	46.00		15.54		1	00		1	70	Hor	izontal
6	900.14	74	36.8	82	31	.78	46.00		9.18		1	00		1	30	Hor	izontal



		Radia	ated Emiss	ion Test Res	ults at 30MH	z-1GHz			
EUT Name	Tru	e Wireless Ste	reo Earphoi	ne	Model Na	me	FoKus Am	adeus	
Temperature	21.	<b>2</b> °C			Relative I	Relative Humidity		65.6 %	
Pressure	960	hPa			Test Volta	age	DC 3.6V by battery		
Test Mode	Мо	de 6			Antenna	Polarity	Vertical		
72.0	dBuV/r	n							
							Limit: <u>—</u> Margin: —		
							F		
					J		6		
32					Mary Marker Jones Port	A 2	purpor Andrawd Prov		
	1 X	and when her have a second and a		3	Ineres both	and the standard of			
-8									
30	.000	40 50 60 70	80	(MHz)	300	400 500 600	0 700 1000.00	00	
Final Data Lis	t								
NO. Fre		Level [dBµV/m]	Factor [dB]	Limit [dBµV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	
1 32.7	486	23.23	14.48	40.00	16.77	100	130	Vertical	
2 44.9	006	22.59	16.87	40.00	17.41	100	180	Vertical	
2 44.9 3 200.6		22.59 23.22	16.87 17.85	40.00 43.50	17.41 20.28	100 100	180 80	Vertical Vertical	
	881								
3 200.6	881 943	23.22	17.85	43.50	20.28	100	80	Vertical	
3 200.6 4 443.2	8881 943 8212	23.22 31.02	17.85 25.95	43.50 46.00	20.28 14.98	100 100	80 210	Vertical Vertical	

# **RESULT: PASS**

**Note:** 1. Factor=Antenna Factor + Cable loss, Margin=Measurement-Limit.

2. All test modes had been pre-tested. The mode 6 is the worst case and recorded in the report.



EUT Name	True Wirel	ess Stereo Ea	rphone <b>Mo</b>	lel Name	FoKus Amadeus		
Temperature	<b>21.2</b> ℃		Rela	ative Humidity	65.6 %		
Pressure	960hPa		Tes	t Voltage	DC 3.6V b	y battery	
Test Mode	Mode 1		Ant	enna Polarity	Horizontal		
Frequency	Meter Reading	Factor	Emission Leve	el Limits	Margin	Value Type	
(MHz)	(dBµV)	(dB)	(dBµV/m)	(dBµV/m)	(dB)		
4804.000	46.70	0.08	46.78	74	-27.22	peak	
4804.000	37.02	0.08	37.10	54	-16.90	AVG	
7206.000	41.42	2.21	43.63	74	-30.37	peak	
7206.000	32.31	2.21	34.52	54	-19.48	AVG	
Remark:							
	nna Factor + Cab	e Loss – Pre-	amplifier.				
Factor = Anter		le Loss – Pre- ess Stereo Ea		lel Name	FoKus Am	adeus	
