

Inverted F Antenna Specification

MANUFACTURE : Dongguan Songhui Industrial Co., Ltd.

PRODUCT NAME : PCB Antenna

MODEL : InvertedFAntenna

DATE : 2023-11-09

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1. Antenna describe

Antenna plate: Inverted F Antenna

Frequency range: 2.4GHz-2.5GHz 5.15GHz-5.85GHz

ITEM Name	Inverted F Antenna Specification	
Model Name	2.4GHz Antenna	
Polarization	Horizontal and Vertical	
Azimuth Beam Pattern	Omni-directional	
Impedance	50 Ohm	
Antenna Lengh	11.5mm	
Gain(Max)	2.4 G:2.0(± 1)dBi	5.1G:2.1(± 1)

2. Antenna Photo& Lengh (mm)



3. Gain

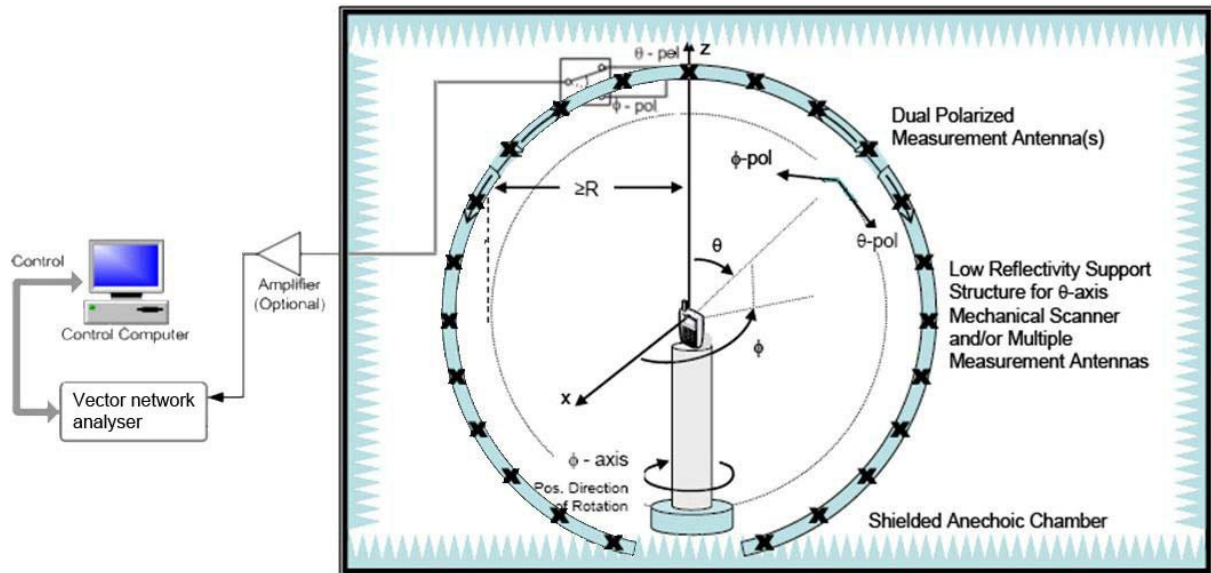
Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	46.12	2.09	5150	51.38	2.11
2410	53.46	2.75	5175	44.36	1.9
2420	53.71	2.78	5200	42.25	1.67
2430	53.02	2.65	5225	42.28	1.68
2440	57.4	2.92	5250	37.67	1.27
2450	55.13	2.92	5275	42.67	1.83
2460	61.94	3.62	5300	44.15	1.73
2470	59.52	3.56	5325	45.98	2.1
2480	62.63	3.88	5350	51.75	2.37
2490	61.72	3.88	5375	45.5	1.86
2500	68.31	4.34	5400	53.02	2.9
			5425	43.51	2.3
			5450	50.73	3.05
			5475	46.12	3.05
			5500	51.93	3.86
			5525	45.15	3.33
			5550	56.22	4.06
			5575	42.89	2.59
			5600	50.52	2.77
			5625	40.8	1.65
			5650	53.77	2.45
			5675	39.64	1.02
			5700	51.64	2.02
			5725	40.92	1.4
			5750	50.4	2.31
			5775	38.08	1.05
			5800	45.85	1.93
			5825	33.11	0.42
			5850	43.42	1.26

