

东莞市高畅电子科技有限公司

产 品 规 格 书
Product specification

客 户:	
CUSTOMER:	
客 户 案 号:	
CUSTOMER P/N:	
本 厂 编 号:	GC-811FPC-L80
OUR MODEL NO:	
品 名 / 规 格:	双频-811 内置天线
SPECIFICATIONS:	
样 品 数:	0
Q' TY:	
日 期:	2025-8-7

东莞市高畅电子科技有限公司			客户承认
工程 Engineering	品保 Quality	核准 Approved	签名（盖章）
谢工	黄小姐	高工	

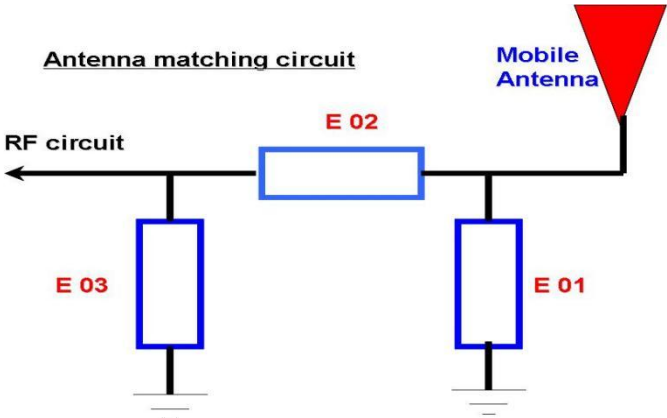
1. Technical Specification

技术规格

A. Electrical Characteristics	
Working Frequency Range	2400~5800MHz
S.W.R.	2400~5800MHz:<2.0
Antenna Gain(avg.)	2400~2500MHz:4.11dBi
Impedance	50ohm
B. Material	
brass	
C. Environmental	
Operation Temperature	-45℃~+85℃
Storage Temperature	-45℃~+85℃

2. Matching Circuits

匹配电路



Element	Value	Vender
E1(0402)	OPEN	/
E2(0402)	SHORT	50 Ω
E3(0402)	OPEN	/

注:匹配未更改。

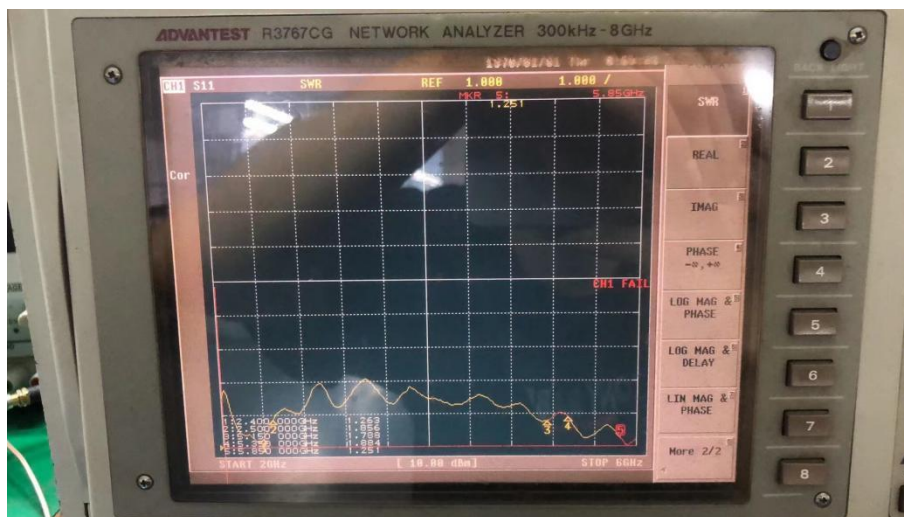
3. Curing antenna S11 Testing Result. 无源测试

The S11 parameter was performed using a Agilent 8753D Network Analyzer and BEST'S test fixture that was using customer-providing device.

