



Material specification sheet

Customer Name	Huizhou Bo Shi Jie Technology Co., Ltd.
Project Name	
Product name	MR01-LTE Built-in antenna/FPC antenna
Product model	Printing:MR01-4G-V0.1, Size:50.5*20.08*0.15MM
Customer P/N	1301-01620/621

Supplier information

Supplier name:	Gaoyou Xin Ding Electronics Co., Ltd.
Supplier address:	Building 3, No.28, Xinpeng Road, South Economic New Area, Gaoyou, Yangzhou, Jiangsu Province
TEL:	15262201000
EMAIL:	xinding@y-fpc.com



Supplier signature

RoHS Material ☒Non-RoHS Material ☐

Department	Make	Engineering Department	Design Department	Quality Department
Signatories	Haijiao.Wan	Guangyu.Tang	Guangyu.Tang	Haijiao.Wang
Date of signature	Mar 27.2026	Mar 27.2026	Mar 27.2026	Mar 27.2026
Note: 1, RoHS materials, non-RoHS materials must be selected; 2. The engineering department and design department need to participate in selecting the type of material according to the customer's requirements and sign it.				

Huizhou Bo Shi Jie Technology Co., Ltd.

Acknowledge state	☐ Admit	☐ Refuse to acknowledge
	☐ Conditional recognition: The following conditions must be met	
	☐ Temporary limited recognition, limited procurement Pcs (A special procurement process needs	

Department	Purchaser	☐ ID Dept	☐ Structure		☐ Hardware		☐ Quality	
			Structure PL	Structural	Hardware P	Hardware Director	QPM	SQE
Check item	elivery tim	Appearance and craftsmanship	Structural dimensions, Specifications		Electrical properties, Specifications		Appearance, sample testing	
Signatories								
Date								

Gaoyou Xinding Electronics CO.LTD

Specification sheet

Customer Name	BO Shi Jie			
Customer Project Name	MR01-LTE Built-in antenna/FPC antenna		Xinding Project Name	Printing:MR01-4G-V0.1, Size:50.5*20.08*0.15MM
Customer P/N	1301-01620/621		Xinding P/N	2S20192A0
Version	A			

