



Antenna Part Specification

Project name:	TB096
Antenna material:	FPC antenna
Antenna type:	Monopole antenna
Version:	V2.0
Date:	2023.08.11
PN:	102BK3F1421



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Change record			
Compile / change date	Reason for change	Changed content	Version
2023.05.08	First edition	First edition	V1.0
2023.08.11	Antenna optimization	Antenna optimization	V2.0

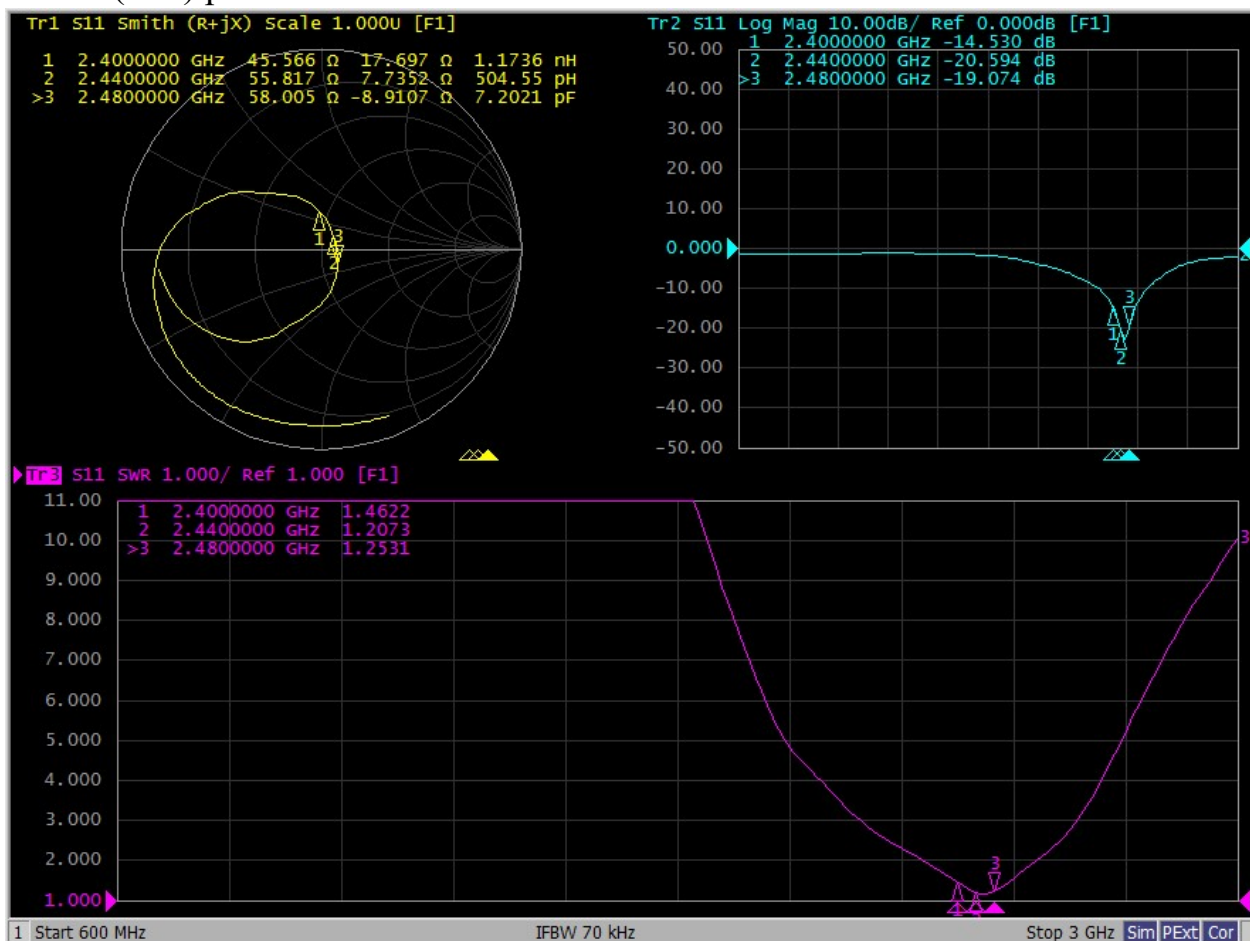


I: The report of passive data



Angilent E5071C

VSWR(S11) parameter (R) :





