

SPECIFICATION FOR APPROVAL

Product: Connect_PG1830CR-2.4G-2 gray1.13RF Cable+Ipex, L=170mm

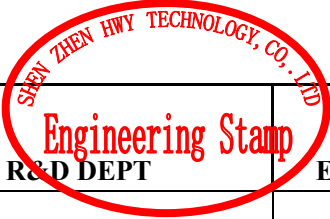
Model: HWY-24PCB-2G-1638

Part Number: 32030138

Written By : Xianjiang Yang

Issued Date: 2023.8.4

HWY:

 R&D DEPT	ENGINEER R&D DEPT	APPROVED
Xianjiang Yang	Shitong Tang	Youguang Zeng

Address: No.3 Xianglong Road, Changlong community, Huangjiang Town,

Dongguan City, Guangdong Province

Email: zyg713@126.com/gendanyuan01@126.com

TEL: 0769-81773130 / 186 8030 6792

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	

Index

1、	Cover.....	1
2、	Document Change Resume.....	2
3、	Index.....	3
4、	The basic parameters.....	4
5、	Product Drawing.....	5
6、	Test Equipment & Conditions.....	6
7、	Test Report.....	7~9
8、	Antenna Picture.....	10
9、	Tee Packingway.....	11

The basic parameters:

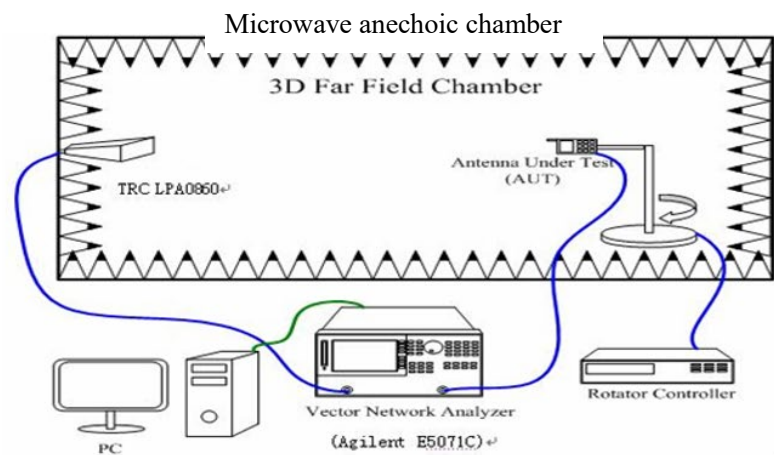
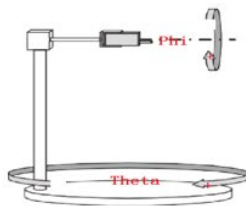
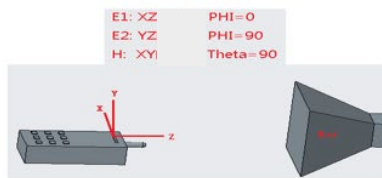
A. Electrical Characteristics	
Frequency	2.4 ~2.4835GHz
VSWR	≤2.0
Efficiency	>40%
Impedance	50 Ohm
Polarization	Linear
Gain	See the test report for details
Radiation	omnidirectional
B. Mechanical parameters	
Cable Type	1.13mm gray
Connector Type	I-pex
Dimension	L=170mm
Antenna Colour	green
C. Operating/ Storage Temperature	
Operation Temperature	- 20 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

A		B		C		D		E		F		G	
1 2 3 4 5 6 7 ⑤ ④ ③ ② ① 1. Frequency: 2.4~2.5GHz 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. 38.0±0.3 9.0±0.3 1.0±0.1 170±3 170±1 2.5±0.2 1.5±0.2 1.2±0.2 1.0±0.2 1.1±0.2 1.2±0.2 ① ② ③ Connect_PG1830CR-2.4G-2-V2.0 HF6981S XXXX tin tin weld PCB link ipex 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 ⑤ ④ ③ Y0406000003 I-PEX,Gold-plated terminal, Connect the 1.13 coaxial cable 1 ② Z0800000399 Wire material: RF1.13 gray coaxial cable , L = 170mm, both ends stripped and tinned. 1 ① Y0301110142 Connect_PG1830CR-2.4G-2-V2.0, FR-4,38.0*9.0*1.0mm, OSP , green solder mask. 1 NO. Item Number Description Num													