VSWR (Voltage standing wave ratio)

The Voltage Standing Wave Ratio (VSWR) is an indication of how good the impedance match is. VSWR is often abbreviated as SWR. If the transmission line and the antenna are not matched, the antenna will not accept all the power from the transmission line. The part it does not accept is reflected back and forth between the transmitter and the antenna. This sets up a fixed wave pattern along the line which we can measure and which is called the voltage standing wave ration(VSWR).The VSWR (ratio of maximum voltage to the minimum voltage along the line)expresses the degree of match between the transmission line and the antenna. When the VSWR is 1 to 1(1:1) the match is perfect and all the energy is transferred to the antenna prior to be radiated. When the VSWR is 1.5:1, 96% of the power reaches the antenna. By definition VSWR can never be less than 1.VSWR and reflected power are different ways of measuring and expressing the same thing. A high VSWR is indication that the signal is reflected prior to being radiated by the antenna.

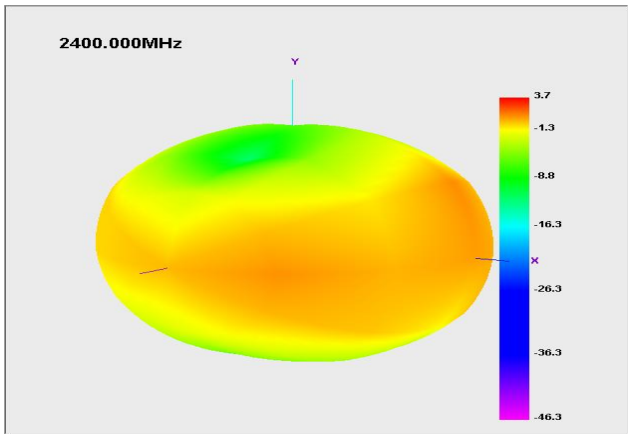
驻波 VSWR



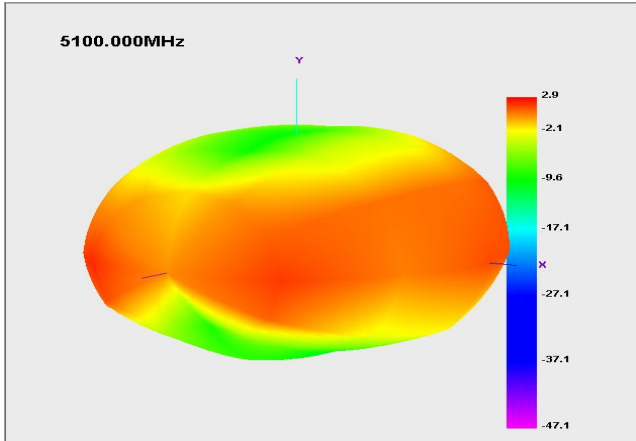
Marker	2400MHz	5100MHz	5800MHz
S.W.R	<2.0		