4. Return Loss/VSWR/Input Impedance

Frequency	Return Loss (dB)	VSWR	Input Impedance(Ω)
2400MHz	-21	1.2	
2500MHz	-10	1.8	
5150MH	-13	1.5	
5500MHz	-25	1.1	
5858MHz	-17	1.3	

Annex A Photographs

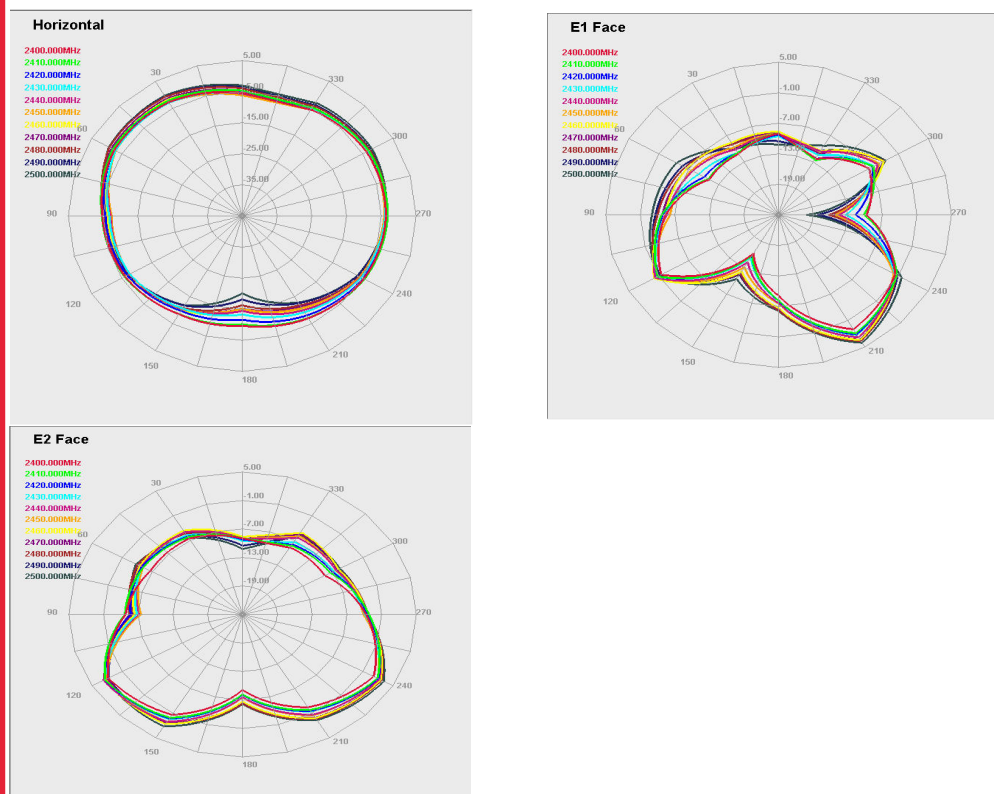
1. Test Setup

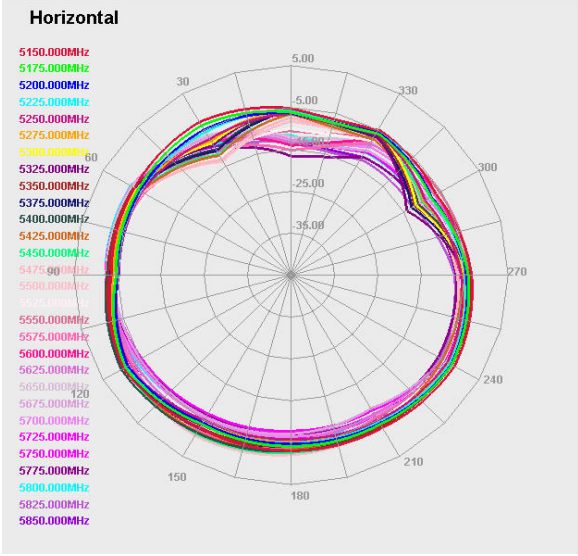
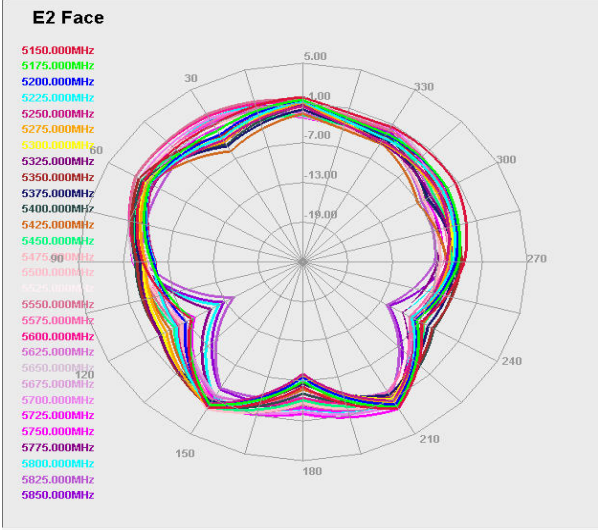
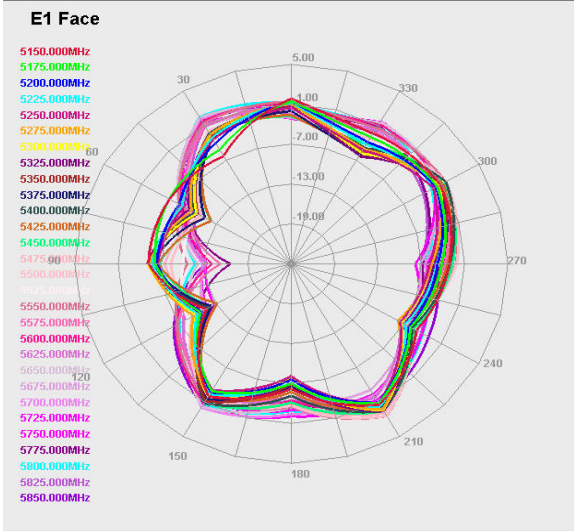


