



SPECIFICATION FOR APPROVAL

Customer Name: SHENG SHI

Product Model: PGD638

Customer P/N:

ZHIWANGYOU P/N: CP. 21. 0000528

SPECIFICATIONS: BT antenna, black coaxial cable, ϕ 1.13, L=45mm, with Gen 1 connector

Production date: 2026. 06. 17

Sample Version: R1

ZHIWANGYOU		
FICTION	SE	R&D
Customer		
PUR	QC	R&D

Address: Room 108, Building 6, Jialin Huaxi, Bantian Street, Longgang District, Shenzhen



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THREE. Change history

Number	Effective date	Change record
R1	2026.06.17	Initial release



FOUE. The basic parameters

A. Electrical Characteristics	
Frequency	2400MHZ~2500MHZ
VSWR	< 2.5
Avg Efficiency	>35%
Impedance	50 Ohm
Polarization	Linear
Peak Gain	2.72dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPCB Black
Cable Type	Φ 1.13 Black, L=45MM
Connector Type	One generations
Dimension	19.5MM*22.2MM±0.15MM
C. Environmental	
Operation Temperature	- 20 °C ~ + 60 °C
Storage Temperature	- 20 °C ~ + 60 °C

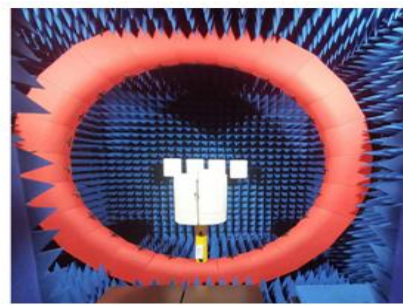
FIVE. Introduction:

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.

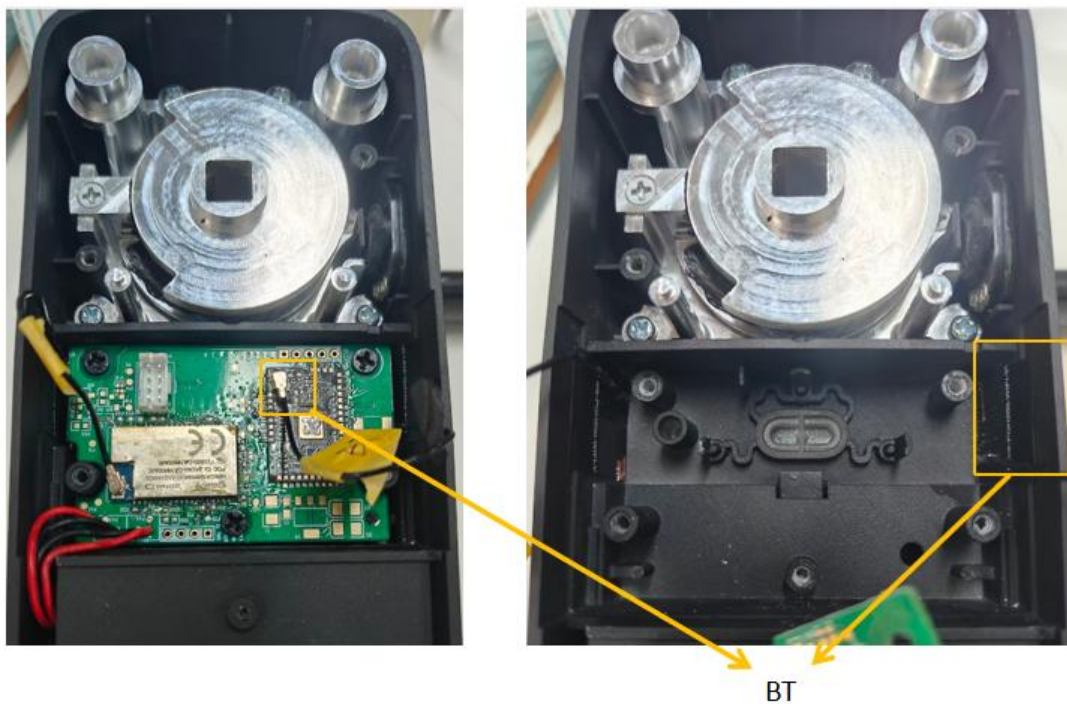
main performance :

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)



