APPROVAL

Version：A1

：

DESCRIPTION: **PCB2.4G3.5DB**

PART NO.： JJX008-FPC0090

CUS PART NO.：

D A T E： 2022.5-6

Sample sign

ENGINEERING DEPARTMENT	Q C DEPARTMENT	SALES DEPARTMENT
Tian Hong	Tian Qing	Hu Haixin

Client sgin

ENGINEERING DEPARTMENT	Q C DEPARTMENT	PURCHASING DEPARTMENT

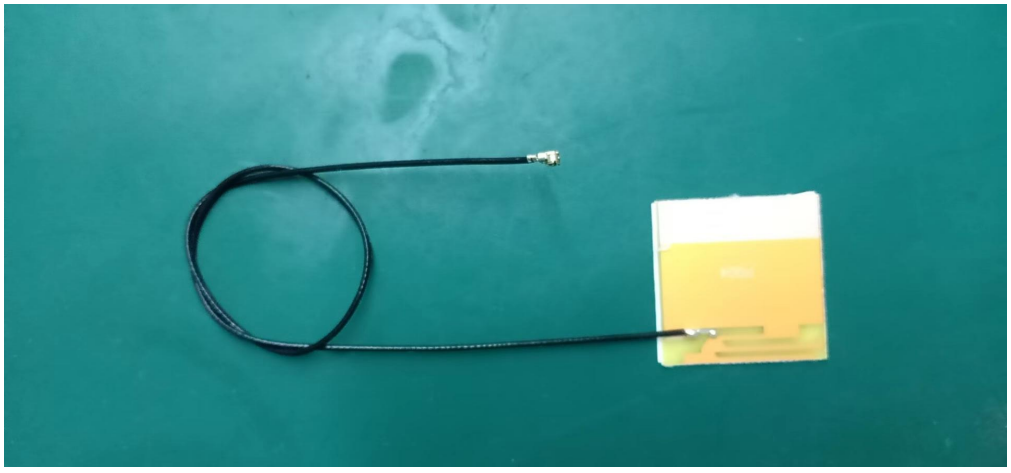
※Sample comments：

SPEC

Electrical Specifications	
Frequency Range	2400-2500MHZ
VSWR	≤2.0
GAIN	5.98DBI
Input Impedance	50 Ω
Mechanical Specifications	
Antenna Color	
Input connector	ipex
Cable length	270mm+2
Working Temperature	-40℃~+85℃
Working Humidity	20~80%

