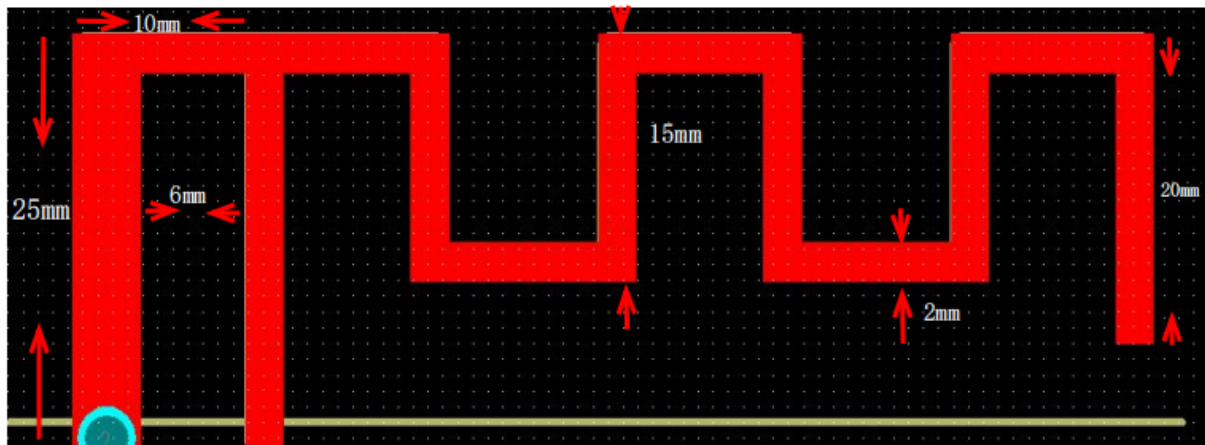


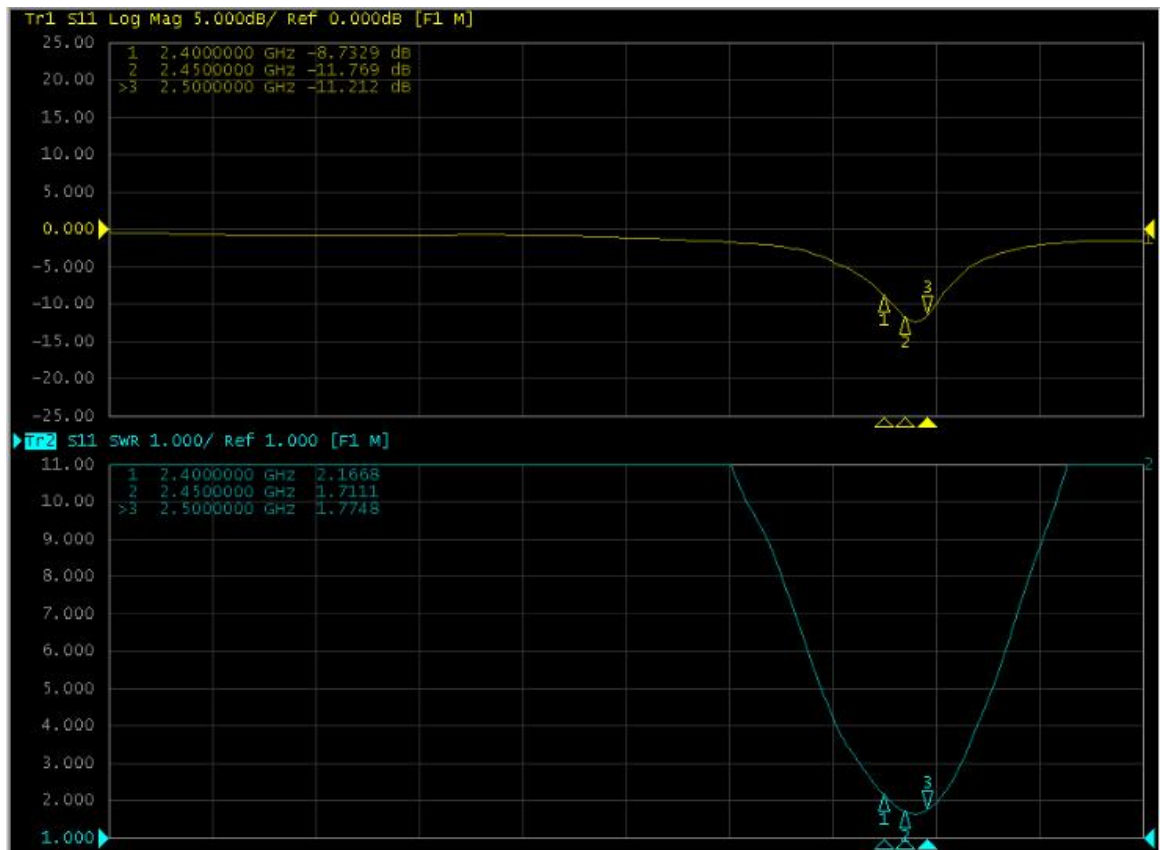
Tuya Antenna Spec

CUSTOMER NAME:	Tuya Smart Inc
PRODUCT NAME:	TYZS3/ZS11/TYZS3-NS/ZS4
Ren Feng P/N:	Printed PCB antenna
WRITED:	Licco
DATE:	20190520
VERSIONS:	A

