Source Control Drawing

Part Description:	Bluetooth TWS headset
客 户 料 号：	
客户规格描述：	
iTD Part Number:	iS.00196
iTD Software version	
iTD Hardware version	XHY-R1330-R-V2.0

Customer Approval

(Please return this copy as a certification of your approval)

Approved by:	
Approval Date:	
Company Seal:	

iTD Contact Information:

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Number	Effective date	Change record
V2.0	2024-10-12	Initial release

编制	工程	审核

一、The basic parameters：

A. Electrical Characteristics	
Frequency	**2400MHZ~2500MHZ**
VSWR	**< 2.0**
Avg Efficiency	**>5%**
Impedance	**50 ± 25 Ohm**
Polarization	**Linear**
Peak Gain	**2.4G:-3.5dBi**
B. Material & Mechanical Characteristics	
Material of Radiator	**FPC black**
Cable Type	/
Connector Type	/
Dimension	/
C. Environmental	
Operation Temperature	**- 20 ˚C ~ + 60 ˚C**
Storage Temperature	**- 30 ˚C ~ + 70 ˚C**

二、 Electrical Specification :

Those specifications were specially defined for R1330-R model.

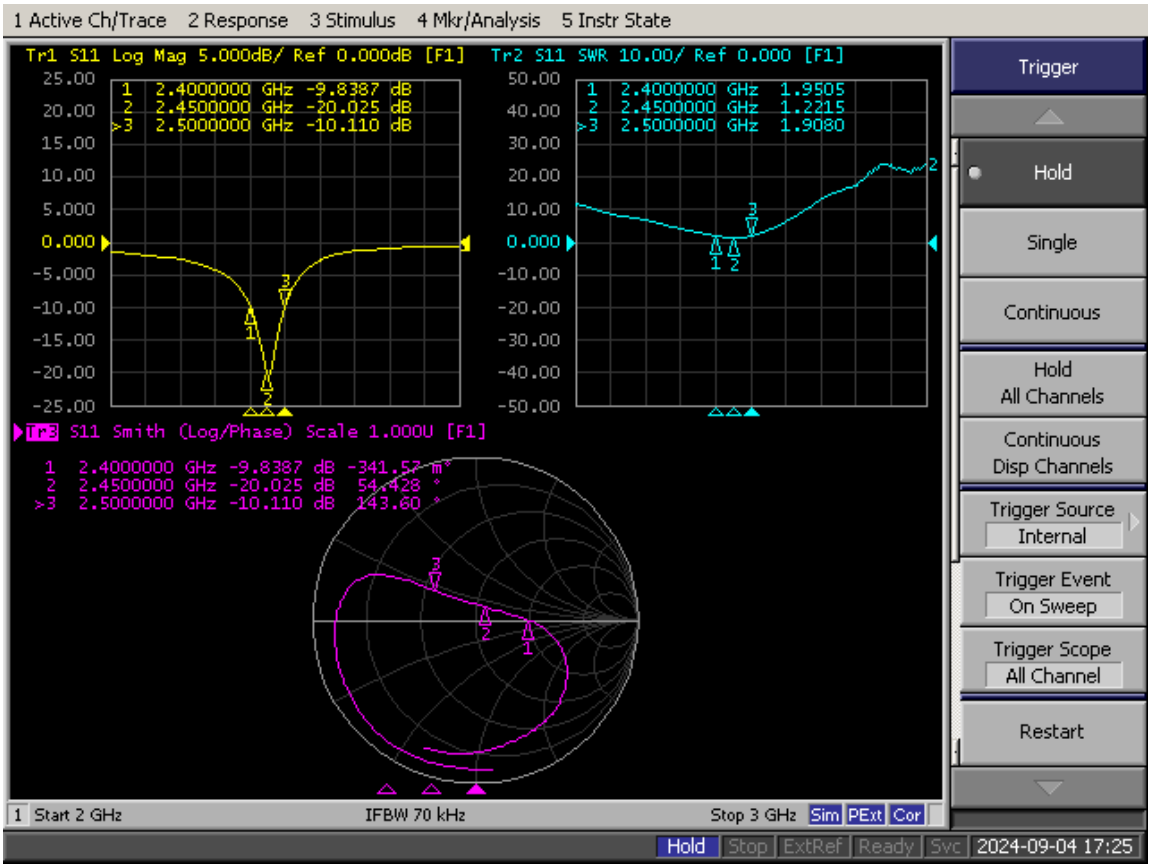
三、VSWR

1 Measuring Method

1.A 50Ωcoaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR

2.Keeping this jig away from metal at least 20cm

2 Measurement frequency points and VSWR value



四、 Anechoic chamber

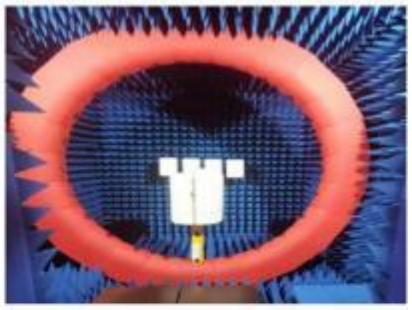
Introduction:

Microwave darkroom and no reflection chamber, absorbing short wave darkroom dark room. Microwave darkroom by electromagnetic shielding room, filtering and isolation, grounding device, the ventilation duct, indoor distribution system, monitoring system, ceiling wave material part. It is based on the wave absorbing material as the lining of the shield room, it can absorb the most of the electromagnetic energy into the six wall is a better simulation of the free space conditions.

The main working principle of microwave anechoic chamber is according to the electromagnetic wave in the medium from the low magnetic guide magnetic direction of propagation rules, absorbing materials to guide the electromagnetic wave using high permeability, through resonance, a substantial absorption of electromagnetic wave radiation energy, by coupling the electromagnetic energy into heat energy.

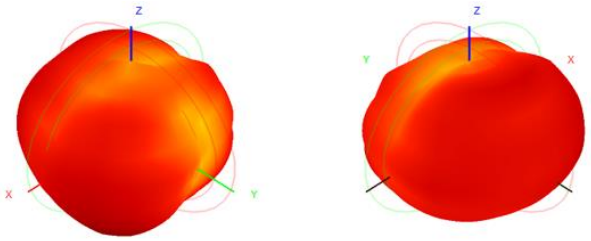
main performance ：

Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)

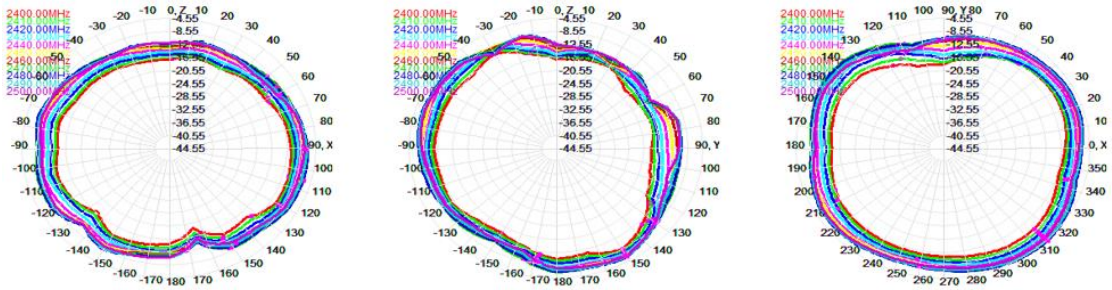


五、Gain table of Antenna

Passive field pattern diagram-R



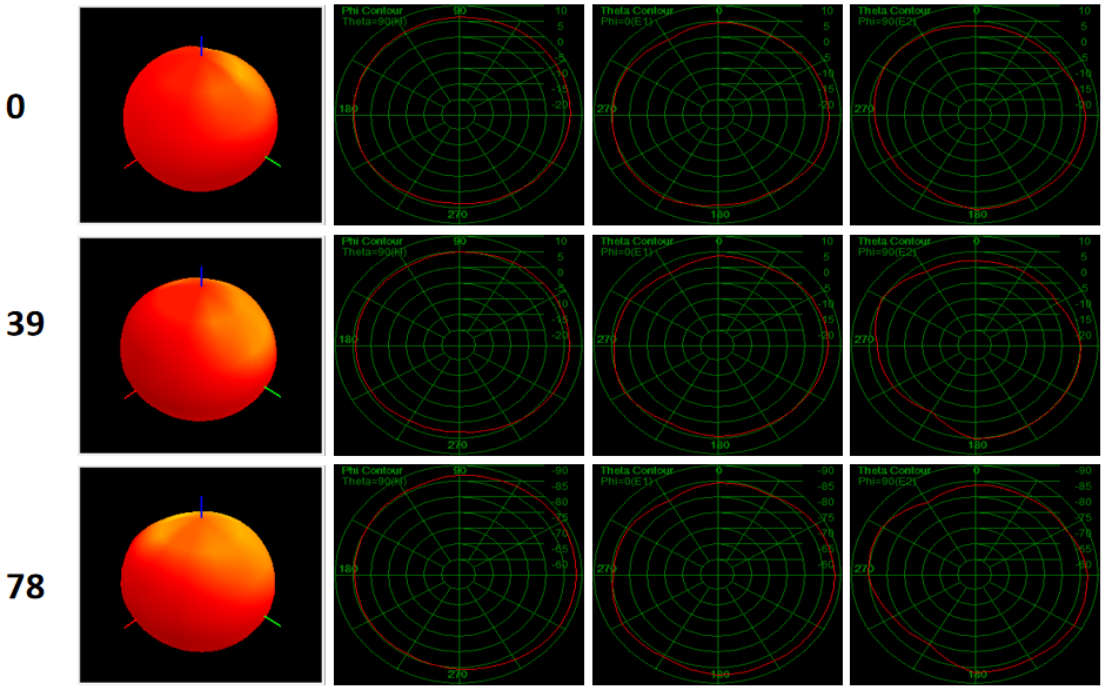
E1(XZ)　　E2 (YZ)　　H (XY)



