Shenzhen Xinhengyang Technology Co., LTD

SPECIFICATION

Customer Name: Zhejiang Bainuo Electric Co. LTD

Product Model: Visual doorbell

Customer P/N :

XINHENGYANG P/N: ZJ.03.0283-KSML

SPECIFFCATIONS: 2.4G+5.8G; FPC L=85MM ∅1.13

Production date: 2023-04-14

Sample Version: V2.0

XINHENGYANG		
FICTION	DQE	R&D
Customer		
PUR	QC	R&D

Manufacturer: Shenzhen Xinhengyang Technology Co., LTD

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Tel: 0755-83600916 Network address: https://www.xhy-2008.com

一、The basic parameters

Number	Effective date	Change record
V1.0	2023-03-25	Initial release
V2.0	2023-04-14	Replace the antenna cable

A. Electrical Characteristics	
Frequency	**2400MHZ~2500MHZ** **5150MHZ~5850MHZ**
VSWR	**< 2.0**
Avg Efficiency	**>42%**
Impedance	**50 ± 25 Ohm**
Polarization	**Linear**
Peak Gain	**2.4G:2.71dBi** **5.8G:2.94dBi**
B. Material & Mechanical Characteristics	
Material of Radiator	**FPC black**
Cable Type	∅1.13 **black L=85MM**
Connector Type	**generation**
Dimension	**20.25MM*18.05MM±0.2MM**
C. Environmental	
Operation Temperature	**- 20 ˚C ~ + 60 ˚C**
Storage Temperature	**- 30 ˚C ~ + 70 ˚C**

二、Electrical Specification

Those specifications were specially defined for Bainuo-Visual doorbell model.