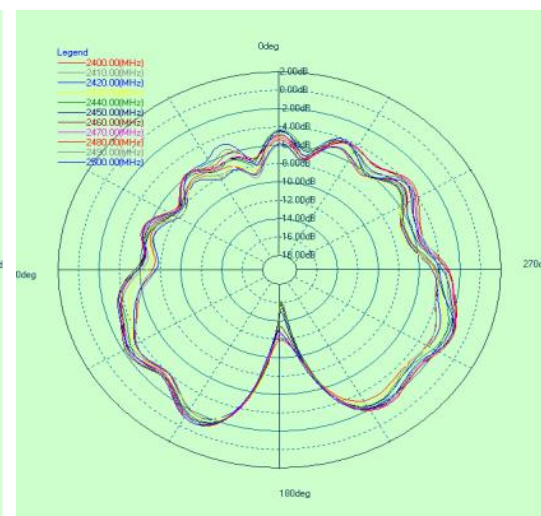
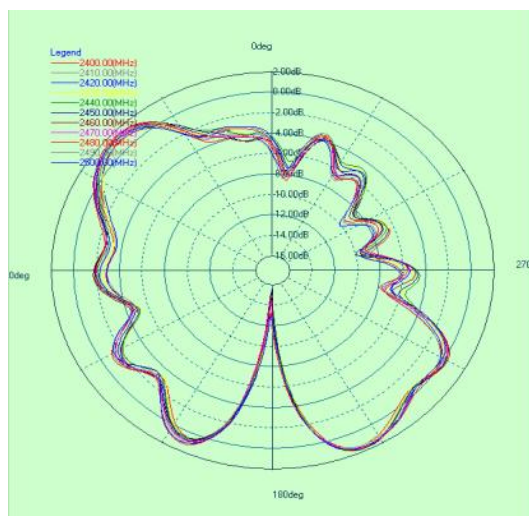
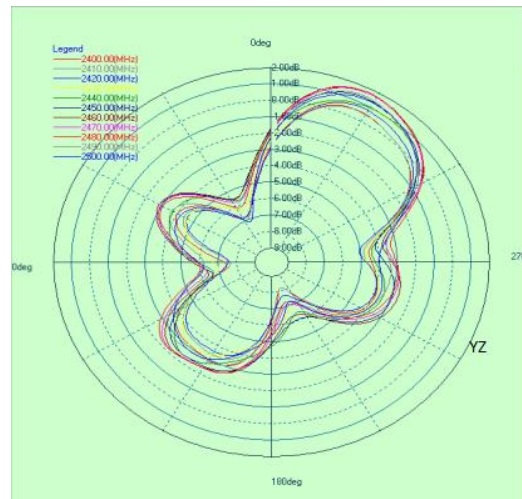
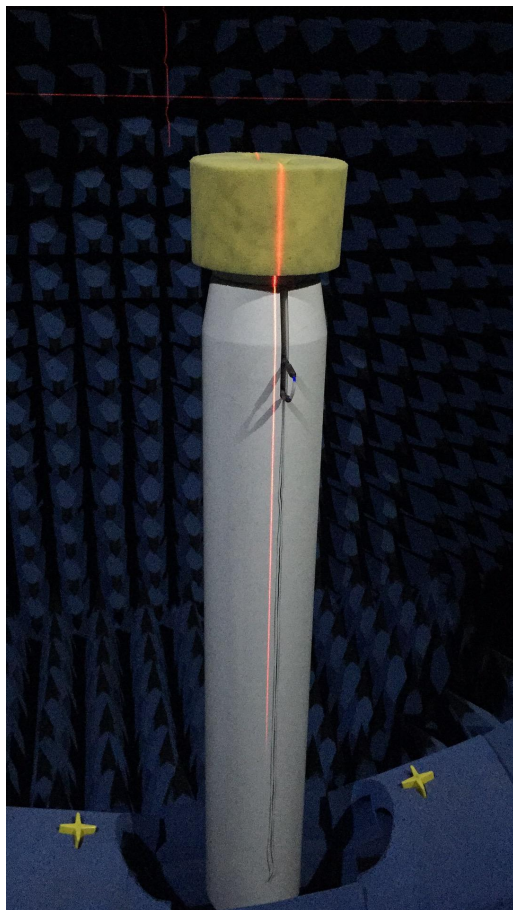


Manufacture's Name: Hangzhou Zhihua Home Technology Co., LTD
Address: Room 1203, Building 1, Haichuang Science and Technology Center, Yuhang District, Hangzhou City, Zhejiang Province

2- Test Data and curve



Frequency (MHz)	2400	2450	2500
Return Loss	-8.73	-11.76	-11.21
VSWR	2.16	1.71	1.77



3- Efficiency and Gain

Frea. (MHz)	Effi(%)	Gain(dBi)
2400	52.29	1.62
2410	52.17	1.71
2420	53.14	1.93
2430	54.16	1.76
2440	57.62	1.96
2450	59.64	1.78
2460	61.55	1.89
2470	60.64	1.75
2480	62.86	1.66
2490	59.85	1.58
2500	60.41	1.88