

SPECIFICATION APPROVAL

CUSTOMER NAME :	Lexiang Technology Co.,LTD
COMMODITY :	FPC Antenna
MODEL No :	E4
Part Number :	43-000090/ 1.04.00.1097/ R1022-070

LOT No :

Customer (Approved By)	Supplier (Approved By)	Date
Lexiang Technology Co.,LTD	Kunshan Yunzhihong Electrical & Technology Co.,LTD.	June 23,2022

Approve List :

1.Application

This antenna is applied to E4 antenna project.

2.Environment parameters

Work Temp : $-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$

Storage Temp : $22^{\circ}\text{C} \sim 26^{\circ}\text{C}$

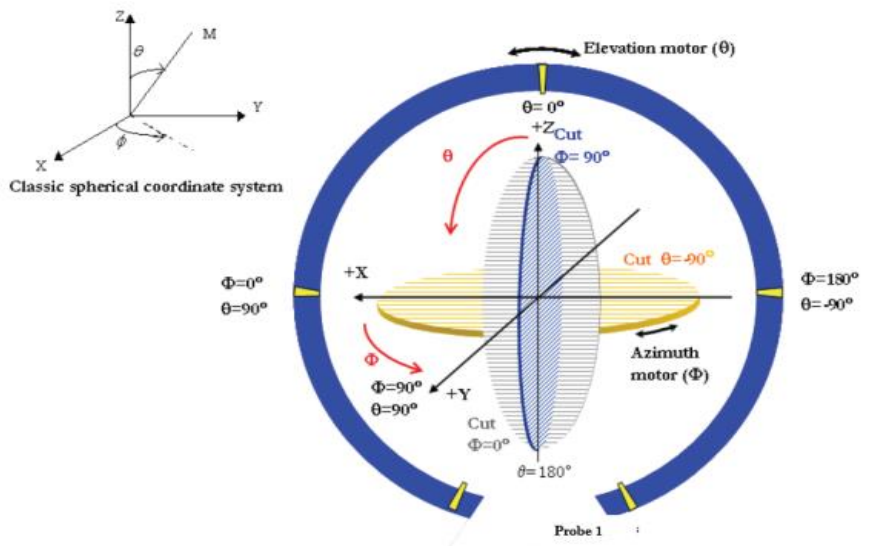
3.Electric characteristics

Electric performance	
Antenna index (WiFiantenna)	
Frequency range (MHz)	2400-2500
Band Width (MHz)	100
Input impedance (Ω)	50
Return Loss (S11)	≤ -10
Polarization	Line

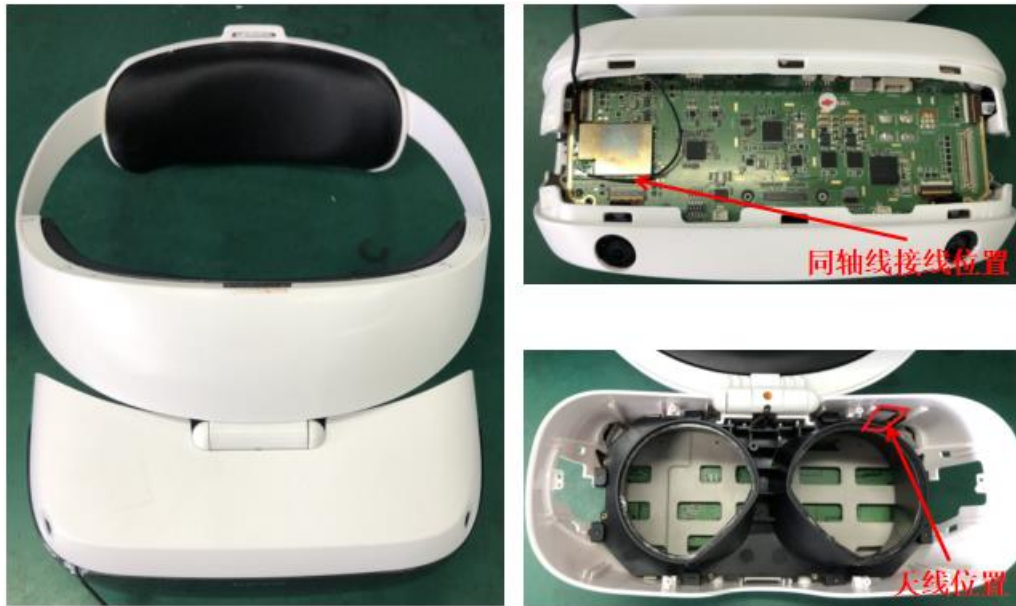
4.Antenna Electrical Performance Setup

Antenna input characteristics measurements (S_{11}) were performed using an Agilent E5071C Network Analyser.

