

SPECIFICATION FOR APPROVAL

Customer: Wuhan Guide Sensmart Tech Co., Ltd

CUSTOMER PART NO:BA3202000064A

Supplier: Shenzhen Myantenna RF Technology Co., Ltd.

PRODUCT MODEL: ZG45

PRODUCT NAME: SMD 258P 8.0x3.0x1.0

PRODUCT CODE: M01-0201190R0A

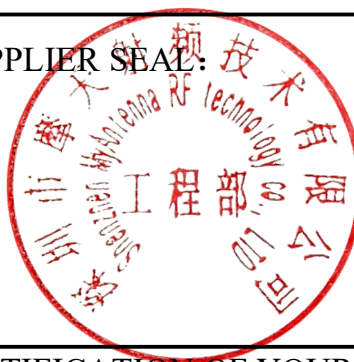
CUSTOMER SIGNATURE:

CUSTOMER SEAL:

SUPPLIER SIGNATURE:

陈建芳

SUPPLIER SEAL:



NOTE: PLEASE RETURN THIS COPY AS A CERTIFICATION OF YOUR APPROVAL

Prepared by: Dong Chunling	Date: 2025-03-22	Address:	A410, Country Garden Phoenix Smart Valley, No.50 Tiezai Road, Bao'an District, Shenzhen
		Tel:	0755-86503881

Revision History VERSION INFORMATION

[illegible]

PERFORMANCE PARAMETER

1. Electrical Characteristics

Antenna		
1	Antenna model	Omnidirectional Antenna
2	Frequency Range	2400-2500MHz; 5100-5900MHz
3	VSWR	≤ 3.5
4	Peak Gain	3.08
5	Peak Efficiency	46.97%
6	Impedance	50 Ω
7	Polarization	Linear Polarization

2. Material Item

No	Part Name	
1	PCB Material	Blue PCB

PERFORMANCE PARAMETER

3.Environment Condition

1	Operating Temperature	-40°C~+85°C, 10%~95% RH
2	Storage Temp	-40°C~+85°C, 10%~95% RH

4. Environmental Requirements:

1	Environmental Requirements	ROHS /REACH Directive	Compliant
		Other Requirements	-

5. Environmental compliance requirements :

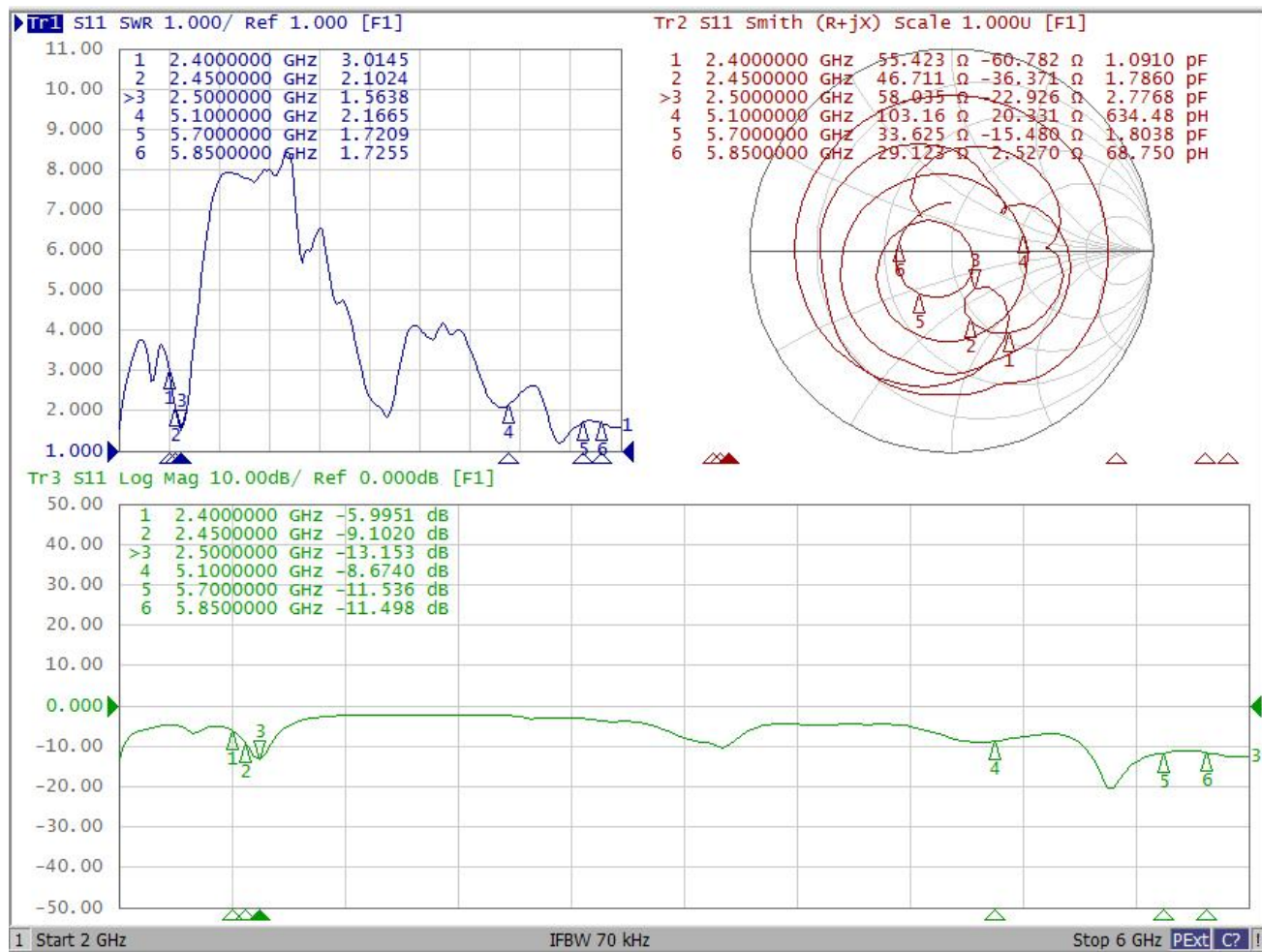
S/N	Test items	Reference Standards	Test Method	Test Conditions	Qualification judgment
1	Low-Temperature Storage	ETSI 300019-2-4 YD/T 1059	IEC 60068-2-1 GB/T 2423.1	-40°C, 24 hr, 1°C/min (Place the sample at room temperature, cool down to -40°C, hold for 24 hr, then ramp up to room temperature within 2 hr)	After the test, the product specifications, functions and mechanical performance shall be normal at room temperature.

