

承 认 书

SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G 4dBi PCB Ceramic antenna
(21B00174A)

客 户 料 号

CUSTOMER P/N:

亿瑞 料号

YR P/N: 21B00174A REV: A

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
CHECKED BY:		
APPROVED BY:		
DATE:		
	2022/12/21	

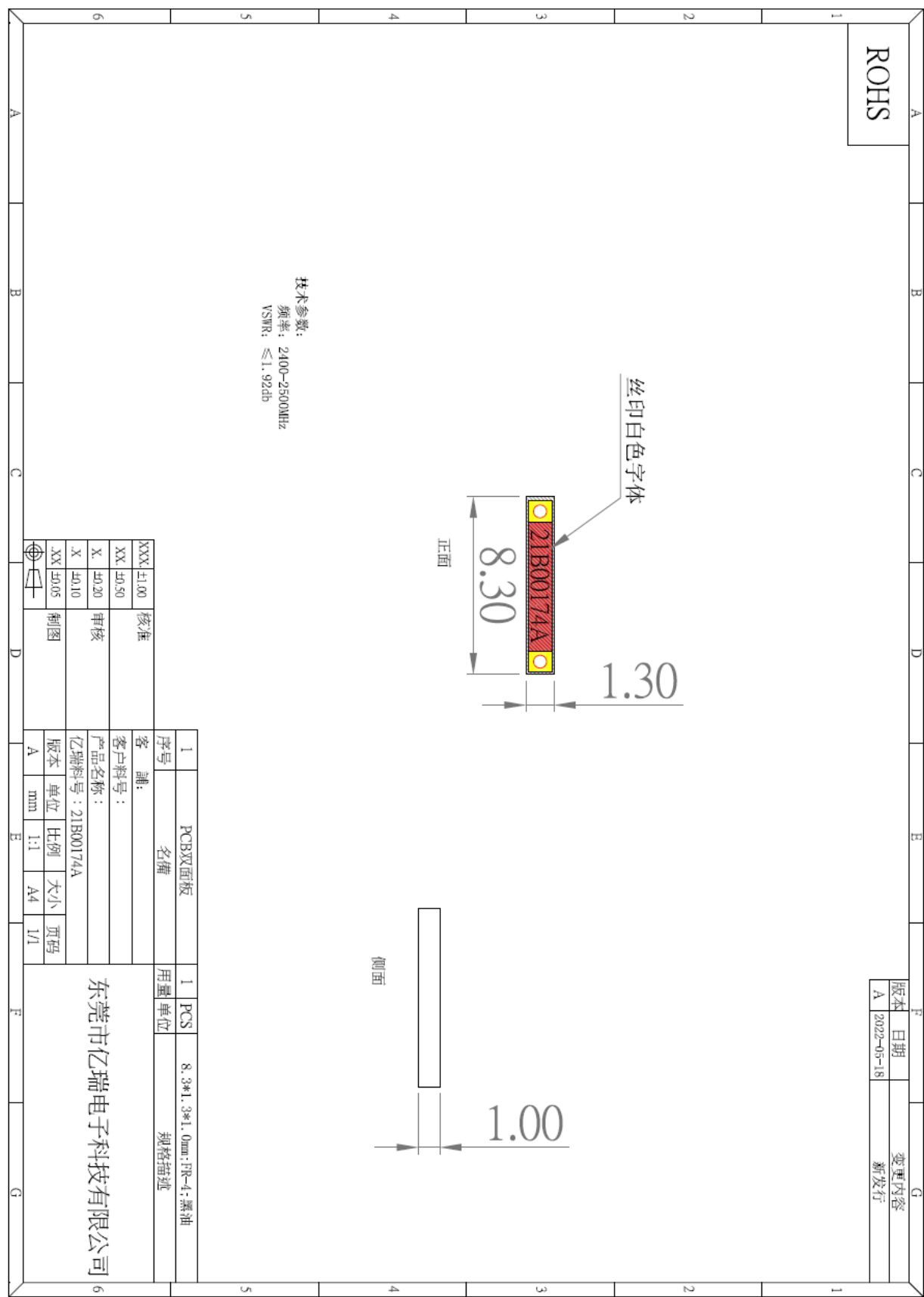
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1. Main technical parameters of products

