

Antenna Test Report

Report No.: AGC13300220901PA01

PRODUCT DESIGNATION: Antenna

BRAND NAME : N/A

MODEL NAME: PRACXX01420 (Yoto Bluetooth Headphones)

APPLICANT : Yoto Limited

DATE OF ISSUE : Sep. 15, 2022

REPORT VERSION: V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd





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REPORT REVISE RECORD

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 15, 2022	Valid	Initial release

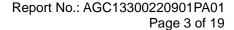
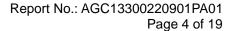




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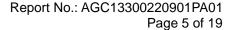
1. PRODUCT INFORMATON

General information			
Applicant	Yoto Limited		
Address	124 City Road, London, EC1V 2NX, UK		
Manufacturer	Shantou Yonglestyle Industrial Co., Ltd.		
Address	Gounan Industry Zone, Gurao Town, Chaoyang District, Shantou City, Guangdong, China		
Factory	Shantou Yonglestyle Industrial Co., Ltd.		
Address	Gounan Industry Zone, Gurao Town, Chaoyang District, Shantou City, Guangdong, China		
Product Designation	Antenna		
Brand Name	N/A		
Test Model	PRACXX01420 (Yoto Bluetooth Headphones)		
Date of test	Sep. 02, 2022 to Sep. 15, 2022		
Report Template	AGCRT-ER-PA/V1.0		
	Technical information		
Frequency Range	2400MHz-2500MHz		
Test Frequencies	2400MHz, 2410MHz, 2420MHz, 2430MHz, 2440MHz, 2450MHz, 2460MHz, 2470MHz, 2480MHz, 2490MHz, 2500MHz		
Antenna Type	PCB Antenna		
Dimensions	3mm*15mm		
Impedance	50 Ω		
Maximum test values	Gain: 2.594dBi; Efficiency: 37.890%; VSWR: 1.196:1		

The above equipment was tested by Attestation of Global Compliance (Shenzhen) Co., Ltd. The test results of this report relate only to the tested sample identified in this report.

Prepared By	Alan Duan	
	Alan Duan (Project Engineer)	Sep. 15, 2022
Reviewed By	Calin Liu	
	Calvin Liu (Reviewer)	Sep. 15, 2022
Approved By	Max Zhang	
	Max Zhang (Authorized Officer)	Sep. 15, 2022

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2. TEST FACILITY

Test Site	Attestation of Global Compliance (Shenzhen) Co., Ltd
Location	1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3. TEST EQUIPMENT LIST

Equipment	Manufacturer	Model	Cal. Date	Cal. Due
ANTENNA MEASUREMENT SYSTEM	ETS-Lindgren	AMS-8600	Nov. 26, 2021	Nov. 25, 2022
Network Analyzer	R&S	101443	Oct. 14, 2021	Oct. 15, 2022
Test Software	ETS-Lindgren	EMQuest (Ver V1.12)	N/A	N/A

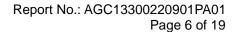
4. MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in measurement" (GUM) published by CISPR and ANSI.

