

SPECIFICATION FOR APPROVAL

CUSTOMER/PROJECT : SUPERACME

CUSTOMER P.N./: _____

PRODUCT NAME./: WIFI innerMODEL NO./: 31Y012A-41

VERSION	DATE	REVISION DESCRIPTION
T:A	2025/12/1	NEW

SUPPLIER AUTHORIZED SIGNATURE		
PREPARED	CHECKED	APPROVED
Chuzhilei		

CUSTOMER AUTHORIZED SIGNATURE			
Project		Quality	

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with your approved signature.

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1 Terminology Explanation

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access

2 Test Equipment

May be adjusted based on actual conditions

Vector Network Analyzer

Comprehensive Test Instrument

SATIMO 64-bit Anechoic Chamber

3 Applicable Frequency Bands

Highlight applicable bands in a different color.

Standard	Frequency Band
WIFI (2.4G)	2412MHz~2483MHz
5.8G	5725MHz~5850MHz

4 Basic Test Items

4.1 VSWR Diagram

4.2 Smith Impedance Chart

4.3 Radiation Pattern

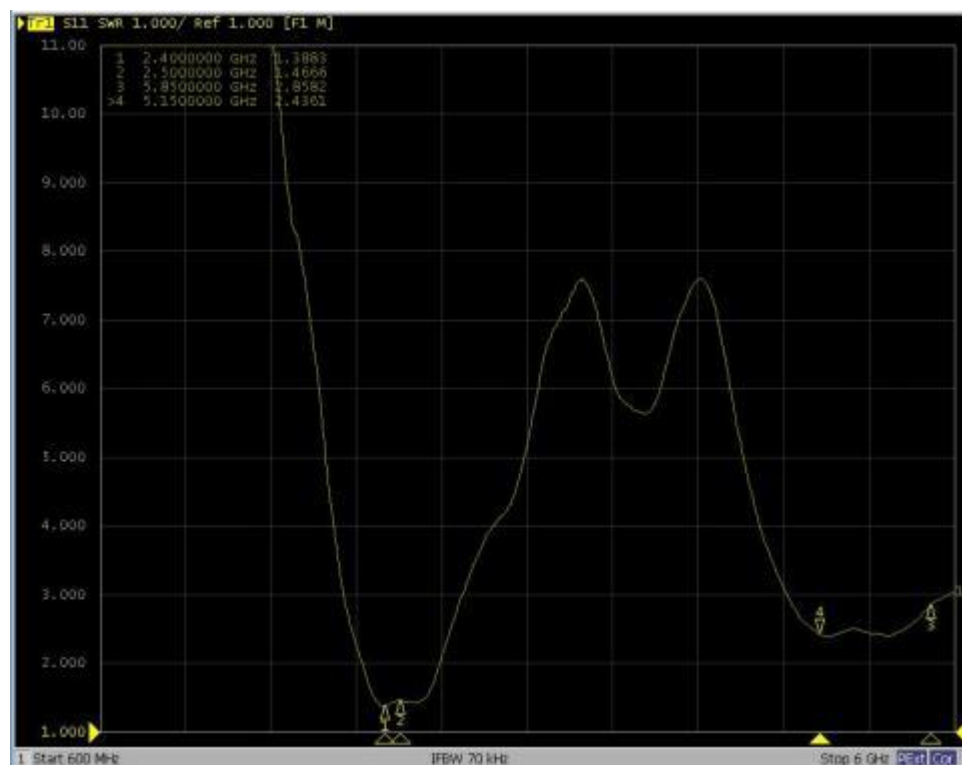
4.4 Gain and Efficiency

4.5 TRP & TIS Testing

5 Test Indicators and Data Charts

5.1 VSWR

5.1.1 VSWR Diagram

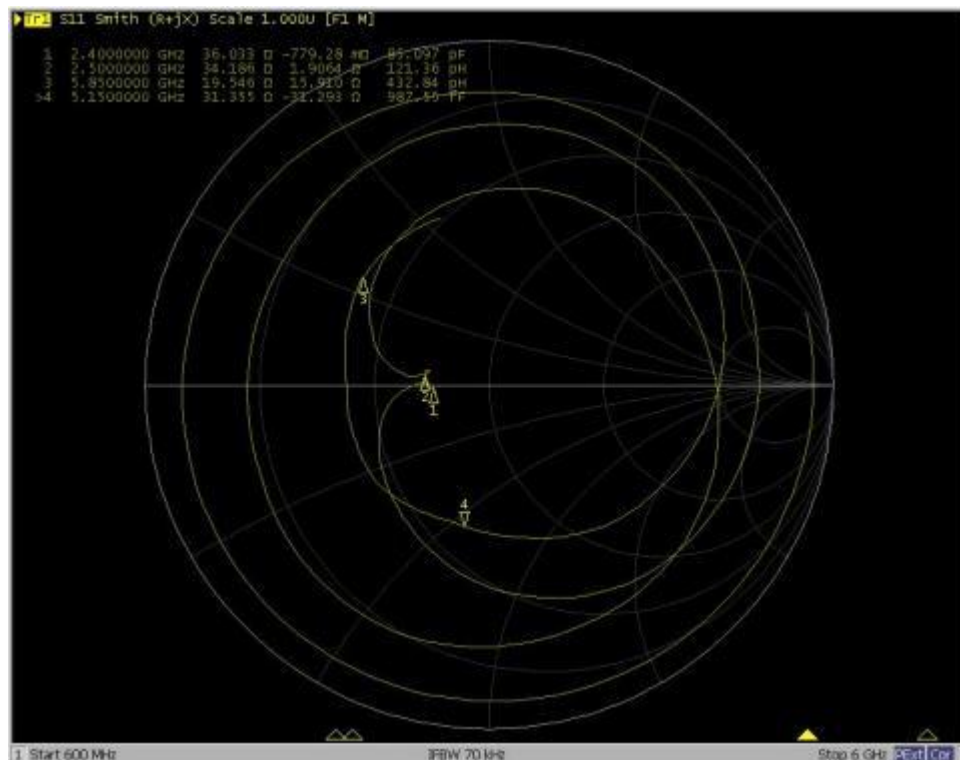


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5.1.2 VSWR Data

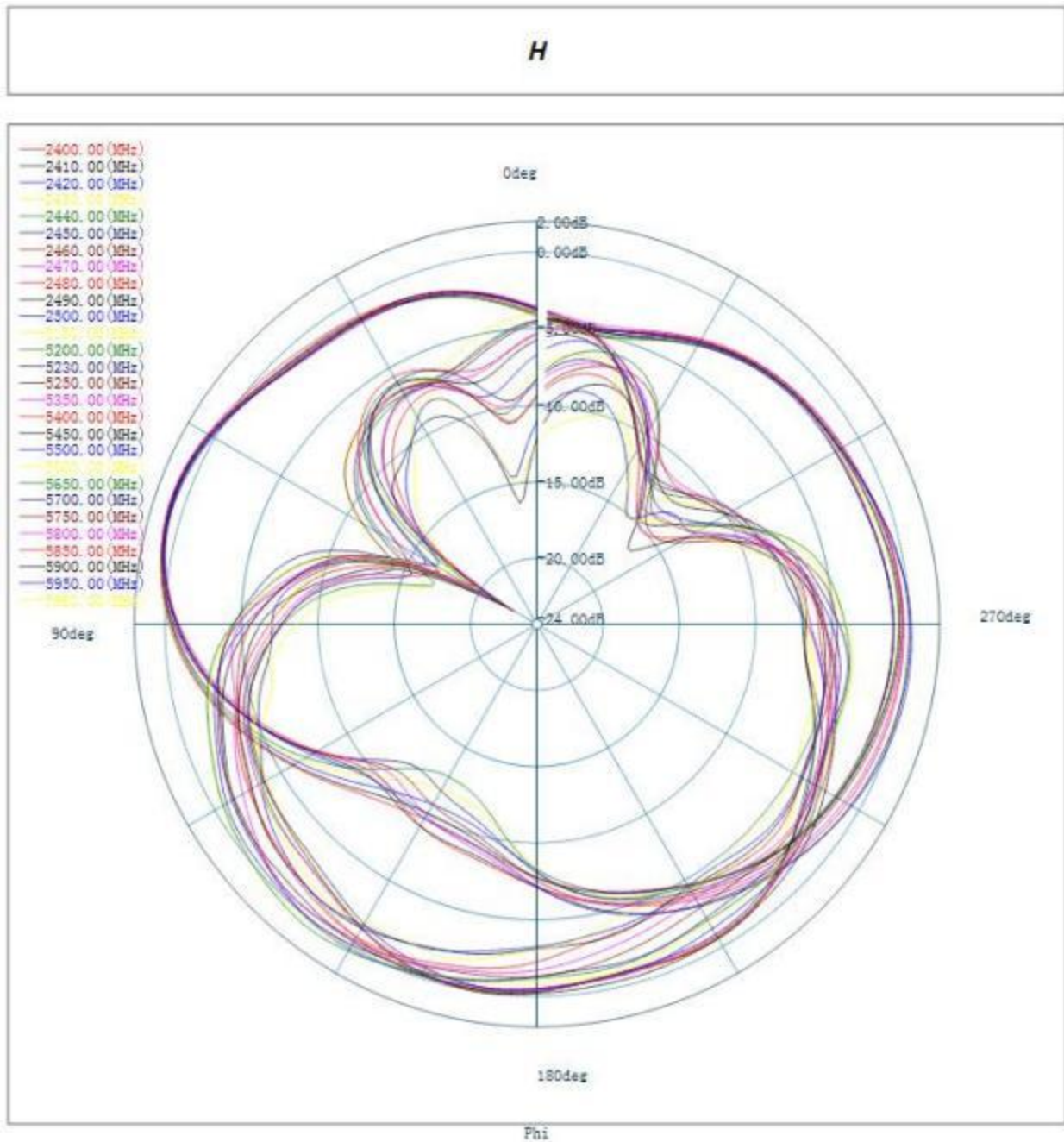
Freq/MHz	2400	2500	5150	5850
VSWR	1.3	1.4	2.4	2.8

