

Product specification

(Structural part)

SPECIFICATION FOR APPROVAL

DESCRIBE: FPC antenna black + 2 Four generations terminals 0.81coaxial cable Black/Grey

PROJECT NAME: DY-7D01-V3

PART NO: BY-DY-7D01-V3-B01

CUSTOMER NAME: Shenzhen De Yi Technology Co., LTD

CUSTOMER (P/N):

DATE: 2024 年 4 月 24 日

Supplier confirmation:

Customer confirmation			
verify	proofread	examine	ratify

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

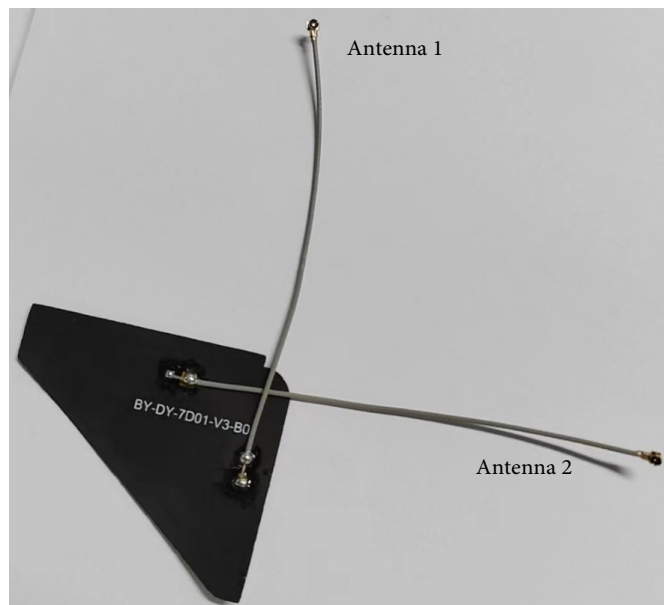
一. Cover.....	
二. Catalogue.....	
三. Change resume.....	
四. Antenna picture.....	
五. Antenna matching.....	
六. Antenna performance.....	
七. Antenna structure drawing.....	
八. Full scale measurement repor.....	
九. Bill of materials.....	
十. Antenna assembly position.....	

三. Change the resume

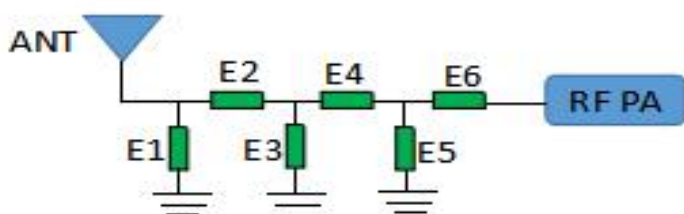
Number	Change date	Project name	edition	Change content	remarks
1	2024.4.24	FPC antenna	B01	no	New edition issue

