

# Gao chang electronic technology co. LTD

## SPECIFICATION FOR APPROVAL

File No. 20111201

Revision 1.0

CUSTOMER: \_\_\_\_\_

CUSTOMER NO: \_\_\_\_\_

**2.4G Antenna L=70MM**

PART NAME: \_\_\_\_\_

GC-ML18 L=70MM

SUPPLIER NO: \_\_\_\_\_

Date:

Q'TY: PCS

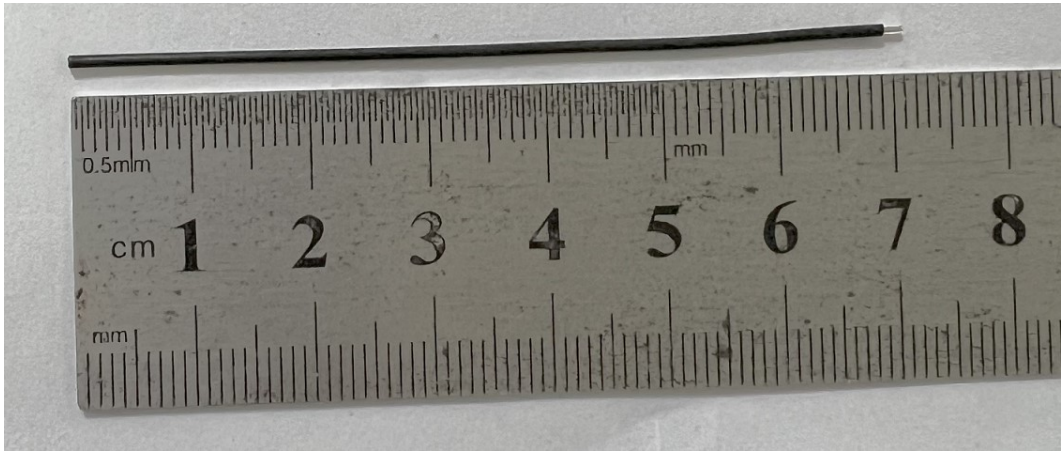
<b>CUSTOMER APPROVED BY</b>		
APPROVAL	CHIEF	SUPERVISOR

<b>SUPPLIER SIGNATURE</b>		
APPROVAL	CHECK	DESIGN

SH-RD-F04-A

# The project table

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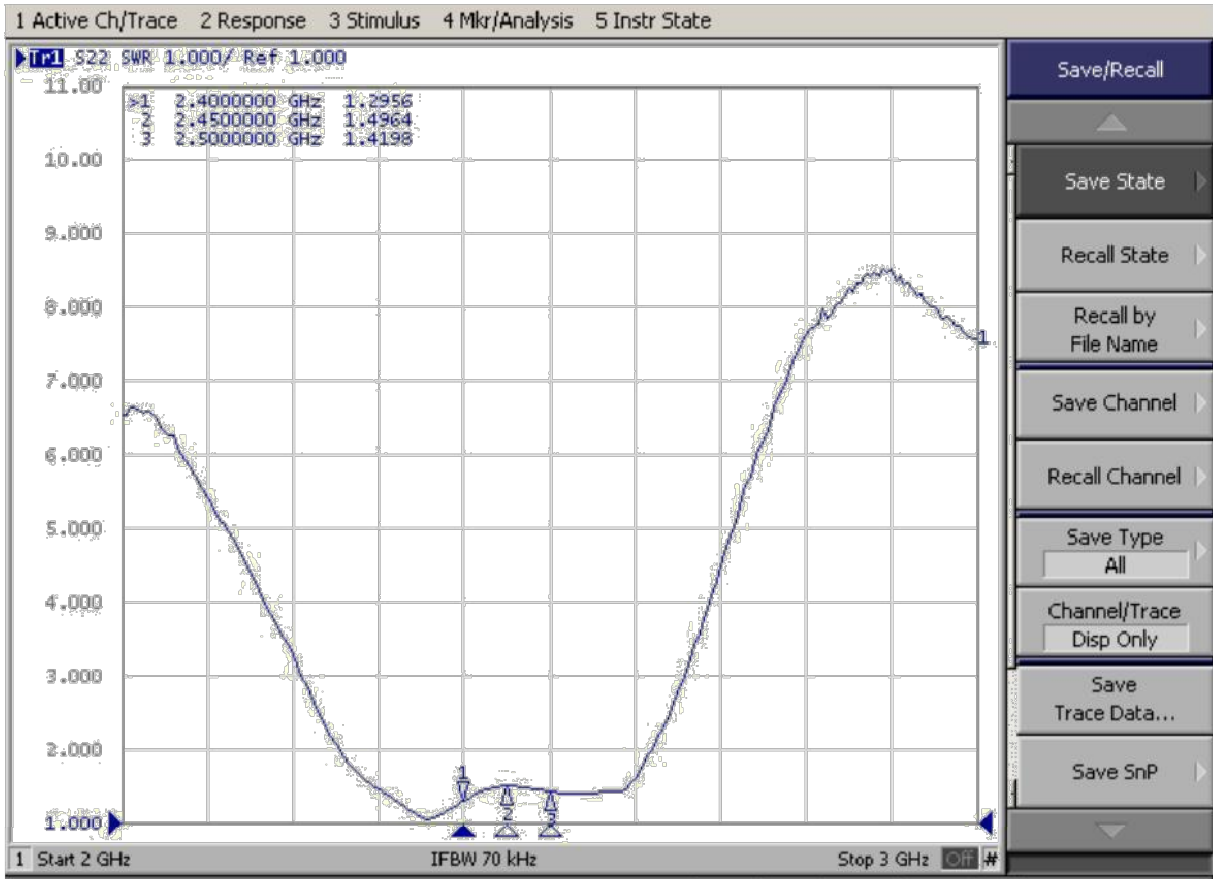
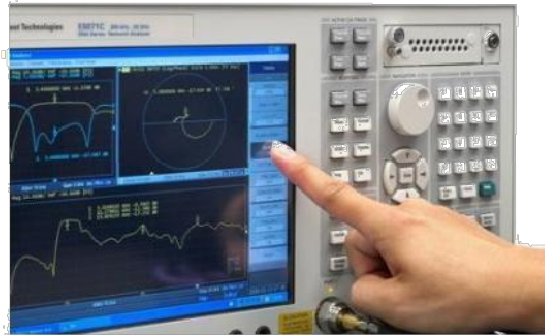


