



Antenna Part Specification

Customers:	Cosonic Intelligent Technologies Co., Ltd.
Project name:	A4T
Antenna type:	FPC
Antenna model:	SX240212-151E
Antenna morphology:	Monopole
Version:	V1.0
Date:	2024.06.07
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer Address:	505-506 ,A Block,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china



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Change record			
Compile / change date	Reason for change	Changed content	Version
2024.06.07	First edition	First edition	V1.0

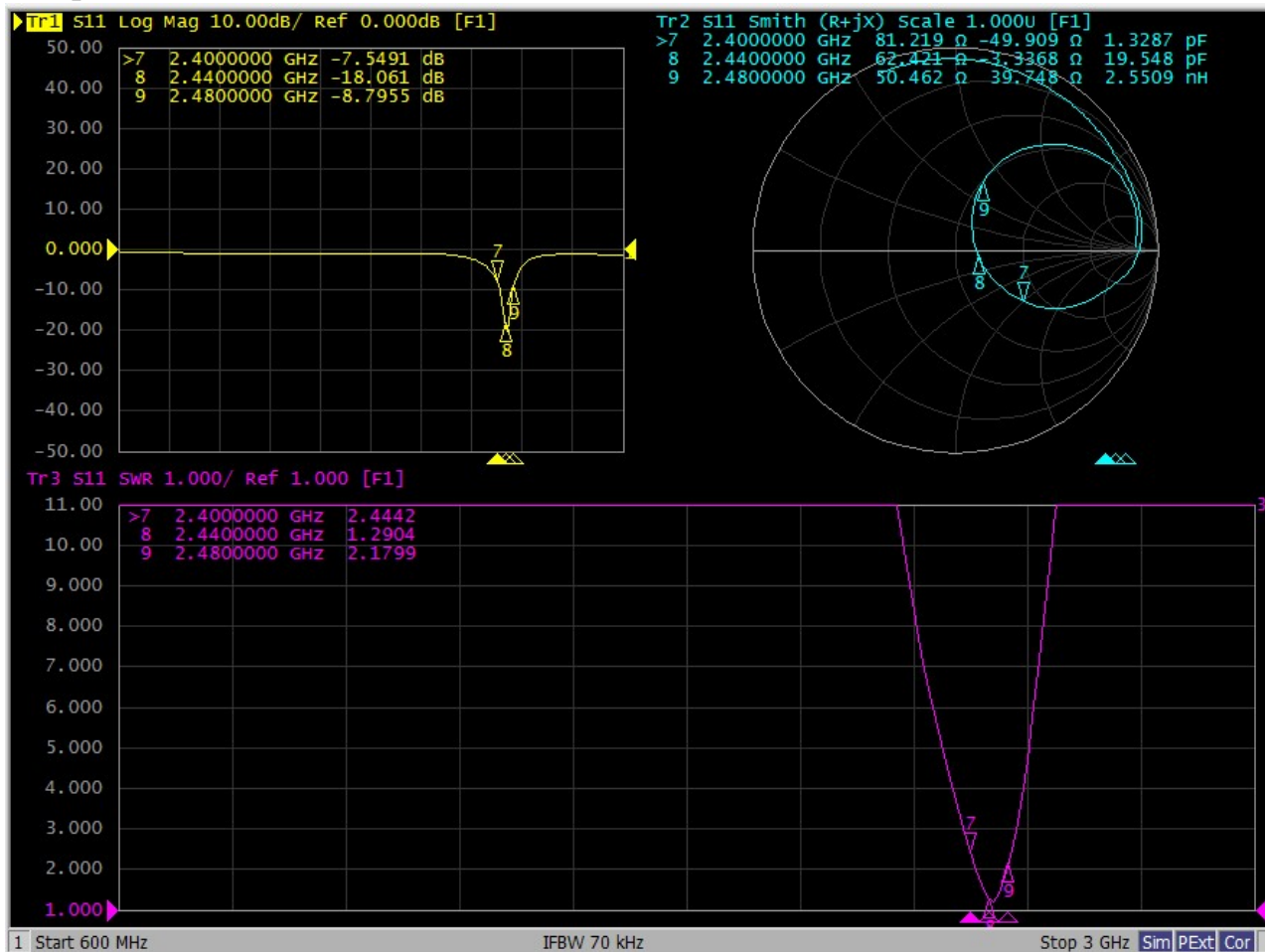


I: The report of passive data



Agilent E5071C

S11 parameter:





Efficiency:

