

承 认 书

SPECIFICATION FOR APPROVAL

客 户 名 称

CUSTOMER NAME:

产 品 名 称

PRODUCT NAME: 2.4G 3dBi 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

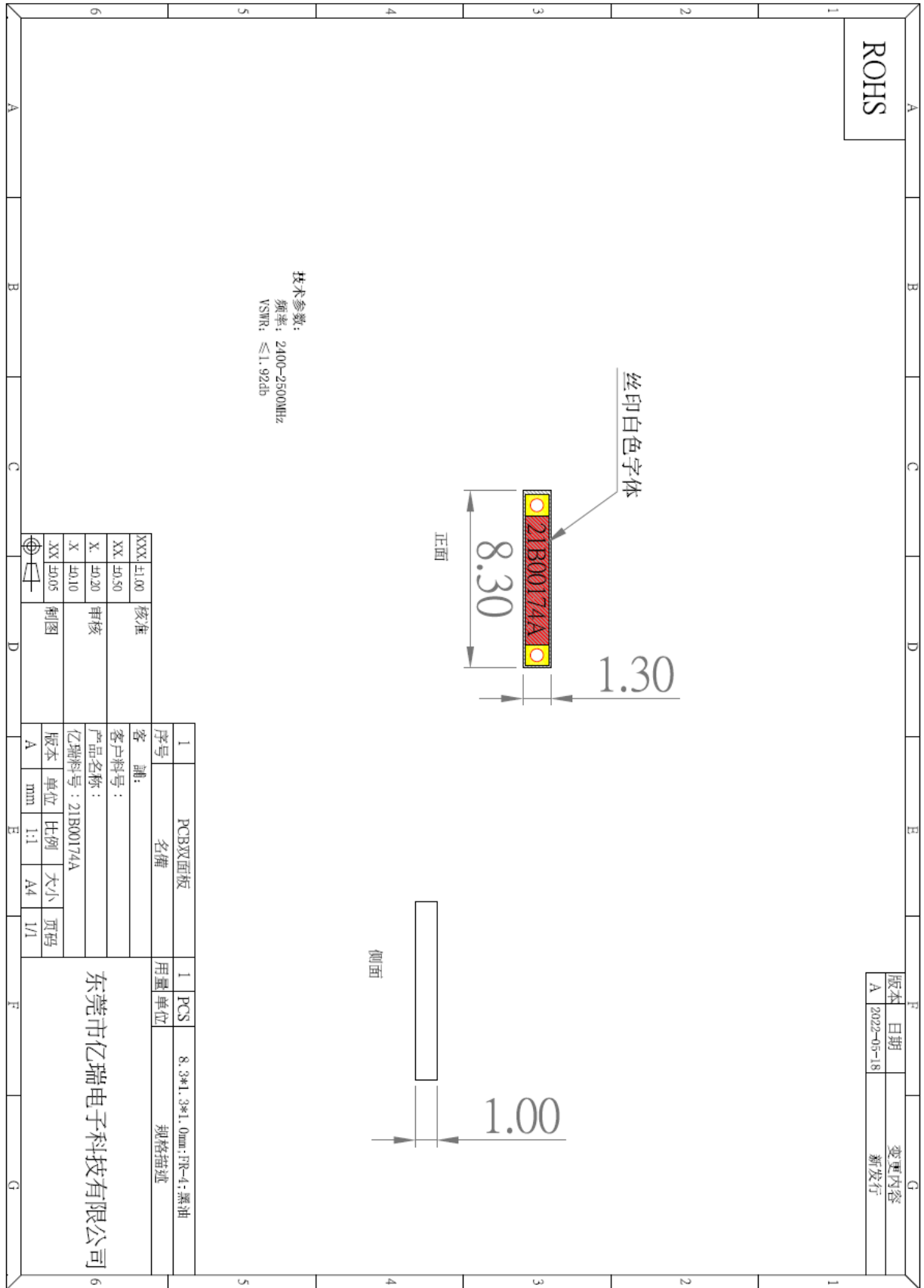
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1. Main technical parameters of products