Factor = Anter EUT Name			rphone Mod	lel Name ative Humidity	FoKus Am 65.6 %	adeus	
Factor = Anter EUT Name Temperature	True Wirel		rphone Moo Rela				
Factor = Anter EUT Name Temperature Pressure	True Wirel 21.2°C		rphone Moo Rela Tes	ative Humidity	65.6 %		
Factor = Anter EUT Name Temperature Pressure	True Wirel 21.2°C 960hPa		rphone Moo Rela Tes	ative Humidity t Voltage enna Polarity	65.6 % DC 3.6V b	by battery	
Factor = Anter EUT Name Temperature Pressure Test Mode	True Wirel 21.2℃ 960hPa Mode 1	ess Stereo Ea	rphone Moo Rela Tes Ant	ative Humidity t Voltage enna Polarity	65.6 % DC 3.6V b Vertical	by battery	
Factor = Anter EUT Name Temperature Pressure Test Mode	True Wirel 21.2°C 960hPa Mode 1 Meter Reading	ess Stereo Ea Factor	rphone Moo Rela Tes Ant Emission Leve	ative Humidity t Voltage enna Polarity	65.6 % DC 3.6V b Vertical	by battery	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz)	True Wirel 21.2℃ 960hPa Mode 1 Meter Reading (dBµV)	ess Stereo Ea Factor (dB)	rphone Moo Rela Tes Ant Emission Leve (dBµV/m)	ative Humidity t Voltage enna Polarity el Limits (dBµV/m)	65.6 % DC 3.6V b Vertical Margin (dB)	y battery Value Type	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4804.000	True Wirel           21.2℃           960hPa           Mode 1           Meter Reading           (dBµV)           46.69	ess Stereo Ea Factor (dB) 0.08	rphone Moo Rela Tes Ant Emission Leve (dBµV/m) 46.77	ative Humidity t Voltage enna Polarity el Limits (dBµV/m) 74	65.6 % DC 3.6V b Vertical Margin (dB) -27.23	vy battery Value Type peak	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4804.000 4804.000	True Wirel           21.2°C           960hPa           Mode 1           Meter Reading           (dBµV)           46.69           37.60	Ess Stereo Ea Factor (dB) 0.08 0.08	rphone Moo Rela Tes Ante Emission Leve (dBµV/m) 46.77 37.68	etive Humidity t Voltage enna Polarity el Limits (dBµV/m) 74 54	65.6 % DC 3.6V b Vertical Margin (dB) -27.23 -16.32	vy battery Value Type peak AVG	