5.2 Smith Impedance Chart

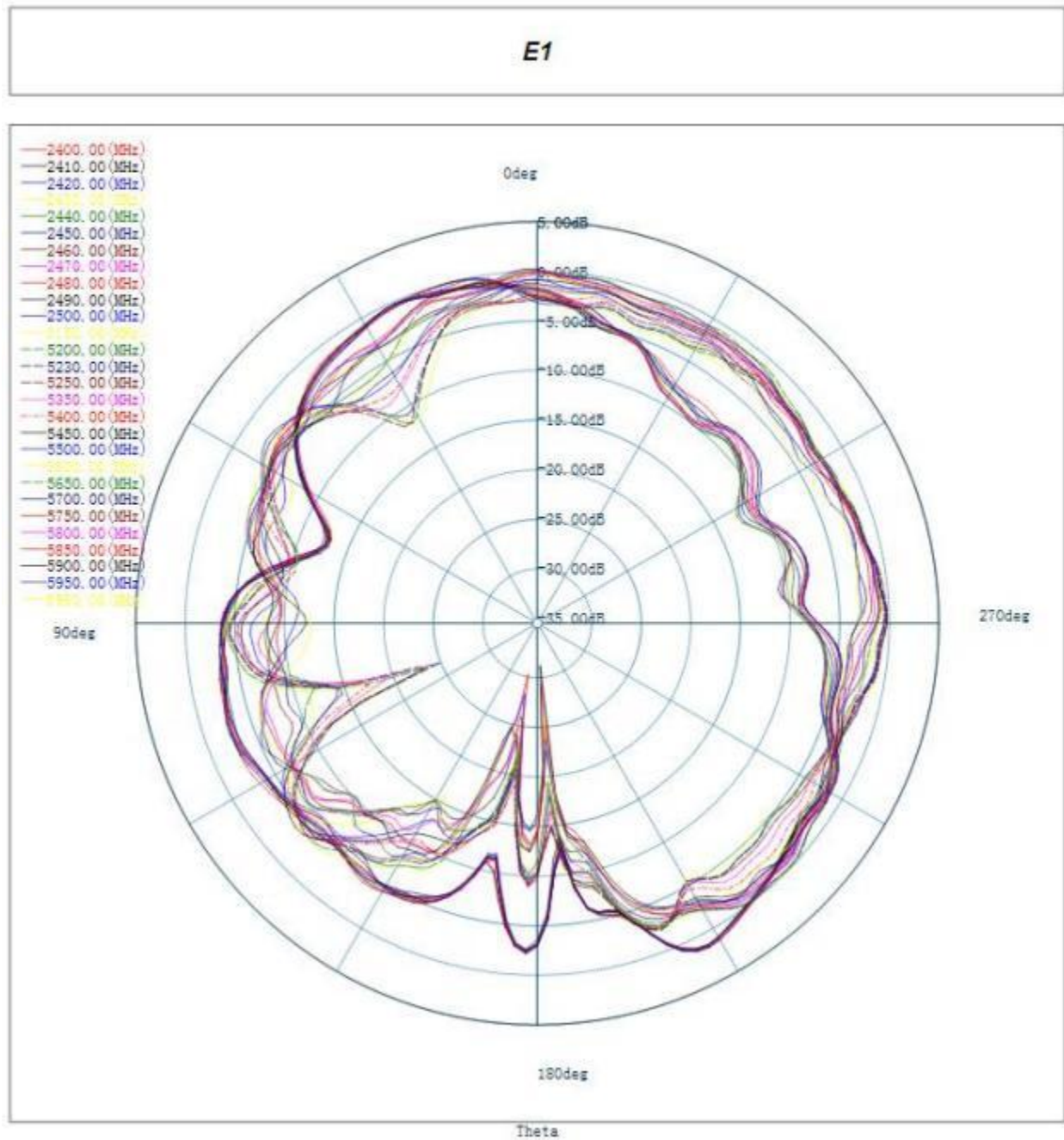


5.3 Radiation Pattern

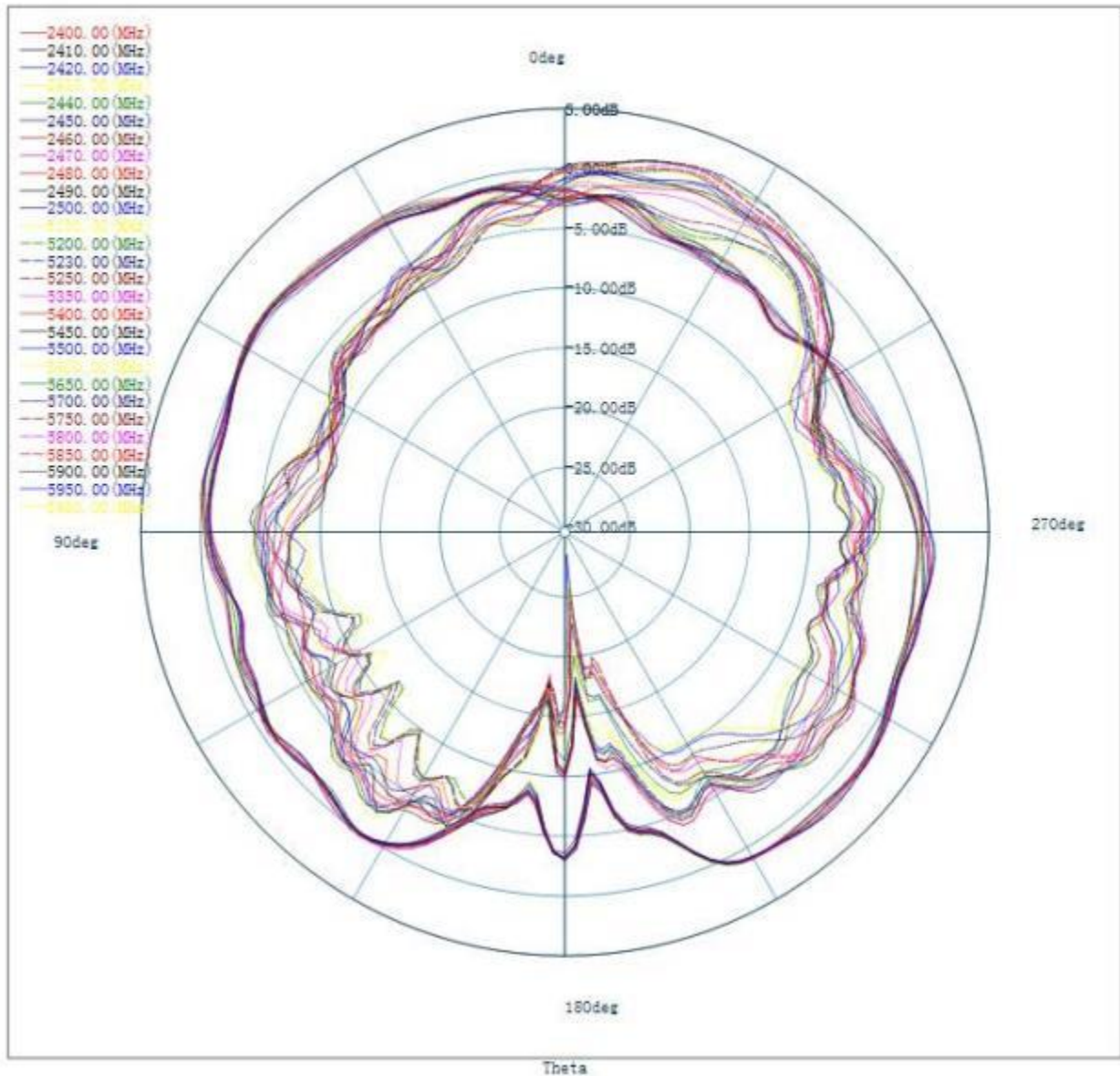
5.3.1 H-plane



5.3.2 E-plane



E2



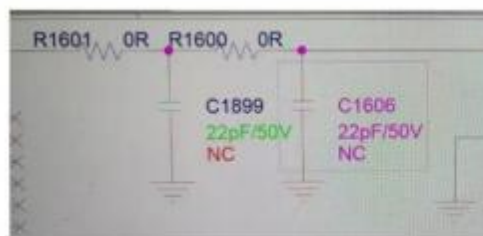
5.4 Gain and Efficiency

Frequency/MHz	Efficiency	Gain/dBi
2400	58%	1.714495265
2420	57%	1.676319602
2430	56%	1.555700112
2450	56%	1.531431935
2470	58%	1.710130502
2480	57%	1.624728303
2500	57%	1.677056196
5150	46%	2.782972173
5200	46%	2.792325547
5250	47%	2.863537573
5350	50%	3.27562084
5450	55%	3.437168333
5500	56%	3.508148781
5650	60%	3.911211255
5750	57%	3.686369014
5850	53%	3.392652464
5950	47%	2.863533821

6 Environmental Treatment Recommendations

No environmental treatment required.

7 Impedance Matching Requirements



Element	Value
R1601	0Ω
C1899	/
R1600	0Ω
C1606	0.3pF

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9 Antenna Installation Guide

9.1 Antenna Installation Location Description

10 Others