

Product specification

(structural component class)

SPECIFICATION FOR APPROVAL

Material description

DESCRIBE: FPC antenna black +0.81 coaxial black.

Project name

PROJECT NAME:M7

Material code

PART NO: BY-M7-WIFI-A01

Customer name

CUSTOMER NAME: Dongguan Decai Electronic Technology Co., Ltd.

Customer item

CUSTOMER (P/N):

date

Date: July 04th, 2025

Supplier acknowledges that

Supplier confirmation:

Customer confirmation			
confirm	proofread	check	approve

深圳市博远无线通讯技术有限公司

Shenzhen Boyuan wireless communication technology Co.,LTD

通讯地址：深圳市宝安区石岩街道松柏路美生智谷秋谷 401/402

Catalogue

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三. Change resume

serial number	Change date	Project name	version	Change content	remarks
one	2025.7.04	FPC antenna	A01	without	New edition release

IV. Antenna pictures

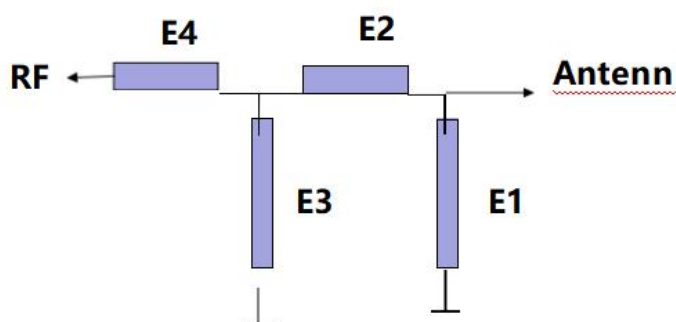
1. Antenna Structure



V. Antenna matching

Match the circuit diagram

Element	E1(0402)	E2(0402)	E3(0402)	E4(0402)
Value				



The matching
circuit has not
been modifiend

六. Antenna performance

Electrical specification/electrical characteristics	
Freq.Range/ band range (MHz)	2400-2500MHz;
Impedance/ impedance (ω)	50Ω
Directional/ radiation direction	omnidirection
Polarization/ polarization mode	Linear polarization
Mechanical Specification/ mechanical index	
Material/ material	FPC
RF Cable/ radio frequency cable specification	RF 0.81
Connector Type/ connector type	without
Environmental Specification/ environmental indicators	
Operation temp/ operating temperature	-20°C~+85°C

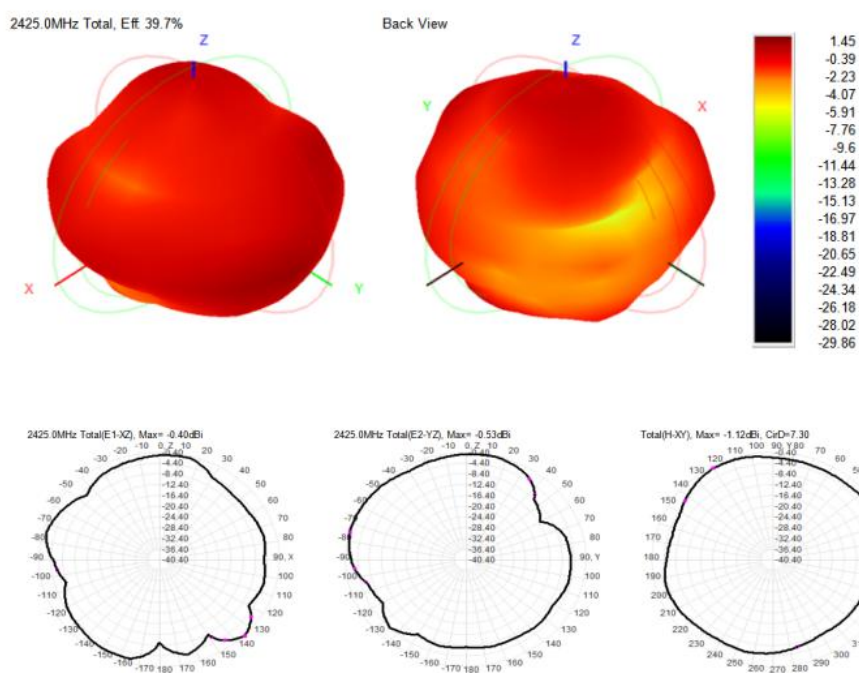
WIFI Test date

Frequency (MHz)	Gain (dBi)	Efficiency (%)
2400.0	0.36	36.40
2405.0	0.80	39.76
2410.0	0.81	36.60
2415.0	1.31	38.84
2420.0	1.16	37.09
2425.0	1.45	39.71
2430.0	0.99	35.54
2435.0	1.44	38.63
2440.0	0.87	34.47
2445.0	1.27	38.29
2450.0	0.65	34.61
2455.0	0.96	37.42
2460.0	0.48	33.70
2465.0	0.84	36.59
2470.0	0.33	32.71
2475.0	0.77	35.88
2480.0	0.53	32.90
2485.0	0.95	34.06
2490.0	0.72	31.09
2495.0	1.25	34.08
2500.0	0.93	31.78

