

WALKMAN Antenna Test Report

Customer	优程
Project	WALKMAN
Antenna Revision	A1
Product Description	板载天线
Product No	V1.0
DATE	2024. 11. 14

Purpose

This report is to measure the performance of BT antenna for WALKMAN.
The antenna operating frequency at 2.4~2.5GHz, All test data are showed as below.

Content

1. Product Overview & Dimension
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2.Test System

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	CMW500 & CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C

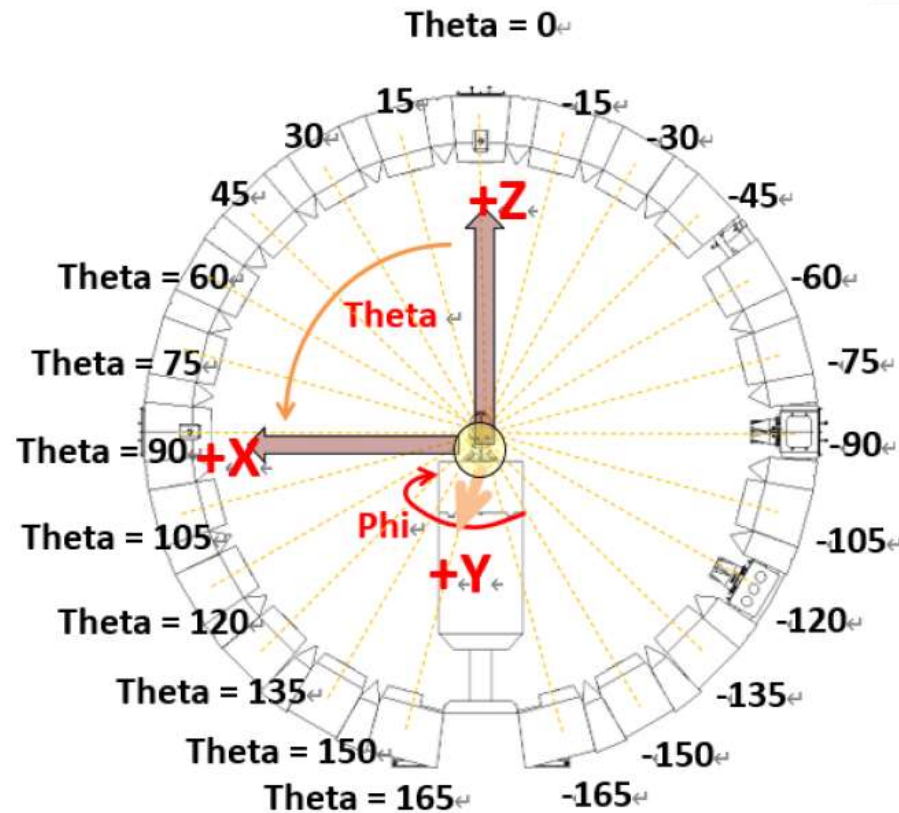


产品图片

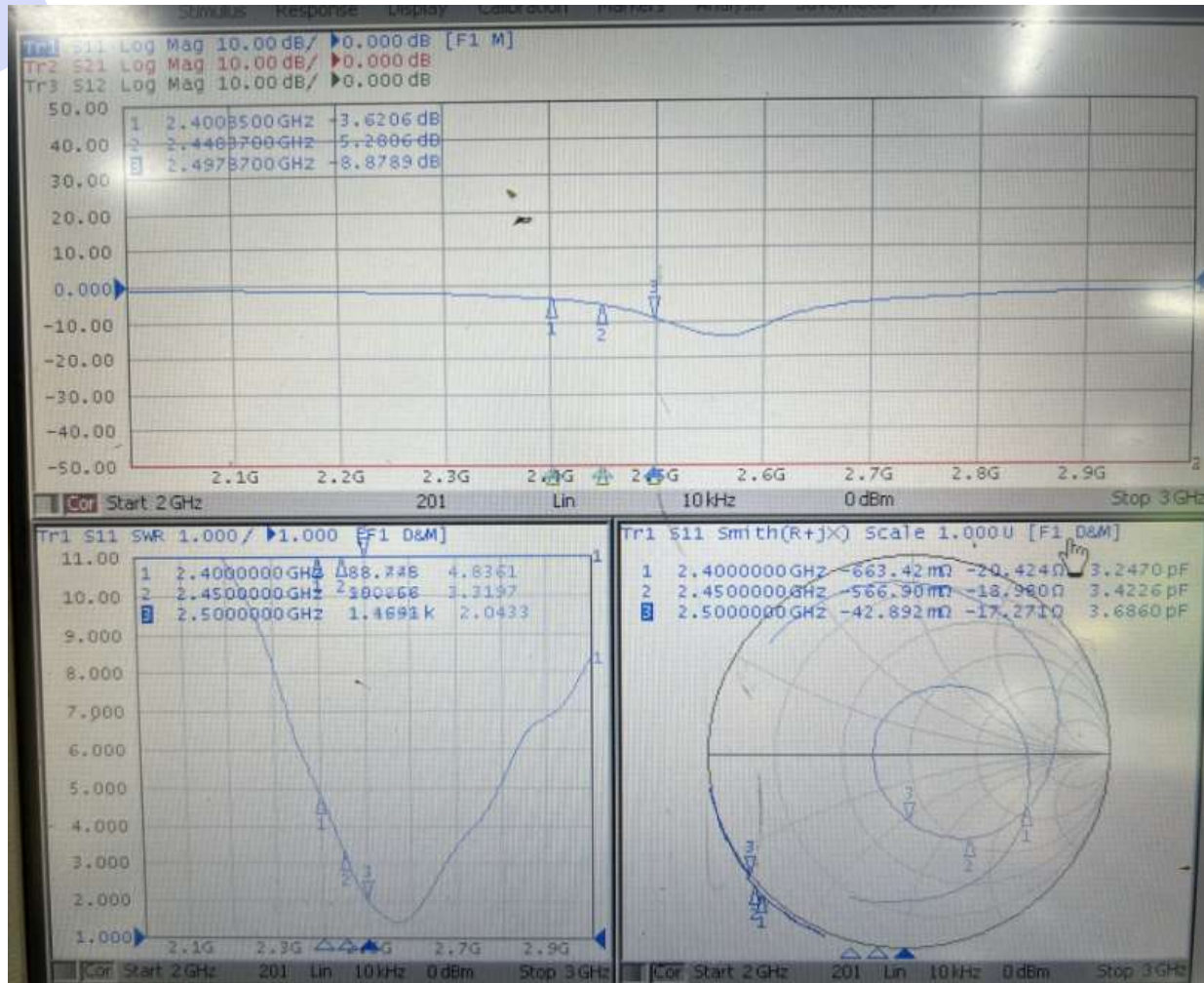


Test Result

Sample status & coordinates



无源S11—(BT ANT)-耳机



Test Result

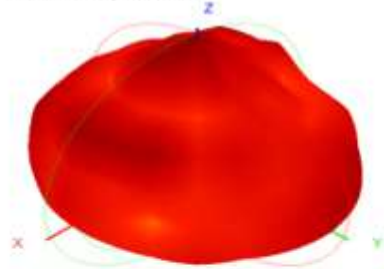
Gain & Efficiency——BT- ANT



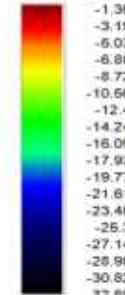
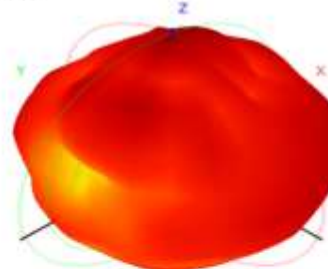
深圳市合拓科技有限公司

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-9.37	-9.00	-8.34	-7.59	-7.23	-7.08	-6.96	-7.21	-7.46	-7.79	-7.97
Gain (dBi)	-4.15	-4.42	-3.23	-2.14	-2.52	-1.73	-1.63	1.00	-1.84	-2.47	-2.93