Antenna radiation characteristics was measured in Yunzhihong's 3D anechoic chamber in Kunsha, China , as below figure shown.

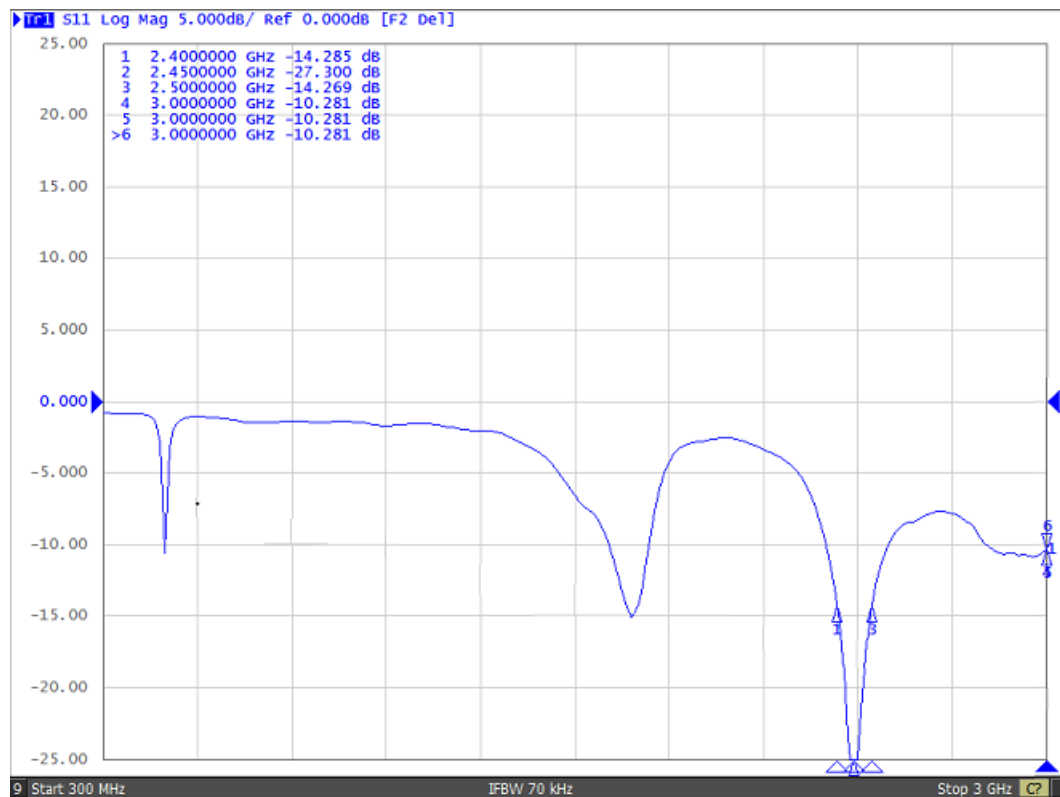


5. Antenna picture



Test Prototype

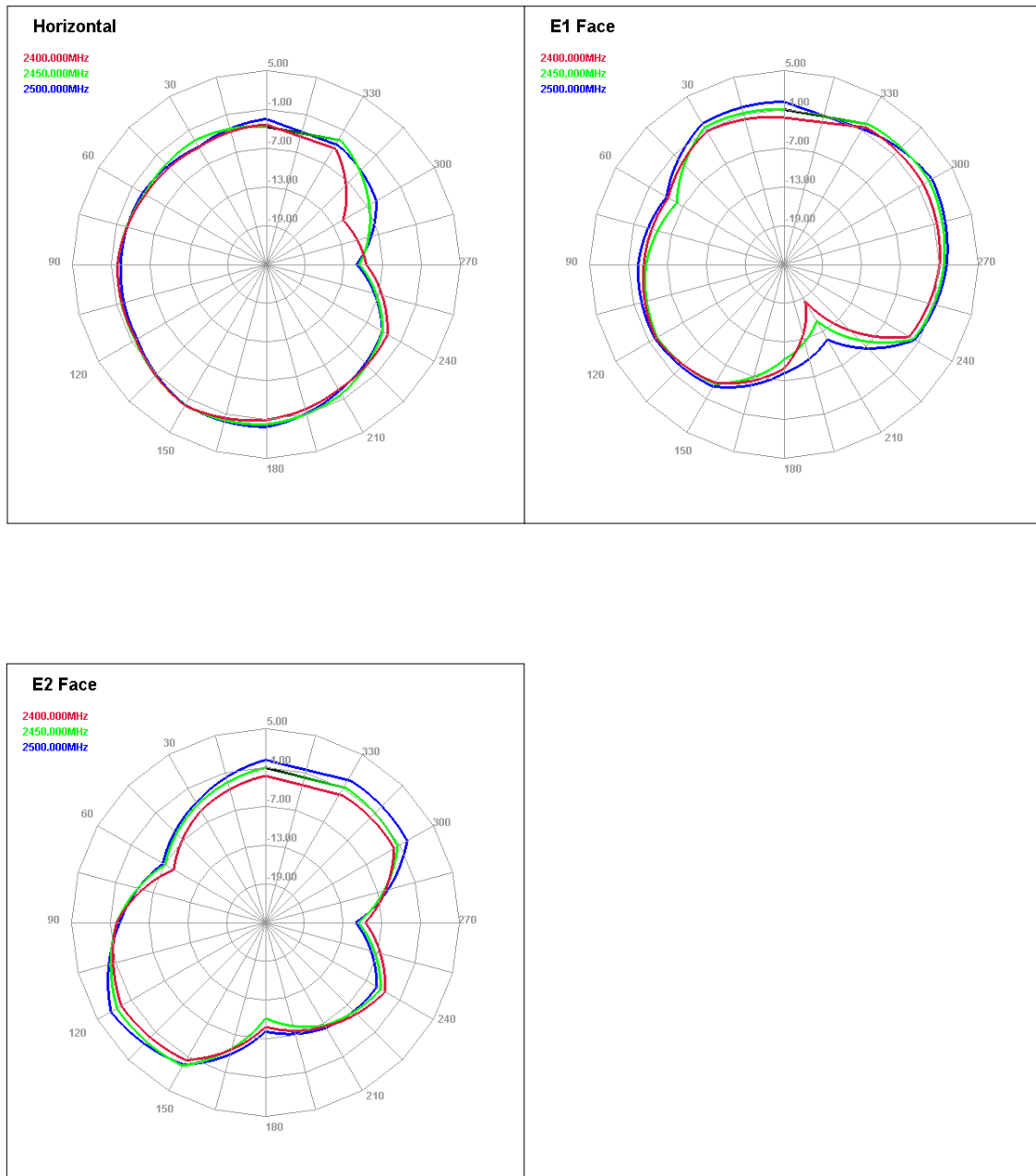
6. Antenna VSWR



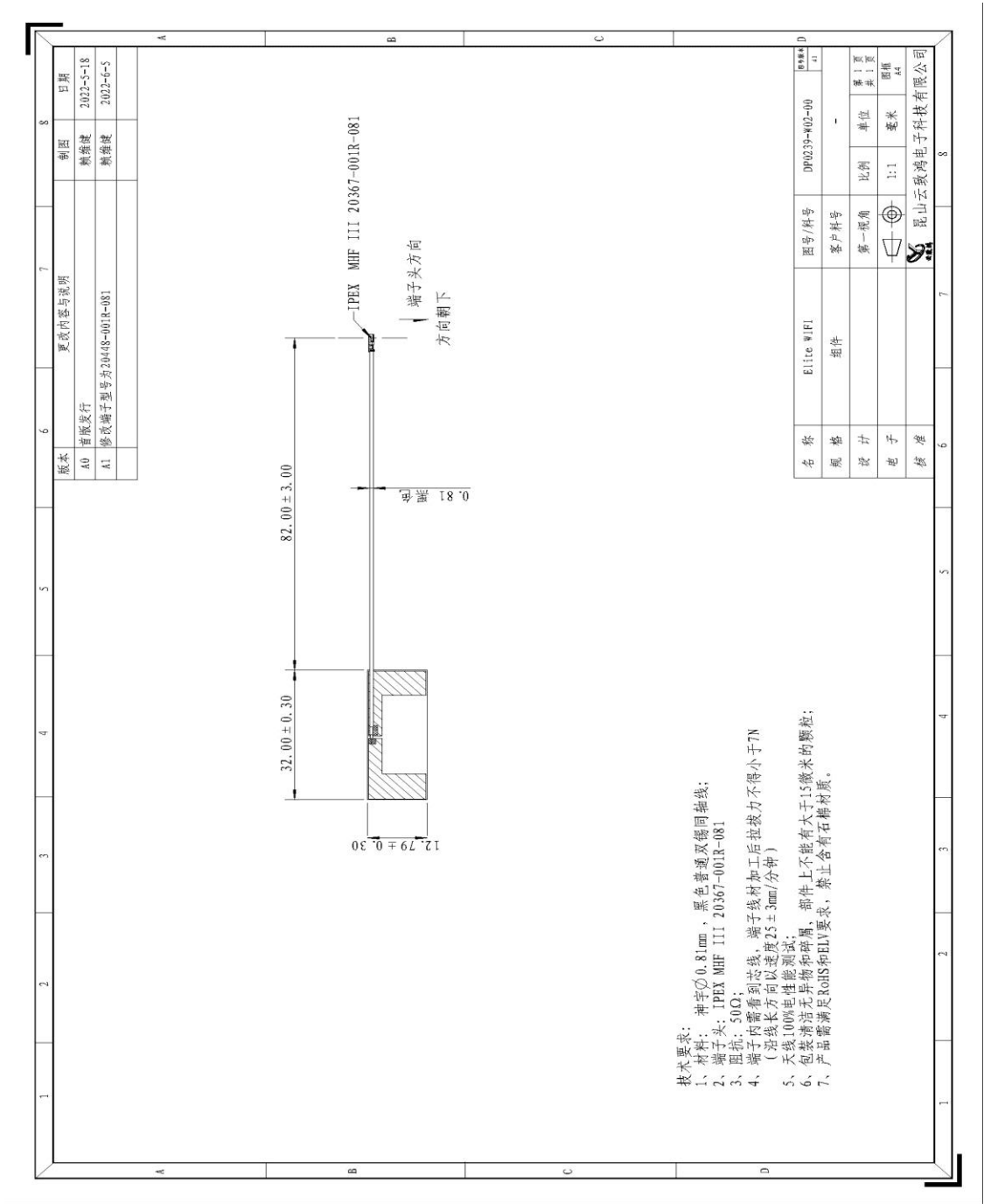
7. Antenna Test Data

Freq	Effi	Effi	Gain
(MHz)	(%)	(dB)	(dBi)
2400	49.4	-3.1	0.1
2410	46.8	-3.3	-0.2
2420	52.6	-2.8	0.2
2430	46.5	-3.3	-0.5
2440	52.6	-2.8	0.1