- Uncertainty of VSWR, Uc = ±1.5dB
- Uncertainty of Gain, Uc = ±0.8dB

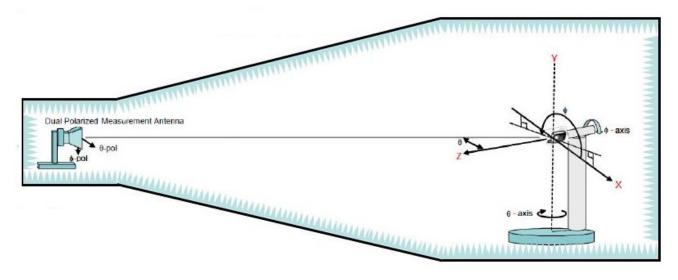
5. TEST SUMMARY LIST

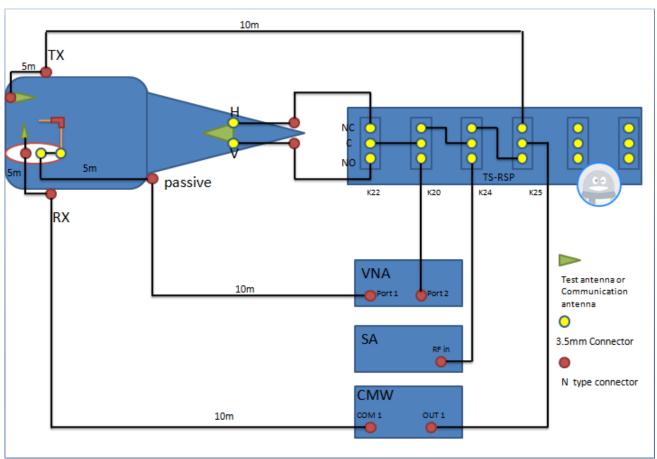
NO.	Test item	Remark
1	VSWR	
2	Gain and efficiency	
3	Radiation pattern	





6. TEST SETUP



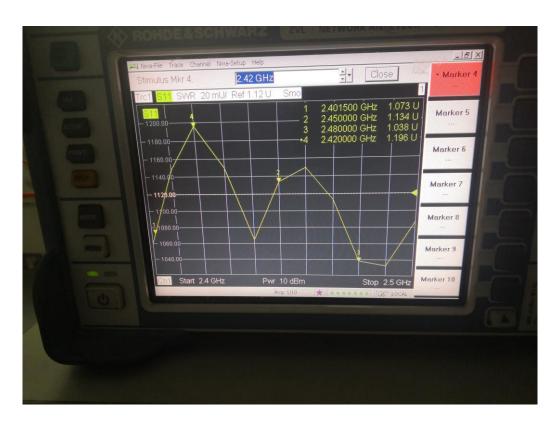


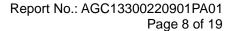


7. TEST RESULTS

7.1. **VSWR**

Frequency(MHz)	VSWR
2402	1.073:1
2420	1.196:1
2450	1.134:1
2480	1.038:1

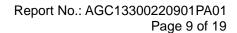






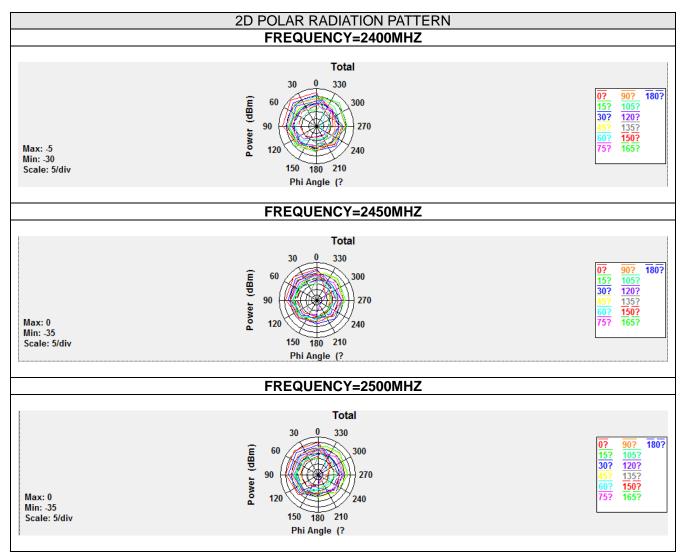
7.2. GAIN AND EFFICIENCY

Frequency(MHz)	Efficiency(dB)	Efficiency(%)	Gain(dBi)
2400	-4.432	36.039	0.389
2410	-3.022	36.858	0.697
2420	-2.345	37.275	1.510
2430	-1.341	37.427	1.839
2440	-0.198	37.524	2.010
2450	0.788	37.890	2.594
2460	1.579	37.857	2.586
2470	2.315	37.429	2.279
2480	3.148	37.468	2.277
2490	3.495	36.655	1.943
2500	3.356	36.584	1.206