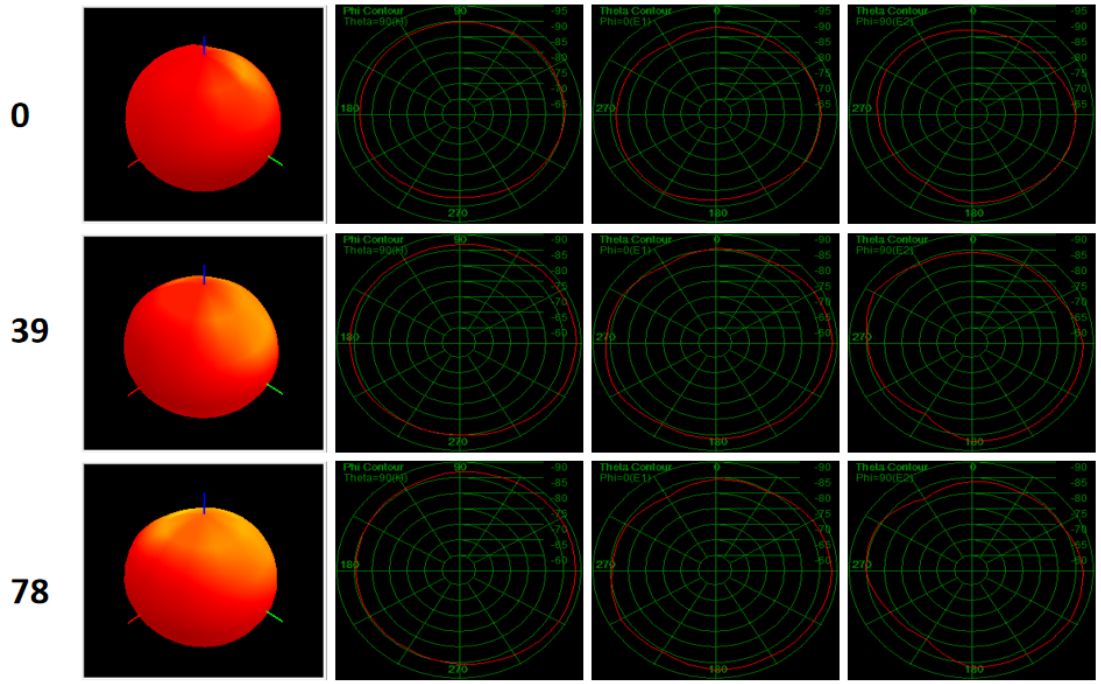
Passive efficiency gain

R		
Freq （MHz）	Gain (dBi)	Effi(%)
2400	-8.05	5.85
2410	-7.33	6.91
2420	-6.33	8.48
2430	-5.73	10
2440	-5.18	12.13
2450	-4.24	14.13
2460	-3.67	15.91
2470	-3.5	16.84
2480	-3.67	16.62
2490	-4.25	15.1
2500	-4.9	13.36