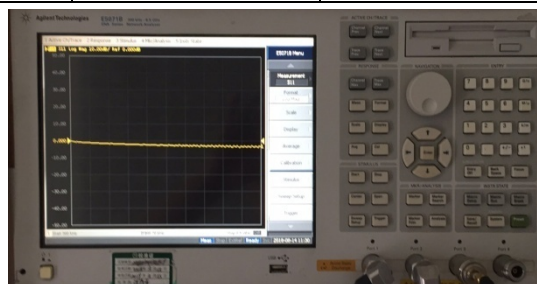
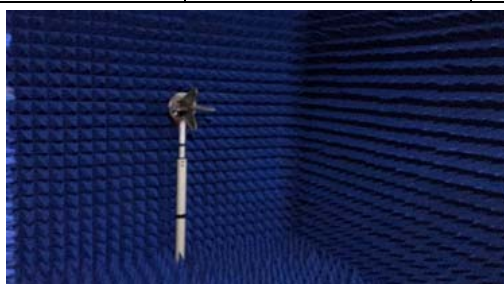
主要技术指标		Main technical specifications	
频率范围 (MHZ)	2400~2500	Frequency Range (MHZ)	2400~2500
特性阻抗(Ω)	50 $\pm$ 10	Impedance(Ω)	50 $\pm$ 10
峰值增益(dBi)	4	Peak Gain(dBi)	4
输出电压 驻波比	≤ 1.92	VSWR	≤ 1.92
最大功率	1W	Admitted Power	1W
极化方式	线极化	Polarization	Line, Vertical
连接方式	SMT	Connector Type	SMT
物理性能		Physical Properties	
天线本体材料	PCB+陶瓷	Antenna Base	PCB+ Ceramics
工作温度	-20 $^{\circ}$ C~+70 $^{\circ}$ C	Operating Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C
保存温度	-20 $^{\circ}$ C~+70 $^{\circ}$ C	Storage Temp	-20 $^{\circ}$ C~+70 $^{\circ}$ C

2. Structure diagram:

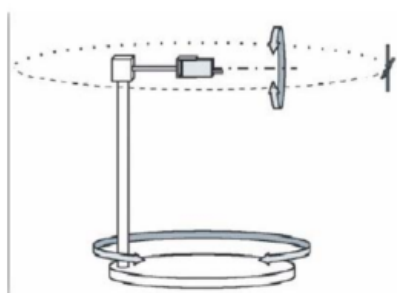


3. Test environment

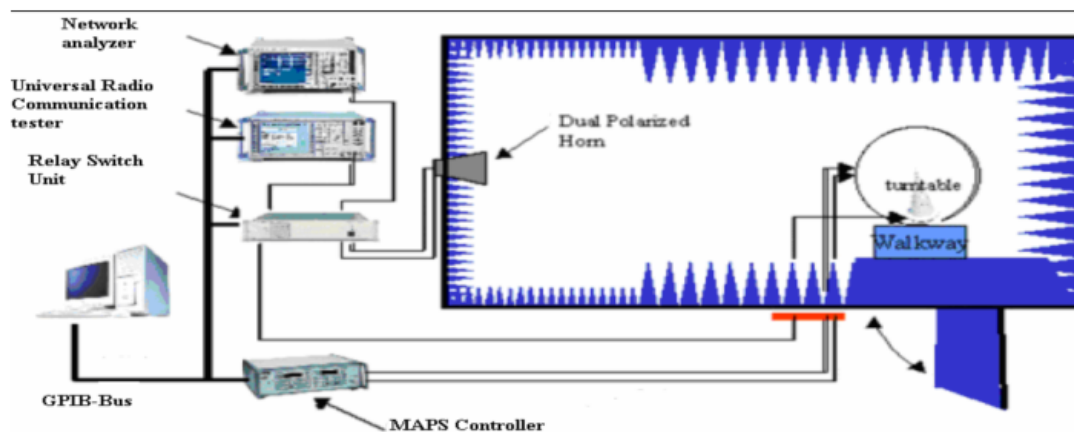
/	Test items	Equipment		
		Equipment	Model No	Manufacturers
S11	1. Return loss 2.VSWR	Analyzers	E5071B	Agilent
		Coaxial Cable	RG316	YiRui
Testing	1. 2D、3DRaditation Pattern	OTA	ETS 5*3*3(3D)	Guang Ping
		Analyzers	E5071B	Agilent
	2. Antenna gain 3. Antenna efficiency	PC Console	Win 7	ASUS
		OTA	ETS;Far Field probe	Guang Ping
		3D turntable	$\phi 1*1*1.5(3D)$	Guang Ping