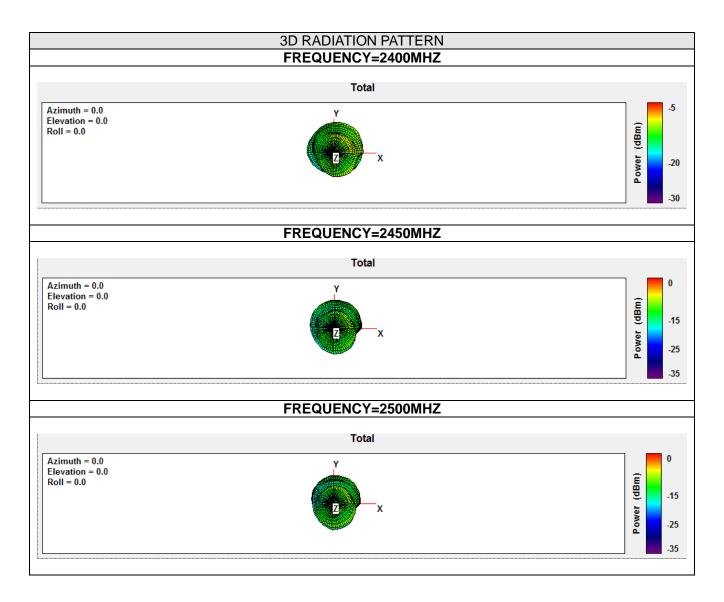


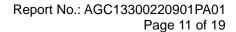


7.3. RADIATION PATTERN



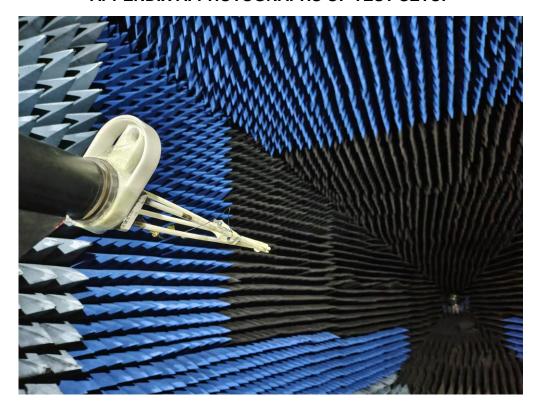


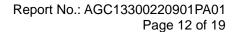






APPENDIX A: PHOTOGRAPHS OF TEST SETUP







APPENDIX B: PHOTOGRAPHS OF EUT

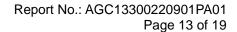
ALL VIEW OF EUT



TOP VIEW OF EUT



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BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



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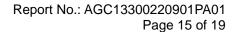
BACK VIEW OF EUT



LEFT VIEW OF EUT



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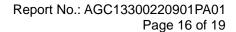
RIGHT VIEW OF EUT



PORT VIEW OF EUT



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OPEN VIEW OF EUT (FIGURE 1)

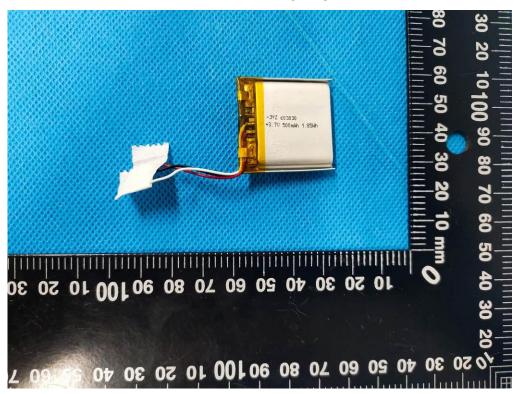


OPEN VIEW OF EUT (FIGURE 2)