2450	50.1	-3.0	0.1
2460	55.0	-2.6	0.7
2470	51.8	-2.9	0.6
2480	56.6	-2.5	1.0
2490	53.6	-2.7	0.8
2500	60.4	-2.2	1.0
AVE	52.3	-2.8	0.4

8.Radiation Pattern



9.Engineering Drawing



10.Reliability Reports

Experiments condition	Spray time: 48hours	Moisturizing time: 48 hours
	Lab. temp: $35^{\circ}\text{C} \pm 2^{\circ}\text{C}$	Equipment temp: $46^{\circ}\text{C} \pm 2^{\circ}\text{C}$
	RH: 65%—75%	Pressure: 101-02KPA
	NACL%: $5\% \pm 0.5\%$	PH: 6.5-7.2 (Middle)
Result	Appearance	Normal, No rust
Experiments condition	HT/HM: 92hours	
	Lab. temp: $85^{\circ}\text{C} \pm 5^{\circ}\text{C}$	
	Lab. humidity: $-40^{\circ}\text{C} \pm 5^{\circ}\text{C}$	
Result	Appearance	Normal, No rust
Dim.	callipers	Measurement: $82.00 \pm 3\text{mm}$

11.Package

Packing
Normal requirements : 1.Marked customer,part name,part number. 2.Show the inner PE bag and packed methold. 3.Quatity the product on the cartoon. 4.Dated on part manufacturing.