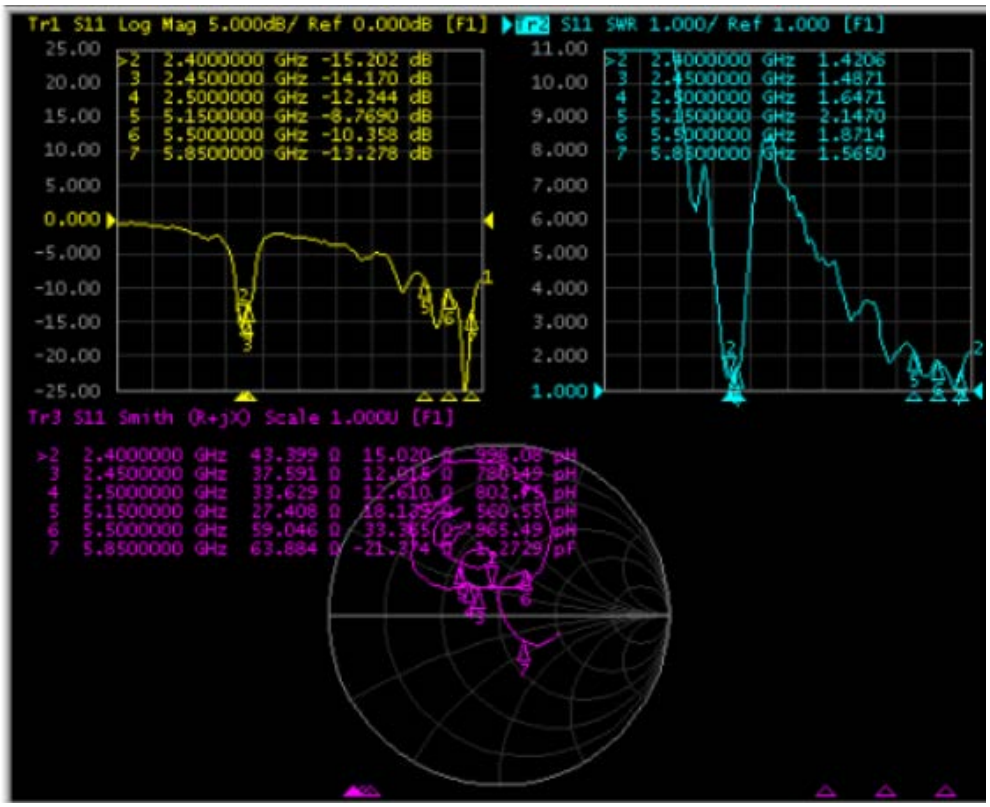
三、VSWR

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

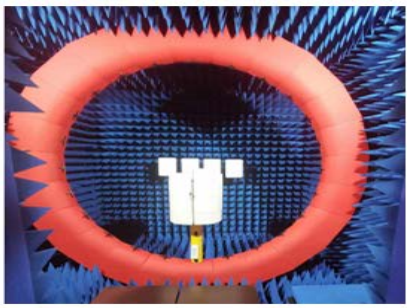
Introduction:

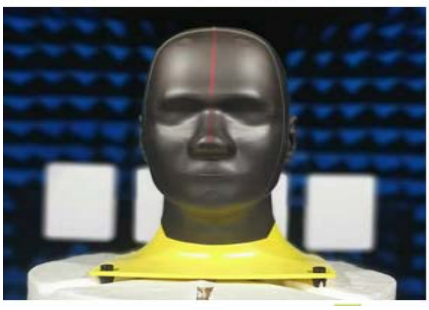
Microwave darkroom and no reflection chamber, absorbing short wave darkroom dark room. Microwave darkroom by electromagnetic shielding room, filtering and isolation, grounding device, the ventilation duct, indoor distribution system, monitoring system, ceiling wave material part. It is based on the wave 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 ：

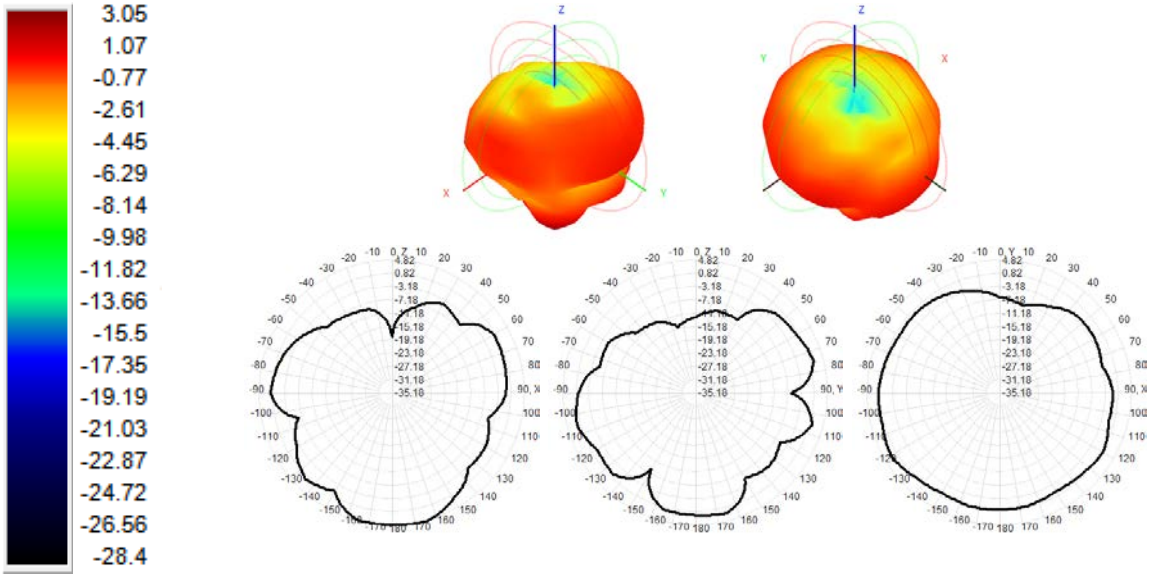
Frequency range:400MHz ~ 6GHz ceiling reflected wave loss materials: 400MHz ~ 6GHz is equal to or more than 15dB (microwave absorbing material by composite wave absorbing materials, namely tapered containing carbon sponge suction wave material paste in ferrite)