### **RESULT: PASS**



EUT Name		1					FoKus Amadeus		
Temperature		<b>21.2℃</b>			Relativ	e Humidity	65.6 %		
Pressure		960hPa			Test Vo	oltage	DC 3.6V b	y battery	
Test Mode	Mode 2				Anteni	na Polarity	Horizontal		
Frequency	Mete	er Reading	Factor Emission		n Level	Limits	Margin	Value Type	
(MHz)	(	(dBµV)	(dB)	(dB) (dBµ\		(dBµV/m)	(dB)	value Type	
4880.000		46.08	0.08	46.1	16	74	-27.84	peak	
4880.000		37.56	0.08	37.6	64	54	-16.36	AVG	
7320.000		41.47	2.21	43.6	68	74	-30.32	peak	
7320.000		32.67	2.21	34.8	88	54	-19.12	AVG	
Remark:									
Remark: Factor = Anter	nna Fa	ctor + Cabl	e Loss – Pre-	amplifier.					
	nna Fa	ctor + Cabl	e Loss – Pre-	amplifier.					
	nna Fa		e Loss – Pre- ess Stereo Ea		Model	Name	FoKus Am	adeus	
Factor = Anter	nna Fa					Name ve Humidity	FoKus Am	adeus	
Factor = Anter EUT Name	nna Fa	True Wirele				e Humidity			
Factor = Anter EUT Name Temperature	nna Fa	True Wirele			Relativ Test Ve	e Humidity	65.6 %		
Factor = Anter EUT Name Temperature Pressure Test Mode		True Wirele 21.2°C 960hPa Mode 2			Relativ Test Vo Anteni	ve Humidity oltage	65.6 % DC 3.6V b Vertical	y battery	
Factor = Anter EUT Name Temperature Pressure	Mete	True Wirele 21.2°C 960hPa Mode 2	ess Stereo Ea	phone Emissio	Relativ Test Vo Antenn	ve Humidity oltage na Polarity Limits	65.6 % DC 3.6V b		
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz)	Mete	True Wirele 21.2°C 960hPa Mode 2	ess Stereo Ea Factor (dB)	Phone Emissio	Relativ Test Vo Antenn n Level	ve Humidity oltage na Polarity	65.6 % DC 3.6V b Vertical Margin (dB)	y battery	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4880.000	Mete	True Wirele 21.2℃ 960hPa Mode 2 er Reading (dBµV) 46.46	Factor (dB) 0.08	Emissio (dBµ\ 46.5	Relativ Test Vo Antenn n Level V/m) 54	ve Humidity oltage na Polarity Limits (dBµV/m)	65.6 % DC 3.6V b Vertical Margin (dB) -27.46	y battery Value Type	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz)	Mete	True Wirele 21.2°C 960hPa Mode 2 er Reading (dBµV)	ess Stereo Ea Factor (dB)	Phone Emissio	Relativ Test Vo Anteni n Level V/m) 54 32	ve Humidity oltage na Polarity Limits (dBµV/m) 74	65.6 % DC 3.6V b Vertical Margin (dB) -27.46 -16.68	y battery Value Type peak	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4880.000 4880.000	Mete	True Wirele 21.2℃ 960hPa Mode 2 er Reading (dBµV) 46.46 37.24	Factor (dB) 0.08 0.08	Emissio (dBµ) 46.3	Relativ Test Vo Antenn n Level V/m) 54 32 56	ve Humidity oltage na Polarity Limits (dBµV/m) 74 54	65.6 % DC 3.6V b Vertical Margin (dB) -27.46	y battery Value Type peak AVG	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4880.000 4880.000 7320.000	Mete	True Wirele 21.2°C 960hPa Mode 2 er Reading (dBμV) 46.46 37.24 41.35	Factor (dB) 0.08 0.08 2.21	Emissio (dBµ\ 46.5 37.5 43.5	Relativ Test Vo Antenn n Level V/m) 54 32 56	ve Humidity oltage na Polarity Limits (dBµV/m) 74 54 74	65.6 % DC 3.6V b Vertical Margin (dB) -27.46 -16.68 -30.44	y battery Value Type peak AVG peak	
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4880.000 4880.000 7320.000	Mete	True Wirele 21.2°C 960hPa Mode 2 er Reading (dBμV) 46.46 37.24 41.35	Factor (dB) 0.08 0.08 2.21	Emissio (dBµ\ 46.5 37.5 43.5	Relativ Test Vo Antenn n Level V/m) 54 32 56	ve Humidity oltage na Polarity Limits (dBµV/m) 74 54 74	65.6 % DC 3.6V b Vertical Margin (dB) -27.46 -16.68 -30.44	y battery Value Type peak AVG peak	