四. 天线图片

1. Antenna Structure



五. 天线匹配



主路匹配		
Element	Value	
E1	N/A	
E2	0 欧姆	
E3	N/A	
E4	0 欧姆	
E5	N/A	
E6	N/A	

天线匹配无更改

六. 天线性能

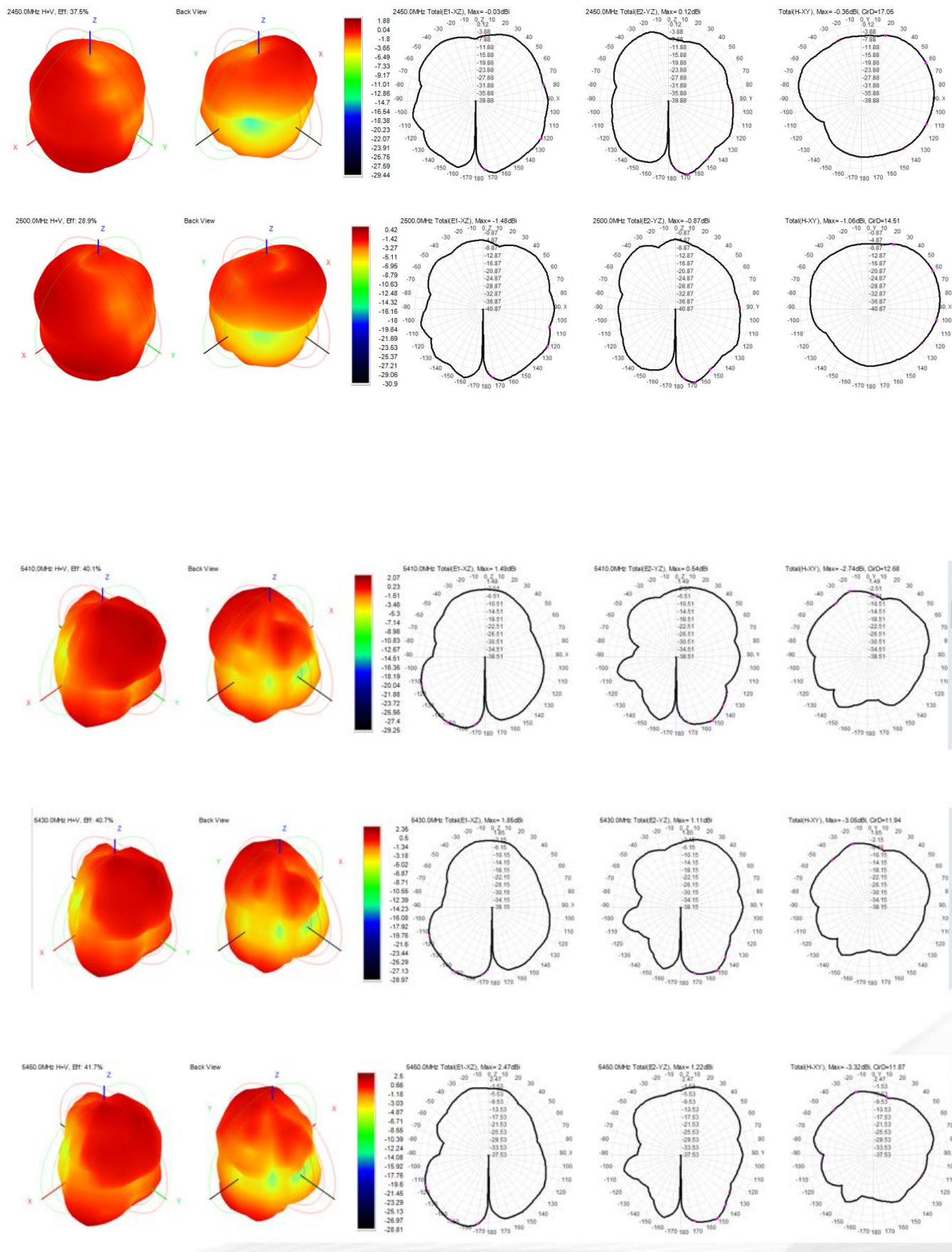
Electrical Specification/电气特性	
Freq. Range/频段范围 (MHz)	2400-2500MHz; 5150-5850MHz
impedance/阻抗 (Ω)	50 Ω
VSWR/驻波比	≤ 2.0
Directional/辐射方向	全向
Polarization/极化方式	线极化
Mechanical Specification/机械指标	
Material/材质	FPC
RF Cable/射频线规格	RF0.81线
Connector Type/连接器类型	IPEX 四代端子
Environmental Specification/环境指标	
Operation temp/工作温度	-20 $^{\circ}$ C~+85 $^{\circ}$ C

