

Antenna Part Specification

Project name	IN097 Headset
Antenna material	FPC antenna
Antenna type	Monopole antenna
Date	2023.12.20
Antenna Vendor	Shenzhen Strongpower Communication Co., Ltd
Antenna Vendor address	Building 502-A, building W2-A, high-tech industrial village, No. 025, Nansi Road, Yuehai Street, Nanshan District, Shenzhen City

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1. IN097 headset uses FPC antenna

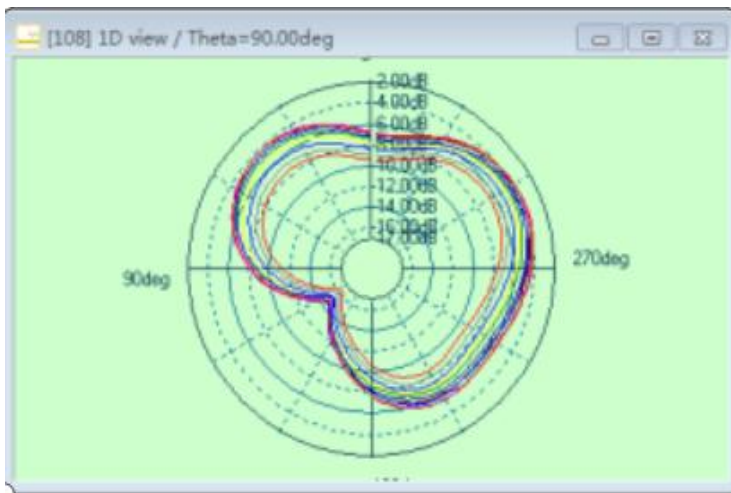
2. ELECTRICAL CHARACTERISTICS-R

Peak Gain	-1.45dBi
Impedance	50 Ω

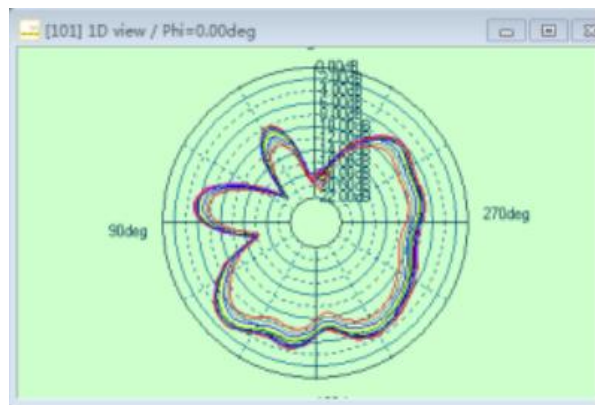
2-1. ELECTRICAL CHARACTERISTICS-L

Peak Gain	-1.19dBi
Impedance	50 Ω

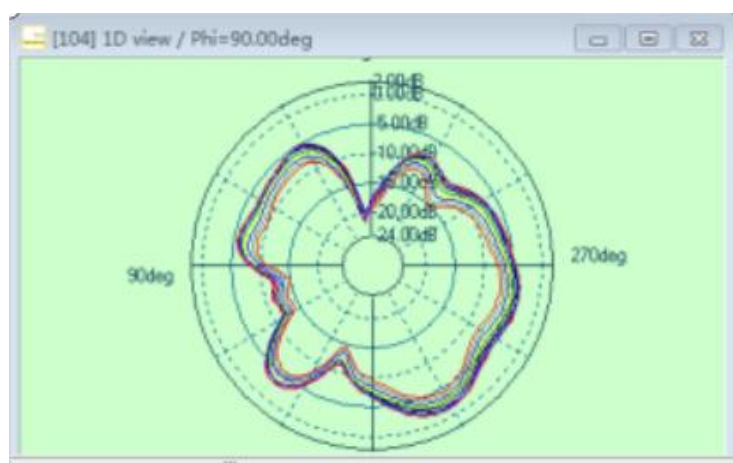
L- Radiation pattern: theta=90°



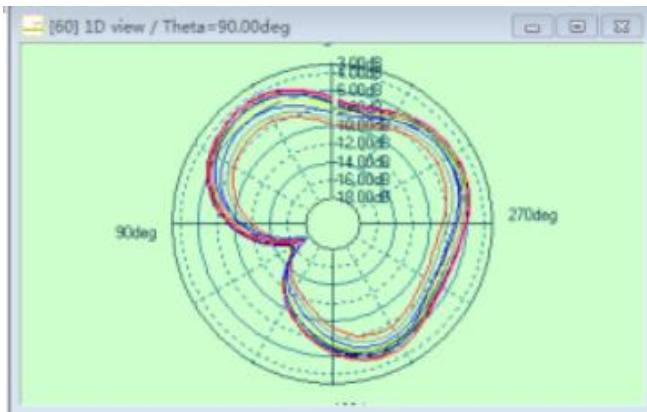
L- Radiation pattern: Phi=0



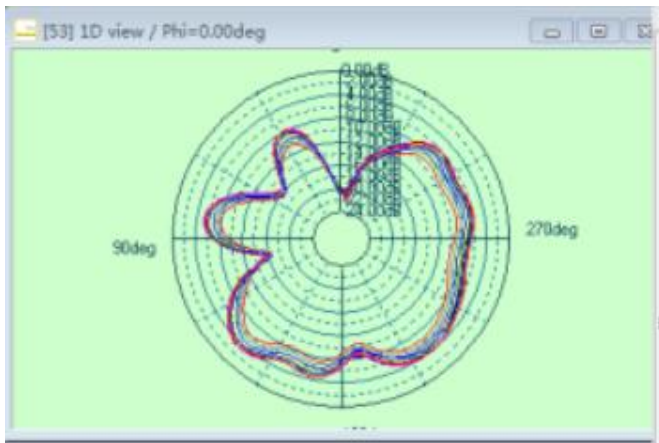
L- Radiation pattern: $\Phi = 90^\circ$



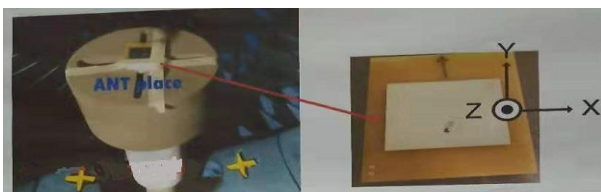
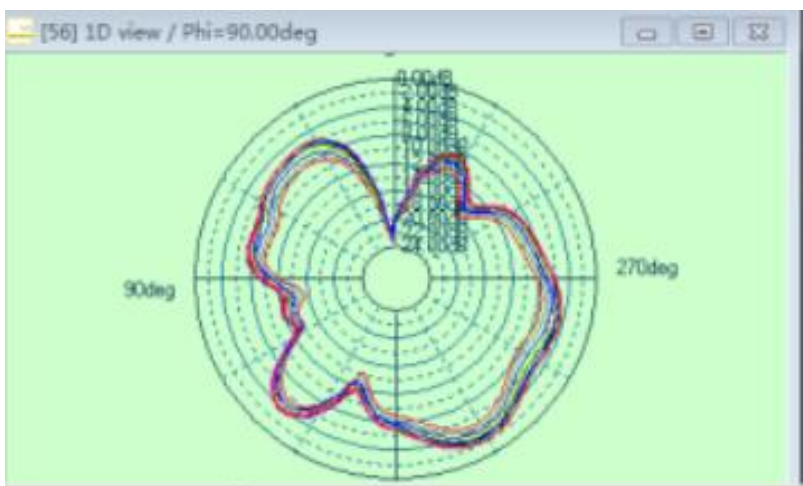
R- Radiation pattern: $\theta = 90^\circ$



R-Radiation pattern: $\Phi=0$