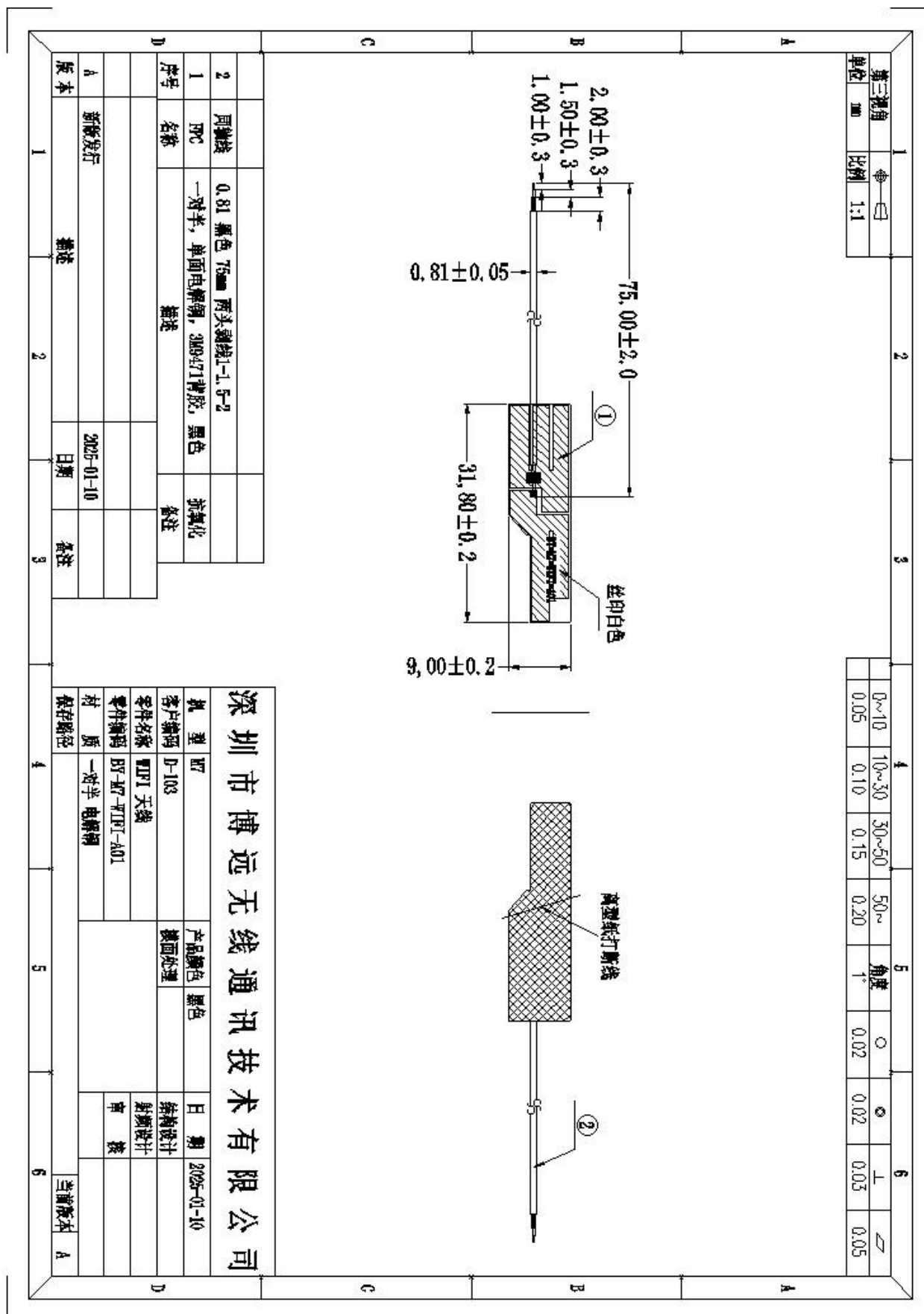
Antenna assembly



2D/3D Firure



VII. Drawing of antenna structure



VIII. Full-scale measurement report

serial number	measure	Measured size					Dimensional tolerance	decide
one	31.80	31.81	31.80	31.81	31.83	31.83	±0.2	√
two	9.00	9.02	9.03	9.05	9.04	9.05	±0.2	√
three	0.81	0.82	0.81	0.81	0.82	0.82	±0.05	√
four	75.00	75.01	75.03	75.02	75.02	75.01	±2.0	√
five								
six								
seven								
eight								
nine								
ten								
eleven								
twelve								
thirteen								
fourteen								
fifteen								
sixteen								
seventeen								
eighteen								
nineteen								
twenty								

IX. Bill of Materials

serial number	name	Material specification	dosage
one	FPC	Material: one and a half, single-sided electrolytic copper, black, 3M9471 adhesive.	one
two	coaxial-line	0.81 black 75mm	one
three			
four			
five			
six			
seven			
eight			
nine			
ten			
eleven			
twelve			
thirteen			
fourteen			
fifteen			
sixteen			
seventeen			
eighteen			
nineteen			