SPECIFICATION FOR APPROVAL

Product: Comnect_PG1830CR-5.8G-1 green 1.13RF Cable+Ipex，L=45mm

Model: HWY-58PCB-2B-1641

Part Number: 32030139

Written By : Xianjiang Yang

Issued Date: 2023.8.4

HWY：

SHEN ZHEN HWY TECHNOLOGY, CO, .LTD Engineering Stamp

R&D DEPT	ENGINEER R&D DEPT	APPROVED
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Change resume

Edition	Description of changes	Date of change	Production / revision	remarks
V1.0	Original version	2023.8.4	Xianjiang Yang	
V2.0	Add test reports, photos, and packaging methods	2023.8.24	Xianjiang Yang	
V3.0	Increase silk-screen content	2024.3.4	Haiming Chen	
V4.0	Modify PCB board tolerance	2024.9.12	Xianjiang Yang	

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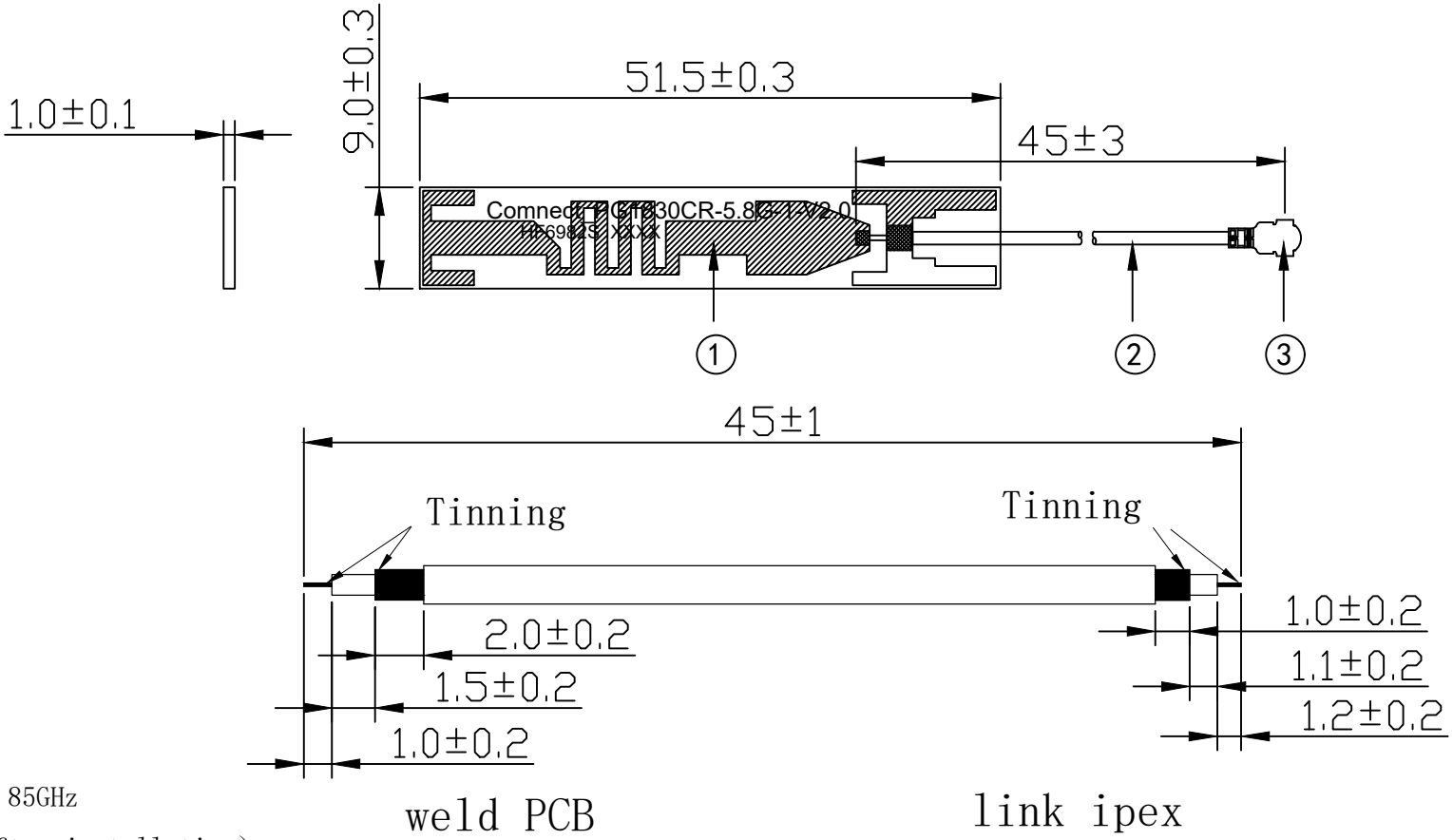
The basic parameters:

A. Electrical Characteristics	
Frequency	5.15 ~5.85GHz
VSWR	≤2.0
Efficiency	>40%
Impedance	50 Ohm
Polarization	Linear
Gain	See the test report for details
Radiation	omnidirectional
B. Mechanical parameters	
Cable Type	1.13mm black
Connector Type	**I-pex**
Dimension	L=45mm
Antenna Colour	green
C. Operating/ Storage Temperature	
Operation Temperature	- 20 ℃ ~ + 65 ℃
Storage Temperature	- 40 ℃ ~ + 80 ℃

V	Date	Description	ECN NO.	NAME
A	2023.8.4	Original version		Yang
B	2024.3.4	Add silk-screen printing		Chen
C	2024.9.13	Change the tolerance		Yang



Description:

1. Frequency: 5.15~5.85GHz
2. VSWR ≤2.0(Test after installation)
3. XXXX:PCB Silk-screen printing production date year and week: 23/42
4. Meet ROHS environmental protection requirements.

NO.	Item Number	Description	
⑤			
④			1
③	Y0406000003	Gold-plated terminals for connecting 1.13mm wires.	1
②	Z0800000400	Wire material: RF1.13 black coaxial cable,L = 45mm. Both ends are stripped and tinned.	1
①	Y0301110143	Comnect_PG1830CR-5.8G-1-V2.0 PCB, FR-4,51.5*9.0*1.0mm,OSP,green solder mask.	1

SHEN ZHEN HWY TECHNOLOGY,CO,.LTD				Model:	HWY-58PCB-2B-1641		
				Name:	PG1830CR 5G Antenna		
Design	Yang	Date	2023.8.4	PN:	C0112000072	Unit	mm
Prfd		Date		CPN:	32010139	Ed.	A
Audit		Date			Persp	Page	1/1

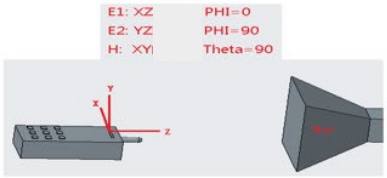
Test Equipment & Conditions

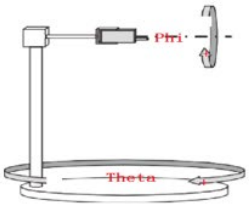
1. Network Analyzers :HP8753D

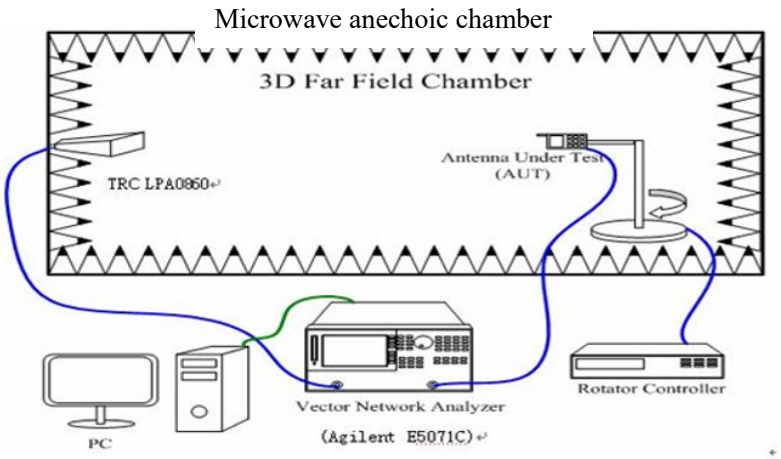
2. Communications Test Set:

3. 3D Chamber Test System:

network analyzer:HP8753D

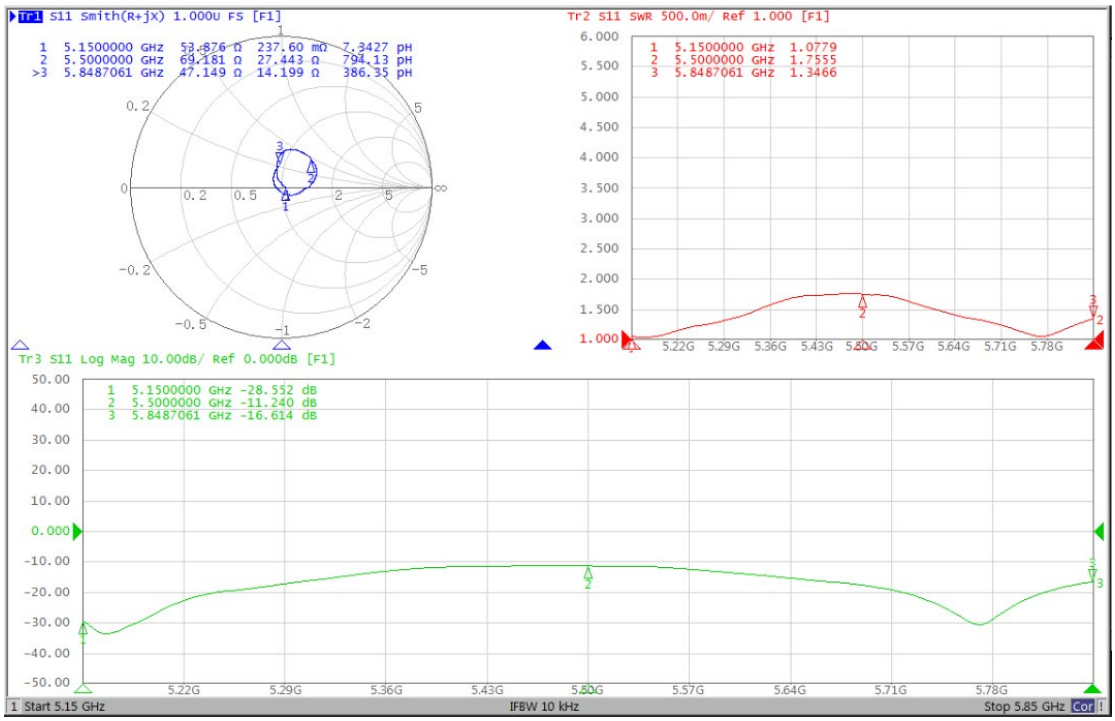






Test Data:

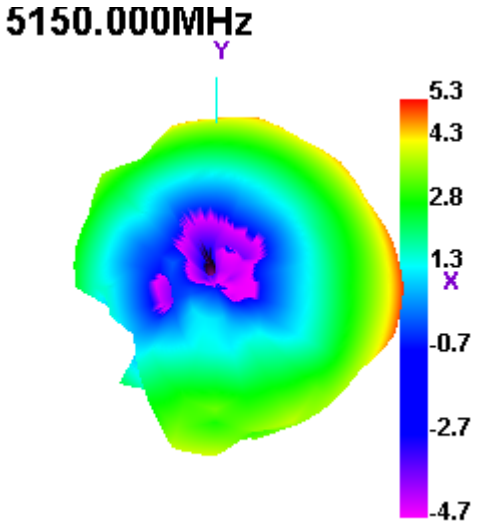
Reflection loss/ VSWR

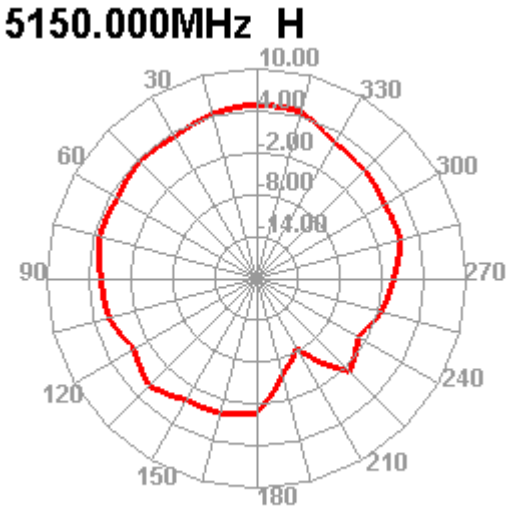


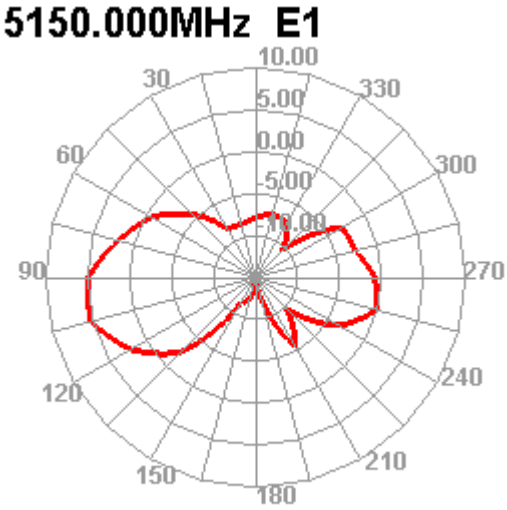
Efficency&Gain:

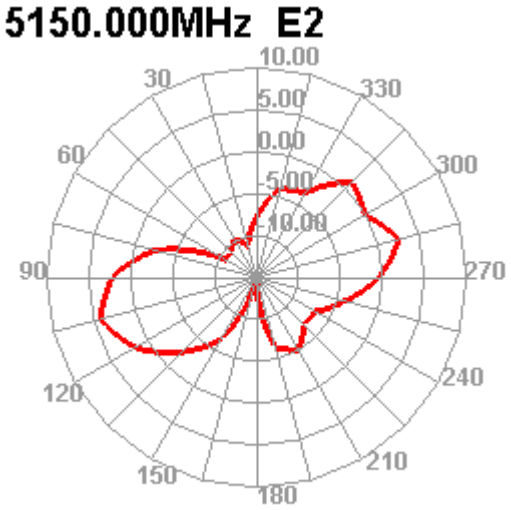
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
5150	76.35	-1.17	5.28	3.13
5200	71.31	-1.47	4.94	2.79
5250	71.74	-1.44	4.99	2.84
5300	70.82	-1.5	5.01	2.86
5350	68.24	-1.66	4.82	2.67
5400	63.94	-1.94	4.44	2.29
5450	62.85	-2.02	4.31	2.16
5500	61.15	-2.14	4.52	2.37
5550	63.36	-1.98	4.81	2.66
5600	63.56	-1.97	4.98	2.83
5650	63.38	-1.98	4.86	2.71
5700	55.56	-2.55	4.15	2
5750	54.42	-2.64	4.09	1.94
5800	54.72	-2.62	4.35	2.2
5850	59.13	-2.28	4.82	2.67