Efficiency (%)	11.57	12.59	14.65	17.42	18.94	19.59	20.12	18.99	17.93	16.65	15.95
Directivity (dB)	5.22	4.58	5.11	5.45	4.70	5.35	5.33	5.36	5.63	5.31	5.04
Peak Gain Position (Theta)	30.00	90.00	75.00	90.00	0.00	0.00	0.00	0.00	15.00	15.00	75.00
Peak Gain Position (Phi)	120.00	105.00	120.00	105.00	165.00	15.00	120.00	135.00	120.00	120.00	135.00
Efficiency ThetaPol (%)	4.34	4.60	5.39	6.53	7.70	8.73	9.32	8.31	7.87	7.06	6.23
Efficiency PhiPol (%)	7.23	7.99	9.26	10.89	11.23	10.86	10.81	10.68	10.06	9.58	9.72
Upper Hem. Efficiency (%)	7.05	7.66	9.08	11.09	12.14	12.55	12.90	11.85	11.18	10.19	9.65
Lower Hem. Efficiency (%)	4.52	4.94	5.56	6.33	6.80	7.05	7.22	7.15	6.74	6.46	6.30

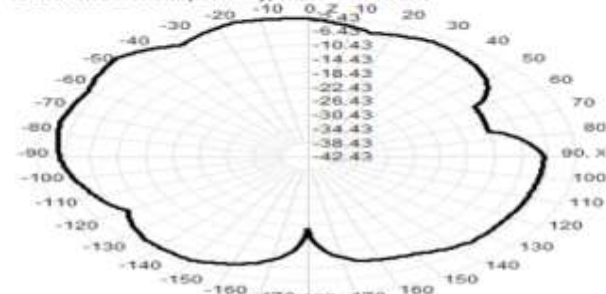
2450.0MHz H+V, Eff: 22.8%



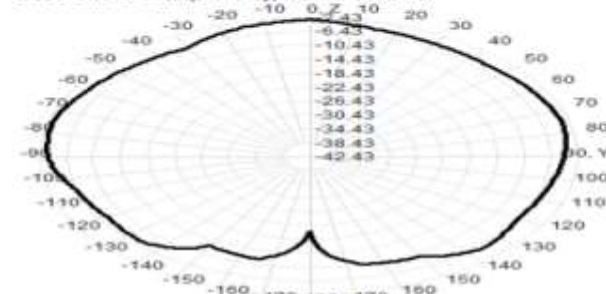
Back View



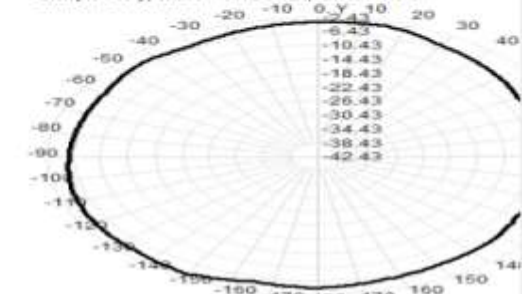
2450.0MHz Total(E1-XZ), Max=-2.43dBi



2450.0MHz Total(E2-YZ), Max=-3.08dBi



Total(H+XY), Max=-3.50dBi, CirD=4.74



OTA DATA

FS 自由空间		
BT Test		
CH	TRP	TIS
0	-0.75	-83.56
39	1.35	-83.87
78	1.77	-84.12

Thanks for your comment!

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