2.4G Antenna 1

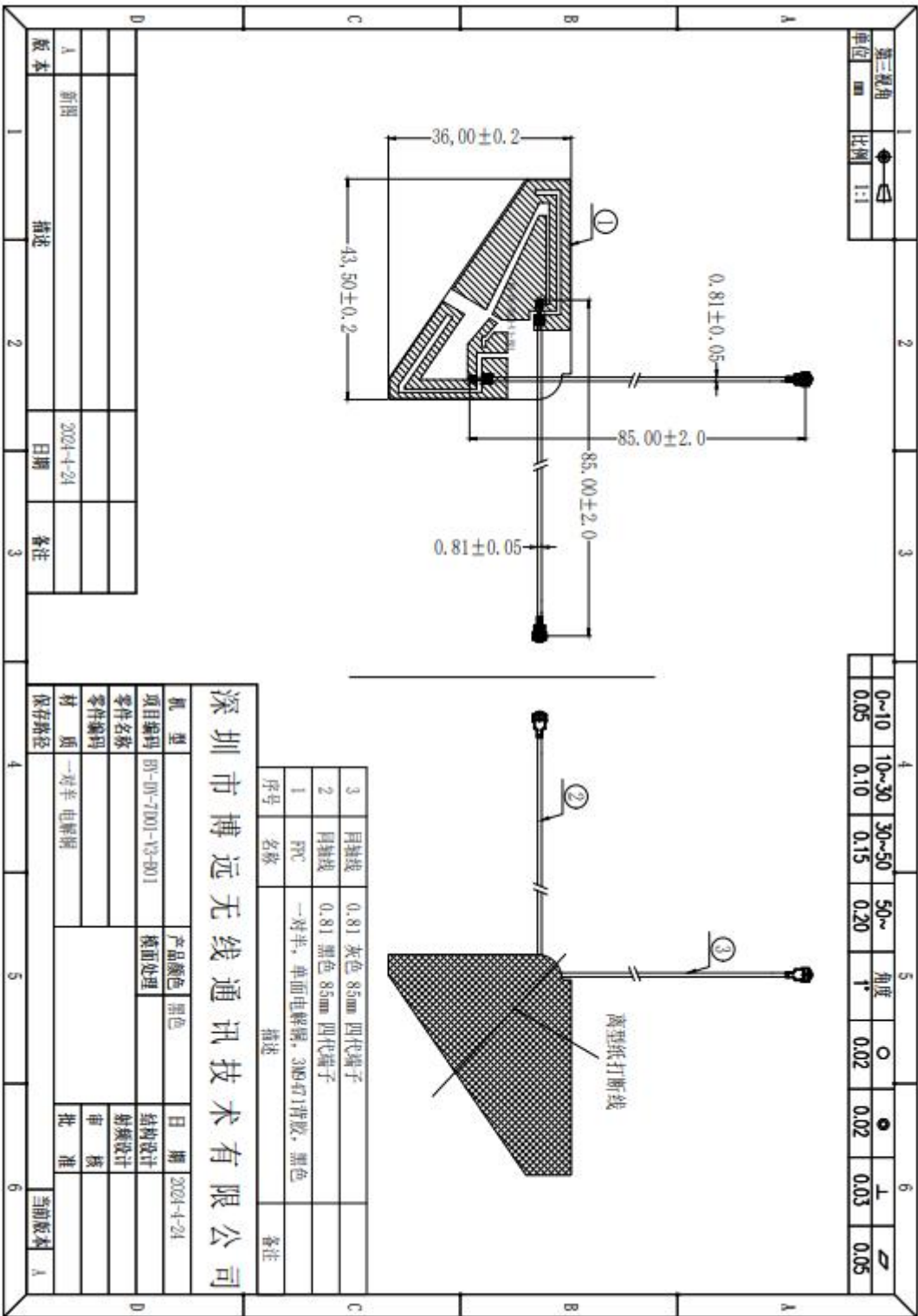
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	-0.05	-0.13	-0.20	-0.29	-0.30	-0.34	-0.33	-0.14	0.13	0.26	0.24
Efficiency (%)	33.29	33.36	32.45	32.46	32.12	32.86	32.99	32.14	33.95	33.18	33.40

2.4G Antenna 2

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Efficiency (dBi)	-4.26	-4.21	-4.17	-4.15	-4.25	-4.26	-4.42	-4.48	-4.85	-5.02	-5.39
Gain (dBi)	-1.59	-1.59	-1.76	-1.91	-1.86	-1.88	-1.70	0.26	-1.16	-0.90	-0.42
Efficiency (%)	37.47	37.95	38.29	38.48	37.59	37.46	36.13	35.62	32.75	31.47	28.92



七. 天线结构图纸



八. Full scale measurement report

NO	size	Actual measurement					Dimensional tolerance	determine
1	36.00	36.02	36.05	35.97	36.01	36.04	± 0.2	√
2	43.50	43.53	43.46	43.51	43.55	43.52	± 0.2	√
3	0.81	0.81	0.80	0.79	0.82	0.78	± 0.05	√
4	85.00	85.26	85.49	85.38	85.52	85.43	± 2.0	√
5	0.81	0.79	0.81	0.80	0.78	0.81	± 0.05	√
6	85.00	85.56	85.28	85.47	85.39	85.42	± 2.0	√
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九. BOM

NO	Name	Material specification	dosage
1	FPC	Material: one-half, single-side electrolytic copper, black, 3M9471 adhesive	1
2	coaxial cable	0.81 Black 85mm fourth generation terminal	1
3	coaxial cable	0.81 grey 85mm fourth generation terminal	1
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十. 天线装配位置



WiFi 天线位置