2	High-Temperature Storage	ETSI 300019-2-4 YD/T 1059	IEC 60068-2-2 GB/T 2423.2	85°C, 24 hr, 1°C/min (Place the sample at room temperature, heat up to 85°C, hold for 24 hr, then cool down to room temperature within 2 hr)	After the test, the product specifications, functions and mechanical performance shall be normal at room temperature.
3	Temperature Cycling	ETS 300019-2-4 YD/T 1059	IEC 60068-2-14 GB/T 2423.22	-40~85°C, 1°C/min, hold at min. and max. temperature for 3 hr each, 5 cycles	After the test, the product specifications, functions and mechanical performance shall be normal at room temperature.
4	Salt Spray Test	ETS 300019-2-4 DKBA4073-20 09.03 Corrosion-resistance requirements for structural products	IEC 60068-2-52 GB/T 2423.18	+15 to +35°C, 5%±1% NaCl solution, pH 6.5–7.2, spray 2 hr; 40°C, 93% R.H., hold 22 hr, 3 cycles	After stress recovery, the antenna surface shall be free of rust, discoloration and coating peeling. After the test, the product specifications, functions and mechanical performance shall be normal.

Test Charts TESTING CURVE

1. Performance Test

1.1 VSWR V.S.W.R



Data List

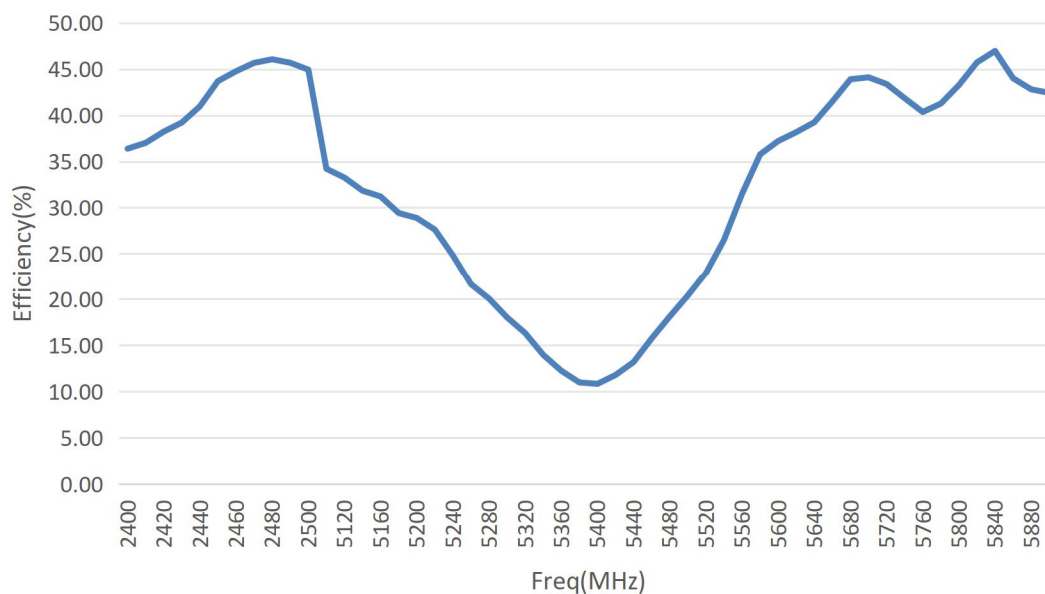
Freq	2.40GHz	2.45GHz	2.50GHz	5.10GHz	5.70GHz	5.85GHz
VSWR	3.01	2.10	1.56	2.16	1.72	1.72