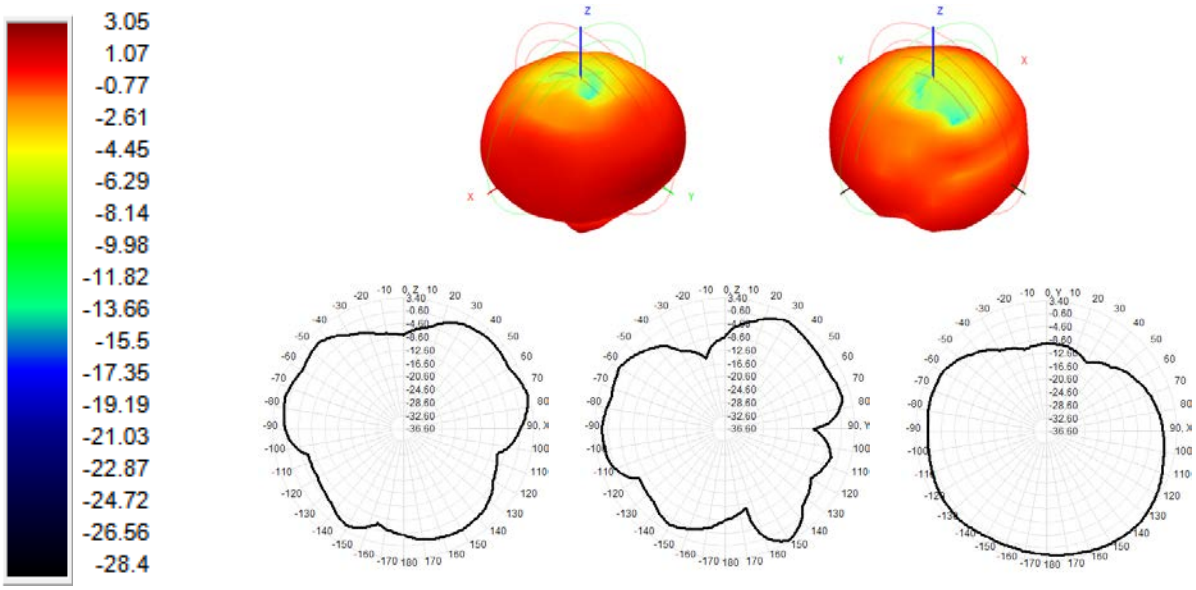


五、Gain table of Antenna

Passive field pattern diagram-2.4G



Passive field pattern diagram-5.8G



Passiveefficiency&Gain

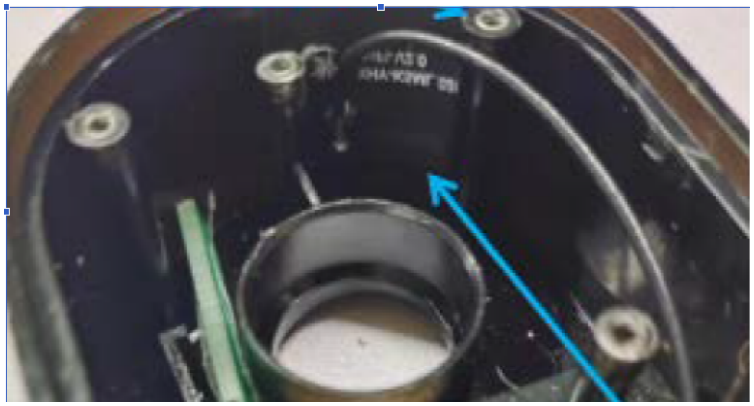
2400MHZ-5800MHZ					
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	46.59	2.57	5200	64.46	2.75
2410	46.78	2.59	5250	64.27	2.64
2420	47.23	2.60	5300	65.78	2.73
2430	47.45	2.58	5350	66.91	2.76
2440	47.32	2.59	5400	67.13	2.78
2450	47.16	2.61	5450	66.49	2.81
2460	46.43	2.71	5500	67.55	2.83
2470	45.45	2.45	5550	68.42	2.94
2480	45.39	2.37	5600	67.49	2.46
2490	43.26	2.39	5650	67.13	2.78
2500	43.17	2.46	5700	66.42	2.51
5100	62.66	2.68	5750	66.55	2.46
5150	63.91	2.71	5800	65.47	2.39