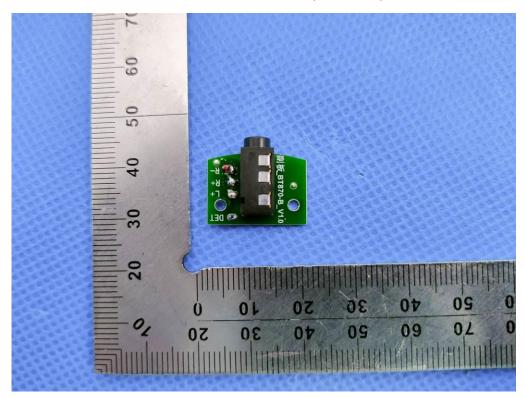




BATTERY VIEW OF EUT



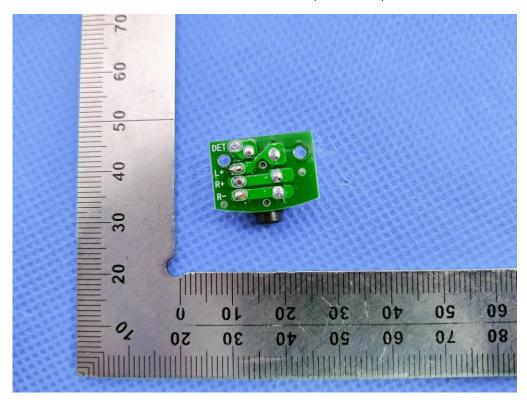
INTERNAL VIEW OF EUT (FIGURE 1)



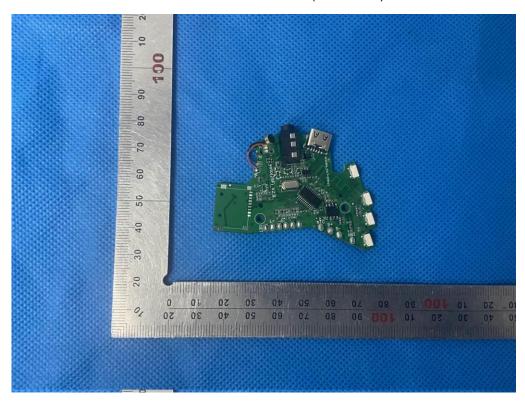
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INTERNAL VIEW OF EUT (FIGURE 2)

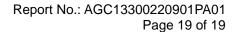


INTERNAL VIEW OF EUT (FIGURE 3)



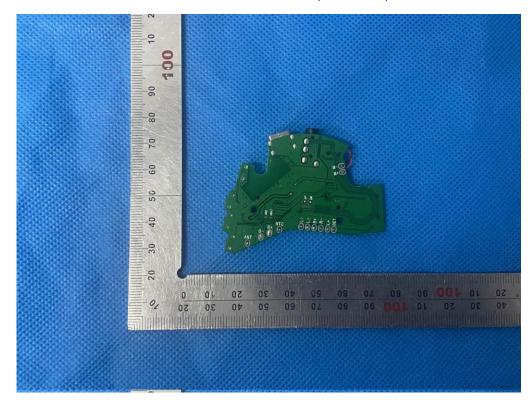
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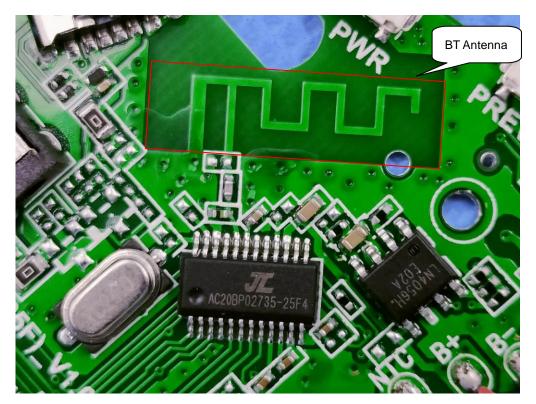




INTERNAL VIEW OF EUT (FIGURE 4)



ANTENNA CLOSE-UP PHOTO-1



----END OF REPORT----

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- 8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
- 9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.