4.测试 3D 报告

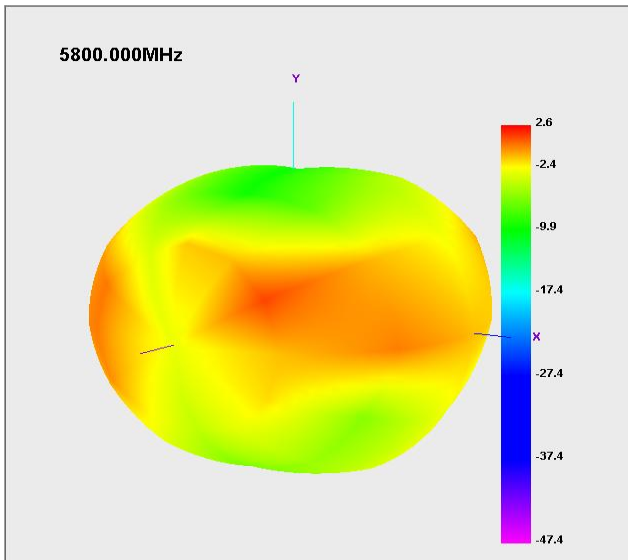
频率：2400MHZ 增益：3.77dbi



频率：5100MHZ 增益：2.91dbi



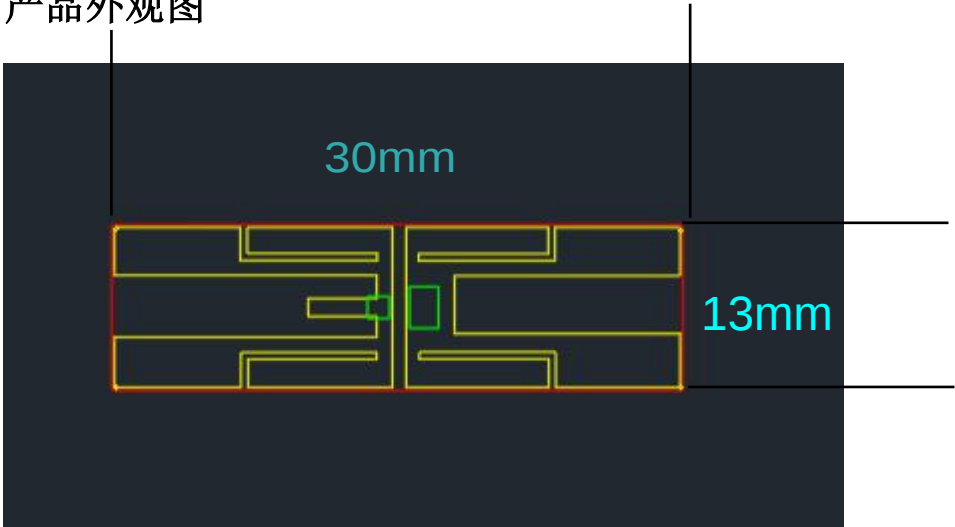
频率：5800MHZ 增益：2.43dbi



Product Number: GC-811FPC-L80

Passive Test For WIFI2.4												
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
2400	68.5	-1.64	3.77	0.62	35.613	32.89	3.77	-18.9	4.41	30	46.18	46.07
2410	66.78	-1.75	3.88	0.83	34.545	32.232	3.88	-18.12	4.73	30	45.78	45.63
2420	63.54	-1.97	3.69	0.94	32.526	31.013	3.69	-16.76	5.06	30	46.26	46.12
2430	62.62	-2.03	3.67	1.22	31.683	30.935	3.67	-19.06	5.41	15	45.65	45.5
2440	63.99	-1.94	3.76	1.61	32.005	31.989	3.76	-21.12	5.7	15	46.3	46.18
2450	66.39	-1.78	4.11	1.96	33.028	33.359	4.11	-20.84	5.89	15	46.12	45.96
2460	64.16	-1.93	4.08	1.93	31.812	32.344	4.08	-19.7	6.01	15	46.12	45.98
2470	60.47	-2.18	3.9	1.75	30.002	30.467	3.9	-19.48	6.08	15	46.05	45.94
2480	60.34	-2.19	3.91	1.76	29.941	30.398	3.91	-19.27	6.11	15	45.82	45.78
2490	61.14	-2.14	3.92	1.77	30.418	30.719	3.92	-18.63	6.06	15	46.03	46.01
2500	62.33	-2.05	3.93	1.78	31.069	31.26	3.93	-18.8	5.98	15	46.01	45.99
5100	59.1	-2.28	2.91	0.76	13.261	45.842	2.91	-24.85	5.19	30	49.4	49.42
5500	46.03	-3.37	-0.93	-3.08	19.808	26.217	-0.93	-18.18	2.44	60	50.05	50.1
5800	59.48	-2.26	2.43	0.28	22.96	36.516	2.43	-19.29	4.69	30	50.5	50.47

5. 产品外观图



Product physical description: 2.4G - Built-in FPC 1.13 - Gray line outlet length 80MM