



Yusheng Communications-equipment Co.,LTD

Antenna Specification

Client : Cosonic

Model : 300116190251C00

Ant. Type : FPC Antenna

Manufacture : Yusheng Communications-equipment Co.,LTD

Add. : 411, Building 2, South Taiyun Chuanggu Park,
southeast of the intersection of Guangming Avenue
and Dongchang Road, Tangwei Community,
Fenghuang Street, Guangming District, Shenzhen



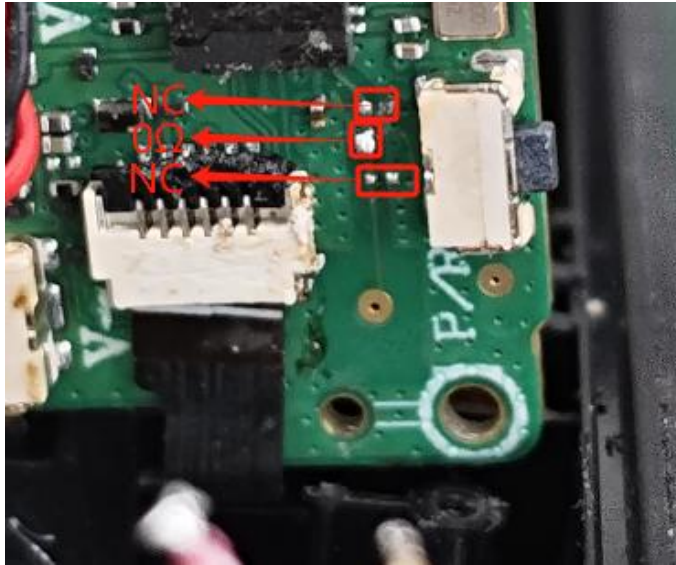
Yusheng Communications-equipment Co.,LTD

1. Overview

Basic information

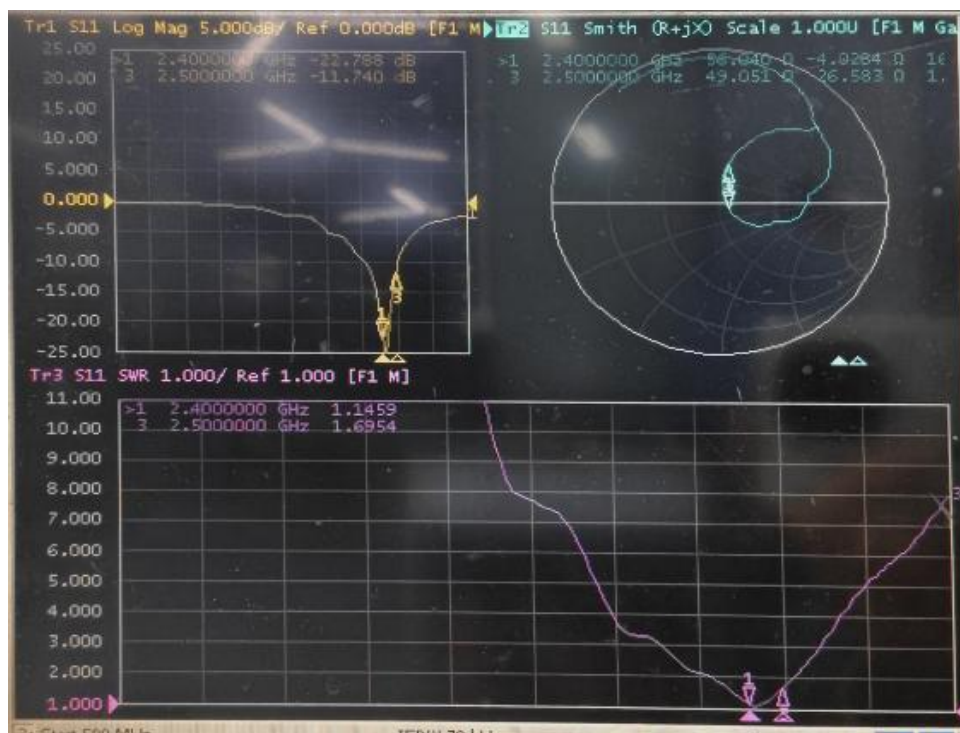
Model :	<u>300116190251C00</u>
Frequency :	BT: 2402-2484MHz
Type :	FPC Antenna

