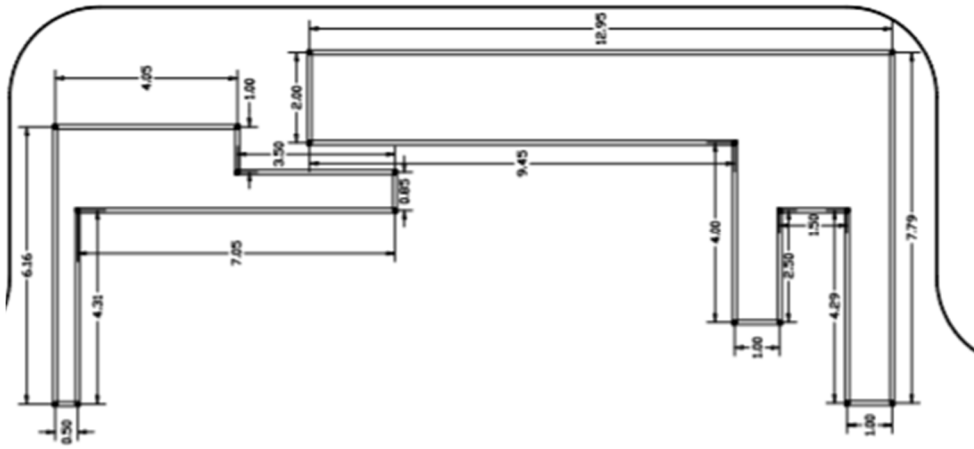


JBL TUNE770NC Antenna report

Applicant	Tonly Technology Co., Ltd.
Address	Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, 516006 China

Manufacturer or Supplier	Tonly Technology Co., Ltd.
Address	Section 37, Zhongkai High-tech Development Zone, Huizhou City, Guangdong Province, 516006 China
Product	Bluetooth headset
Brand Name	JBL
Model	TUNE770NC
Max. Peak Gain	3.38dBi
Date of tests	2022-12-10
Tested by chunlei zhao	Approved by Minding Lu
	

一、 Antenna Size

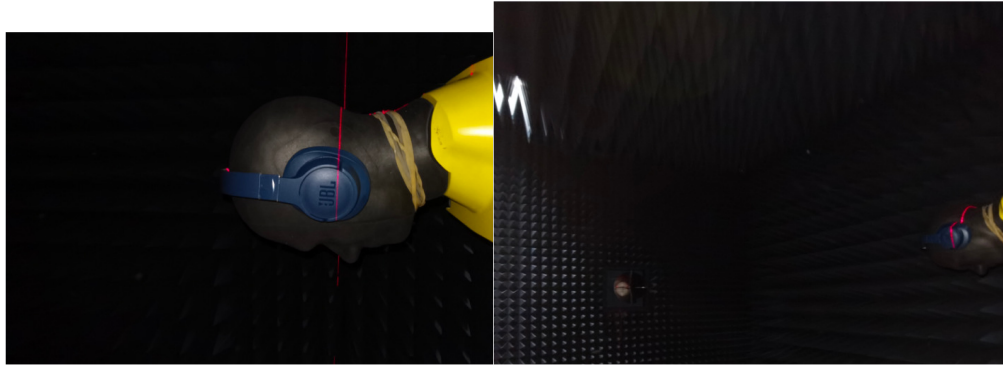


Unit: mm

二、 Antenna photo



三、 Test setup photo



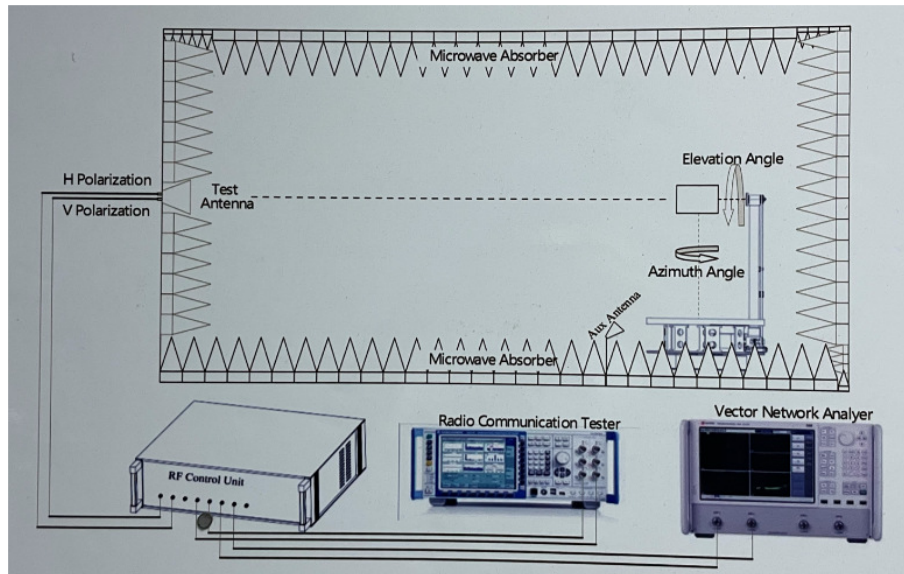
四、 Test standard

Name	Parameter	Method	Standard no.
Antenna performance	Radiation efficiency	IEEE Standard Test Procedures for Antennas	ANSI/IEEE Std 149-1979