R-Radiation pattern: $\Phi=90^\circ$



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- $\Phi = 0^\circ$ $\Rightarrow$ Cut = XZ plane,
- $\Phi = 90^\circ$ $\Rightarrow$ Cut = YZ plane,
- $\Theta = 90^\circ$ $\Rightarrow$ Cut = XY plane

2. Efficiency and Gain

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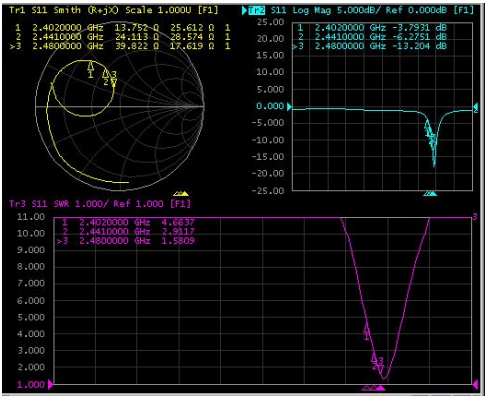
Frequency (MHz)	efficiency (%)	efficiency (dB)	Gain (dBi)
2400	11.90%	-9.24	-4.32
2410	13.65%	-8.65	-3.74
2420	15.89%	-7.99	-3.15
2430	17.72%	-7.52	-2.78
2440	19.21%	-7.16	-2.49
2450	21.00%	-6.78	-2.09
2460	21.58%	-6.66	-1.84
2470	22.01%	-6.57	-1.53
2480	21.57%	-6.66	-1.45
Average value	20.07%	-6.97	-1.70

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Frequency (MHz)	efficiency (%)	efficiency (dB)	Gain (dBi)
2400	11.65%	-9.34	-4.40
2410	13.31%	-8.76	-3.85
2420	15.52%	-8.09	-3.25
2430	17.34%	-7.61	-2.88
2440	18.93%	-7.23	-2.56
2450	21.03%	-6.77	-2.12
2460	22.20%	-6.54	-1.76
2470	23.32%	-6.32	-1.36
2480	23.62%	-6.27	-1.19
Average value	22.70%	-6.44	-1.34

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