ETS远场暗室测试原理

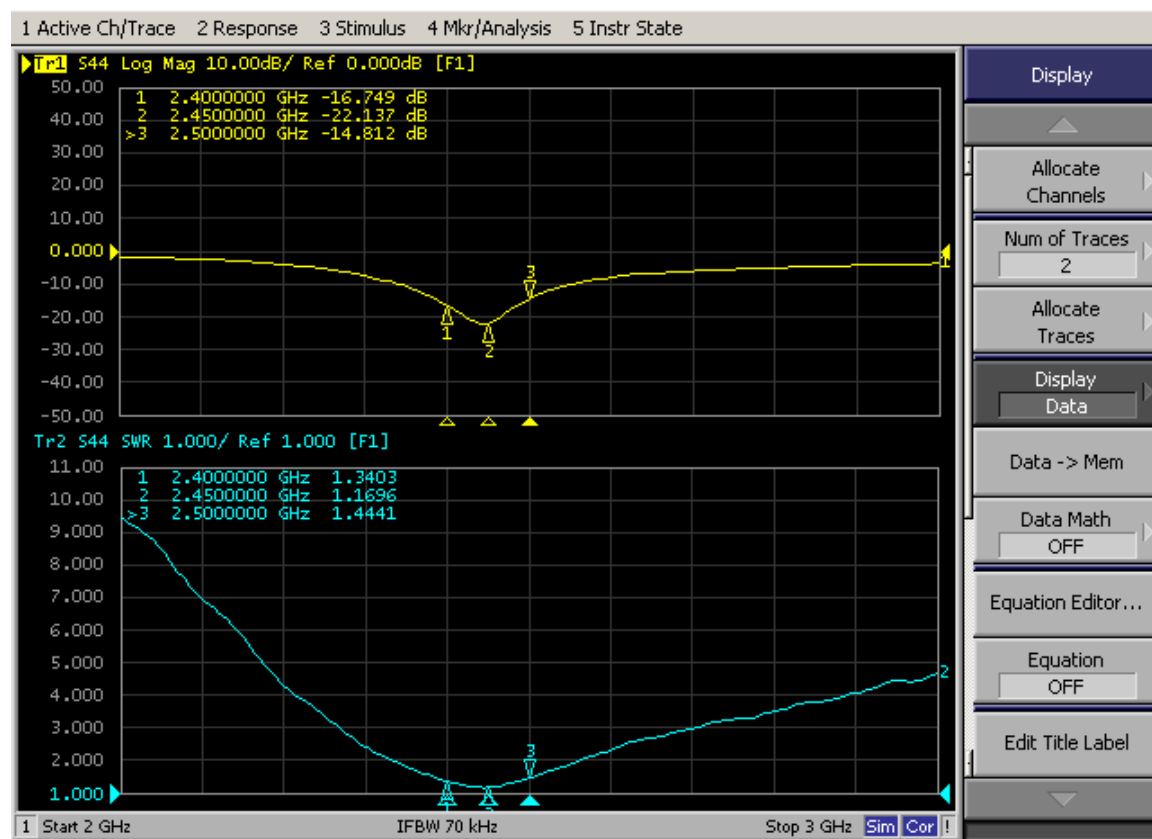


3D转台



4. Test report

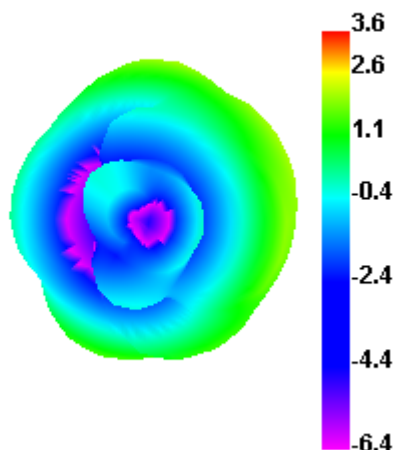
3.1. Return loss/VSWR



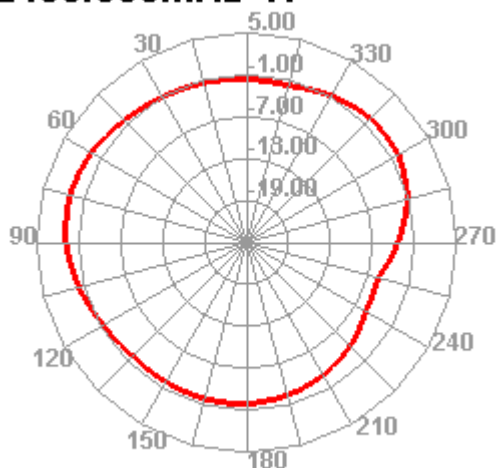
3.2. Gain. Efficiency. 2D、3DRaditation Pattern