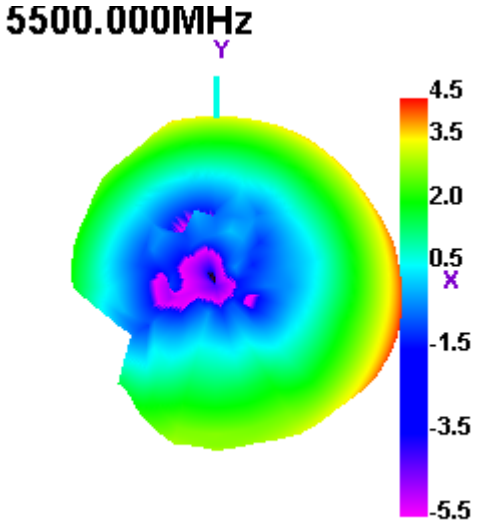
Patten

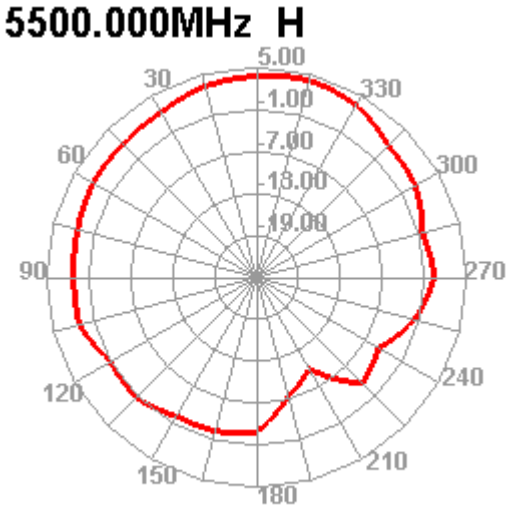

5150.000MHz
Y
X
5.3
4.3
2.8
1.3
-0.7
-2.7
-4.7


5150.000MHz H
10.00
4.00
-2.00
-8.00
-14.00
30
330
60
300
90
270
120
240
150
210
180

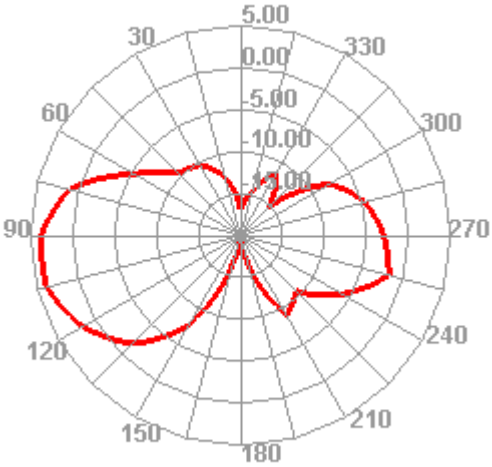

5150.000MHz E1
10.00
5.00
0.00
-5.00
-10.00
30
330
60
300
90
270
120
240
150
210
180


5150.000MHz E2
10.00
5.00
0.00
-5.00
-10.00
30
330
60
300
90
270
120
240
150
210
180

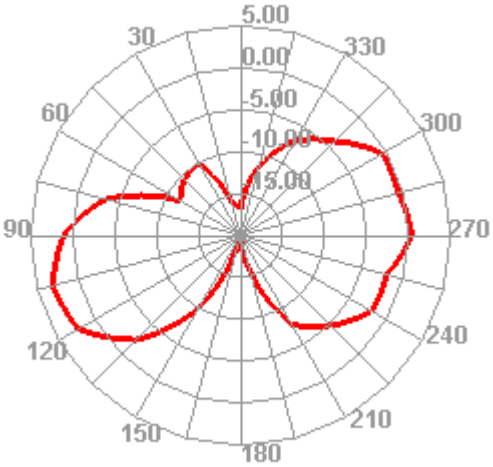

5500.000MHz
Y
X
4.5
3.5
2.0
0.5
-1.5
-3.5
-5.5


5500.000MHz H
5.00
-1.00
-7.00
-13.00
-19.00
30
330
60
300
90
270
120
240
150
210
180