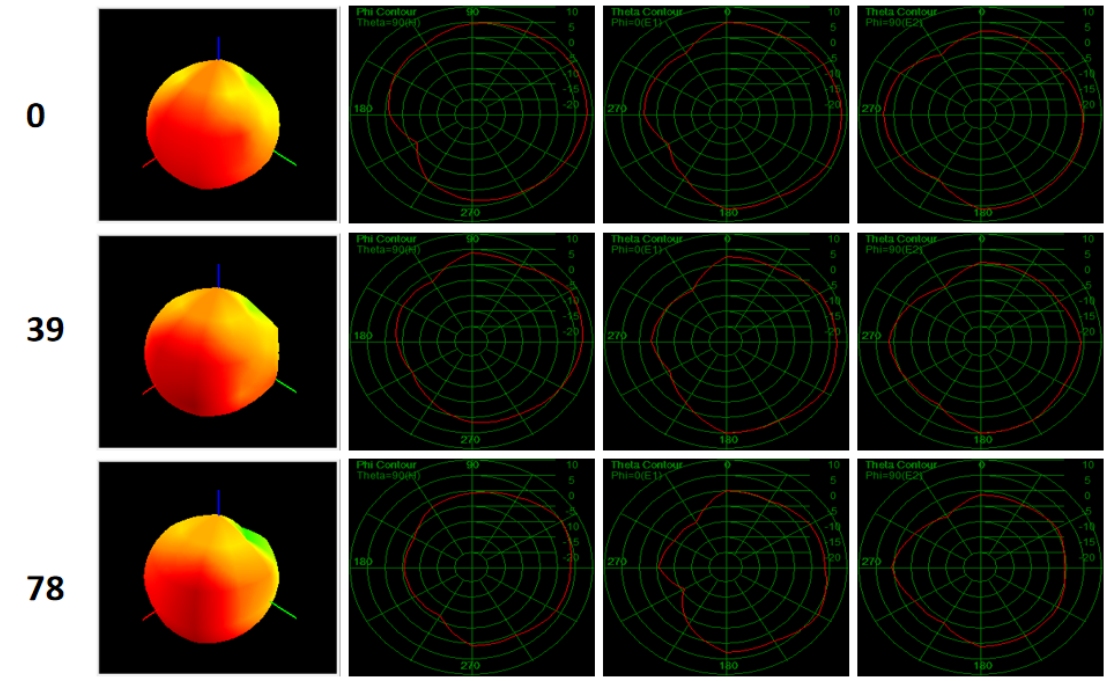
Active Free Space Field Pattern Diagram-R -TRP



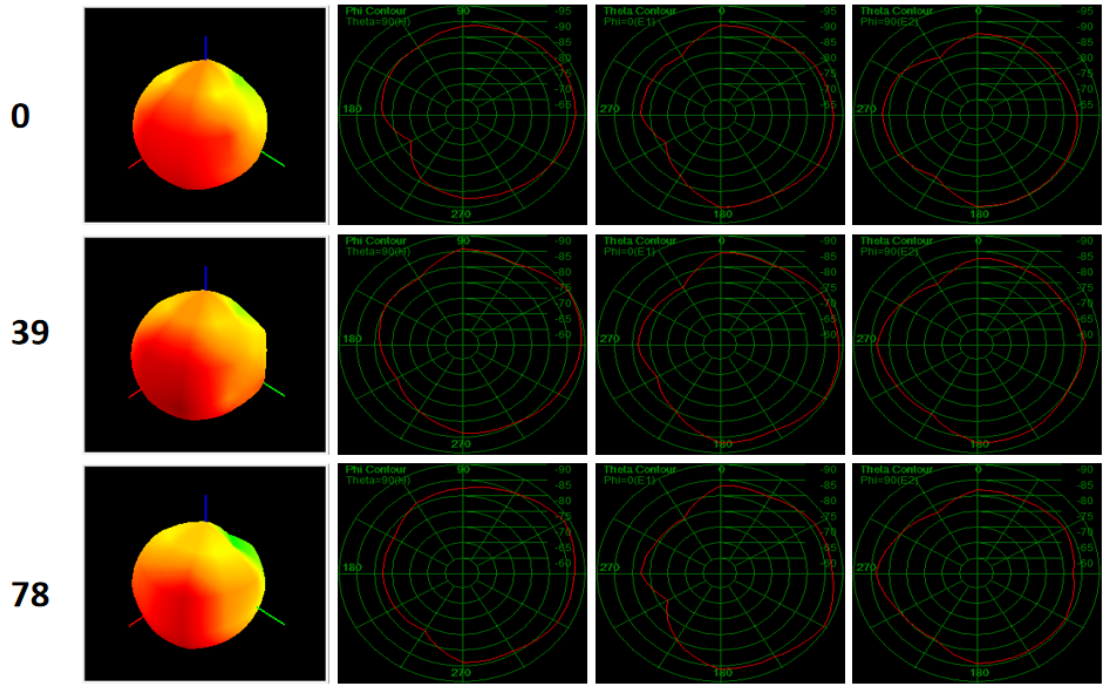
Active Free Space Field Pattern Diagram-R -TIS