# Test Reports

<b>Electrical Properties</b>	
Frequency	2.4GHz
Impedance	50 Ohm Nominal
V.S.W.R	1.92 : 1 Max
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	1.94dBi
Cable Loss	3.2 dB / m Max @ 2450 MHz
Polarization	Linear, Vertical
Admitted Power	1 W
Connector	
<b>Physical Properties</b>	
Antenna Material	TUBE
Cable Type	The wire// L= 70mm
Operating Temp.	-10 ~ +60 °C
Storage Temp.	-10 ~ +70 °C
Cable Color	BLACK

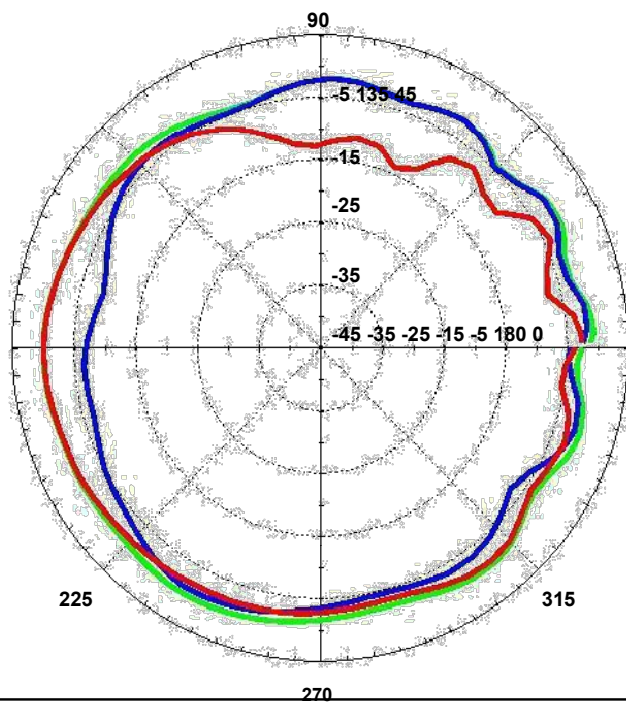
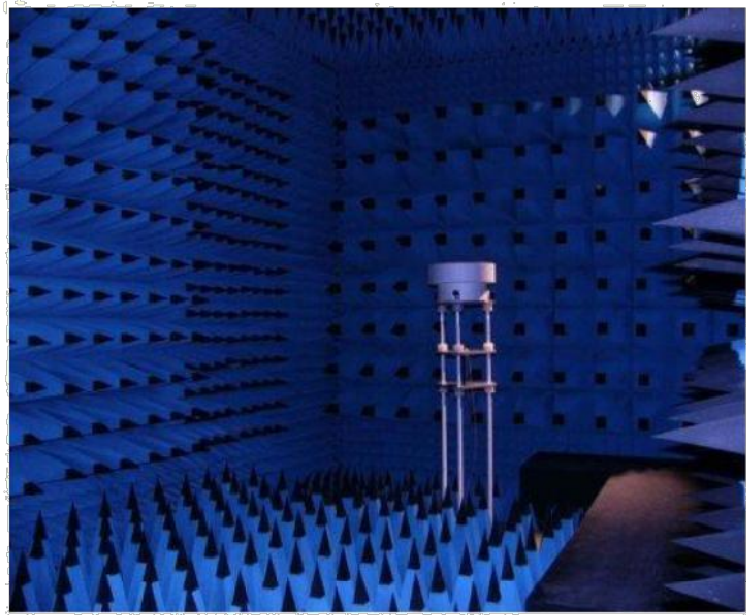
# S Parameter Test

*Agilent E5071C*



# Gain Test

*Antenna  
Radiation  
Pattern  
VS  
Gain*



# Efficiency

Passive Test For 2.4								
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)
2400	59.52	-2.25	1.74	2.59	17.404	42.116	1.74	-15.98
2410	57.06	-2.44	1.61	2.46	16.988	40.071	1.61	-16.43
2420	58.9	-2.3	1.82	2.67	17.853	41.047	1.82	-14.86
2430	60.98	-2.15	1.94	2.79	19.046	41.929	1.94	-15.28
2440	60.05	-2.22	0.5	2.89	18.929	41.118	0.5	-16.06
2450	57.65	-2.39	1.92	2.77	18.834	38.812	1.92	-16.28
2460	51.21	-2.91	1.49	2.34	17.497	33.715	1.49	-16.08
2470	49.05	-3.09	1.23	2.08	17.954	31.101	1.23	-15.57
2480	48.59	-3.13	1.16	2.01	18.701	29.889	1.16	-15.69
2490	49.17	-3.08	1.09	1.94	19.826	29.349	1.09	-15.38
2500	43.12	-3.65	1.47	1.32	17.831	25.29	1.47	-15.29