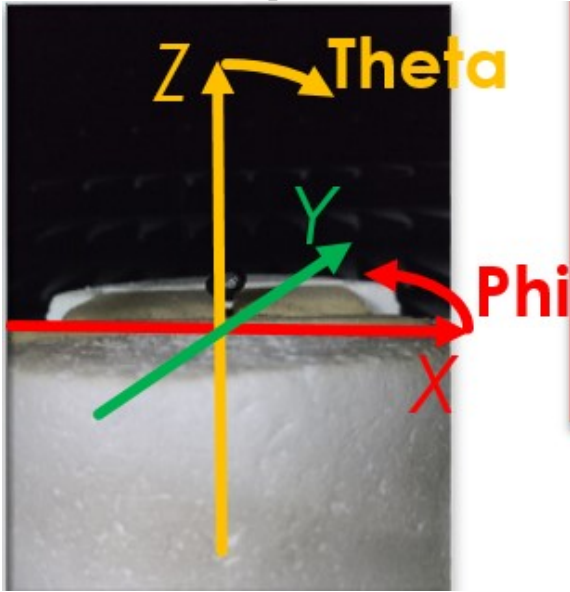
Efficiency:

R-free space			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-2.0	-6.6	21.9
2410	-1.8	-6.5	22.6
2420	-1.6	-6.3	23.5
2430	-1.6	-6.3	23.2
2440	-1.7	-6.4	23.0
2450	-1.5	-6.2	23.8
2460	-1.6	-6.3	23.5
2470	-1.3	-6.0	25.3
2480	-1.2	-5.7	26.7
Average value	-1.6	-6.3	23.7

R-headform			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-5.9	-12.5	5.7
2410	-5.7	-12.3	5.9
2420	-5.3	-12.1	6.2
2430	-5.2	-12.1	6.2
2440	-5.3	-12.2	6.1
2450	-5.1	-12.0	6.3
2460	-5.0	-12.0	6.3
2470	-4.5	-11.7	6.8
2480	-4.2	-11.4	7.2
Average value	-5.1	-12.0	6.3

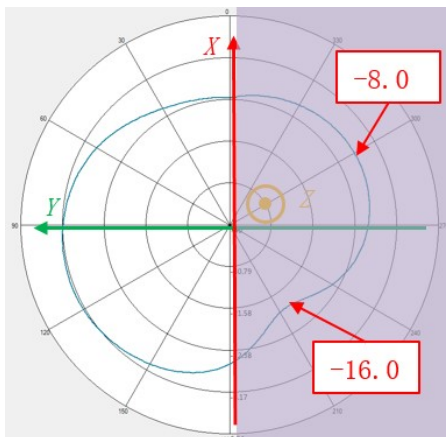


Mark the relative position of DUT XYZ

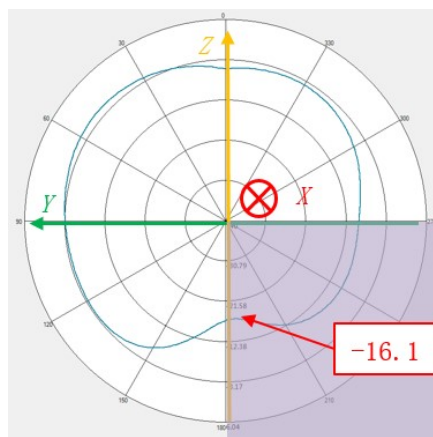


Radiation Pattern @ 2450 MHz (unit: dBi) in FreeSpace (R)