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	63.9	-1.95	3.62
2410	59.35	-2.27	3.37
2420	59.22	-2.28	3.5
2430	55.96	-2.52	3.27
2440	60.05	-2.21	3.5
2450	63.4	-1.98	3.65
2460	65.44	-1.84	3.7
2470	67.18	-1.73	3.73
2480	70.11	-1.54	4
2490	67.68	-1.7	3.56
2500	59.99	-2.22	2.94

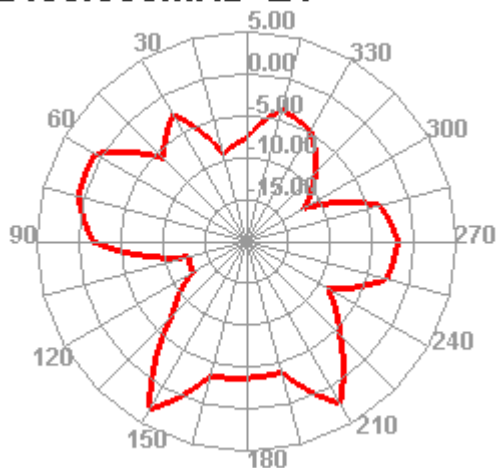
2400.000MHz



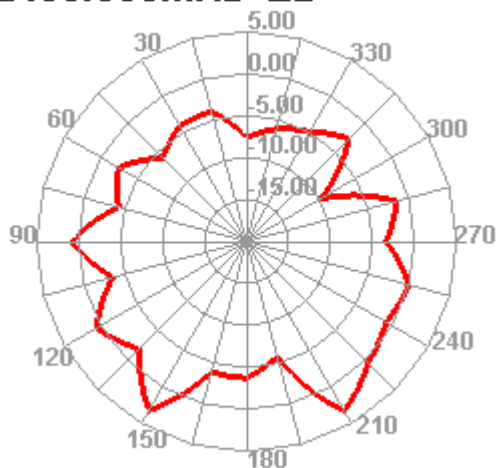
2400.000MHz H



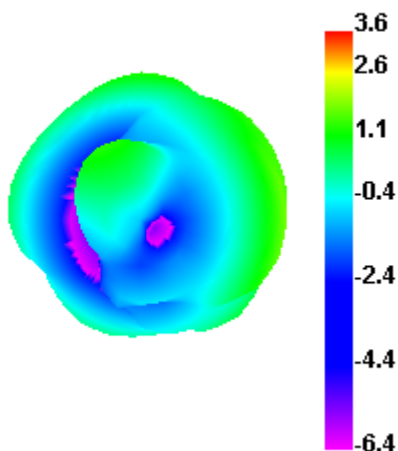
2400.000MHz E1