Test Charts TESTING CURVE

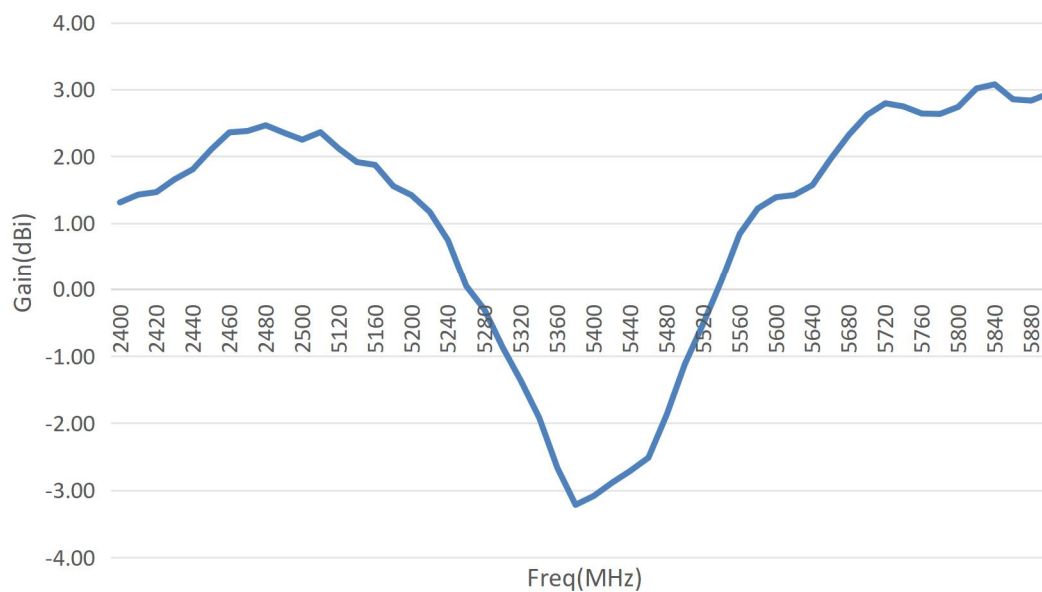
2. Passive Test

2.1 Efficiency and Gain

Efficiency



Gain

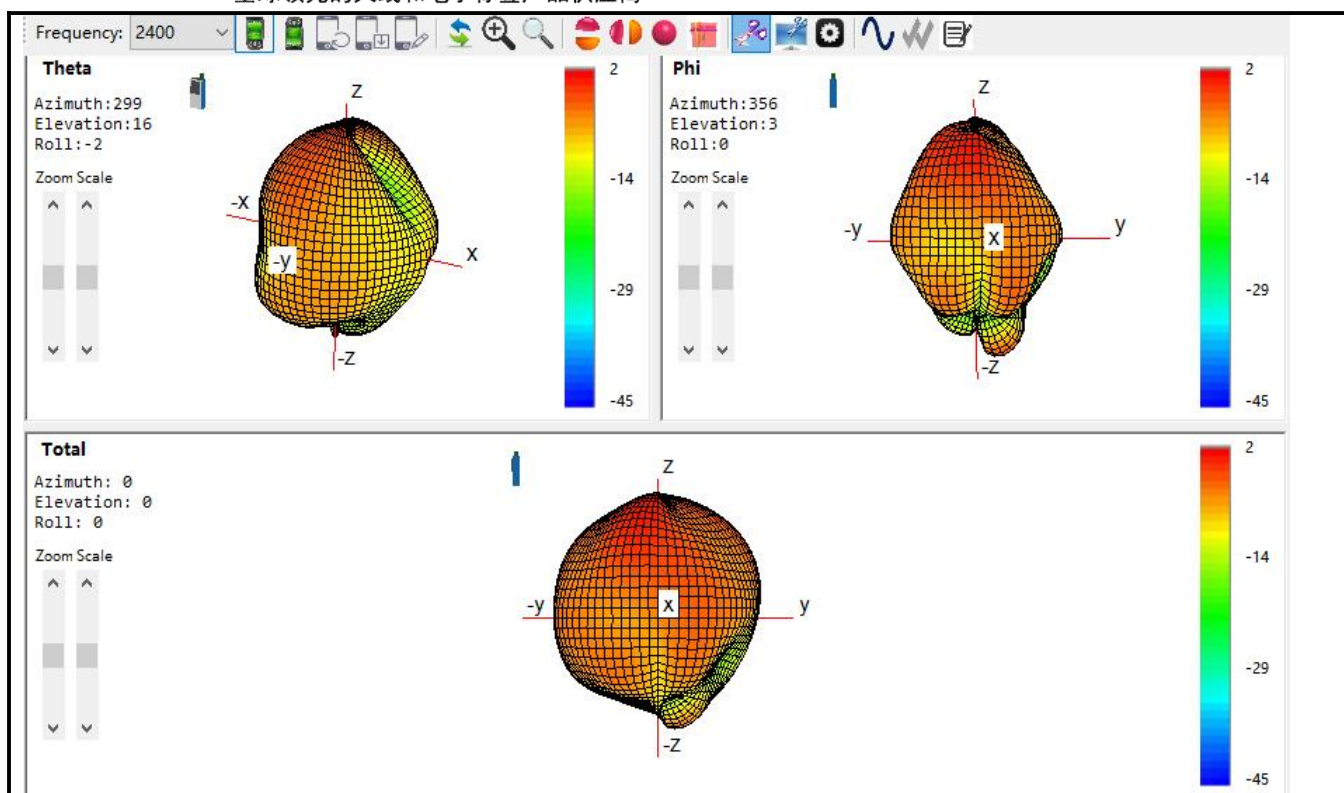


Test Charts TESTING CURVE

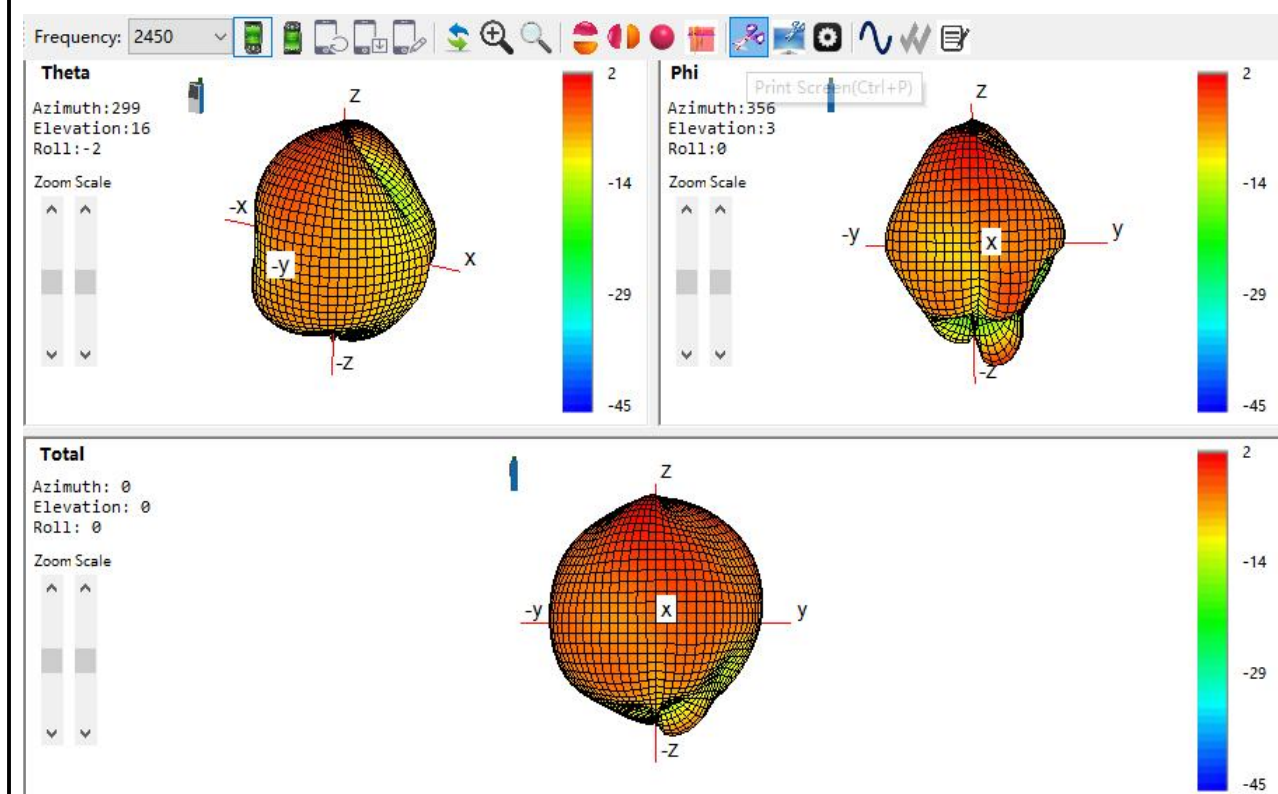
Freq(MHz)	Gain(dBi)	Efficiency(%)	Freq(MHz)	Gain(dBi)	Efficiency(%)
2400	1.31	36.39	5400	-3.08	10.83

2410	1.43	37.02	5420	-2.89	11.79
2420	1.46	38.23	5440	-2.71	13.19
2430	1.66	39.22	5460	-2.51	15.75
2440	1.81	40.98	5480	-1.87	18.12
2450	2.10	43.71	5500	-1.12	20.40
2460	2.36	44.78	5520	-0.52	22.88
2470	2.38	45.68	5540	0.12	26.50
2480	2.47	46.07	5560	0.84	31.49
2490	2.35	45.69	5580	1.22	35.77
2500	2.25	44.94	5600	1.39	37.22
5100	2.36	34.21	5620	1.42	38.18
5120	2.12	33.25	5640	1.57	39.25
5140	1.91	31.84	5660	1.96	41.51
5160	1.87	31.21	5680	2.32	43.91
5180	1.55	29.42	5700	2.62	44.11
5200	1.42	28.88	5720	2.79	43.39
5220	1.17	27.62	5740	2.75	41.85
5240	0.74	24.80	5760	2.64	40.36
5260	0.05	21.62	5780	2.64	41.27
5280	-0.31	20.06	5800	2.74	43.27
5300	-0.87	18.01	5820	3.02	45.73
5320	-1.37	16.32	5840	3.08	46.97
5340	-1.91	13.97	5860	2.85	44.01
5360	-2.66	12.24	5880	2.83	42.81
5380	-3.22	10.98	5900	2.94	42.43

