

Project name: EM08 WIFI ANT-R

Design company: Shenzhen China ZTX Technology Co.,Ltd.

Test Engineer: Wu Ming Yun

1 Noun interpretation

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
TRP	Total Radiated Power
TIS	Total Isotropic Sensitivity
VSWR	Voltage Standing Wave Ratio

2 Test equipment

Vector network analyzer	Agilent 8753E
Comprehensive test instrument	Agilent 8960 E5515C
RF shielding anechoic chamber	ETS 8m*4m*4m

3 Test items

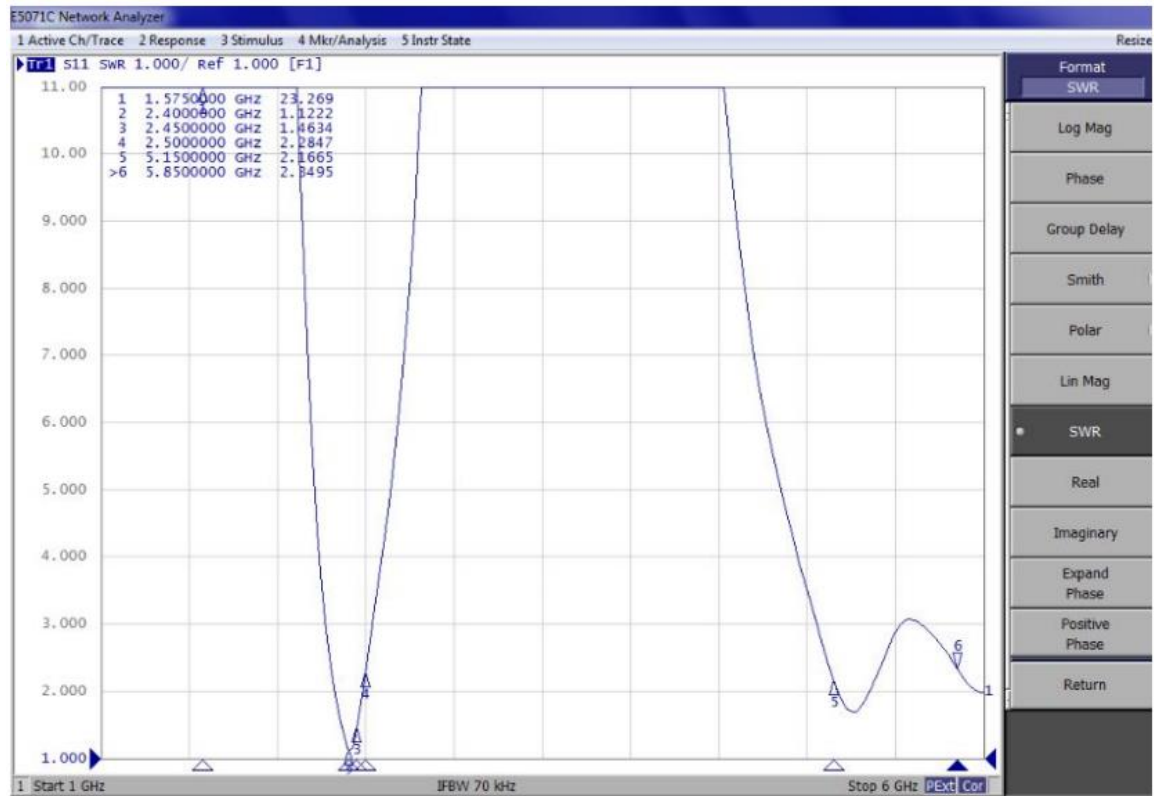