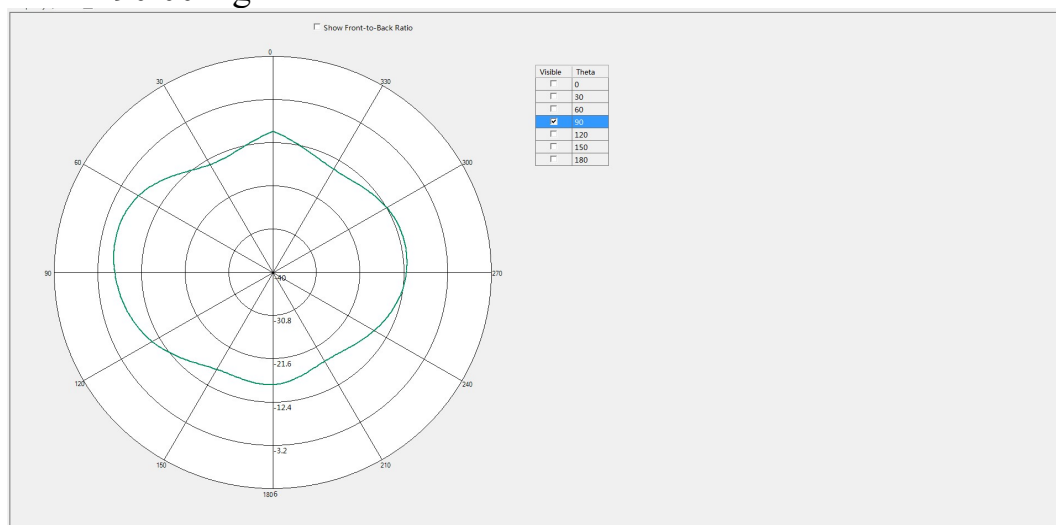
free space			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-4.60	-7.16	19.22
2410	-4.10	-6.82	20.79
2420	-3.88	-6.52	22.30
2430	-3.68	-6.34	23.21
2440	-3.46	-6.26	23.65
2450	-3.33	-6.10	24.55
2460	-3.45	-6.21	23.95
2470	-3.20	-6.06	24.77
2480	-2.94	-6.06	24.75
Average value	-3.63	-6.39	23.02

headform			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-6.67	-10.54	8.83
2410	-5.92	-10.24	9.46
2420	-5.57	-9.98	10.05
2430	-5.60	-9.87	10.31
2440	-5.58	-9.89	10.27
2450	-5.31	-9.88	10.29
2460	-5.36	-10.09	9.79
2470	-5.33	-10.07	9.83
2480	-5.81	-10.24	9.45
Average value	-5.68	-10.09	9.81

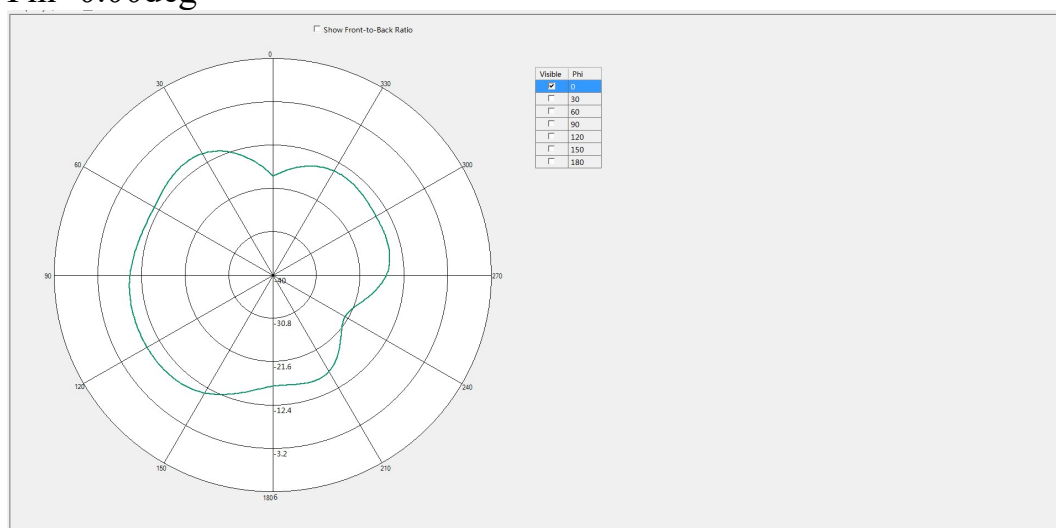


Antenna radiation pattern:

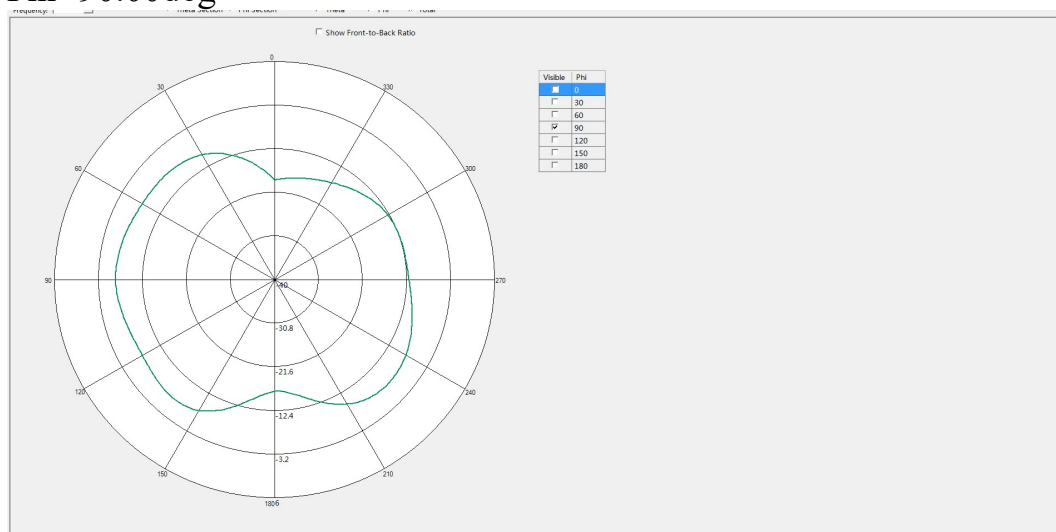
Theta=90.00deg



Phi=0.00deg

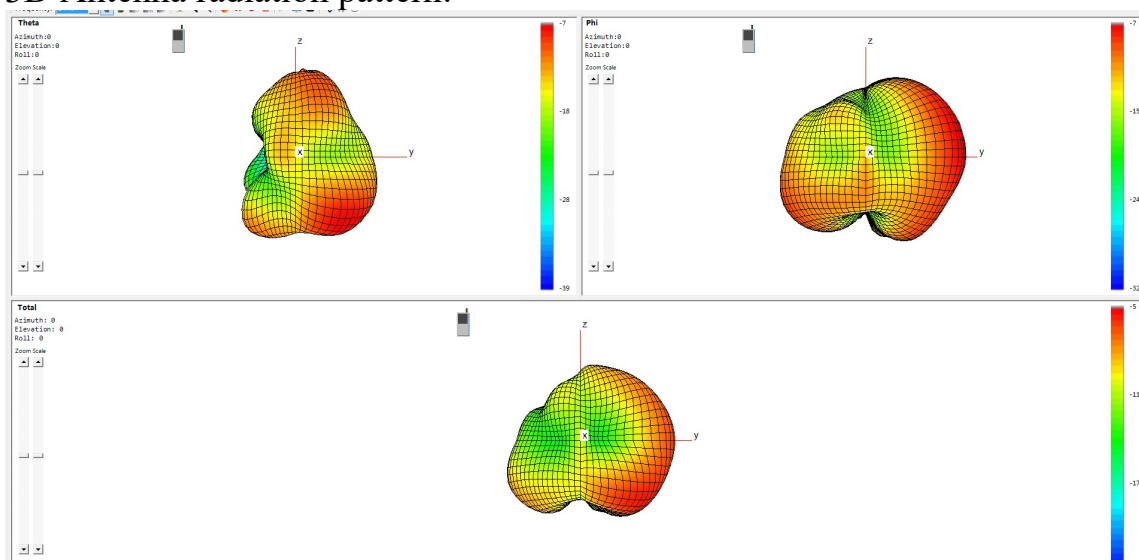


Phi=90.00deg





3D Antenna radiation pattern:



II: 3D Active test report of antenna

Free space	Channel	TRP (dBm)	TIS(dBm)
L	CH 0	3.2	-85.7
	CH 39	4.7	-87.6
	CH 78	5.2	-87.3

Headform	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	-0.9	-83.5
	CH 39	1.5	-84.0
	CH 78	1.3	-83.4

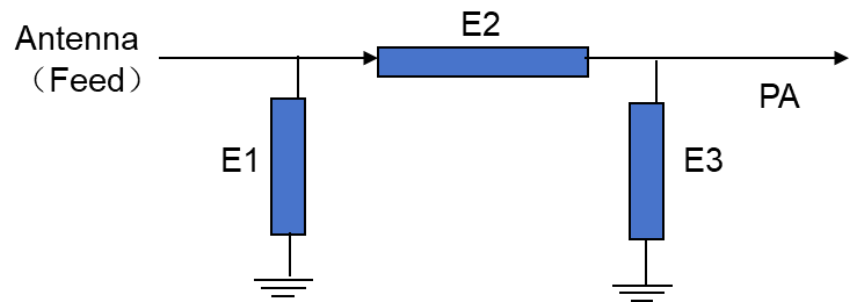


OTA Standard Chamber



III: Matching circuit

Number	Value
C7	N/A
L9	3NH
C5	N/A





IV: Structure file

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