2.2 3D Plot

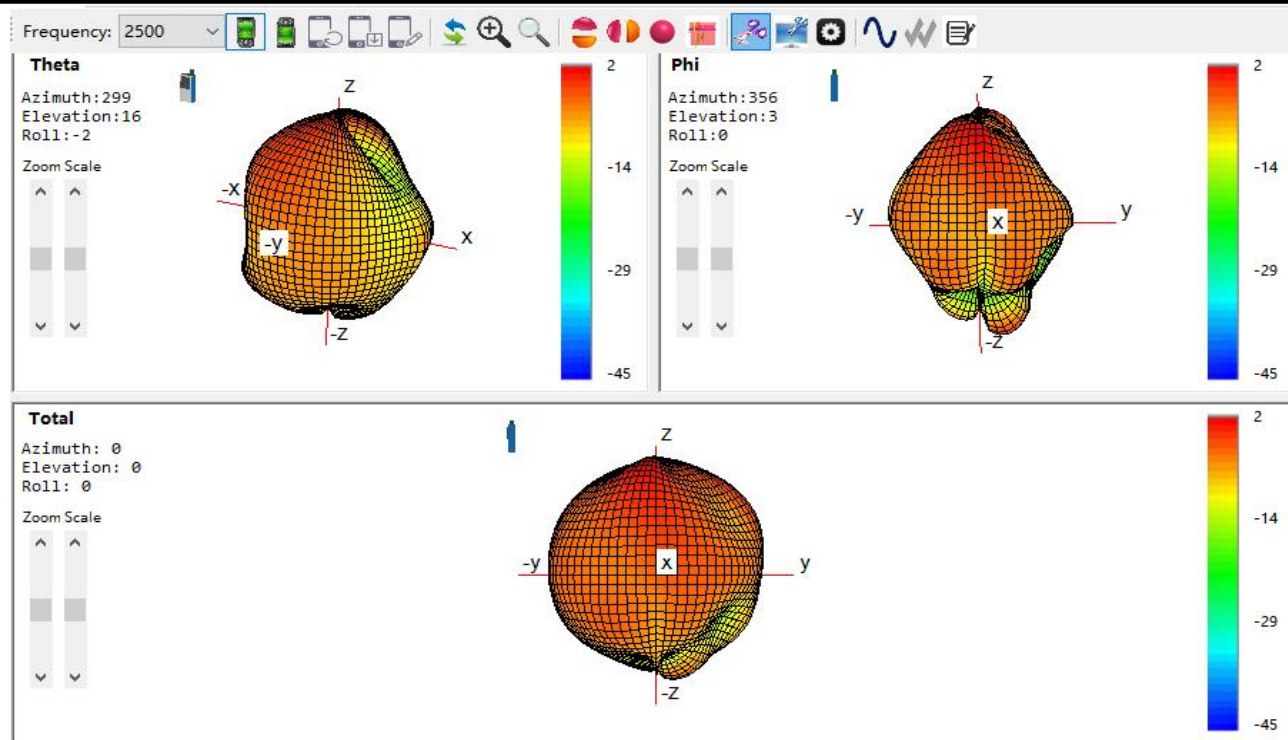


2400MHz Gain=1.31dBi

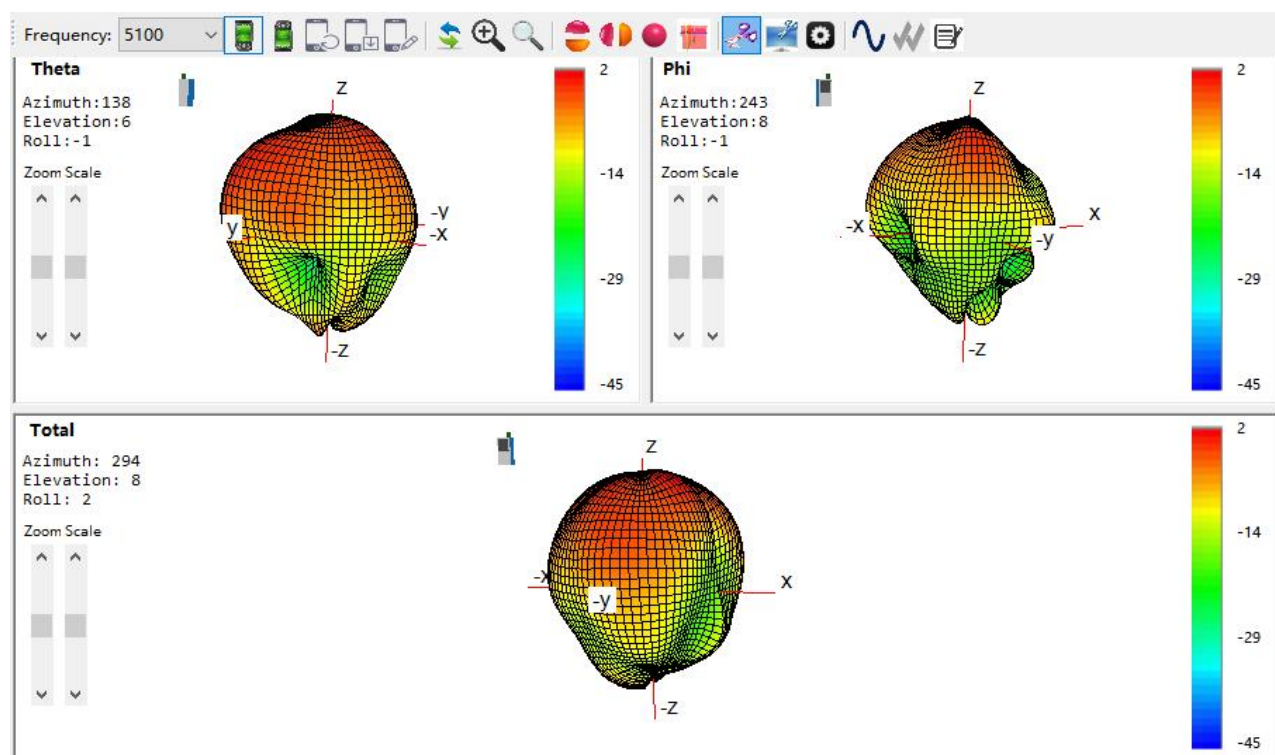


2450MHz Gain=2.10dBi

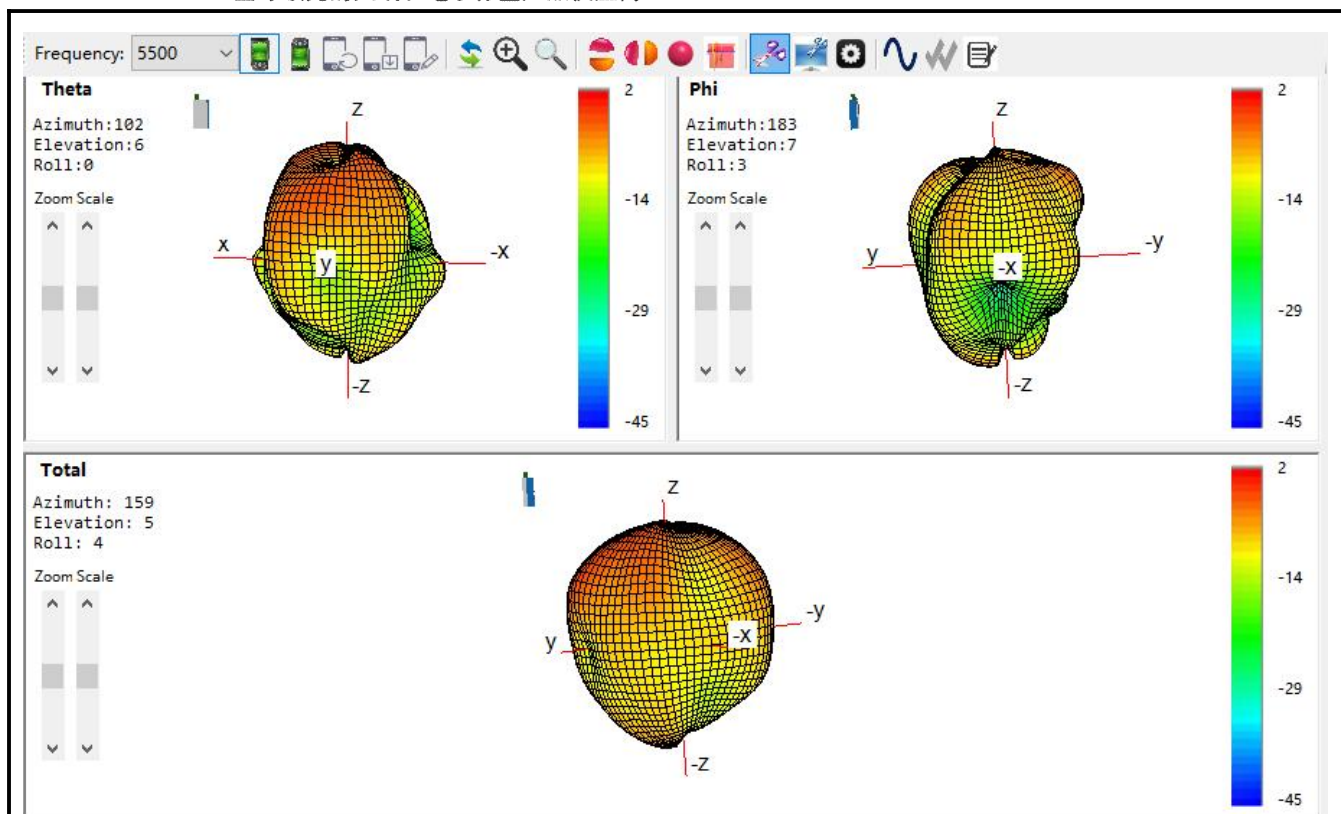
Test Charts TESTING CURVE



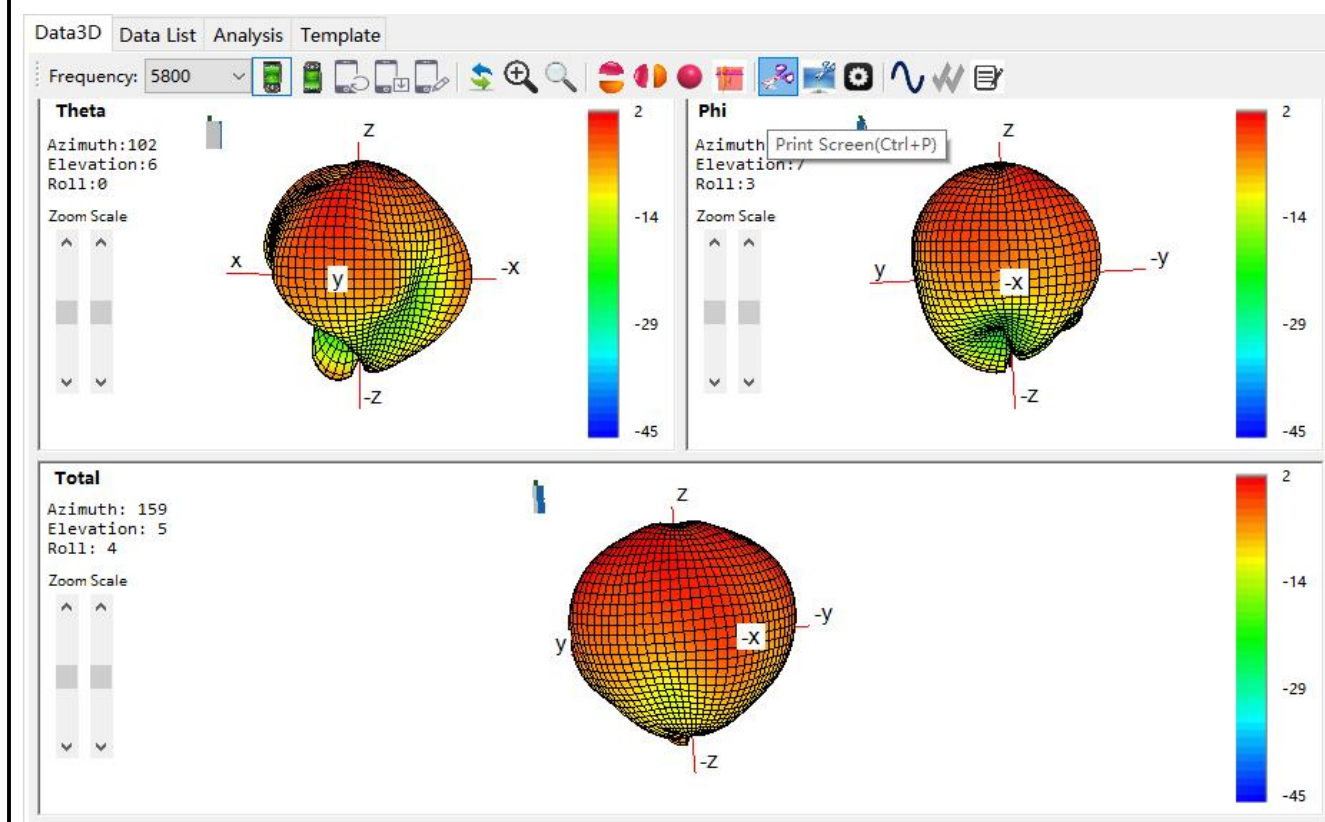
2500MHz Gain=2.25dBi



5100MHz Gain=2.36dBi

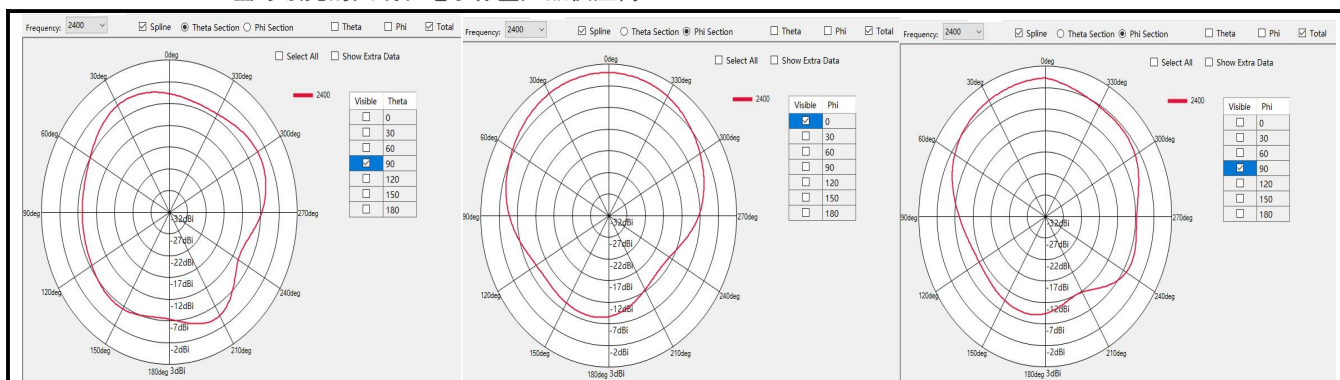


5500MHz Gain=-1.12dBi

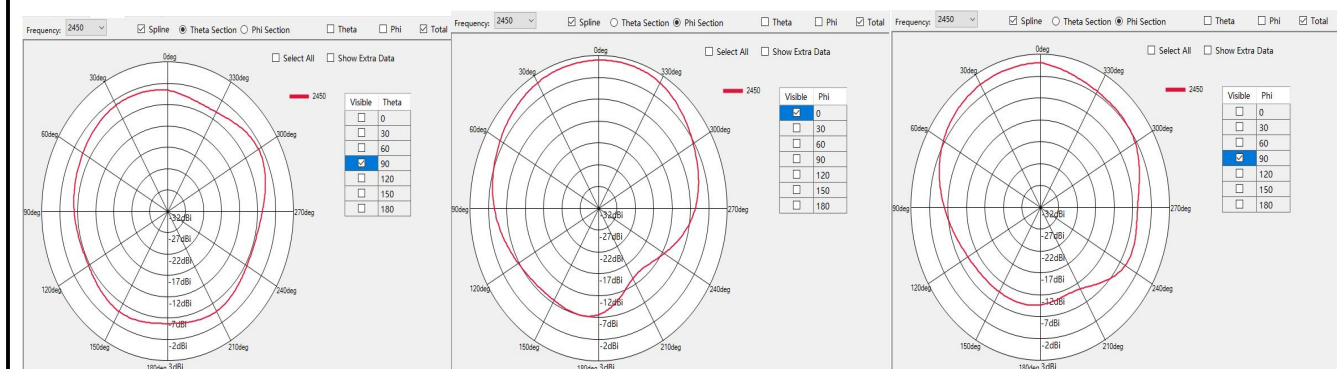


5800MHz Gain=2.74dBi

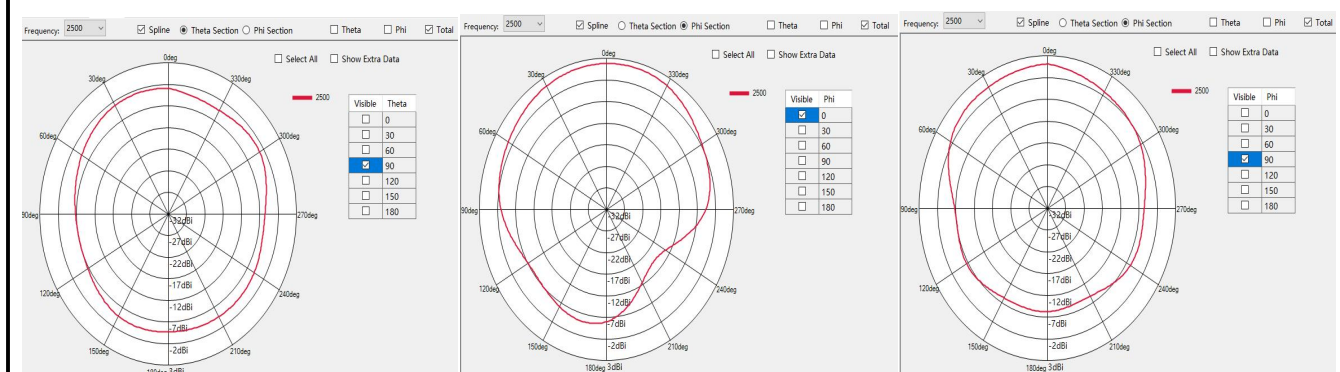
2.3 2D Figure



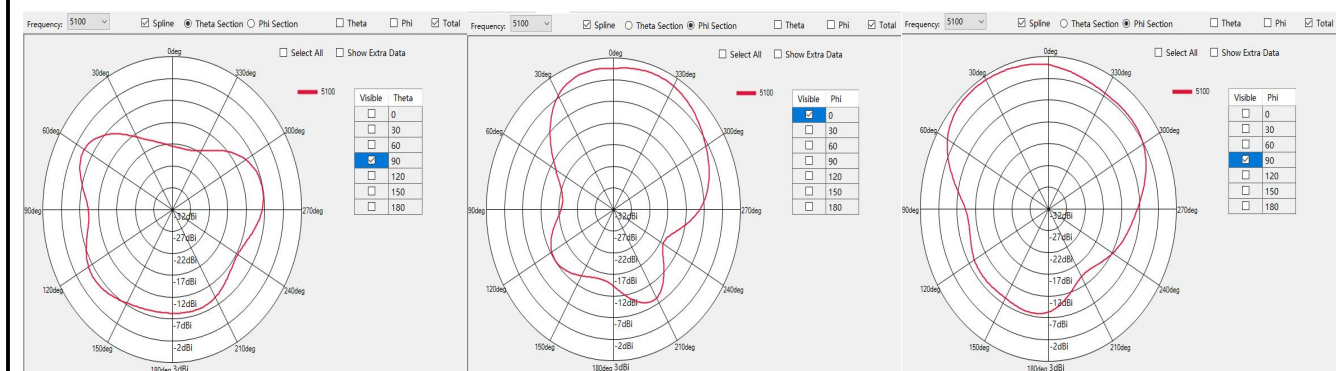
2400MHz Gain=1.31dBi



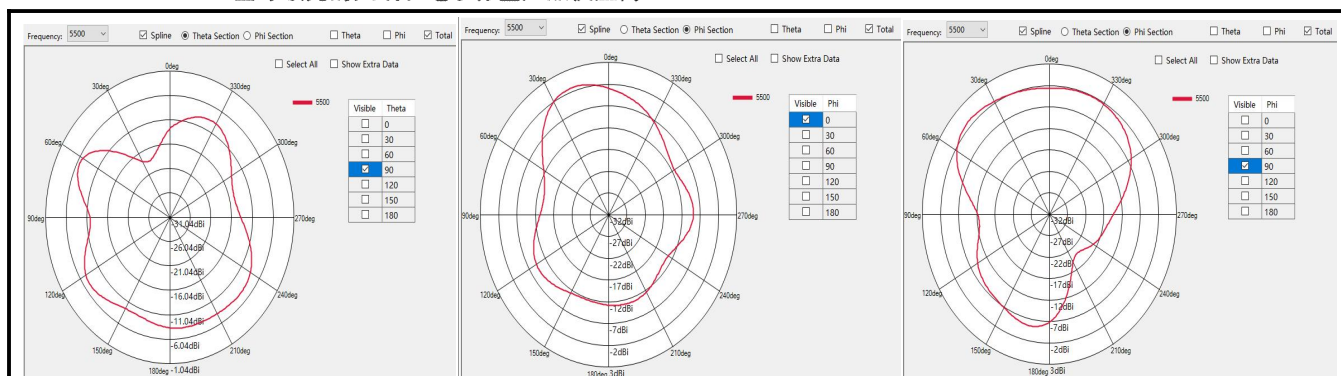
2450MHz Gain=2.10dBi



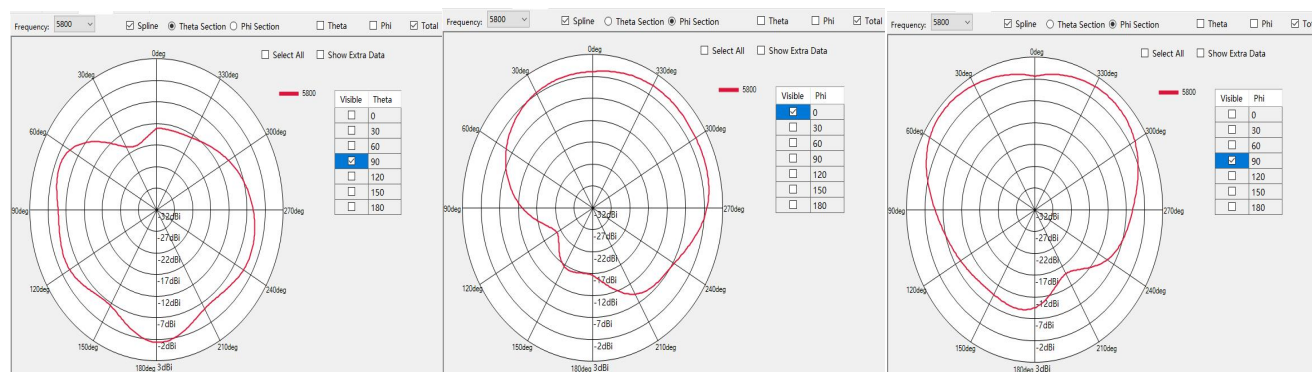
2500MHz Gain=2.25dBi



5100MHz Gain=2.36dBi