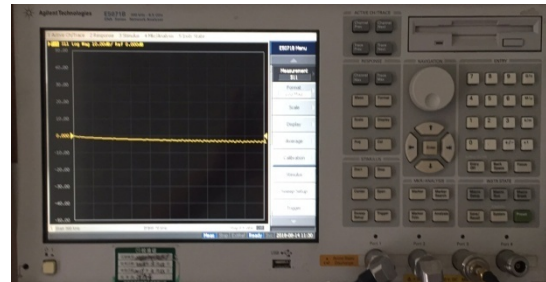
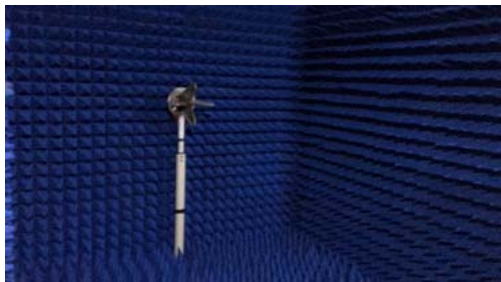
主要技术指标		Main technical specifications	
频率范围 (MHZ)	2400~2500	Frequency Range (MHZ)	2400~2500
特性阻抗(Ω)	50 \pm 10	Impedance(Ω)	50 \pm 10
峰值增益(dBi)	3.8	Peak Gain(dBi)	3.8
输出电压 驻波比	\leq 1.92	VSWR	\leq 1.92
最大功率	1W	Admitted Power	1W
极化方式	线极化	Polarization	Line,Vertical
连接方式	SMT	Connector Type	SMT
物理性能		Physical 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:

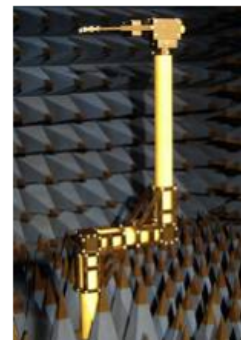
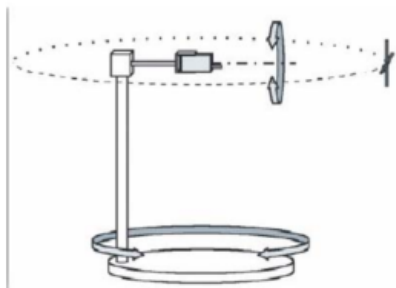


3. Test environment

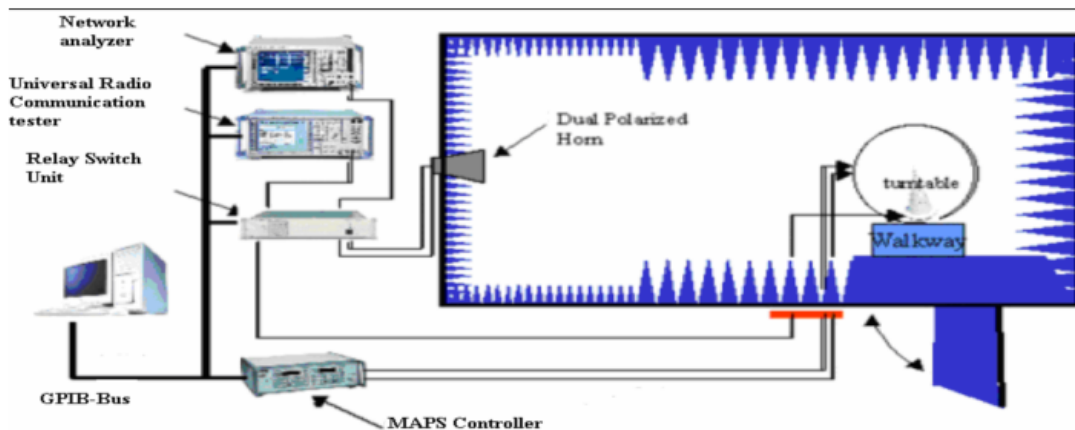
/	Test items	Equipment		
		Equipment	Model No	Manufacturers
S11	1. Return loss 2.VSWR	Analyzers	E5071B	Agilent
		Coaxial Cable	RG316	YiRui
		OTA	ETS 5*3*3(3D)	Guang Ping
Testing	1. 2D、3DRaditation Pattern 2. Antenna gain 3. Antenna efficiency	Analyzers	E5071B	Agilent
		PC Console	Win 7	ASUS
		OTA	ETS;Far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