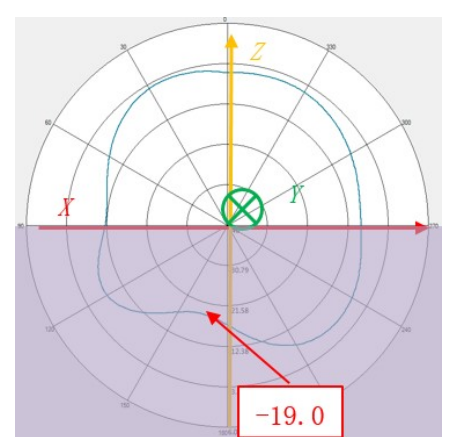
2D



XY

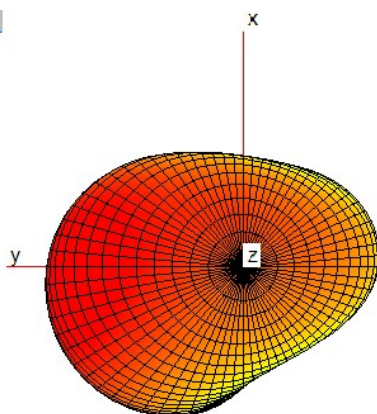


YZ

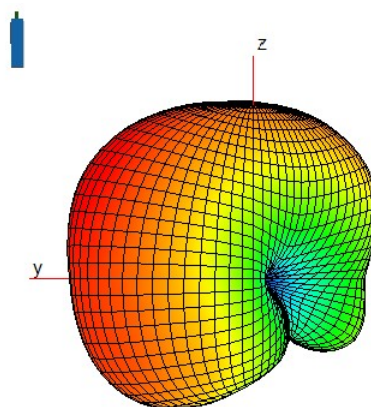


XZ

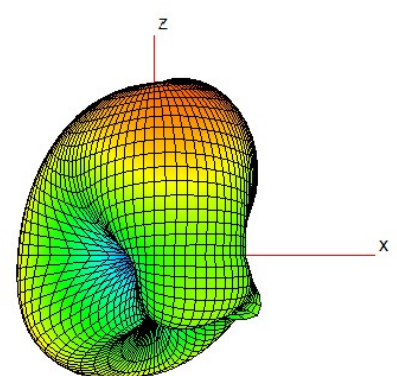
3D



XY



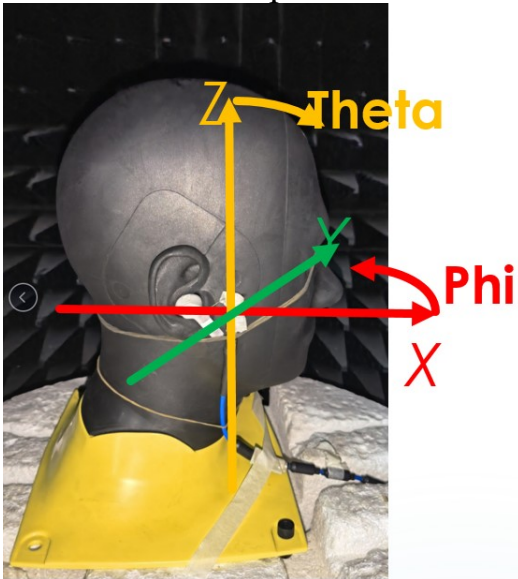
YZ



XZ

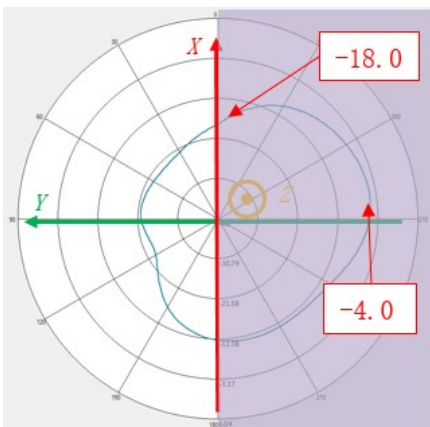


Mark the relative position of DUT XYZ

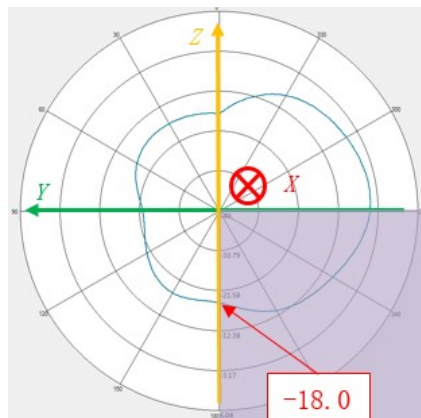


Radiation Pattern @ 2450 MHz (unit: dBi) in headform (R)