VSWR

Gain and efficiency

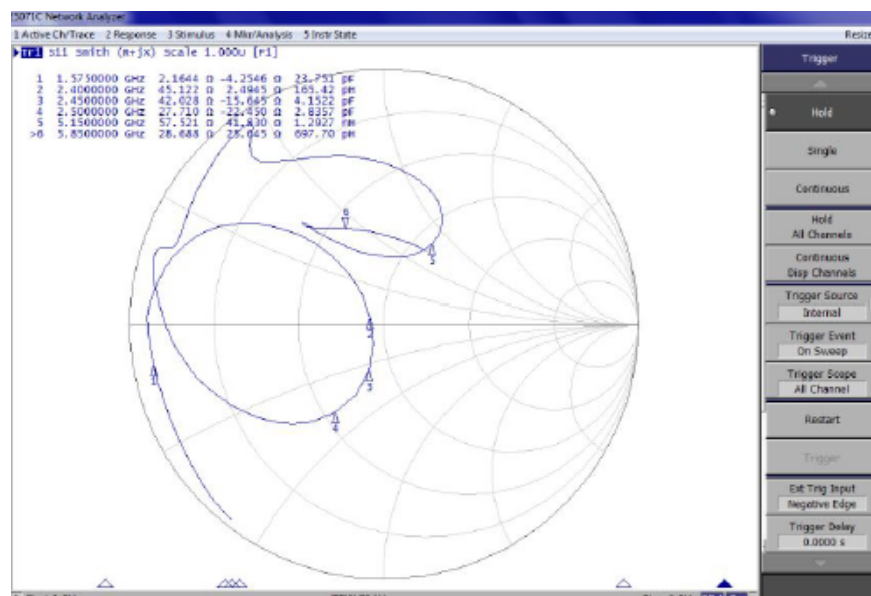
Radiation pattern

4 WIFI ANTENNA Test data

4.1 VSWR



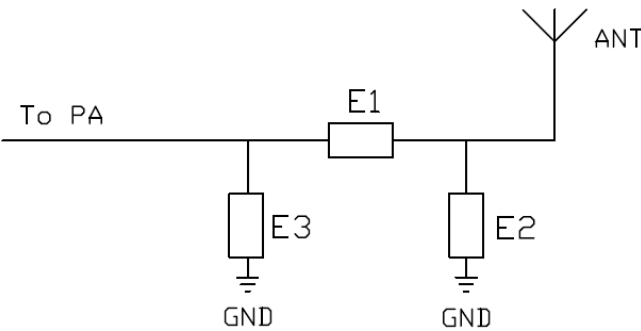
Freq/MHz	2400	2450	2500	5150	5500	5850
VSWR	1.12	1.46	2.28	2.16	2.85	2.34



4.2 Gain and efficiency

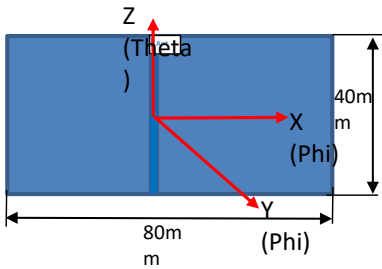
EMBO	WIFI 2.4G/5G					
Frequency (MHz)	2400	2450	2500	5150	5500	5850
Peak gain (dBi)	0.83	1	0.79	1	0.93	0.72
Efficiency %	32	34	30	34	32	29