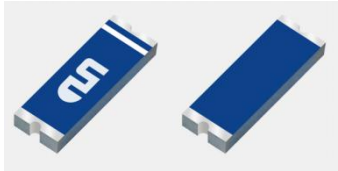
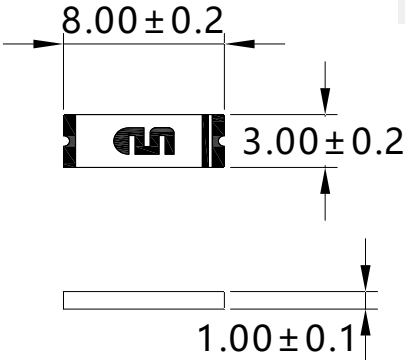
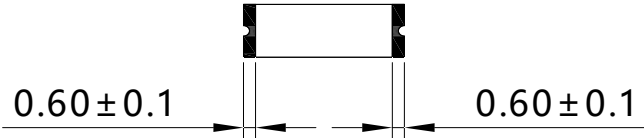
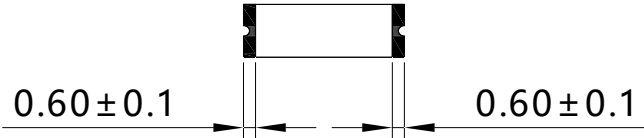


5500MHz Gain=-1.12dBi



5800MHz Gain=2.74dBi

SCHEDULE DRAWING

	5	6	7	8	
	REV.	DESCRIPTION	APPD.	DATE	
	A	INITIAL RELEASED	Chen	2025/03/22	
A					A
B					B
C					C
D					D
E	1. Remarks: Frequency Range: 2400–2500 MHz; 5100–5900 MHz Impedance: 50 Ω VSWR: ≤ 3.5 Polarization: Linear Operating Temperature: -40 °C to +85 °C All components are RoHS compliant				E
F	DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED TOLERANCES ANGLES = ±3° UP TO 6 = ±0.1 6-40 = ±0.2 40-120 = ±0.6 120-315 = ±1.0 ABOVE 315 = ±1.6		CUS P/N: SMD 258P 8.0x3.0x1.0 PART NO.: M01-0201190R0A APPD: 陈建坊 CHKD: 陈建坊 DR: 董海强		F