ETS远场暗室测试原理

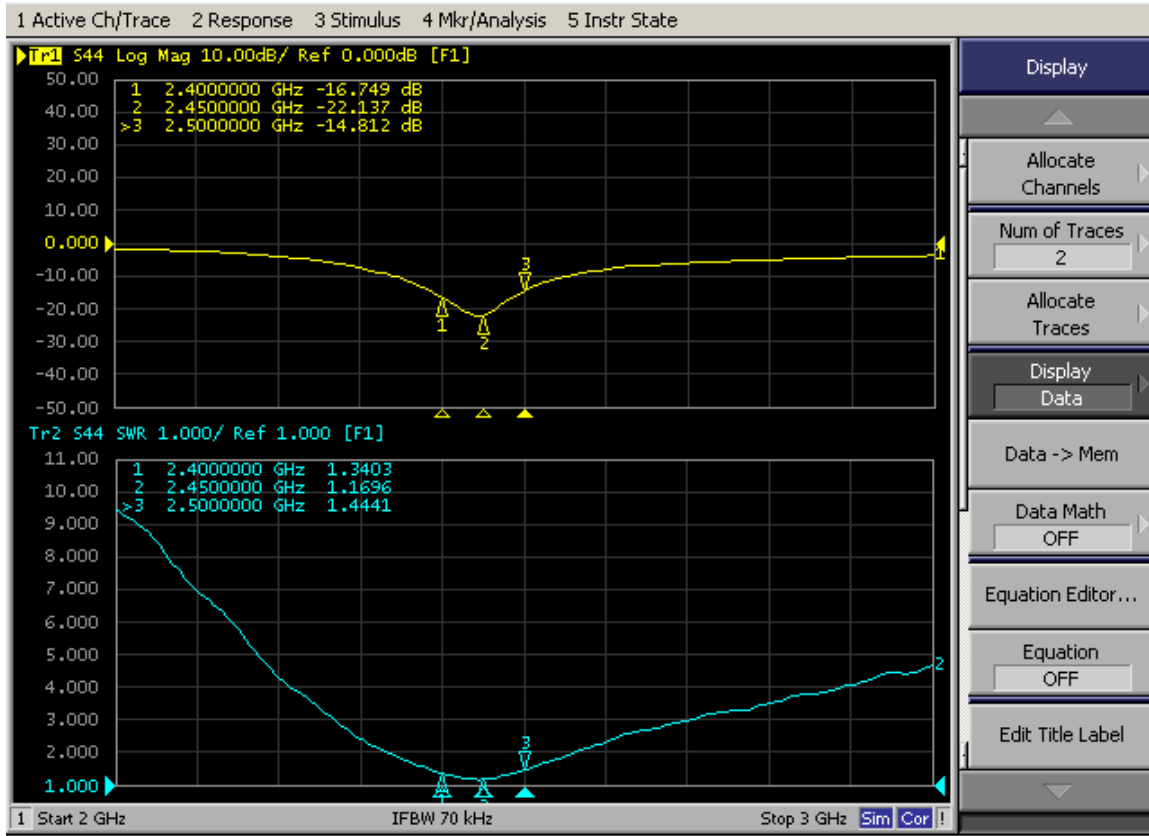


3D转台



4. Test report

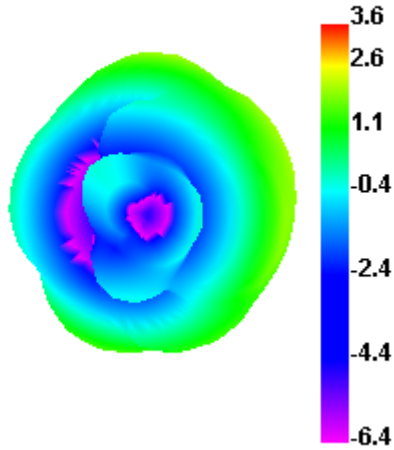
3.1. Return loss/VSWR



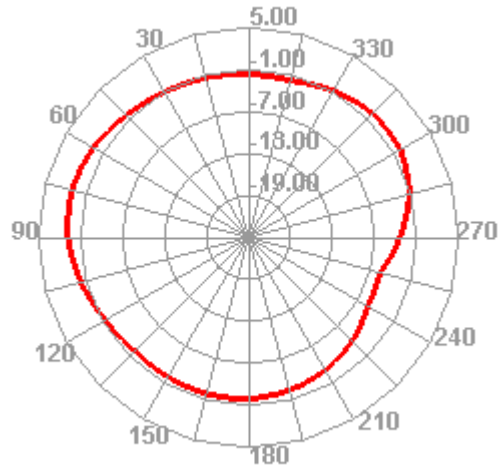
3.2. Gain, Efficiency, 2D、3DRaditation Pattern