## **RESULT: Pass**



EUT Name		True Wirele	ess Stereo Earp	phone	Model I	Name	FoKus Amadeus	
Temperature		<b>21.2</b> ℃			Relative	e Humidity	65.6 %	
Pressure		960hPa	DhPa Test Voltage DC 3.6V by batt					
Test Mode	Mode Mode 3				Antenn	a Polarity	Horizontal	
		I						
Frequency	Met	er Reading Factor Emissio		Emission Level Limits		Limits	Margin	Value Type
(MHz)		(dBµV)	(dB) (dBµ		µV/m)	(dBµV/m)	(dB)	value Type
4960.000		46.88	0.08	46	6.96	74	-27.04	peak
4960.000		37.59	0.08	37	7.67	54	-16.33	AVG
7440.000		41.77	2.21	43	3.98	74	-30.02	peak
7440.000		32.24	2.21	34	1.45	54	-19.55	AVG
Remark:								
	nna Fa	actor + Cabl	e Loss – Pre-a	amplifier.				
	nna Fa					•	E.K. A.	
Factor = Anter	nna Fa		le Loss – Pre-a ess Stereo Earp		Model I	Name	FoKus Ama	deus
Factor = Anter EUT Name	nna Fa				Model I	Name e Humidity	FoKus Ama	deus
Factor = Anter EUT Name Temperature	nna Fa	True Wirele			Model I	e Humidity		
	nna Fa	True Wirele			Model I Relative Test Vo	e Humidity	65.6 %	
Factor = Anter EUT Name Femperature Pressure Fest Mode		True Wirele 21.2°C 960hPa Mode 3	ess Stereo Earp	phone	Model I Relative Test Vo Antenn	e Humidity Itage a Polarity	65.6 % DC 3.6V by Vertical	battery
Factor = Anter EUT Name Femperature Pressure Fest Mode		True Wirele 21.2°C 960hPa Mode 3 ter Reading		Dhone	Model I Relative Test Vo Antenn	e Humidity Itage a Polarity Limits	65.6 % DC 3.6V by Vertical Margin	battery
Factor = Anter EUT Name Femperature Pressure Fest Mode Frequency (MHz)		True Wirele 21.2℃ 960hPa Mode 3 ter Reading (dBµV)	ess Stereo Earp Factor (dB)	bhone Emissi	Model I Relative Test Vo Antenn	e Humidity Itage a Polarity	65.6 % DC 3.6V by Vertical Margin (dB)	battery Value Type
Factor = Anter EUT Name Femperature Pressure Fest Mode Frequency (MHz) 4960.000		True Wirele 21.2°C 960hPa Mode 3 ter Reading (dBµV) 46.73	Ess Stereo Earp Factor (dB) 0.08	bhone Emissi (dBj 46	Model I Relative Test Vo Antenn	e Humidity Itage a Polarity Limits (dBµV/m)	65.6 % DC 3.6V by Vertical Margin (dB) -27.19	battery
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz)		True Wirele 21.2℃ 960hPa Mode 3 ter Reading (dBµV)	Factor (dB) 0.08 0.08	Emissi (dB) 46	Model I Relative Test Vo Antenn	e Humidity Itage a Polarity Limits (dBµV/m) 74	65.6 % DC 3.6V by Vertical Margin (dB)	battery Value Type peak
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4960.000 4960.000		True Wirele 21.2 ℃ 960hPa Mode 3 ter Reading (dBµV) 46.73 37.92	Ess Stereo Earp Factor (dB) 0.08	Emissi (dB) 46 38 43	Model I Relative Test Vo Antenn	e Humidity Itage a Polarity Limits (dBµV/m) 74 54	65.6 % DC 3.6V by Vertical Margin (dB) -27.19 -16.00	battery Value Type peak AVG
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4960.000 4960.000 7440.000		True Wirele 21.2 °C 960hPa Mode 3 ter Reading (dBµV) 46.73 37.92 41.75	Factor (dB) 0.08 0.08 2.21	Emissi (dB) 46 38 43	Model I Relative Test Vo Antenn ion Level µV/m) 5.81 3.00 3.96	e Humidity Itage a Polarity Limits (dBµV/m) 74 54 74	65.6 % DC 3.6V by Vertical Margin (dB) -27.19 -16.00 -30.04	Value Type Peak AVG peak
Factor = Anter EUT Name Temperature Pressure Test Mode Frequency (MHz) 4960.000 4960.000 7440.000		True Wirele 21.2 °C 960hPa Mode 3 ter Reading (dBµV) 46.73 37.92 41.75	Factor (dB) 0.08 0.08 2.21	Emissi (dB) 46 38 43	Model I Relative Test Vo Antenn ion Level µV/m) 5.81 3.00 3.96	e Humidity Itage a Polarity Limits (dBµV/m) 74 54 74	65.6 % DC 3.6V by Vertical Margin (dB) -27.19 -16.00 -30.04	Value Type Peak AVG peak

