

Development case number: Y202008011903/1

Date: 2025.08.26

Edition: A0

Letter of acceptance

Customer name: DeccaDebugging projects: P18Q-X1Bo'an is a general material number: AG-040033-2110Specification description: 4G main built-in antenna (PCB 89×15.8× 0.6) - black 0.81 wire - 3rd generation terminal,L=140mm

Factory signature:

Writing	Review	Approval
Xu Zhangjin	Liu Lihua	Baihao

The customer acknowledges the signature:

Inspection	Review	Approval

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3、 Product drawing

REV.

Revision Date

A0

20-10-26

Revision Details

Front

Side

Back

✱89.00±0.20

✱15.80±0.20

✱140±3

Silkscreen Font:
Brilliant White

BAT-P18Q-X1-MAIN

1

2

3

4

0.6±0.1

✱140±3

Silkscreen Line:
Brilliant White

4G main built-in antenna (PCB
89×15.8×0.6) - black 0.81
wire - 3rd generation
terminal, L=140mm

Name

cust. P/N

Doc. No.

Project No.

P/N

4G main built-in antenna (PCB
89×15.8×0.6) - black 0.81
wire - 3rd generation
terminal, L=140mm

Y202008011903/1

Technical Requirements

1:The antenna solder joint is secure, Cable dimensions must be per drawing(Terminal Retention Force≥0.5Kg).

2:Silkscreen Color: Brilliant White, Permanent and legible marking.

3:Dimensions marked with an asterisk (*) are critical inspection points for IQC.

4:Packaging and quality standards shall refer to B&T Packaging Specification and B&T Quality Standard, respectively.

5:The material is compliant with RoHS 2.0 requirements.

Part Name

Material

Orientation

Quantity

Weight

Scale

Unit

① 3rd RF connector

phosphor bronze (gold-plated)

② coaxial cable

silver-tin plating/FEP/Black

③ PCB

FR4/yellow-core wire/T: 0.6mm

④ Foam

EVA/Black

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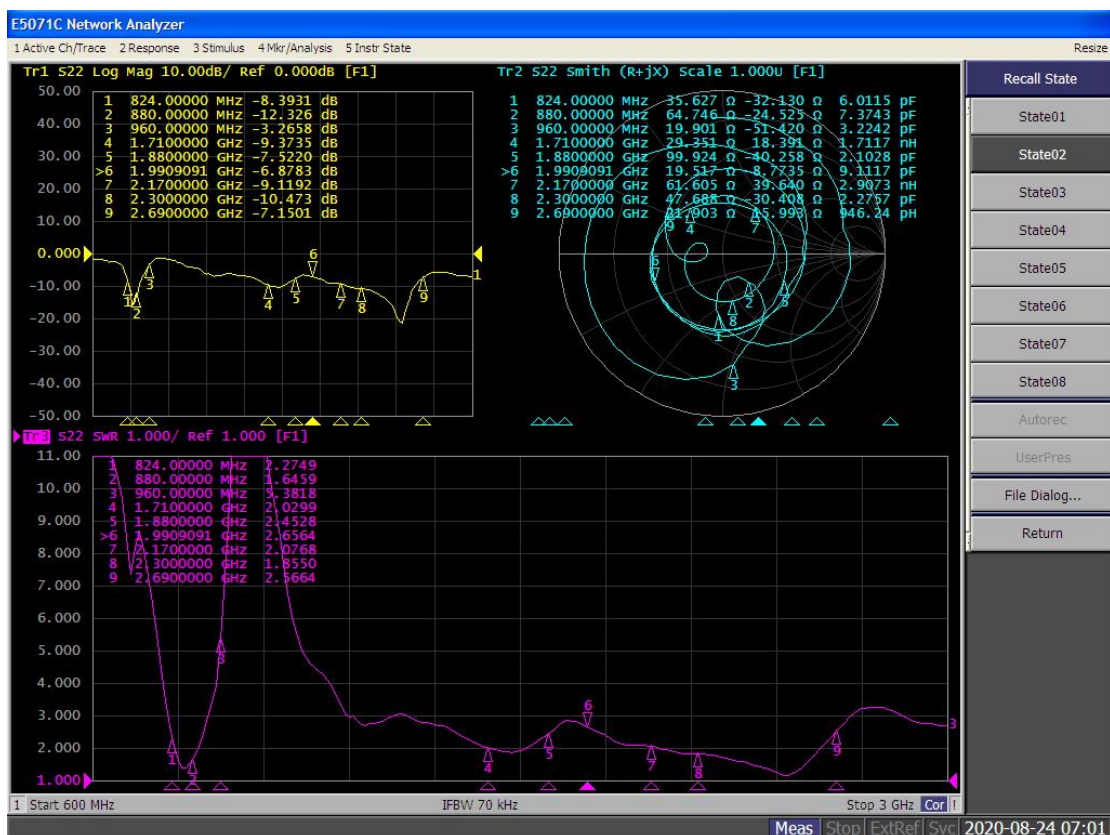
B&T