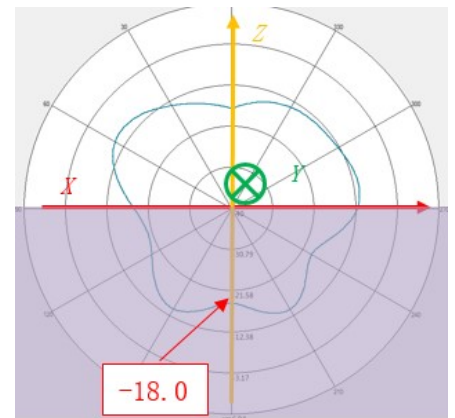
2D



XY

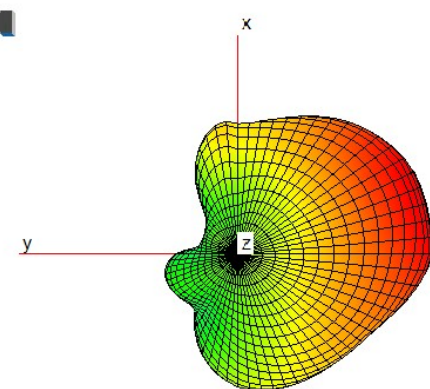


YZ

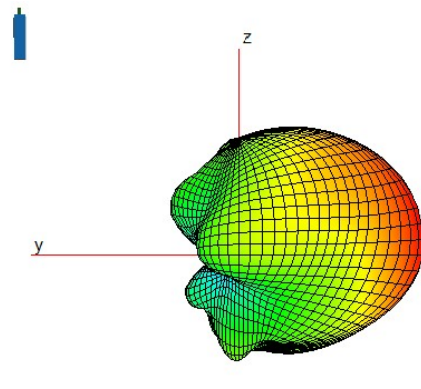


XZ

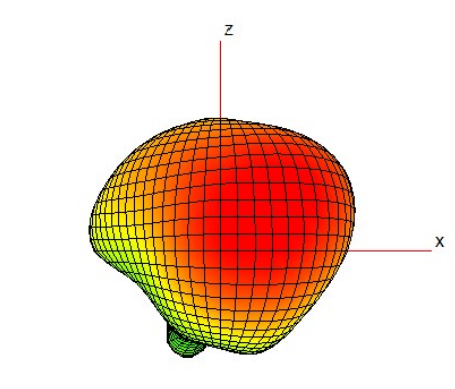
3D



XY



YZ



XZ



II: 3D Active test report of antenna

free space	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	2.5	-89.5
	CH 39	3.3	-89.3
	CH 78	3.1	-90.1

headform	Channel	TRP (dBm)	TIS (dBm)
R	CH 0	-4.6	-83.3
	CH 39	-4.1	-83.5
	CH 78	-3.8	-84.1

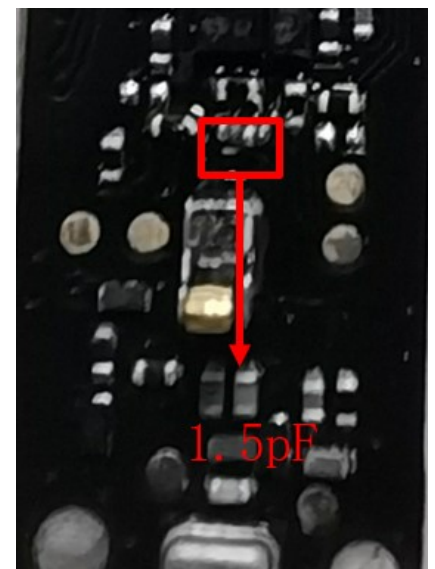
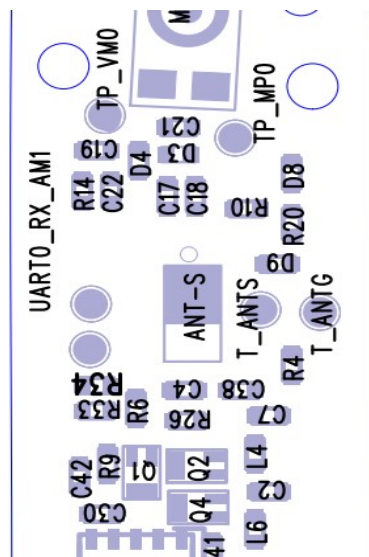


OTA Standard Chamber

III: Matching circuit

Matching Circuits Components(R)

Location	Value
C4	1.5pF
C38	0 Ω
C7	N/A





IV: Structure file