### **RESULT: Pass**



EUT Name	True	e Wirele	ess Stereo Ea	rphone	Model	Name	FoKus Am	FoKus Amadeus	
Temperature	21.2	2°C			Relativ	ve Humidity	65.6 %		
Pressure	960	hPa			Test V	oltage	DC 3.6V b	y battery	
Test Mode	le 4			Anten	na Polarity	Horizontal			
Frequency	Meter Rea	ding	Factor Emission		n Level	Limits	Margin	Value Type	
(MHz)	(dBµ∖	)	(dB)			(dBµV/m)	(dB)		
4804.000	46.59	)	0.08	46.6	67	74	-27.33	peak	
4804.000	37.37	7	0.08	37.4	45	54	-16.55	AVG	
7206.000	41.22	2	2.21	43.4	43	74	-30.57	peak	
7206.000	32.15	5	2.21	34.3	36	54	-19.64	AVG	
Remark: Factor = Anter	nna Factor	+ Cabl	e Loss – Pre-	amplifier.					
EUT Name Tru									
EUT Name			ess Stereo Ea	rphone	Model	Name	FoKus Am	adeus	
EUT Name Temperature	True 21.2		ess Stereo Ea	rphone		Name ve Humidity	FoKus Am 65.6 %	adeus	
		2℃	ess Stereo Ea	rphone		ve Humidity			
Temperature	21.2	°℃ hPa	ess Stereo Ea	rphone	Relativ Test V	ve Humidity	65.6 %		
Temperature Pressure	21.2 960	ଅଅ hPa le 4	ess Stereo Ea	Emissio	Relativ Test V Anten	ve Humidity oltage	65.6 % DC 3.6V b	y battery	
Temperature Pressure Test Mode	21.2 9601 Mod	2°C hPa le 4			Relativ Test V Anten	ve Humidity oltage na Polarity	65.6 % DC 3.6V b Vertical	y battery	
Temperature Pressure Test Mode Frequency	21.2 960 Mod	2°C hPa le 4 ading	Factor	Emissio	Relativ Test V Anten n Level //m)	ve Humidity oltage na Polarity Limits	65.6 % DC 3.6V b Vertical Margin	y battery	
Temperature Pressure Test Mode Frequency (MHz)	21.2 960 Mod Meter Rea (dBµV	Pa hPa le 4 ding	Factor (dB)	Emissio	Relativ Test V Anten n Level //m)	ve Humidity oltage na Polarity Limits (dBµV/m)	65.6 % DC 3.6V b Vertical Margin (dB)	vy battery Value Type	
Temperature Pressure Test Mode Frequency (MHz) 4804.000	21.2 9601 Мос Меter Rea (dBµV 46.00	PC hPa le 4 hding hding	Factor (dB) 0.08	Emission (dBµ\ 46.0	Relativ Test V Anten n Level //m) 08 07	ve Humidity oltage na Polarity Limits (dBµV/m) 74	65.6 % DC 3.6V b Vertical Margin (dB) -27.92	vy battery Value Type peak	
Temperature Pressure Test Mode Frequency (MHz) 4804.000 4804.000	21.2 9600 Mod Meter Rea (dBµV 46.00 37.89	hPa hPa le 4 ding )	Factor (dB) 0.08 0.08	Emission (dBµ\ 46.( 37.5	Relativ Test V Anten n Level //m) 08 07 38	ve Humidity oltage na Polarity Limits (dBµV/m) 74 54	65.6 % DC 3.6V b Vertical Margin (dB) -27.92 -16.03	vy battery Value Type peak AVG	