Designer Information				
RF Engineer			R&D Director	
Engineer				

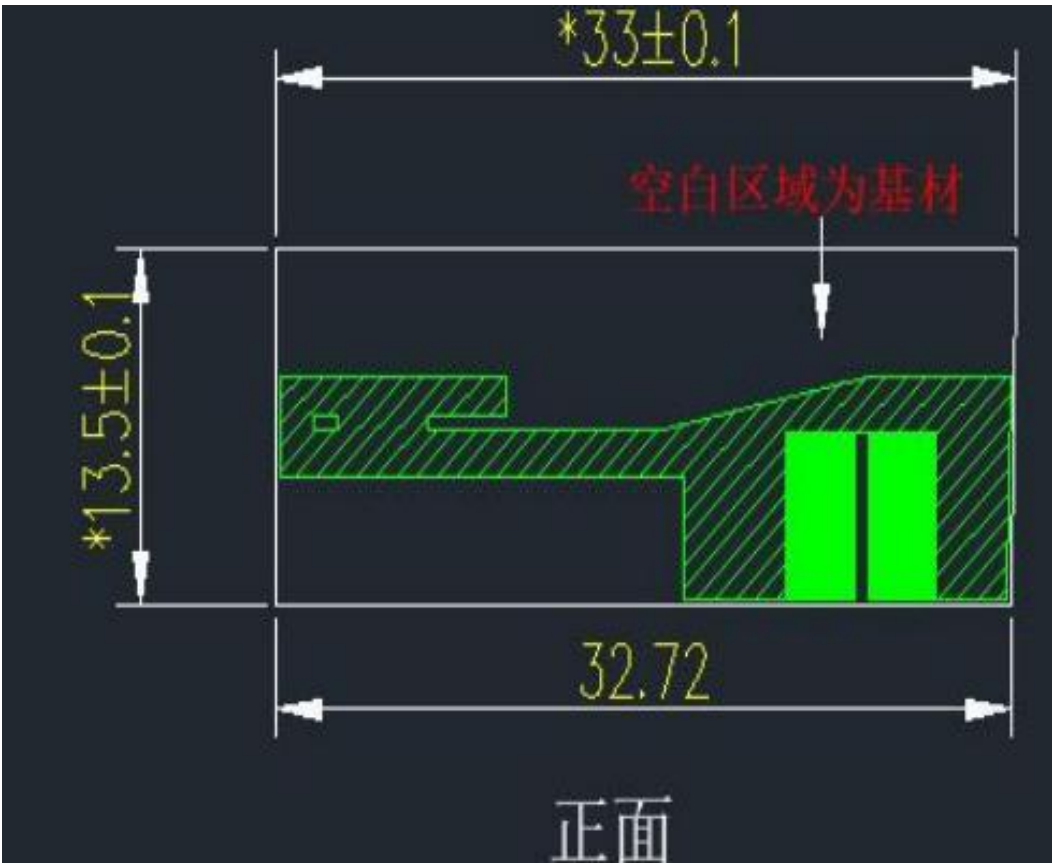
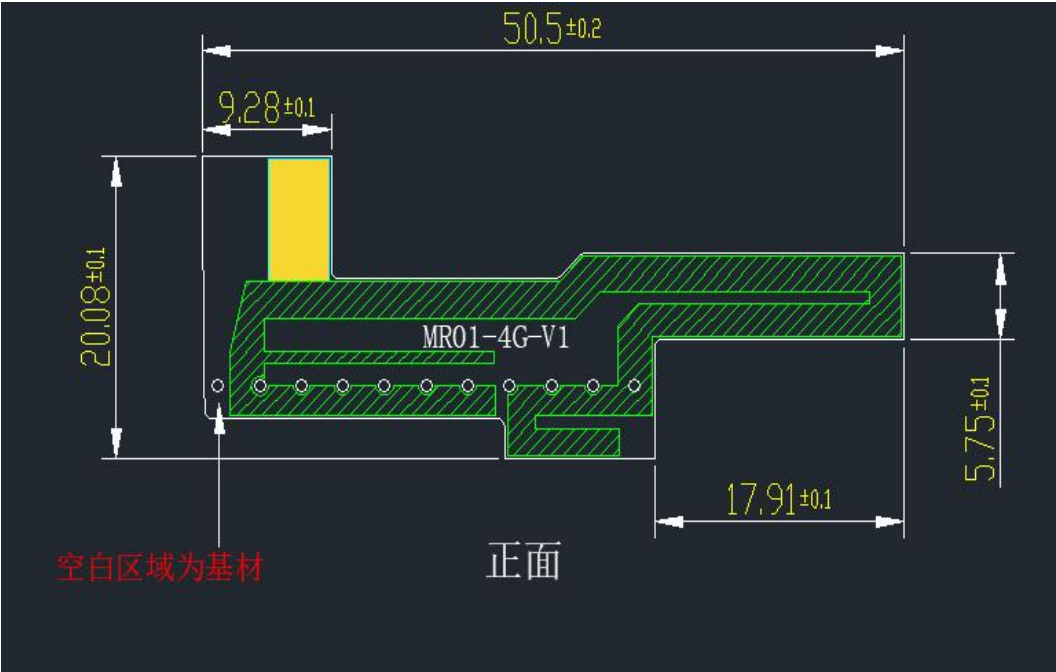
Xinding Approval			Customer Approval		
	Prepared By	Checked By	Approval By	Checked By	Approval By
Signature	Guangyu. Tang	Xiaopian Duan			
Date	Mar 27. 2026	Mar 27. 2026			

Change Log					
Version	Change Description		Person in Charge	Approval By	Date
A	New order				

Catalogue

1. Physical object or drawing
2. Test equipment
3. Electrical and test data
4. Reliability test report
5. Declaration of material composition

1. Antenna drawing



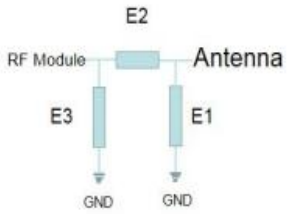
2. Test equipment

Sequence Number	Test Item	equipment
S parameter	VSWR	Agilent 5071C & Agilent 5062A
OTA Test	TRP&TIS	Agilent 8960 E5515C& Agilent 4438C&CMW500 &CMW270 ETS&SATIMO
Gain & Efficiency	Gain & Efficiency	ETS&SATIMO Agilent 5071C



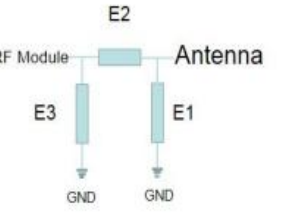
3. Electrical and test data

3.1Matching circuit



Element	Value
E1	8.2NH
E2	10PF
E3	N/A

The 4G matching circuit at the PCB board end has been modified.



Element	Value
E1	1.5PF
E2	0欧姆
E3	N/A

The GPS matching circuit at the PCB board end has been modified.

3.2.1 OTA test data

Band	Channel	TRP	Channel	TIS
LTE Band 1	L	14.91	L	
	M	14.86	M	
	H	14.63	H	-91.22
LTE Band 3	L	14.35	L	
	M	13.32	M	
	H	14.01	H	-89.11
LTE Band 5	L	14.71	L	
	M	14.26	M	
	H	14.73	H	-77.73
LTE Band 7	L	17.04	L	
	M	17.58	M	
	H	17.18	H	-89.34
LTE Band 8	L	13.41	L	
	M	13.35	M	
	H	12.74	H	-70.25
LTE Band 20	L	13.23	L	
	M	13.31	M	
	H	13.29	H	-74.66
LTE Band 28	L	12.37	L	
	M	13.31	M	
	H	14.01	H	-76.69