Test Equipment & Conditions

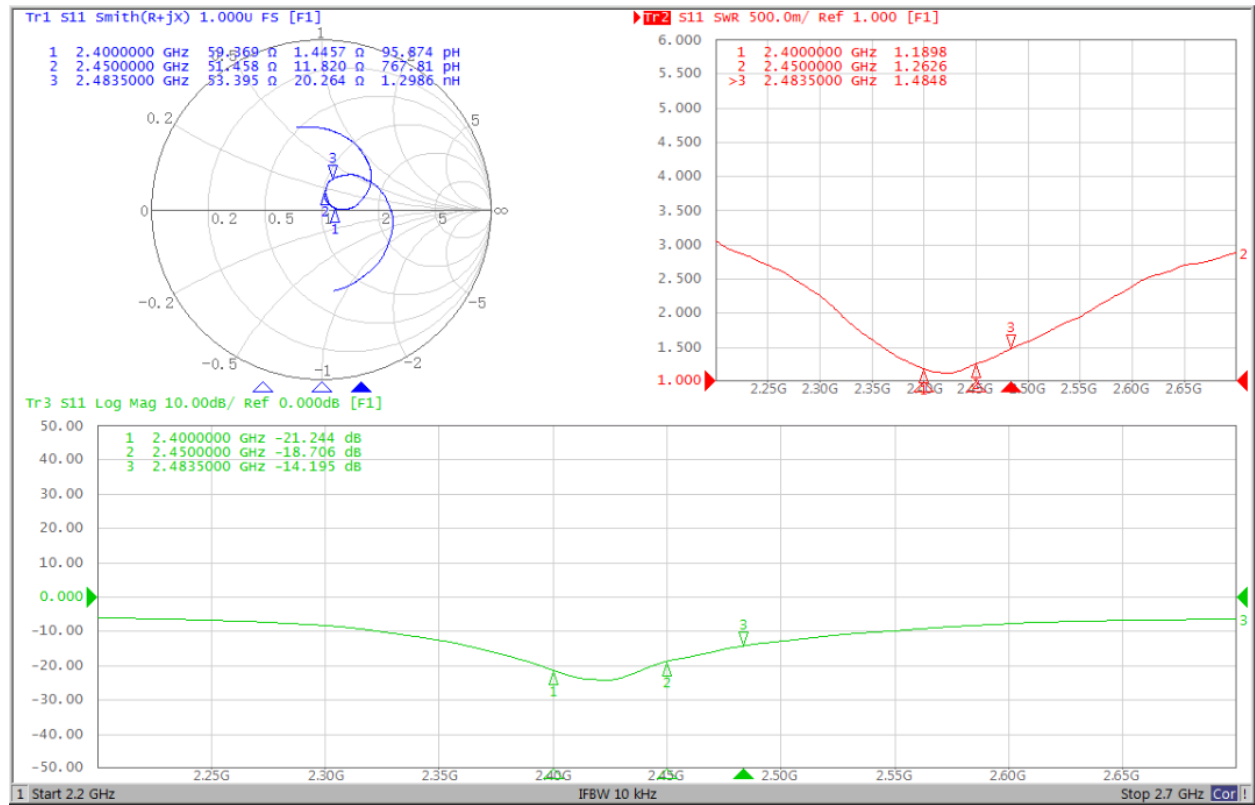
1. Network Analyzers :HP8753D
2. Communications Test Set:
3. 3D Chamber Test System:

network analyzer:HP8753D



Test Data:

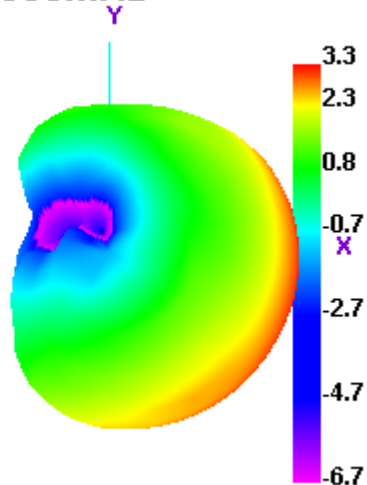
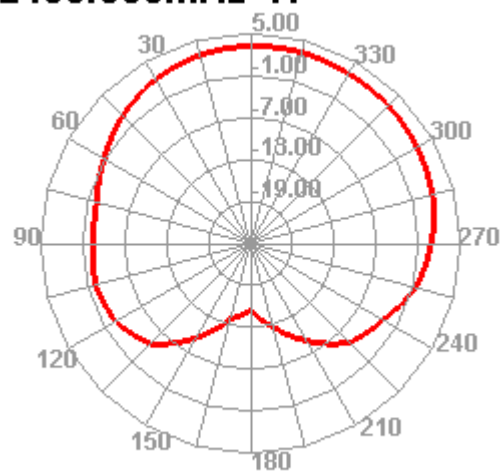
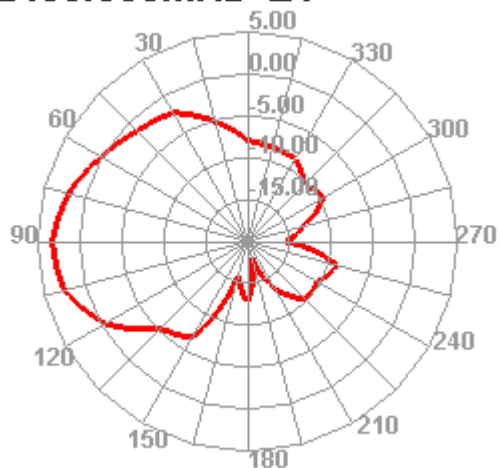
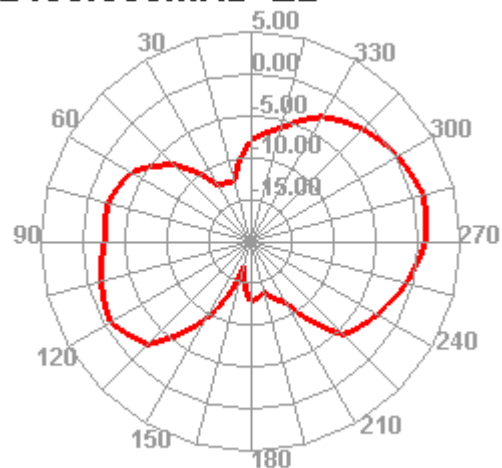
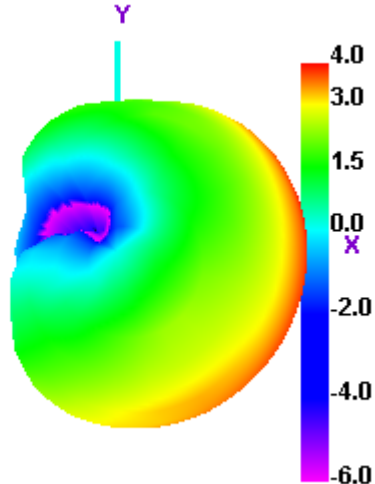
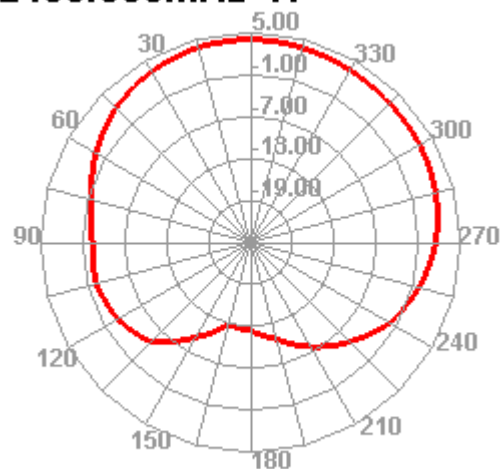
Reflection loss/ VSWR