## **RESULT: Pass**



2°C 0hPa ode 5 eading iV) 18 46 56 52 r + Cable	Factor (dB) 0.08 0.08 2.21 2.21 2.21 e Loss – Pre-	Emissior (dBµV 46.2 37.5 43.8 35.1 amplifier.	Test V Anten	ve Humidity foltage na Polarity Limits (dBµV/m) 74 54 74 54	65.6 % DC 3.6V b Horizontal Margin (dB) -27.74 -16.46 -30.13 -18.87			
ode 5 eading IV) I8 46 56 52	(dB) 0.08 0.08 2.21 2.21	(dBµV 46.2 37.5 43.8 35.1	Anten	Limits (dBµV/m) 74 54 74	Horizontal Margin (dB) -27.74 -16.46 -30.13	Value Type peak AVG peak		
eading IV) I8 46 56 52	(dB) 0.08 0.08 2.21 2.21	(dBµV 46.2 37.5 43.8 35.1	n Level //m) 26 54 37	Limits (dBµV/m) 74 54 74	Margin (dB) -27.74 -16.46 -30.13	Value Type peak AVG peak		
IV) 18 46 56 92	(dB) 0.08 0.08 2.21 2.21	(dBµV 46.2 37.5 43.8 35.1	//m) 26 54 37	(dBµV/m) 74 54 74	(dB) -27.74 -16.46 -30.13	peak AVG peak		
IV) 18 46 56 92	(dB) 0.08 0.08 2.21 2.21	(dBµV 46.2 37.5 43.8 35.1	//m) 26 54 37	(dBµV/m) 74 54 74	(dB) -27.74 -16.46 -30.13	peak AVG peak		
18 46 56 92	0.08 0.08 2.21 2.21	46.2 37.5 43.8 35.1	26 54 37	74 54 74	-27.74 -16.46 -30.13	peak AVG peak		
46 66 92	0.08 2.21 2.21	37.5 43.8 35.1	54 37	54 74	-16.46 -30.13	AVG peak		
66 92	2.21 2.21	43.8 35.1	37	74	-30.13	peak		
92	2.21	35.1				· · · · · · · · · · · · · · · · · · ·		
			3	54	-18.87	AVG		
r + Cabl	e Loss – Pre-	amplifier.						
ıe Wirel∉ .2℃	ess Stereo Ea	rphone		Name	FoKus Amadeus			
0hPa			Relative Humidity Test Voltage			DC 3.6V by battery		
de 5				na Polarity	Vertical	, ,		
eading	Factor	Emissio		Limits	Margin	Value Type		
ıV)	(dB)	(dBµ\	,	(dBµV/m)	(dB)	· · · ·		
65	0.08	46.7	-	74	-27.27	peak		
41	0.08	37.4		54	-16.51	AVG		
12		-				peak		
00	2.21	34.2	21	54	-19.79	AVG		
12	2	2 2.21 ) 2.21	2 2.21 43.	2 2.21 43.63 2.21 34.21	2         2.21         43.63         74           0         2.21         34.21         54	2         2.21         43.63         74         -30.37           0         2.21         34.21         54         -19.79		

### **RESULT: Pass**



		True Wirele	Wireless Stereo Earphone         Model Name			Name	FoKus Amadeus		
<b>Femperature</b>		<b>21.2</b> ℃			Relativ	e Humidity	65.6 %		
Pressure		960hPa			Test Vo	oltage	DC 3.6V by	battery	
Test Mode		Mode 6			Antenn	na Polarity	Horizontal		
Frequency	Mete			er Reading Factor Emission Level Limits		Limits	Margin	Value Type	
(MHz)	(	(dBµV) (dB) (dBµ\		ıV/m)	(dBµV/m)	(dB)	value Type		
4960.000		46.69	0.08	46	.77	74	-27.23	peak	
4960.000		37.21	0.08	37	.29	54	-16.71	AVG	
7440.000		41.84	2.21	2.21 44.0		74	-29.95	peak	
7440.000	<u> </u>	32.92			.13	54	-18.87	AVG	
EUT Name Gemperature		True Wirele 21.2℃	ss Stereo Ear	ereo Earphone Model Name Relative Humidity			FoKus Amadeus 65.6 %		
Pressure		960hPa			Test Voltage		DC 3.6V by battery		
est Mode		Mode 6			Antenna Polarity		Vertical		
Test Mode					Antoni	ia Folanty	ventical		
			Factor	Emissi	on Level	Limits			
Frequency (MHz)	Mete	er Reading (dBµV)	Factor (dB)				Margin (dB)	– Value Type	
Frequency	Mete	er Reading		(dBj	on Level	Limits	Margin	– Value Type	
Frequency (MHz)	Mete	er Reading (dBµV)	(dB)	(dB) 47	on Level uV/m)	Limits (dBµV/m)	Margin (dB)		
Frequency (MHz) 4960.000	Mete	er Reading (dBμV) 46.94	(dB) 0.08	(dB) 47 37	on Level uV/m) 7.02	Limits (dBµV/m) 74	Margin (dB) -26.98		
Frequency (MHz) 4960.000 4960.000		er Reading (dBµV) 46.94 37.05	(dB) 0.08 0.08	(dB) 47 37 43	on Level uV/m) 7.02 7.13	Limits (dBµV/m) 74 54	Margin (dB) -26.98 -16.87	peak AVG	