OTA-active

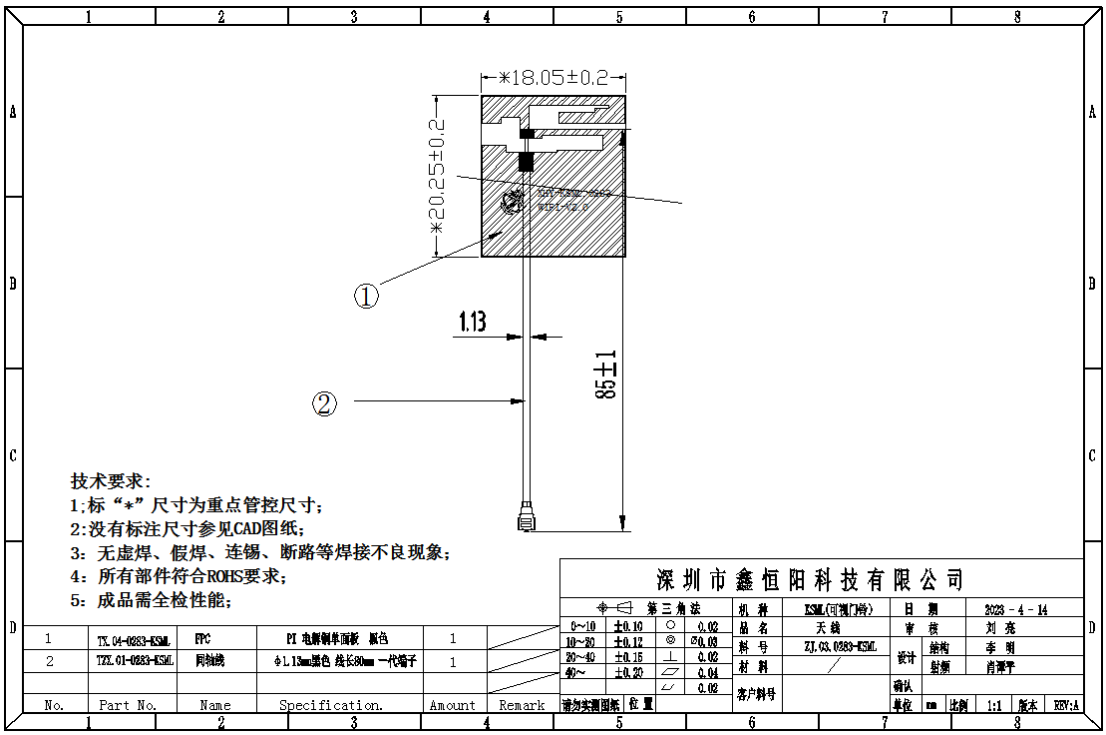
有源数据									
BAND	WIFI-B		WIFI-G		WIFI-N		BAND	WiFi-A	
	TRP	TIS	TRP	TIS	TRP	TIS		TRP	TIS
1	12.26	-75.91	10.78	-64.34	10.58	-60.70	149	9.03	-69.55
6	11.91	-77.22	10.96	-65.54	10.82	-62.42	157	9.13	-68.13
11	12.84	-79.07	11.65	-65.57	11.55	-62.43	165	9.71	-70.07

六、Machine Picture

七，Antenna position



八、Antenna Dimensions



九、ROHS

Antenna ZJ.03.0283-KSML meets RoHS requirements.

十、 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**********