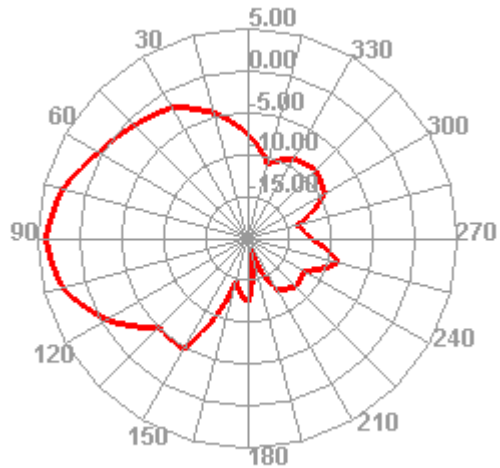
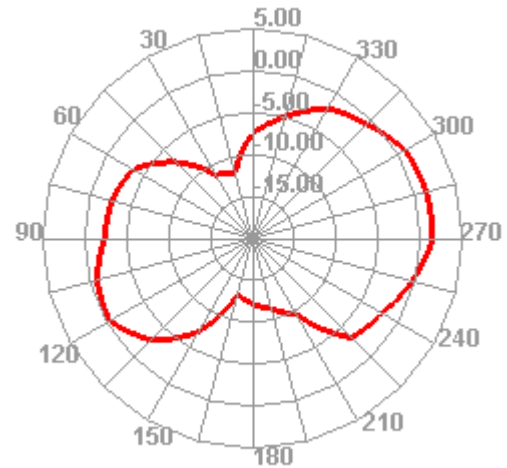
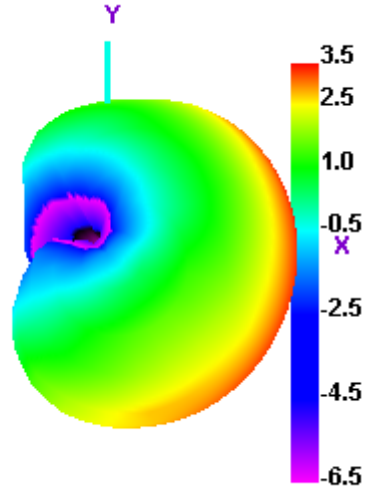
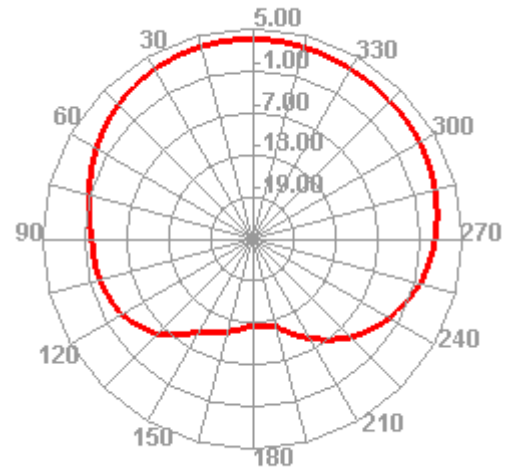
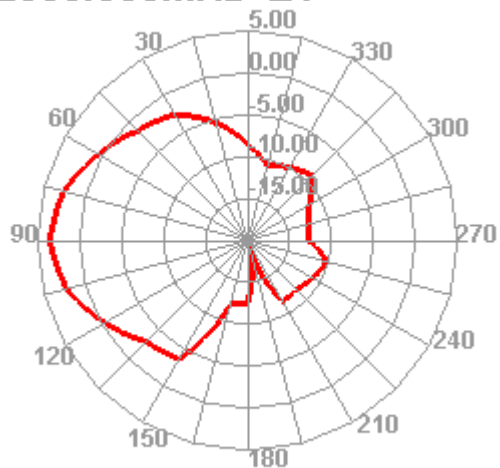
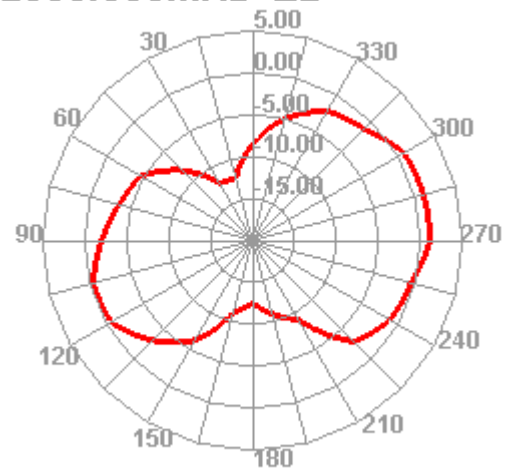


Efficiency & Gain:

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	59.78	-2.23	3.25	1.1
2410	59.55	-2.25	3.32	1.17
2420	59.31	-2.27	3.43	1.28
2430	63.44	-1.98	3.83	1.68
2440	65.32	-1.85	4.08	1.93
2450	64.5	-1.9	4.02	1.87
2460	63.9	-1.95	4.01	1.86
2470	65.12	-1.86	4.05	1.9
2480	62.5	-2.04	3.78	1.63
2490	63.99	-1.94	3.75	1.6
2500	61.74	-2.09	3.52	1.37

Patten

2400.000MHz**2400.000MHz H****2400.000MHz E1****2400.000MHz E2****2450.000MHz****2450.000MHz H**

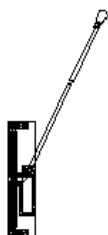
2450.000MHz E1**2450.000MHz E2****2500.000MHz****2500.000MHz H****2500.000MHz E1****2500.000MHz E2**

Antenna picture:

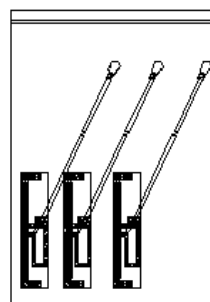


Product packaging specification

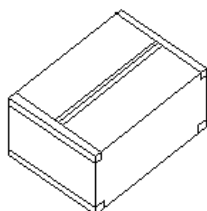
Product name:	External antenna
Description:	Except for customer special requirements
version :	V0



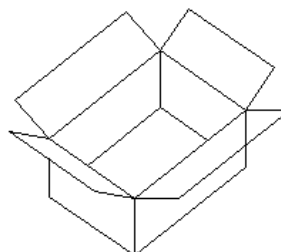
1. Antenna finished product



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



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



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