There is a source mode field diagram-R -TRP



There is a source mode field diagram-R -TIS

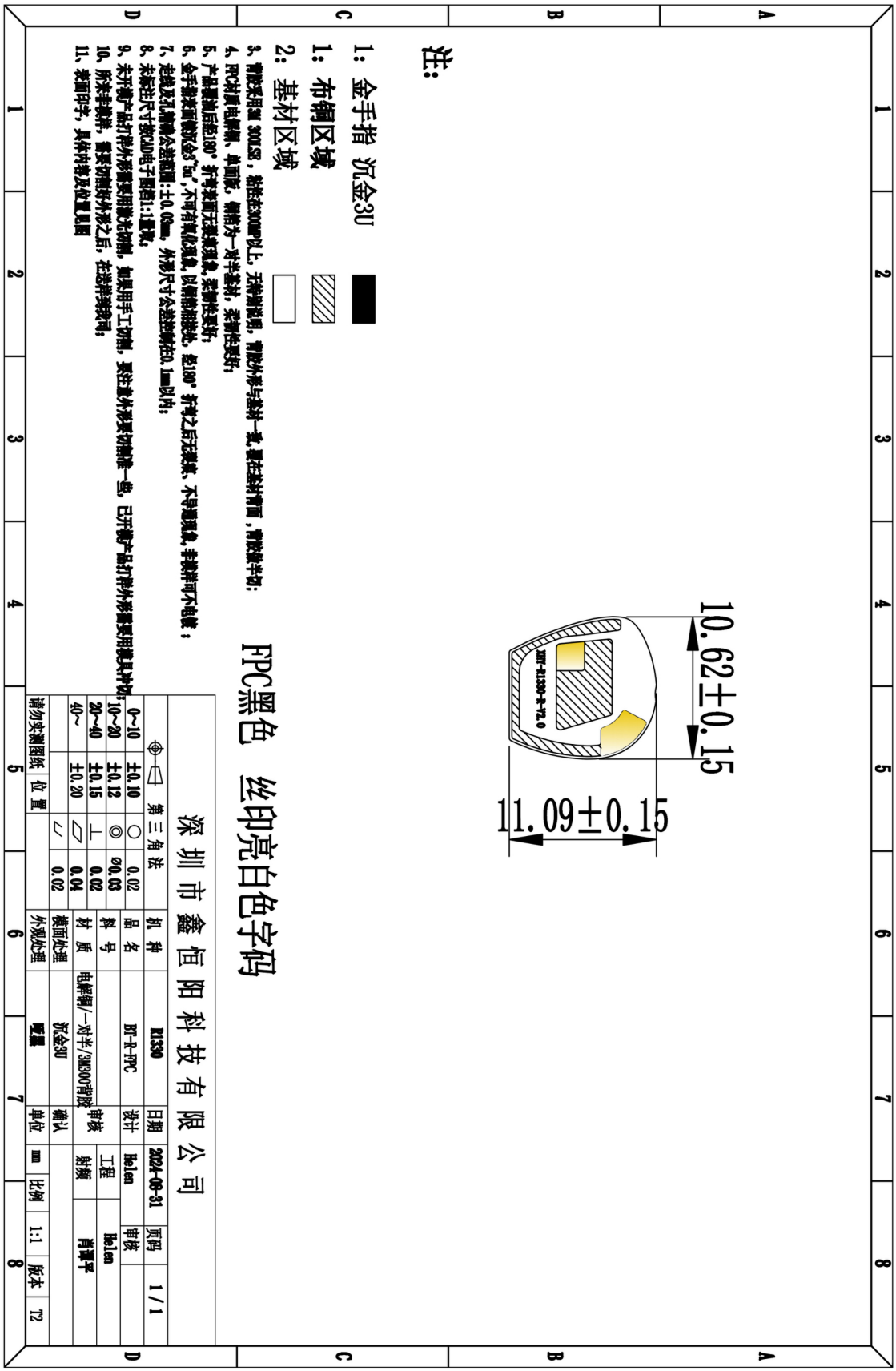


六： Machine Picture

OTA Active

R					
自由空间			头模		
BAND	TRP（dBm）	TIS（dBm）	BAND	TRP（dBm）	TIS（dBm）
0	4.84	-88.35	0	3.68	-87.52
39	4.04	-86.00	39	2.22	-84.12
78	2.27	-85.58	78	-0.01	-83.27

七、Antenna Dimensions



八、ROHS:

Antenna NZ. 01. 0000151 meets RoHS requirements.

九、 Product packaging instructions:

A. packing should meet the moistureproof, vibration, pressure and mildew proof, etc.

B. the smallest packing unit logo must have the manufacturer trademarks, product model, name, code and quantity.

C. in the attached packing list, certificate of approval, and the factory inspection report.

**********END**********