	5		8		

MyAntenna[®]

TITLE: ZG45

DWG NO.:



SCALE
1:1

SHEET
1/1

REV.
V01

Certificate of Acceptance Sample Size Inspection Report

Project Name	ZG45	Antenna Type	Omnidirectional	Inspection	2025-03-22			
Checklist								
	Test Item	Specification Requirements Test criteria	Result					Remark
	Test Item		1	2	3	4	5	
Module	PCB	Color consistent with specification, no chromatic aberration, mis-color or other defects						
Functional Test	VSWR	≤3.5						
Dimensions		8.0±0.2						
		3.0±0.2						
		1.0±0.1						
Remarks								
Approved by:		Reviewed by:			Inspector:			

QC Mechanical Drawing			Document No.	MA-QCW-2503-02 4	Document Name	ZG45 Antenna			Prepared	Lin Tianfu
			Ver.	A					Reviewed	Wang Yuqiang
			Issue Date	2025.03.22	Effective Date	2025.03.22	Page	1/1	Approved	Wang Yuqiang
No.	Process	Process Step	Process Parameters/Quality Characteristics	Equipment / Fixture Used	Inspection Equipment	Inspection Method	Inspection Frequency	Records Used	Person in Charge	Related Documents
1		Incoming Inspection	Inspection Standard/Drawing	Caliper	/	Visual	AQL Sampling Inspection	IQC Inspection Report	IQC	
2		Production Picking	Production Task Order	/	/	/	/	Material Requisition	Warehouse Keeper	
3		Unpack (unbag) and verify quantity	Delivery Note	/	/	/	/	Delivery Note	Operator	
4		Produce the first-piece finished	Technical Document/Drawing/BO M	/	Manual	Visual	Full Inspection	Daily Production Report	Operator	