Schematic diagram of antenna matching circuit modification



Location	Value
M1	NC
M2	0 Ω
M3	NC

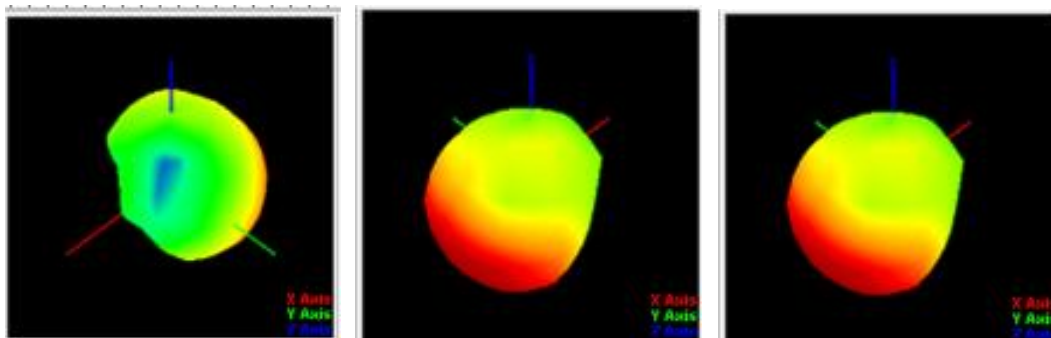
S11 parameter



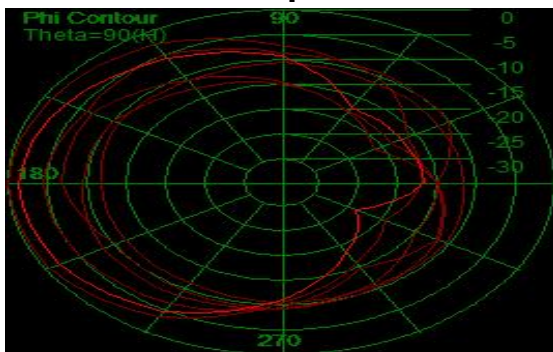
	FrequencyMHz	Gain dB	Efficiency dB	Efficiency %
Free space	2400	0.76	-3.4	45.7
	2410	0.67	-3.33	46.4
	2420	0.69	-3.18	48.1
	2430	0.34	-3.12	48.8
	2440	0.3	-3.05	49.5
	2450	0.08	-2.98	50.3
	2460	0.03	-3.04	49.7
	2470	0.33	-3.12	48.8
	2480	0.11	-3.18	48.1
	Average	0.37	-3.16	48.38

	FrequencyMHz	Gain dB	Efficiency dB	Efficiency %
HEAD	2400	-0.59	-8.12	15.4
	2410	-0.33	-8.01	15.8
	2420	-0.28	-7.9	16.2
	2430	-0.14	-7.75	16.8
	2440	-0.1	-7.57	17.5
	2450	-0.03	-7.3	18.6
	2460	-0.01	-7.45	18
	2470	-0.35	-7.54	17.6
	2480	-0.1	-7.72	16.9
	Average	-0.21	-7.71	16.98

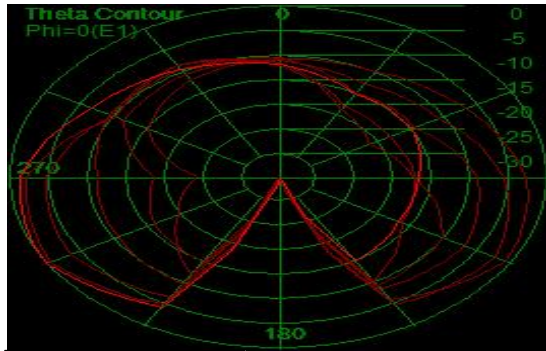
2.2.4 Antenna 3D directional diagram (human head and ear model)



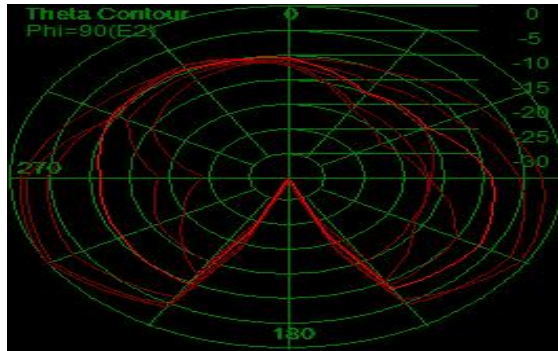
2.2.5 2D antenna pattern



Theta=90°



Phi=0°



Phi=90°

2.2.6 OTA test data

1#	Free space	Channel	TRP (dBm)	TIS (dBm)
		CH 0	6.45	-92.64
		CH 39	6.62	-92.68
		CH 78	6.87	-92.74
	HEAD	Channel	TRP (dBm)	TIS (dBm)
		CH 0	2.67	-89.51
		CH 39	2.75	-89.68
		CH 78	2.81	-89.85

2#	Free space	Channel	TRP (dBm)	TIS (dBm)
		CH 0	6.58	-92.58
		CH 39	6.77	-92.70
		CH 78	6.92	-92.93
	HEAD	Channel	TRP (dBm)	TIS (dBm)
		CH 0	2.55	-89.30
		CH 39	2.68	-89.63
		CH 78	2.87	-89.78



3#	Free space	Channel	TRP (dBm)	TIS (dBm)
		CH 0	6.51	-92.49
		CH 39	6.64	-92.63
		CH 78	6.78	-92.88
	HEAD	Channel	TRP (dBm)	TIS (dBm)
		CH 0	2.58	-89.52
		CH 39	2.70	-89.66
		CH 78	2.94	-89.86

3. structural drawings