#### **RESULT: PASS**

Note:

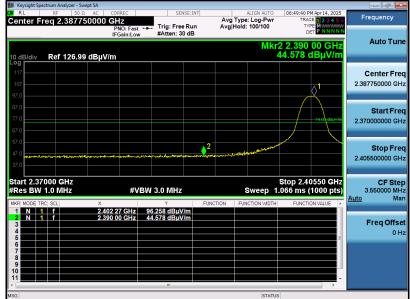
- 1. The amplitude of other spurious emissions from 1G to 25 GHz which are attenuated more than 20 dB below the permissible value need not be reported.
- 2. Factor = Antenna Factor + Cable loss Pre-amplifier gain, Margin = Emission Level-Limit.
- 3. The "Factor" value can be calculated automatically by software of measurement system.



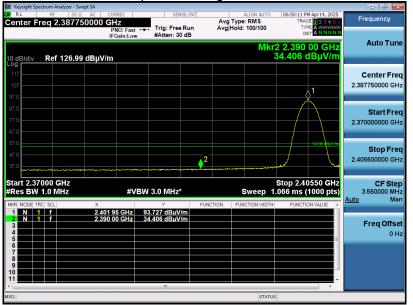
Band Edge Emission Test Results for Re	estricted Bands
--	-----------------

EUT Name	True Wireless Stereo Earphone	Model Name	FoKus Amadeus
Temperature	<b>25.1℃</b>	Relative Humidity	41%
Pressure	960hPa	Test Voltage	DC 3.6V by battery
Test Mode	Mode 1	Antenna Polarity	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement



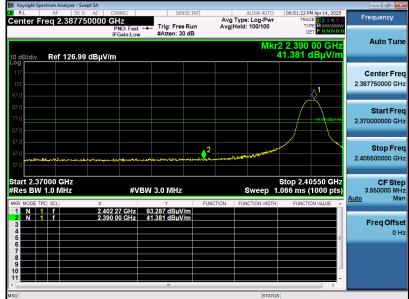
# **RESULT: PASS**



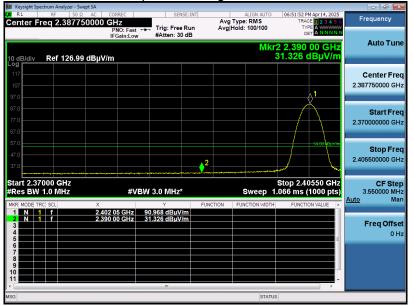
### Band Edge Emission Test Results for Restricted Bands

EUT Name	True Wireless Stereo Earphone	Model Name	FoKus Amadeus
Temperature	<b>25.1</b> ℃	Relative Humidity	41%
Pressure	960hPa	Test Voltage	DC 3.6V by battery
Test Mode	Mode 1	Antenna Polarity	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement



# **RESULT: PASS**

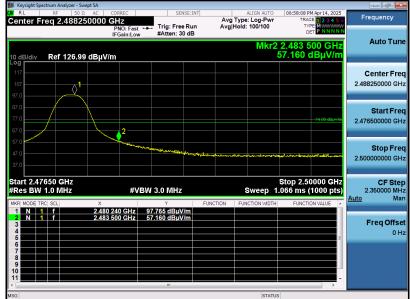


Frequency

### Band Edge Emission Test Results for Restricted Bands

EUT Name	True Wireless Stereo Earphone	Model Name	FoKus Amadeus
Temperature	<b>25.1</b> ℃	Relative Humidity	41%
Pressure	960hPa	Test Voltage	DC 3.6V by battery
Test Mode	Mode 3	Antenna Polarity	Horizontal