4、Performance parameters

Electrical parameters	
Frequency range	824-960/1710-2690MHz
Input impedance	50 Ω
Stop the wave	Control the project sealing sample
Maximum gain	5.22dBi
Power capacity	<10w
Polarization mode	Line polarization
Radiation direction	Omnidirectional
Connector model	3rd generation terminal
Mechanical parameters	
Line length	140 $\pm$ 3mm
Terminal retention	$\geq$ 0.5KG
coaxial cable	Black 0.81 line
Salt spray test	24H
Environmental parameters	
Operating temperature	-30 $^{\circ}$ C~65 $^{\circ}$ C

5、Electrical Performance Test Report (Complete Machine)

Antenna S11 parameter diagram



VSWBN data

Frequency (MHz)	824	880	960	1710	1880
VSWR	2.27	1.64	5.38	2.02	2.45

Antenna test data

frequency/MHz	820.0	840.0	860.0	880.0	900.0	920.0	940.0	960.0
gain/dBi	-3.44	-1.75	-0.60	-0.12	0.18	-0.31	-1.51	-3.91
efficiency/%	23.12	27.85	30.19	33.62	35.51	30.13	28.99	25.81

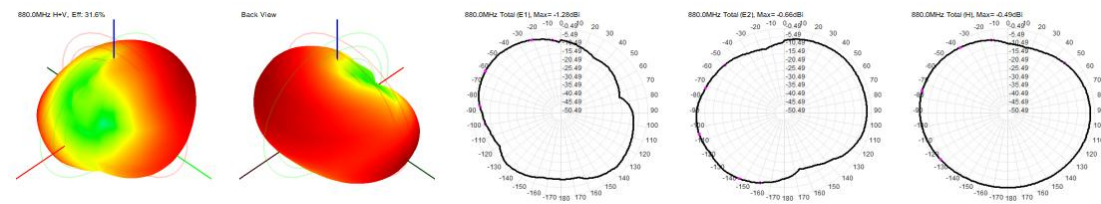
frequency/MHz	1700.0	1750.0	1800.0	1850.0	1900.0	1950.0	2000.0	2050.0	2100.0	2150.0
gain/dBi	2.99	2.84	3.99	4.50	4.63	4.39	4.64	3.99	4.04	3.50
efficiency/%	42.65	45.95	46.91	51.69	50.99	50.58	59.30	56.79	60.83	66.85

frequency/MHz	2250.0	2300.0	2350.0	2400.0	2450.0	2500.0	2550.0	2600.0	2650.0	2700.0
gain/dBi	2.51	2.44	3.17	4.52	4.60	4.39	5.06	5.22	4.75	3.47
efficiency/%	62.15	59.84	52.19	54.08	56.55	57.51	63.10	62.28	58.26	51.51

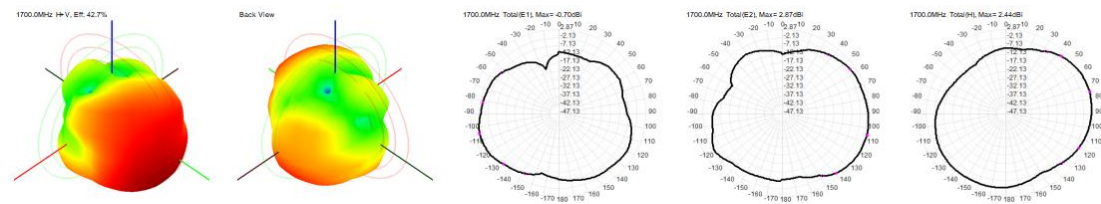
Antenna pattern

4G main antenna

880MHz



1700MHz



2700MHz