SIX. Test Report

1. Machine pictures and antenna assembly



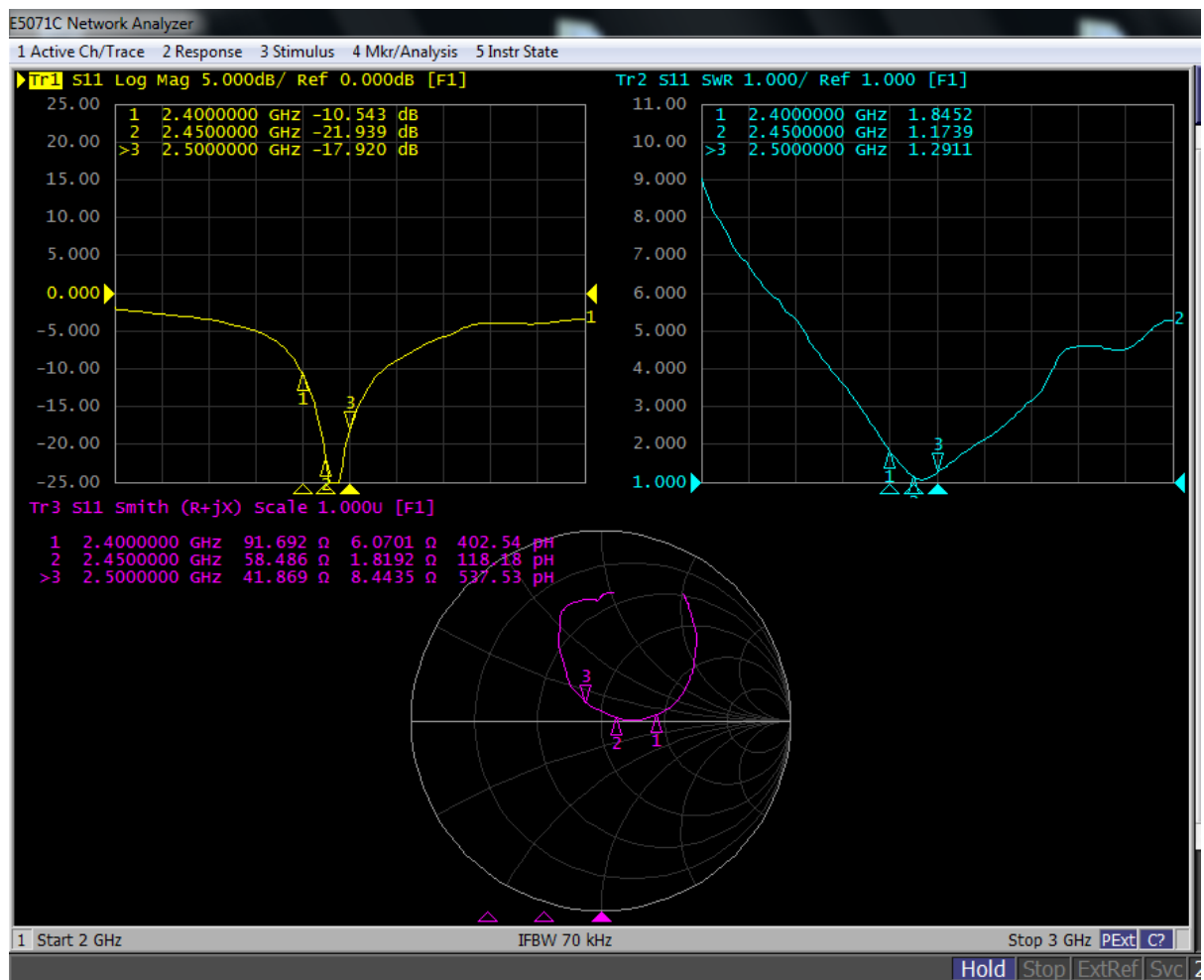
VSWR

2.Measuring Method

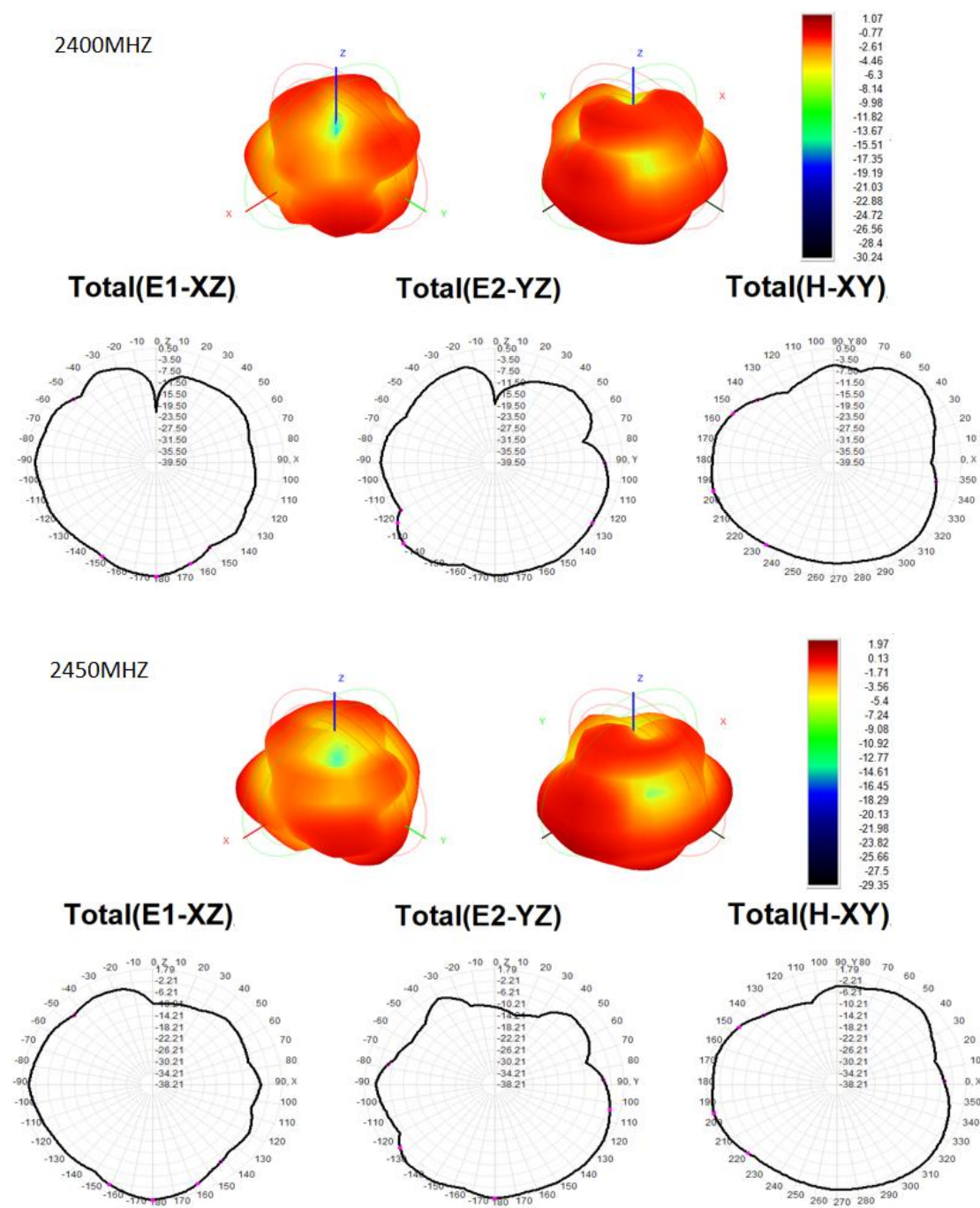