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	3.8
2490	67.68	-1.7	3.56
2500	59.99	-2.22	2.94

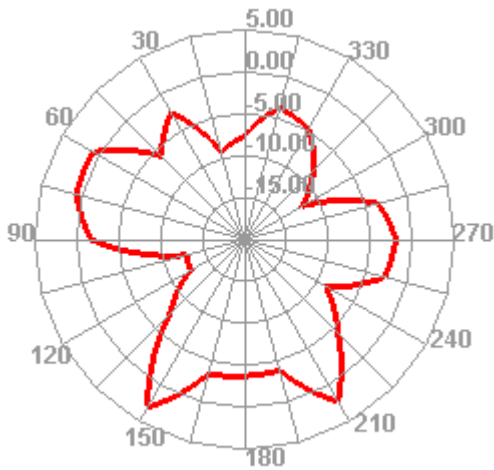
2400.000MHz



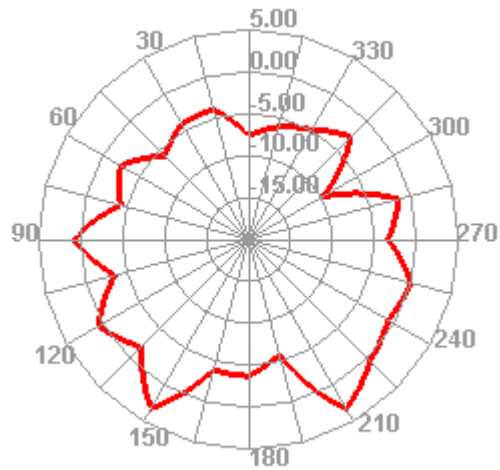
2400.000MHz H



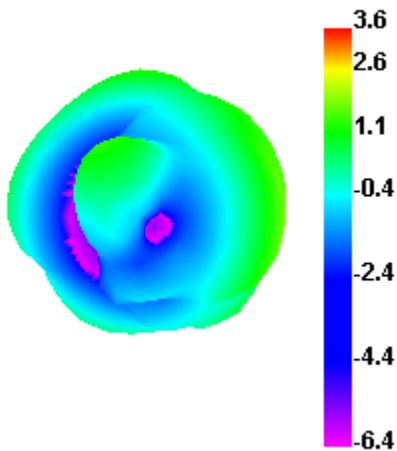
2400.000MHz E1



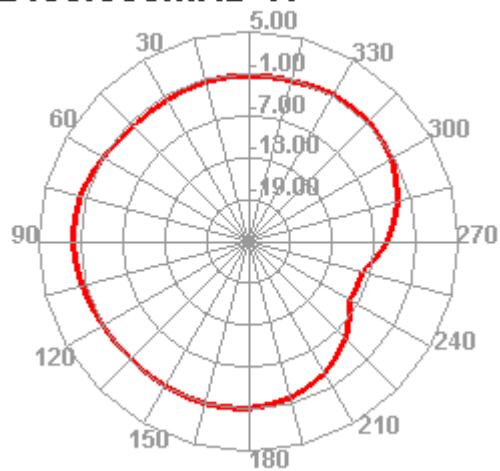
2400.000MHz E2



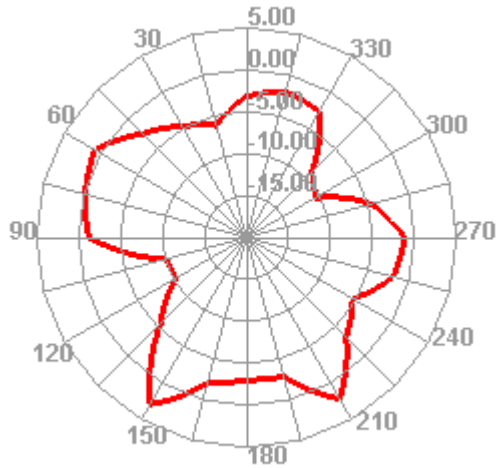