Band	Channel	TRP	Channel	TIS
LTE Band 38	L	17.24	L	
	M	16.13	M	
	H	17.19	H	-87.93
LTE Band 40	L	14.39	L	
	M	14.88	M	
	H	14.34	H	-87.25
LTE Band 41	L	16.27	L	
	M	17.18	M	
	H	16.76	H	-88.68

3.2.2 LTE Efficiency and Gain

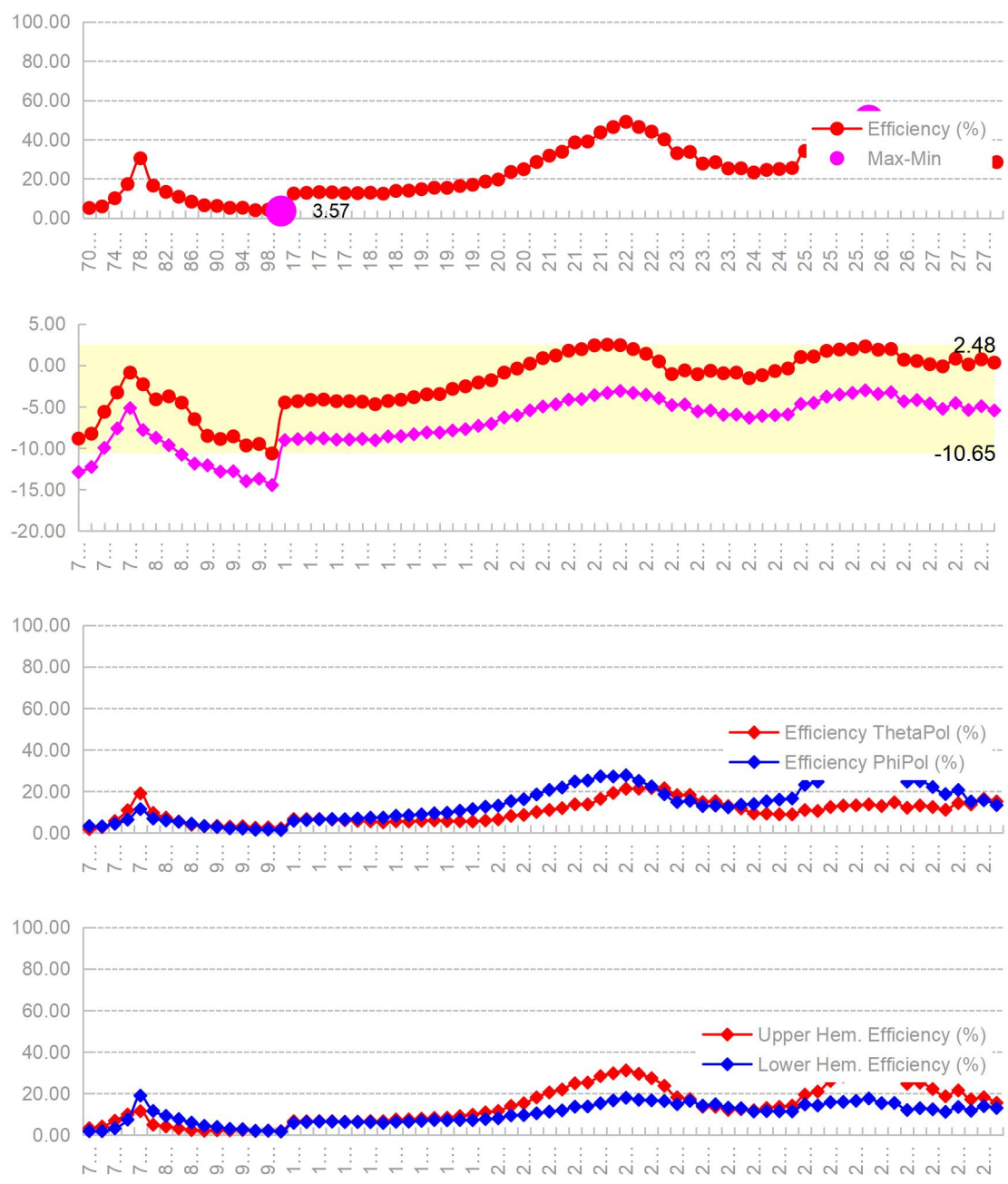
Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
700	19.41	-1.45
740	20.44	-1.34
780	23.25	-1.28
820	23.13	-1.19
960	19.14	-1.38
1710	32.89	0.68
1880	31.13	0.62
2170	32.38	0.70
2300	39.25	0.98
2500	36.89	0.75
2690	35.36	0.74

3.3 Test data

3.3.1 GPS Antenna efficiency

Frequency (MHz)	Efficiency (%)	Peak GAIN (dBi)
1510	30.14	0.94
1530	31.41	1.07
1550	33.31	1.37
1570	35.29	1.84
1590	34.29	1.35
1610	33.52	1.02
1630	31.17	0.95
1650	30.26	0.91

2D



3D