Test Graph for Peak Measurement

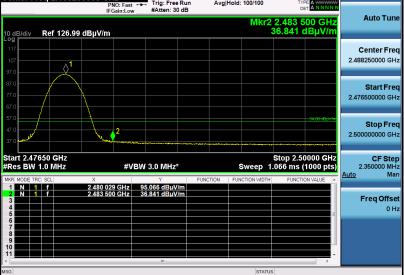


 Test Graph for Average Measurement

 Rk
 RF
 50 g
 AC
 CORREC
 SENSE:INT
 ALION AUTO
 06:58:39 PM Apr 14, 2025

 enter Freq 2:488250000 GHz
 Free Run
 Avg Type: RMS
 TARCE ID 2 4 5 C

 PNO: Frast
 Trig: Free Run
 Avg Type: RMS
 TARCE ID 2 4 5 C

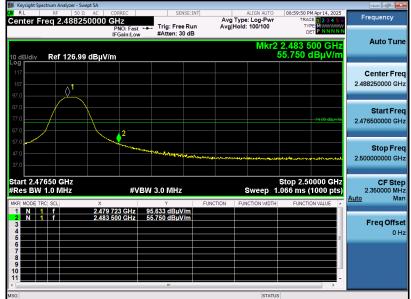


# **RESULT: PASS**



EUT Name	True Wireless Stereo Earphone	Model Name	FoKus Amadeus
Temperature	<b>25.1</b> ℃	Relative Humidity	41%
Pressure	960hPa	Test Voltage	DC 3.6V by battery
Test Mode	Mode 3	Antenna Polarity	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement



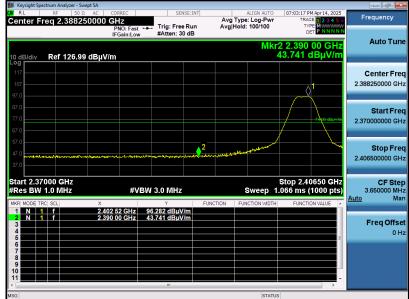
# **RESULT: PASS**



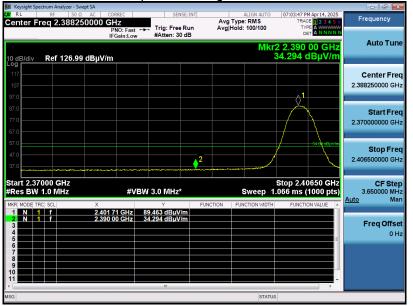
Band Edge Emission Test Results for Re	estricted Bands
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EUT Name	True Wireless Stereo Earphone	Model Name	FoKus Amadeus
Temperature	<b>25.1</b> ℃	Relative Humidity	41%
Pressure	960hPa	Test Voltage	DC 3.6V by battery
Test Mode	Mode 4	Antenna Polarity	Horizontal

Test Graph for Peak Measurement



Test Graph for Average Measurement



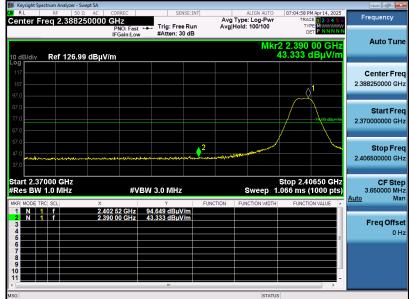
# **RESULT: PASS**



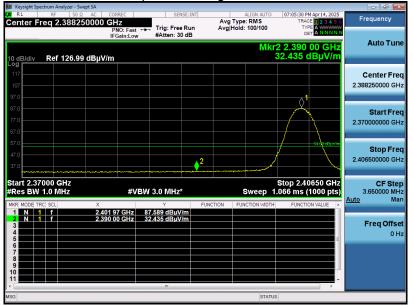
### Band Edge Emission Test Results for Restricted Bands

EUT Name	True Wireless Stereo Earphone	Model Name	FoKus Amadeus
Temperature	<b>25.1</b> ℃	Relative Humidity	41%
Pressure	960hPa	Test Voltage	DC 3.6V by battery
Test Mode	Mode 4	Antenna Polarity	Vertical

Test Graph for Peak Measurement



Test Graph for Average Measurement



# **RESULT: PASS**