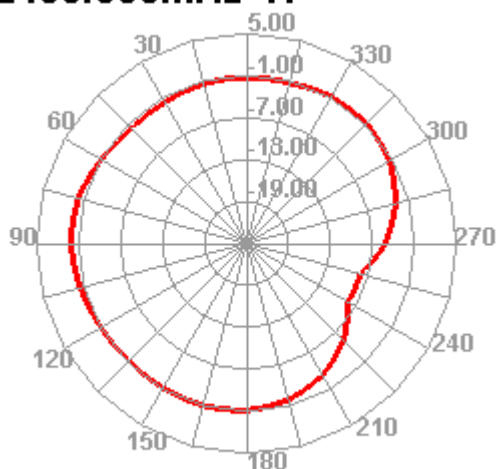
2400.000MHz E2



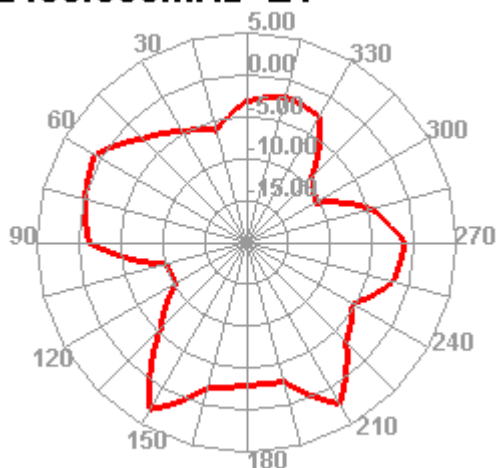
2450.000MHz



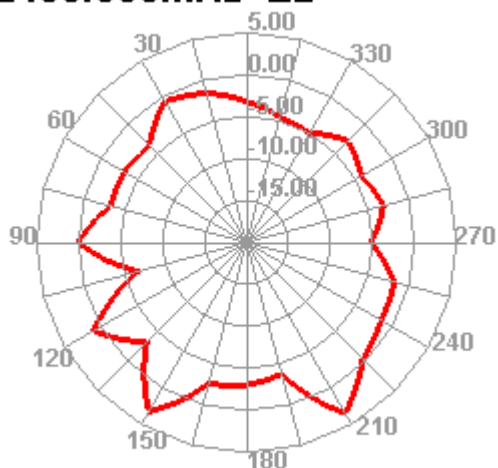
2450.000MHz H



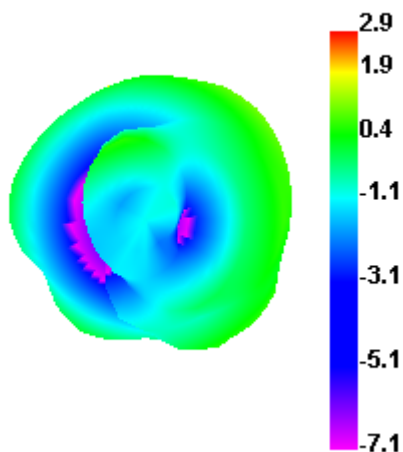
2450.000MHz E1



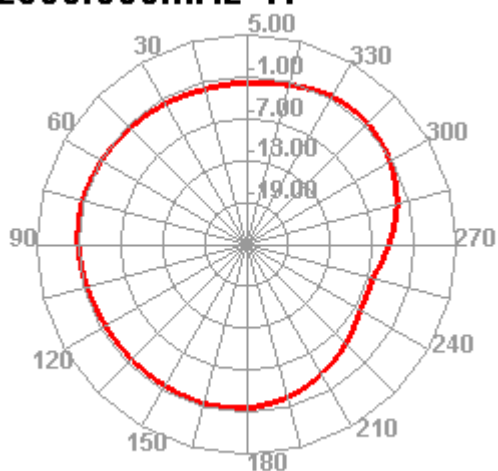
2450.000MHz E2



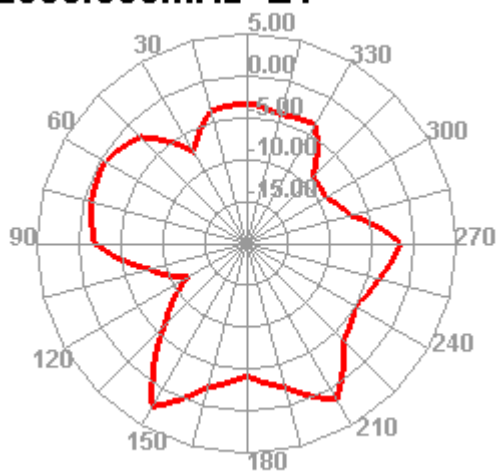
2500.000MHz



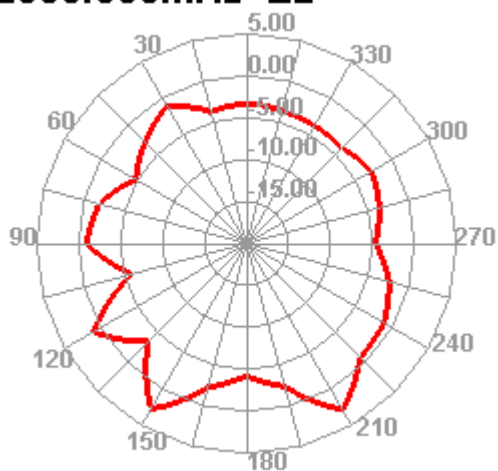
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



5. Packaging