Annex B Figures

1. 2D Radiation Pattern

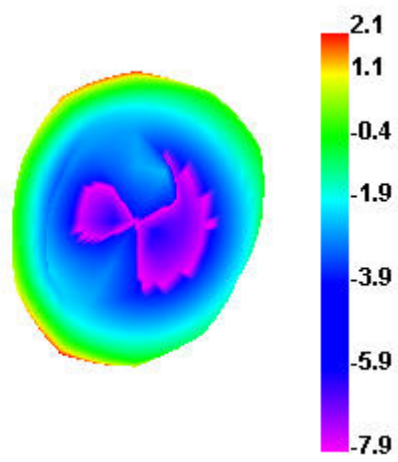
$\Phi=0^\circ$



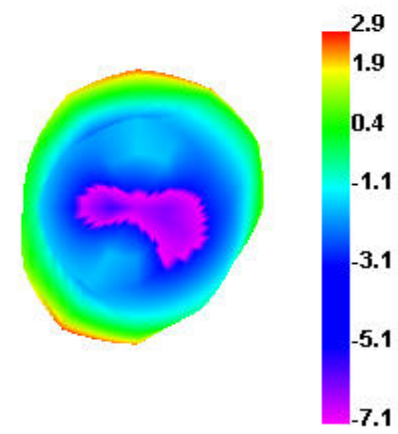


2. 3D Radiation Pattern

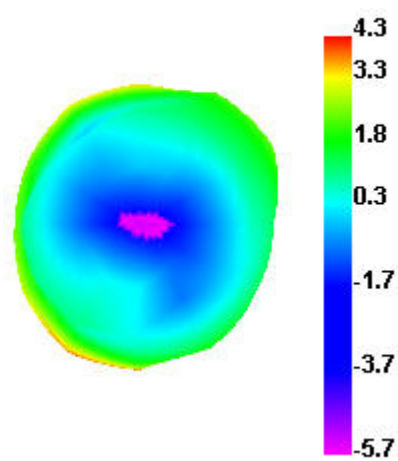
2400.000MHz



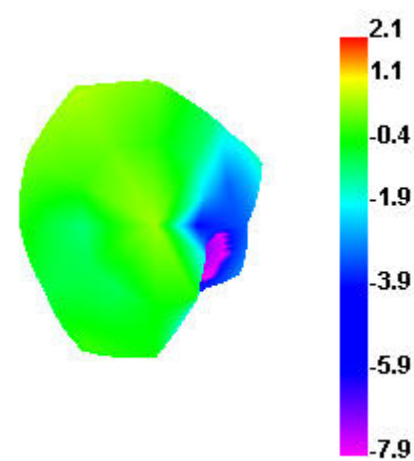