五、 Equipment list

Equipment	Manufacturer	Model No	Serial No.	Last Cal.	Due Date
Network Analyzer	Agilent	E5071C	MY46630767	2022. 4. 28	2023. 4. 27
Microwave chamber	GTS	GTS Maxsign-Dart7000		2022. 4. 28	2023. 4. 27
Turn table	GTS	Dart-700 turn table		2022. 4. 28	2023. 4. 27
turn table controller	GTS	Dart-700 turn table controller		2022. 4. 28	2023. 4. 27
Broad-Band Horn Antenna	GTS	AT-6000	MA-D0460	2022. 4. 28	2023. 4. 27
Test Software	GTS	Libra Version-3.0.3.1		2022. 4. 28	2023. 4. 27

六、 Test configuration diagram



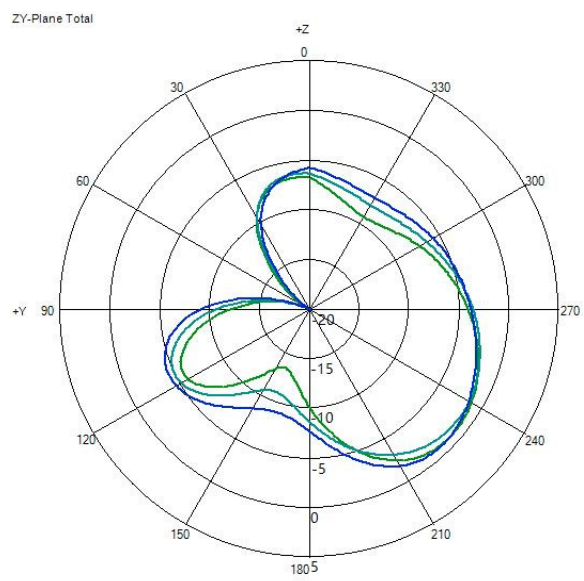
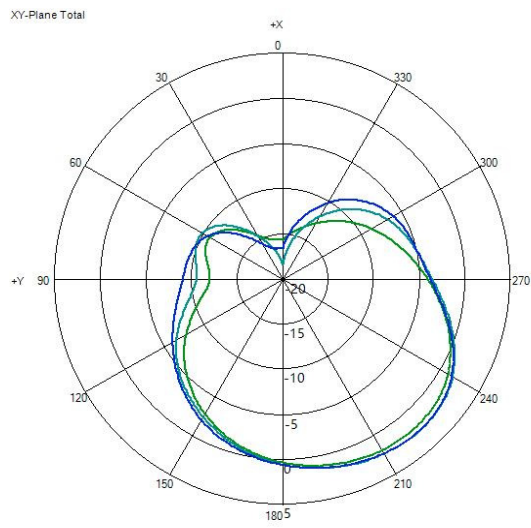
Test step flow:

- 1) Maintain the test ambient temperature of 23 ± 2 C, the instrument is powered on and preheated for more than 30 minutes;
- 2) Turn on the darkroom power supply, connect the test cable, and set up the sample according to the standard;
- 3) Outline sets the test content objectives and conducts calibration tests;
- 4) Run the software, when the test is completed, export the corresponding test diagram and test data, and save to the corresponding directory.

七、 Antenna gain

Freq (MHz)	Gain (dB)	Efficiency (dB)	Efficiency (%)
2400	3.262640781	-3.984449023	39.9535246
2410	3.256393727	-3.967332366	40.11130238
2420	3.255756335	-3.867390743	41.04506291
2430	3.263840116	-3.800472332	41.68240478
2440	3.349885045	-3.696984144	42.68758498
2450	3.375047994	-3.659843543	43.05421208
2460	3.377359362	-3.639551139	43.25585354
2470	3.33650695	-3.594794416	43.70393669
2480	3.059384217	-3.692511856	42.73156654
2490	2.764720689	-3.869759676	41.02268029
2500	2.482133564	-4.060362216	39.26121889

八、 Antenna test data



ZX-Plane Total