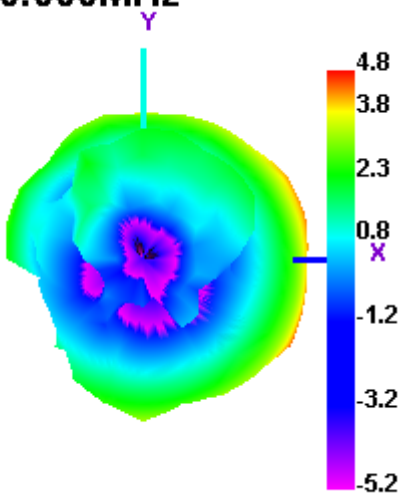
5500.000MHz E1



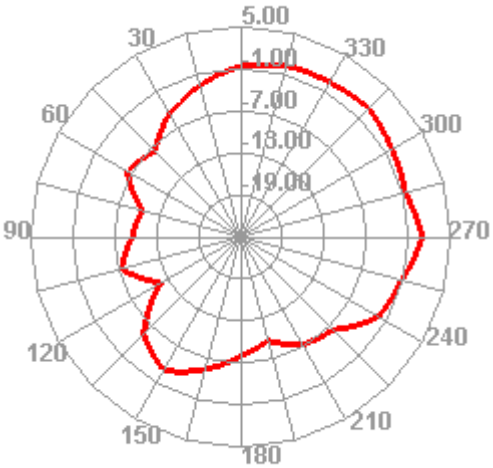
5500.000MHz E2



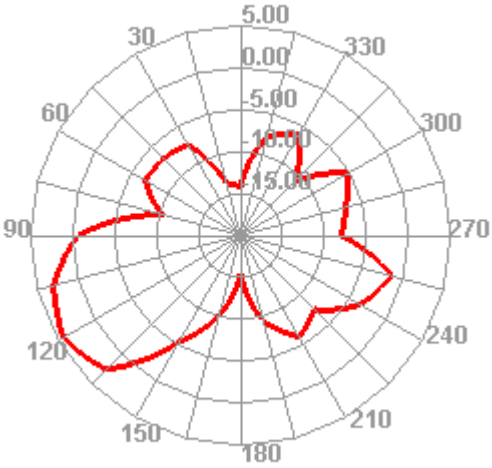
5850.000MHz



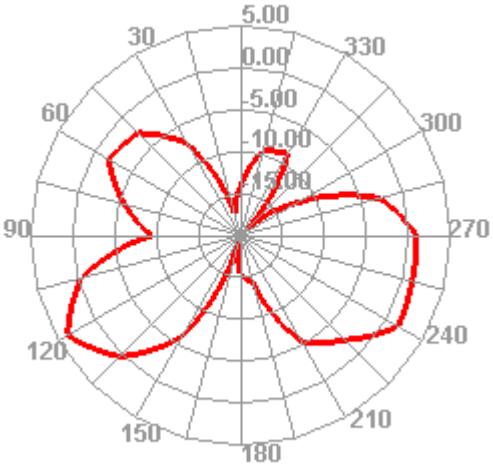
5850.000MHz H



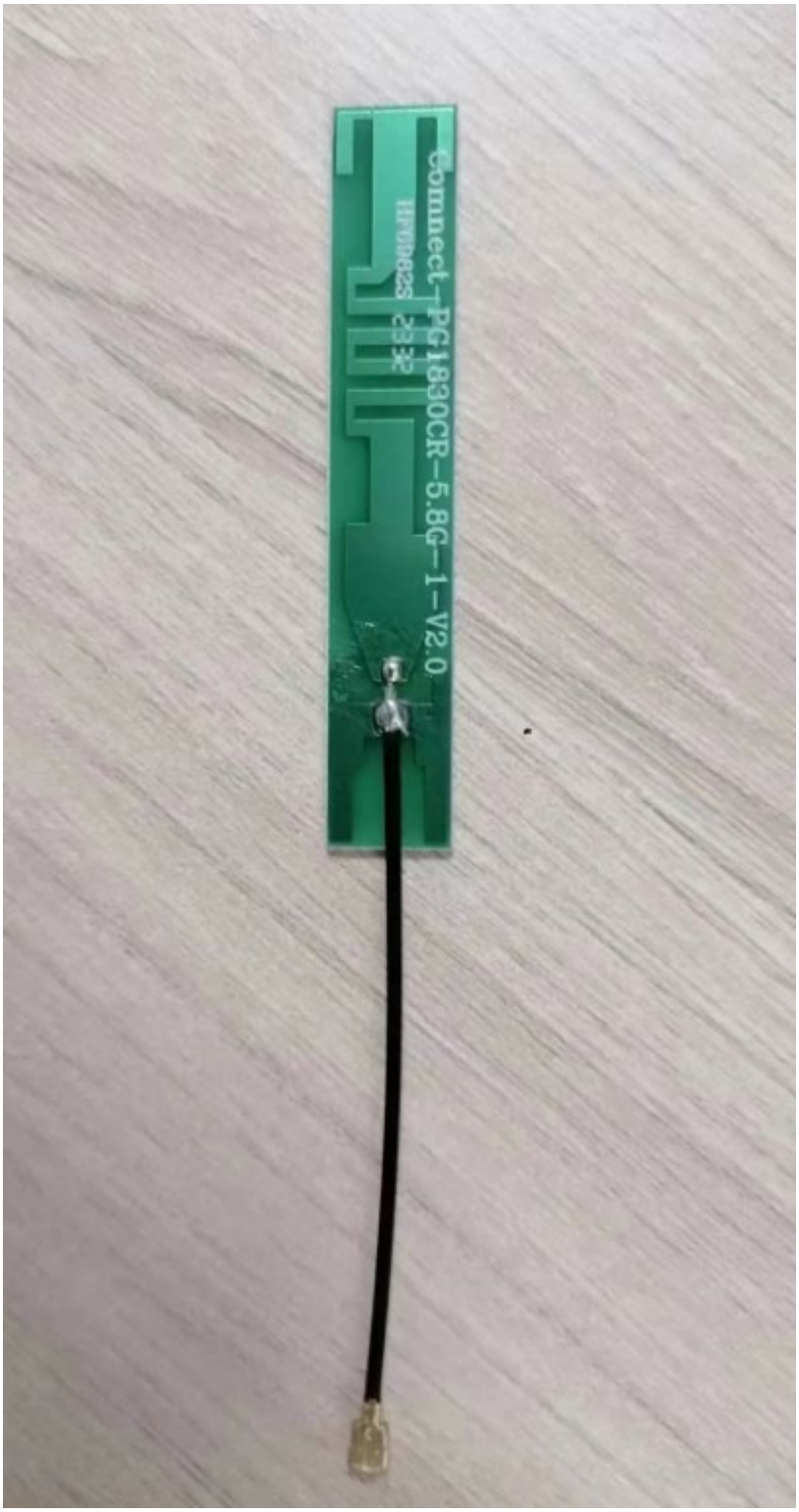
5850.000MHz E1



5850.000MHz E2



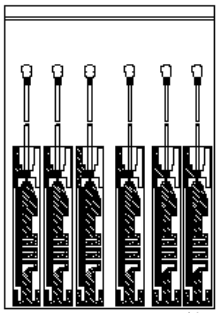
Antenna picture：



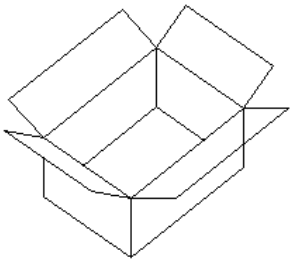
Product packaging specification

Product name:	External antenna
Description:	Except for customer special requirements
version :	V0

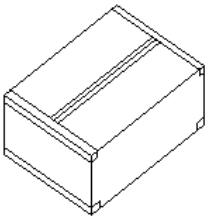
1.Antenna finished product



2. Antenna finished products are packed in PE bags. The quantity is subject to the actual situation.



3. Put the installed antenna into a cardboard box (subject to the actual quantity).



4. Seal the box and affix our company's label or a label as specified by the customer on the outside.