Product Picture

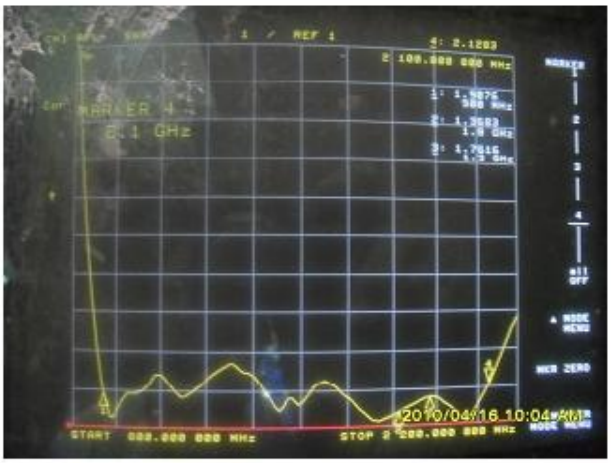
Copper material

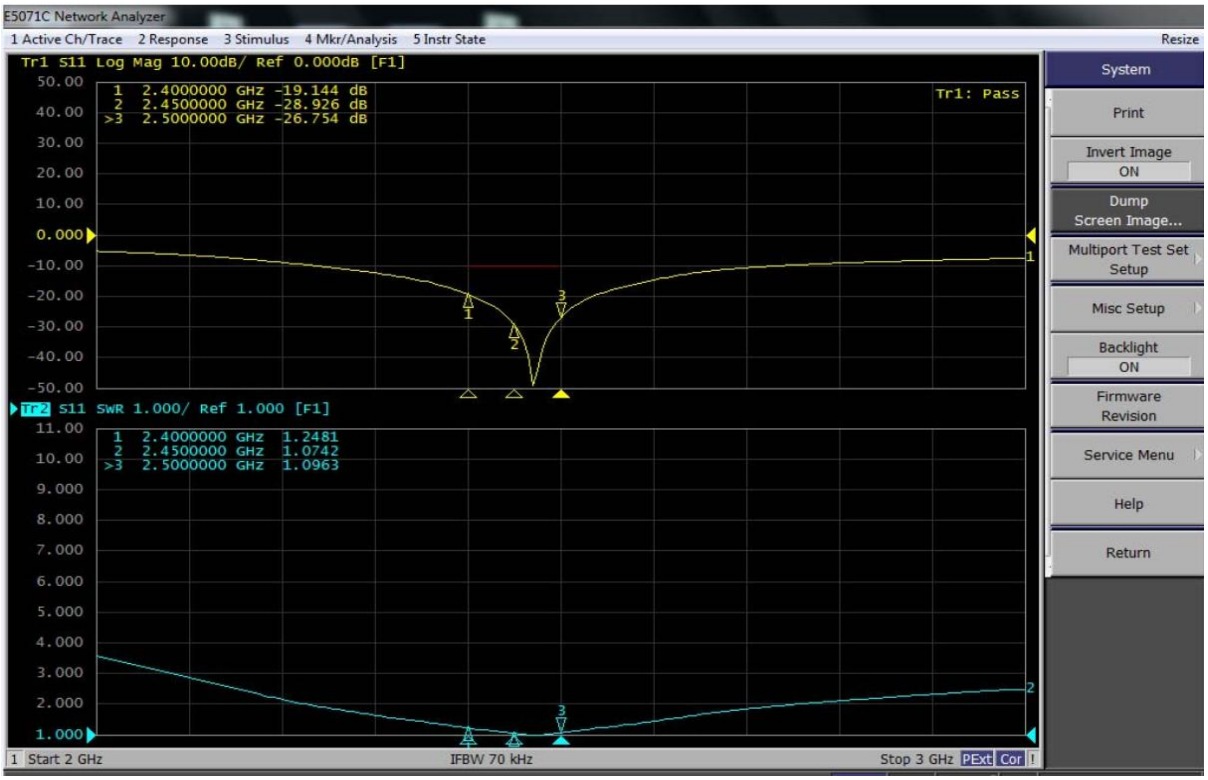


Environmental performance testing:

ITEM	TEST CONDITION	TEST RESULT
The storage environment	In the absence of the specified circumstances test temperature, humidity, air pressure is as follows 1 temperature is -30C ~ +80 C 2 relative humidity for 45%-85% The 3 pressure is 86kpa-106kpa	Electrical and mechanical properties of normal
thermocycling	5 cycles between 70℃ and 40℃ , then under normal conditions 1-2H, appearance quality inspection.	Dimensions should meet there requirements and shall satisfy.In the mechanical Electrical properties
resistance to damp heat Test	Relative humidity is 95 + 3%, test temperature: 40℃.Continue after 2H. Test within the product after removing the 5mindetermination of the electrical properties, in the normal sample. Under 1-2H, the appearance of quality inspection	Dimensions should meet there requirements and shall satisfy In the mechanical electrical properties
vibration test	Displacement amplitude of vibration frequency range: 10-55HZ0.35MM, the amplitude of acceleration: 50.0M/S, sweep cycle times: 30 times	Electrical and mechanical properties of normal
fall-down test	1M high altitude in accordance with the perpendicular axis free fall 3	Electrical and mechanical properties of normal

Network analysis testing:



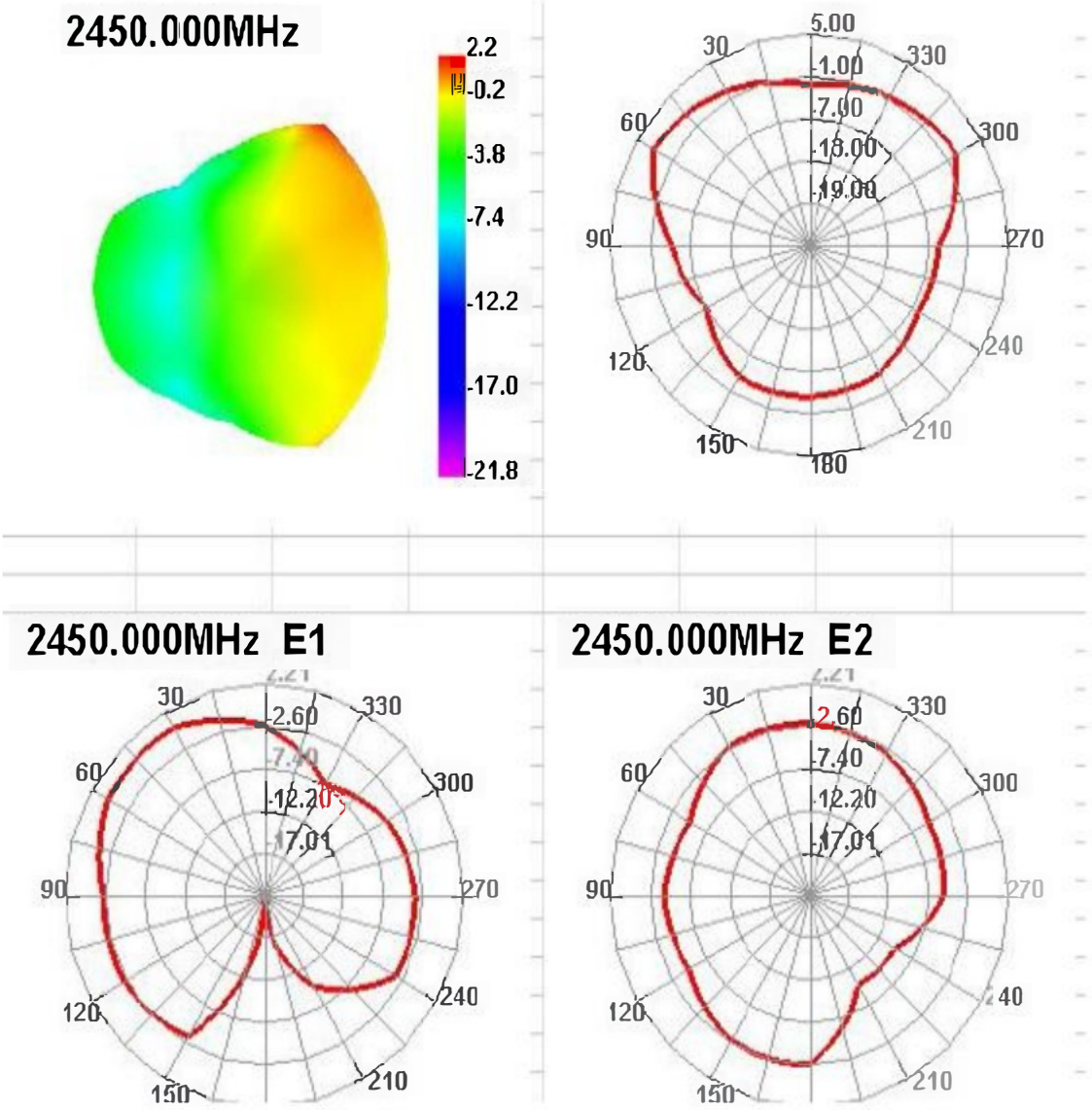


3.2：Darkroom 2D、3DRaditation Pattern

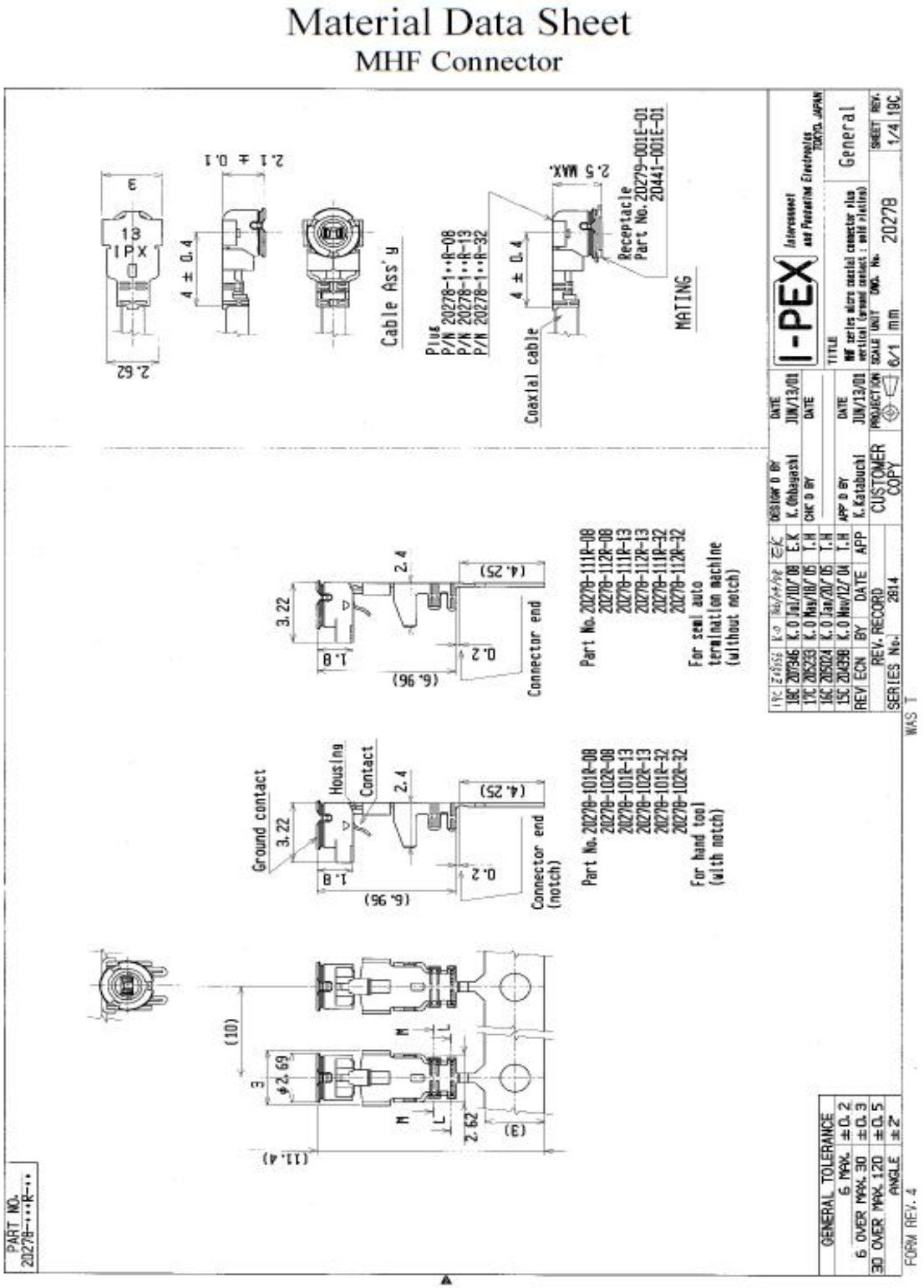
3.2-1 Efficiency and gain

Frequency (MHz)	Efficiency (%)	Peak Gain / dB
2400	63.21	4.81
2450	65.91	5.98
2500	64.75	5.84

3D radiation pattern diagram



Wire terminal diagram:



Product Material Details Table	Product number	JJX-OO90
	Confidentiality	

Product name: Built-in PCB antenna

Material specification: PCB silver paddle rolling wire

wire length 270MM

2.4G

impedance 50 ohm

gain 3.5DBi

Wire parameters;

	material	Diameter (mm)
1; Inner conductor	tinned copper wire	7-00.8+00.2
2；Insulator	Solid insulator	0.06+0.02
3；External conductor	tinned copper wire	0.88+0.05
4；Sheath	Polyfluoroethylene Propylene (FEP)	1.13+0.05

Electrical performance parameters

Capacitance;	96+3
Impedance;	50
Speed;	66