2450.000MHz



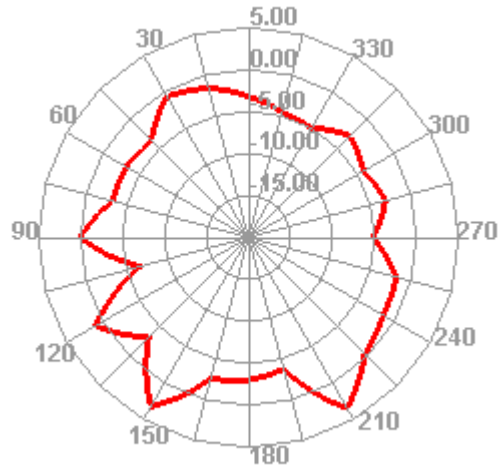
2450.000MHz H



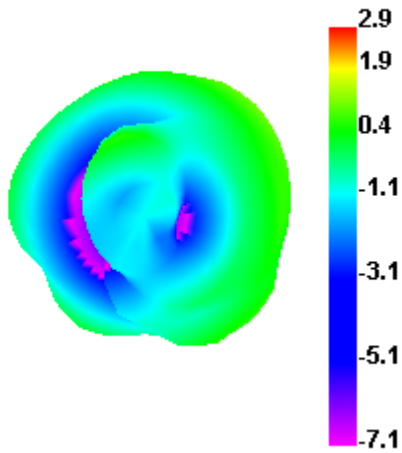
2450.000MHz E1



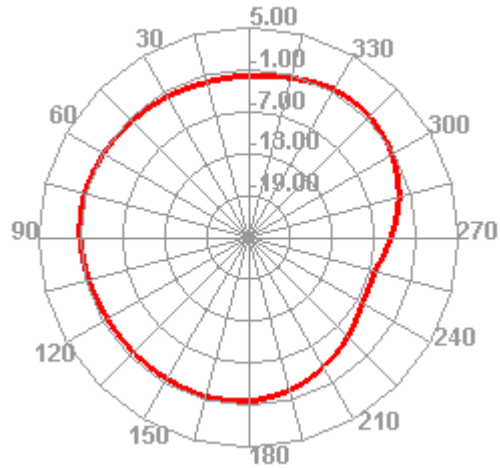
2450.000MHz E2



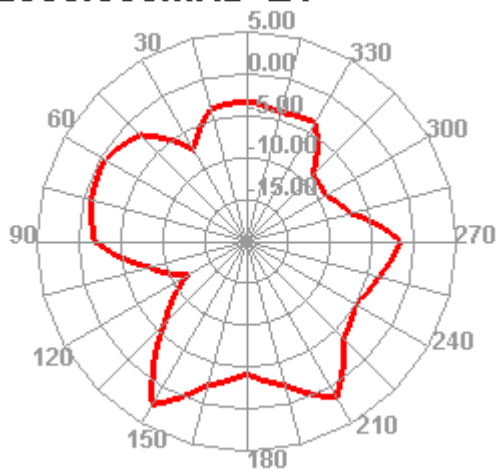
2500.000MHz



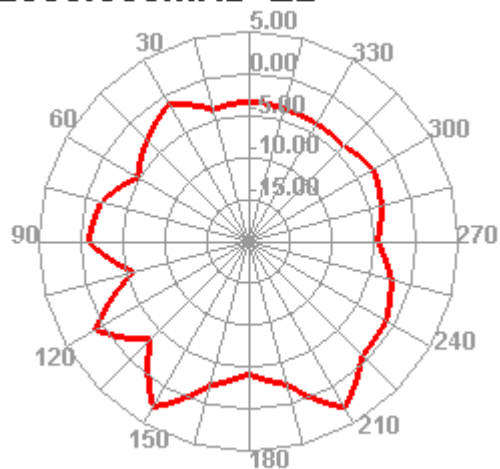
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



5. Packaging