1.A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR

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

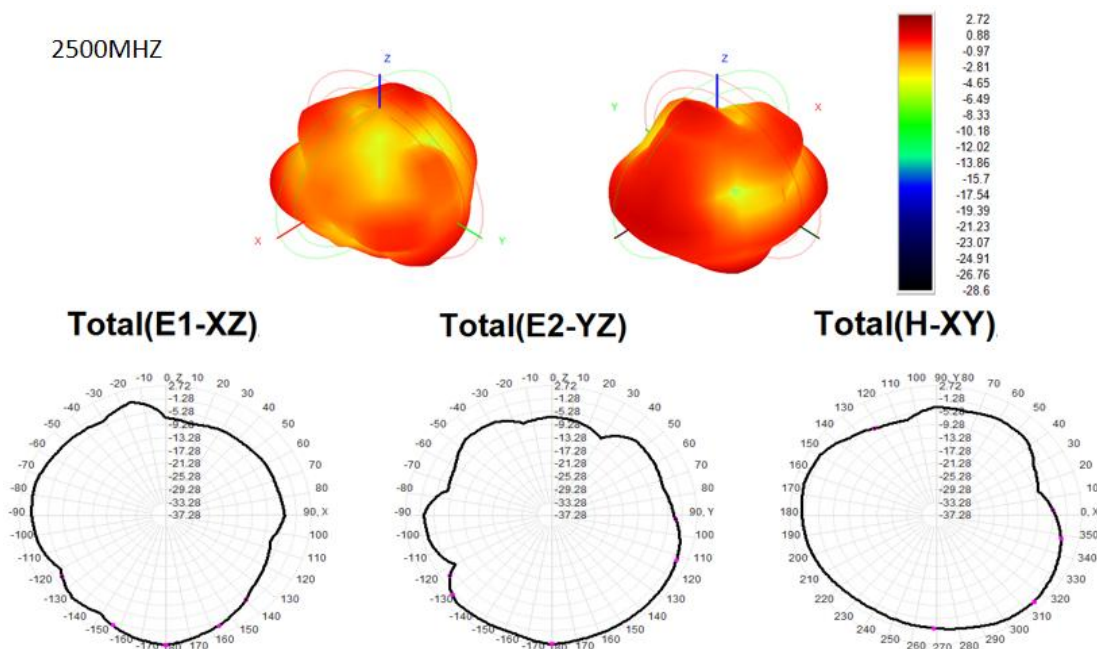
3.Measurement frequency points and VSWR value