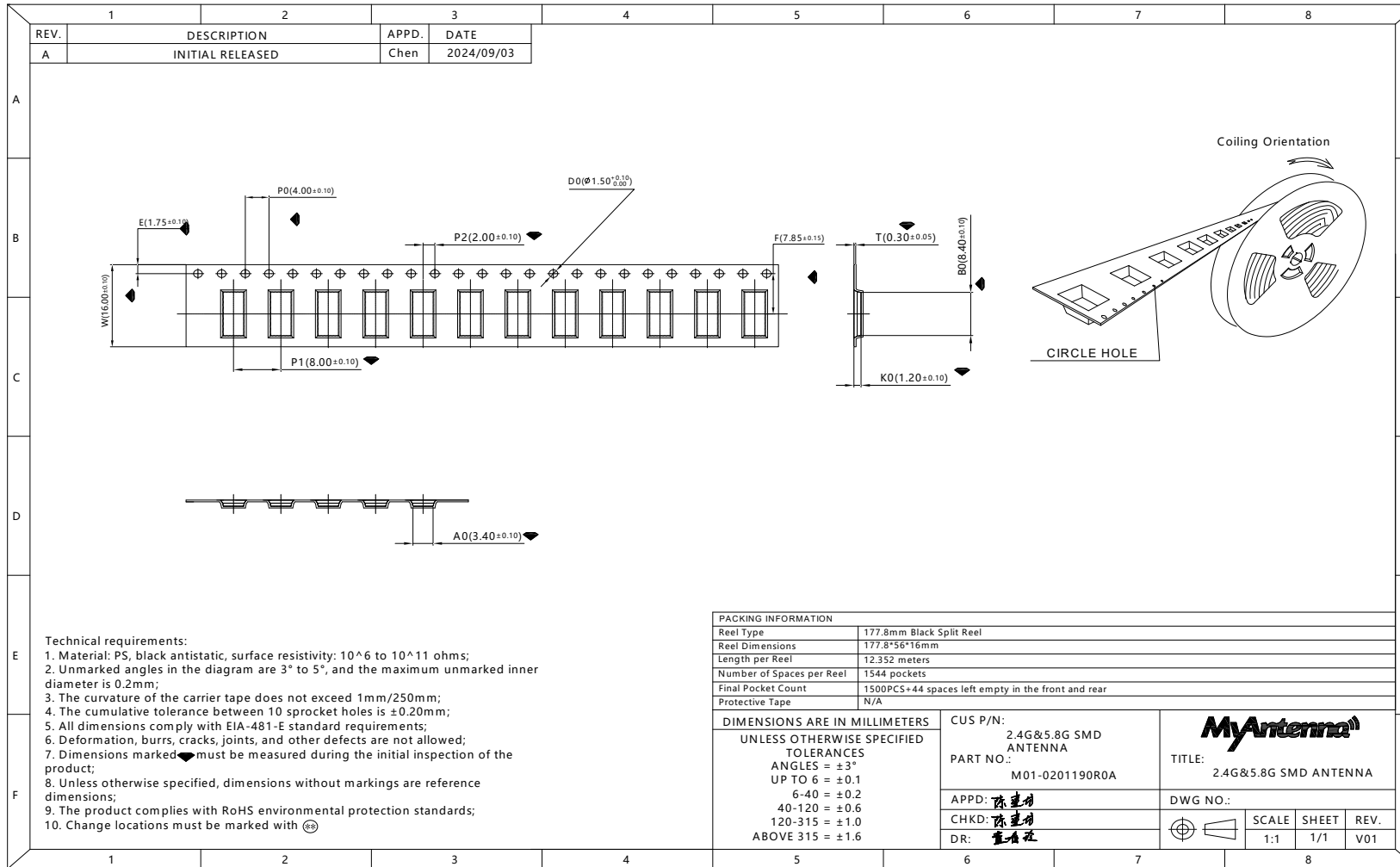
		product								
5		First-piece Appearance Confirmation	Sealed Sample	/	Visual	Visual	/	IPQC First-piece Patrol Inspection Record	IPQC	
6		First-piece Performance Test	Product meets the design specification requirements	/	Network Analyzer	Test Visual	/	IPQC First-piece Patrol Inspection Record	IPQC	
7		Patrol Inspection	IPQC In-process Patrol Inspection Rules	/	Visual	Visual	2H	IPQC In-process Patrol Inspection Record	IPQC	
8		Full Appearance Inspection	Technical Document/Drawing/ Appearance Judgment Criteria	/	Visual	Visual	Full Inspection	Daily Production Report	Inspector	
9		Test	Technical Document/Drawing	/	Network Analyzer	Test Visual	Full Inspection	Daily Production Report	Operator	
10		Packaging (bagging) Quantity	Drawing/BOM	/	/	Visual	Full Inspection	Daily Production Report	Operator	

		Confirmation								
11		Inspection	IPQC In-process Patrol Inspection Rules	/	Visual	Visual	2H	IPQC In-process Patrol Inspection Record	IPQC	
12		Warehousing	Production Task Order	/	/	/	/	Product Warehousing Note	Warehouse Keeper	
13		Pre-shipment Inspection	Shipment Notice	Network Analyzer		Measurement	AQL Sampling Inspection	/	OQC	

Notes: □ Denotes operation / processing; ◇ Denotes confirmation, inspection, judgment or approval; ▽ Denotes warehousing; ↓ Denotes handling / transfer;

Symbol	Modification	Rev.	Date	Modified by	Approval
		A	2025.03.22	Lin Tianfu	Wang Yuqiang

PACKAGE DIAGRAM



PRODUCT VERIFICATION

Test Item	Test Description / Standard	Target Requirements	Product Verification (PV)							Remarks
			Sample		Test Location			Test	Person in Charge	
			Quantity	Type	Customer	Supplier	Third Party	Result		
Visual Inspection	The surface shall be free of dents, scratches, cracks, deformation, burrs, mildew and other defects; the surface coating shall not blister, crack or peel; metal parts shall be free of rust and other mechanical damage; potting compound shall not overflow.	Appearance Normal	Full Inspection	Tooling Parts		√		OK		
Dimension	According to Drawing	Within Dimensional	3pcs	Tooling Parts		√		OK		

	Dimension	Tolerance								
Performance Inspection	Product meets the design specification requirements	Short-circuit / Continuity Test	Full Inspection	Tooling Parts		√		OK		
Salt Spray Resistance	48 hr Salt Spray Test	No rust on the surface after cycle verification	3pcs	/		√		OK		
Restricted / Prohibited Substance Requirements	Test according to RoHS requirements	Product shall comply with RoHS standard	/	/			√	OK		
Packaging Specification	Place according to drawing specification	Visually inspect placement per requirement	Full Inspection	Tooling Parts		√		OK		