2450.000MHz



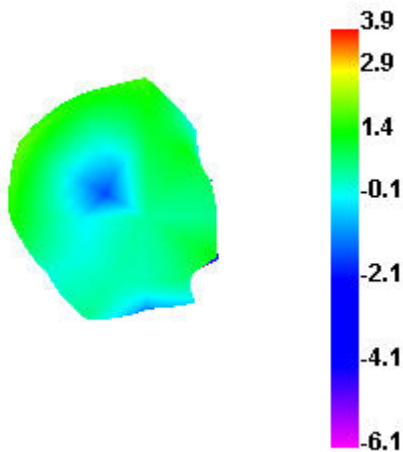
2500.000MHz



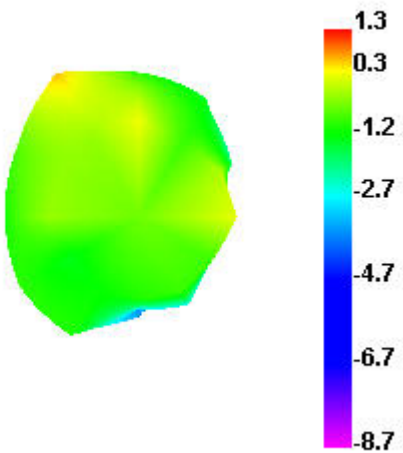
5150.000MHz



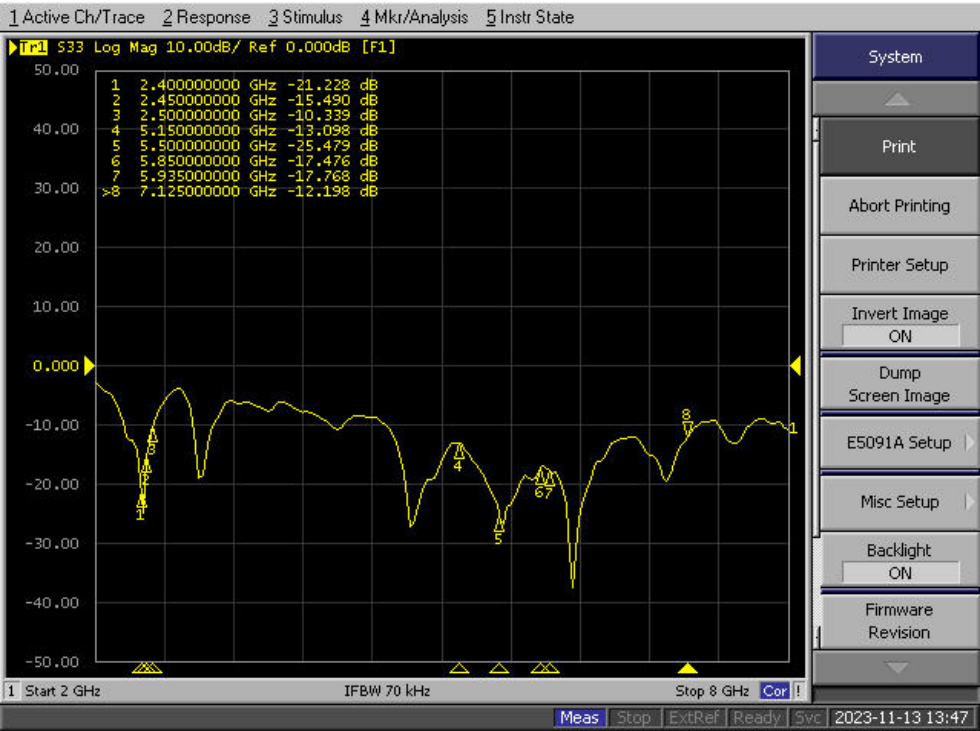
5500.000MHz



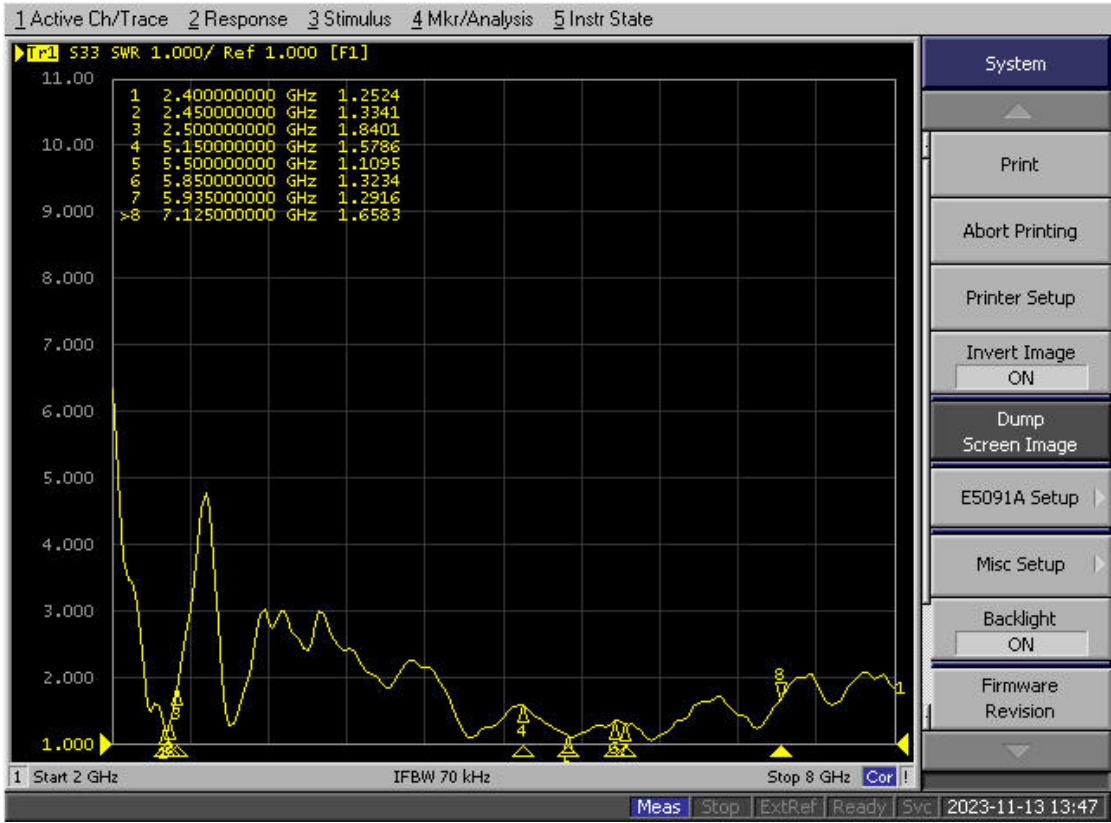
5850.000MHz



3. Return Loss



4. VSWR



END