5 Matching structure

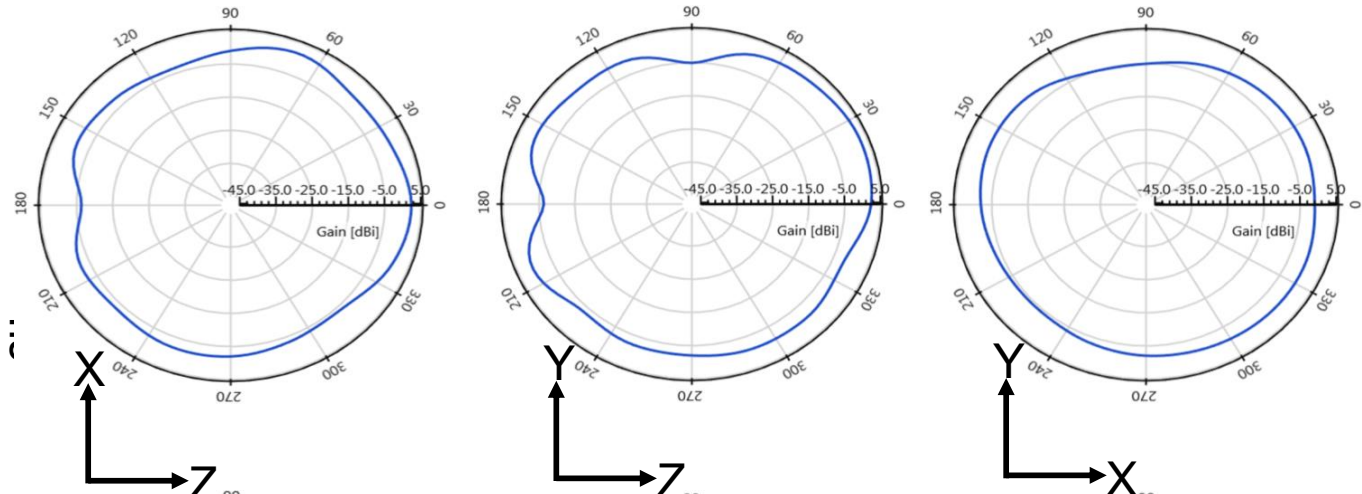


Matching structure	Wifi
E1	0 Ohms
E2	0.5pF
E3	NM

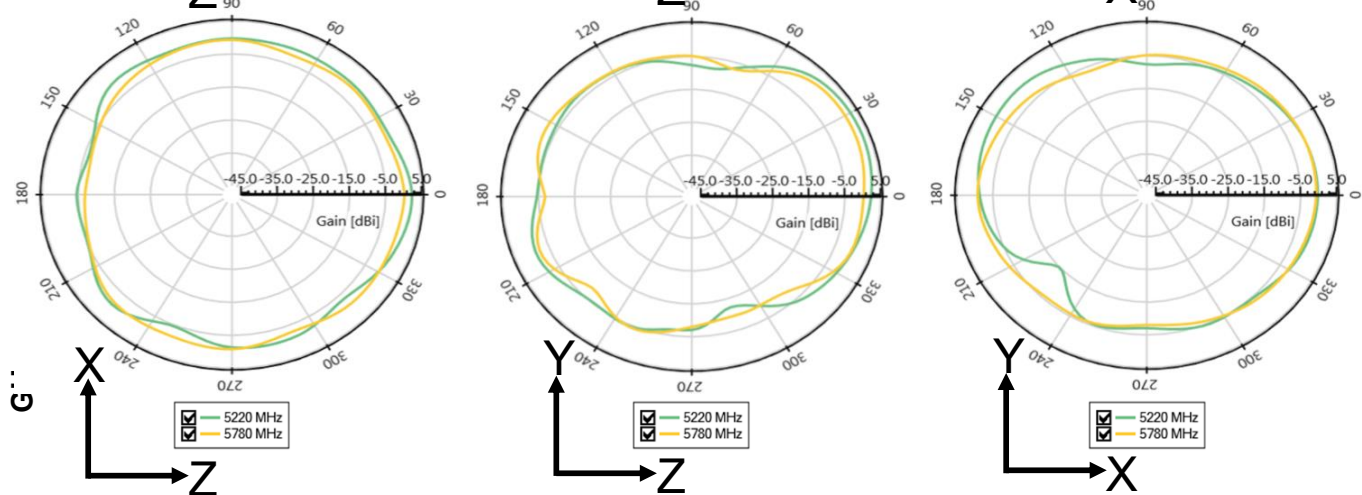
6 Radiation pattern



Measured at 2.45 GHz



Measured at 5.220 & 5.780 GHz



ANTENNA DRAWING

CUS P/N EM08 WIFI ANT-R

ApplicationDate:

Rev: R:A2

ZTX P/N :EM08 WIFI ANT-R

Editor:

1: Strike * scale is the CPK tube measurement scale, and the test is the IQC weighted scale.

2: The external line is smooth and smooth, and the internal line is impervious.

3: Defective problems such as imperfections on the FPC surface, scratches, dew copper, etc.

4: 48 times when the request for the upper area has been exceeded, it will be disabled.

5: Requests for the 100% scale test for oil ink surface demand.

6: The demand for product packaging is good, and there is no problem during the transportation process.

SN	Material	specification	Process
①	code	Arial / White Bright Oil	silk
②	ink	T=20um	black
③	Copper foil	Single panel	Electrolytic
④	Double-sided tape	3M 9471	
⑤	gold plated	T=0.03um	plating

MATERIAL	RoHs (PPW)
Cd	≤100
Pb	≤1000
Hg	≤1000
Cr6+	≤1000
PBB	≤1000
PBDE	≤1000

5 UND	±0.05	5-10	±0.06	10-35	±0.07	35-50	±0.08	50-100	±0.09	100 OVE	±0.10
2016.07.18											
mm											
FPC											
1/1											
EM08-WIFI											
ZTX-QR-RD-018											