4. Gain table of Antenna:



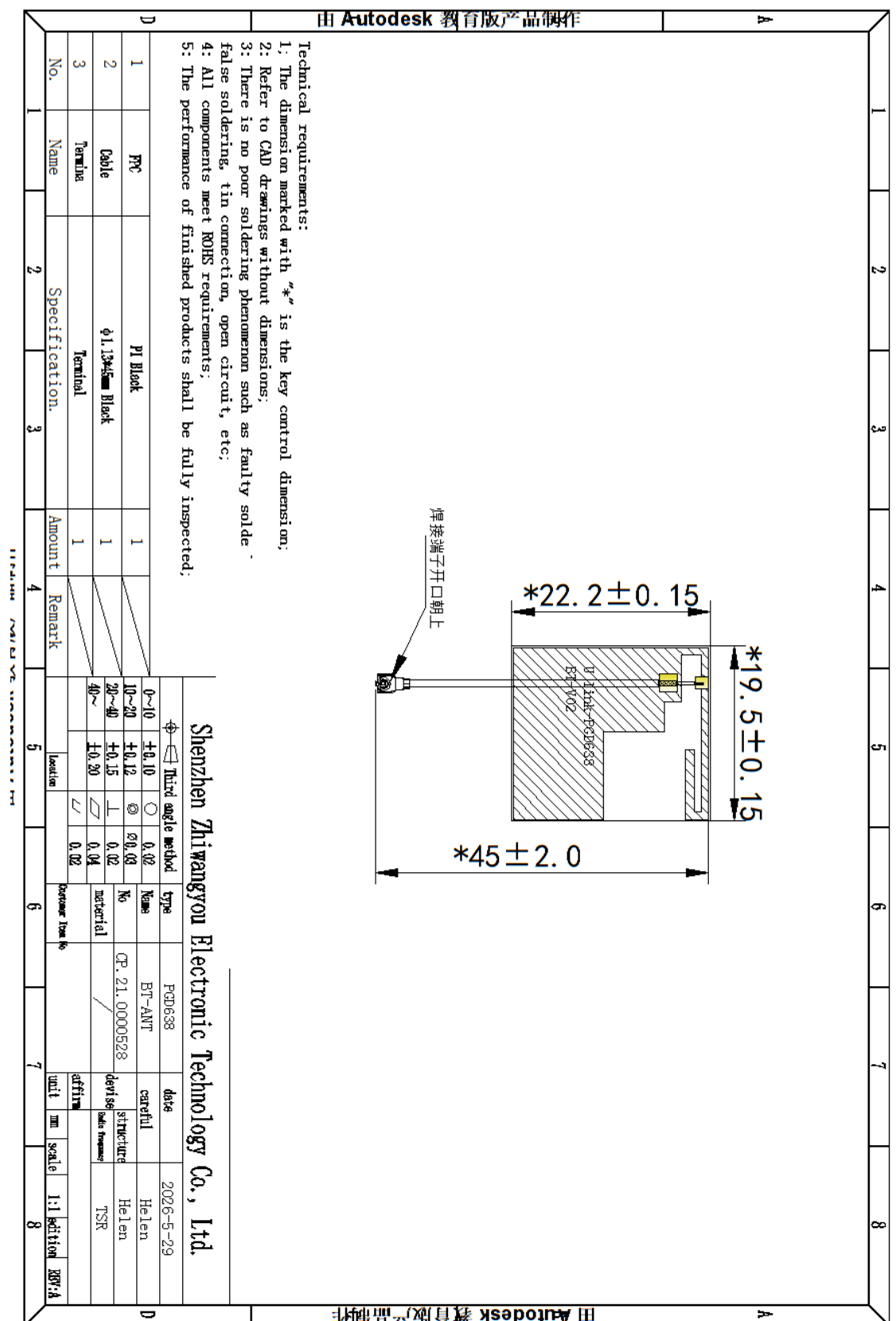
2500MHZ



2400MHZ-2500MHZ		
Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400	1.07	40.17
2410	1.22	41.40
2420	1.57	42.89
2430	1.75	42.87
2440	1.85	44.38
2450	1.97	45.36
2460	2.09	45.83
2470	2.25	46.42
2480	2.45	47.23
2490	2.66	48.28
2500	2.72	48.29



SEVEN. Product Drawing





EIGHT. ROHS

Antenna CP.21.0000528 meets ROHS requirements.

NINE. Product packaging instructions

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

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

*****END*****