



Antenna Part Specification

Project name:	TB096
Antenna material:	FPC antenna
Antenna type:	Monopole antenna
Version:	V2.0
Date:	2023.08.11
PN:	102BK3F1420



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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

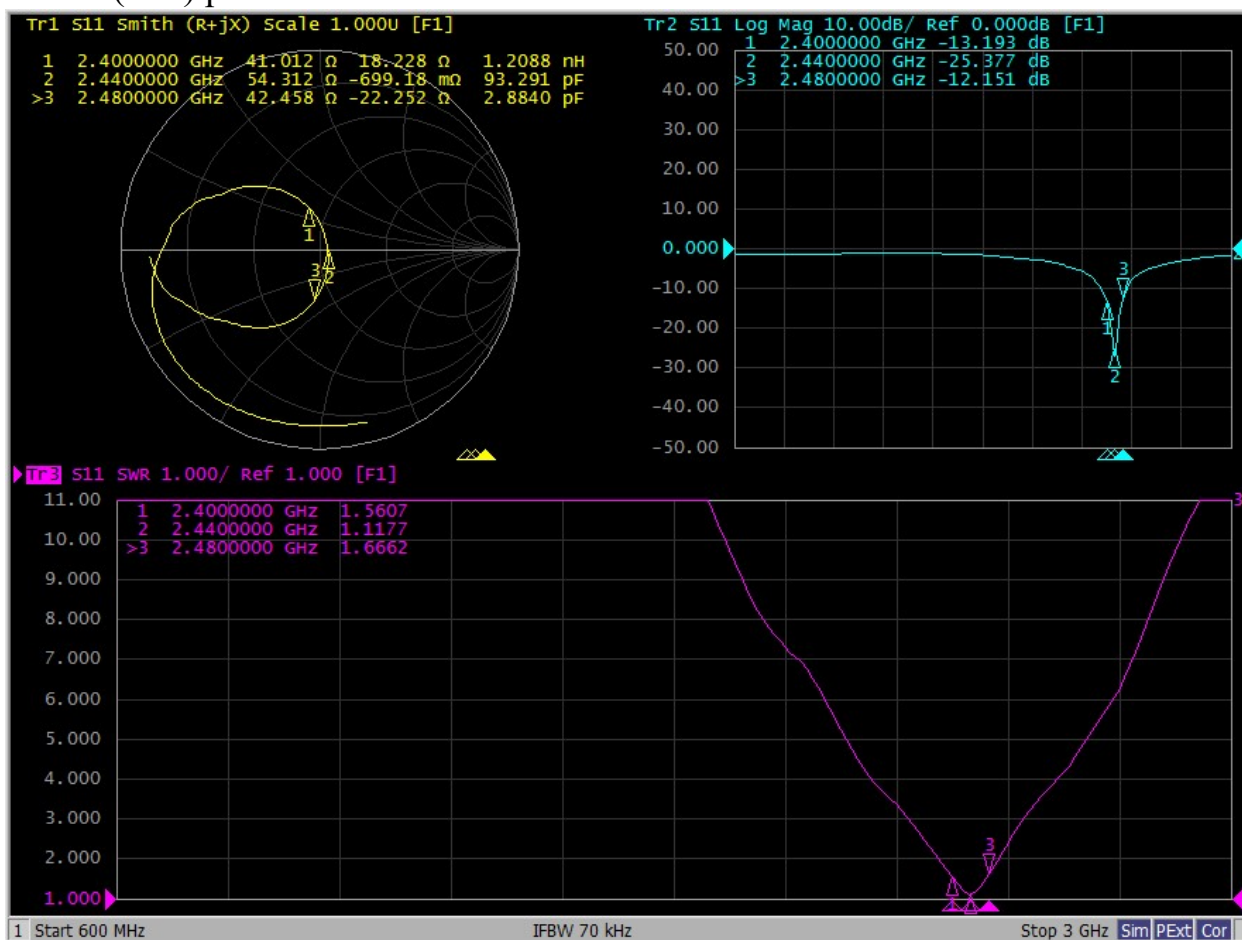


I: The report of passive data



Angilent E5071C

VSWR(S11) parameter (L) :





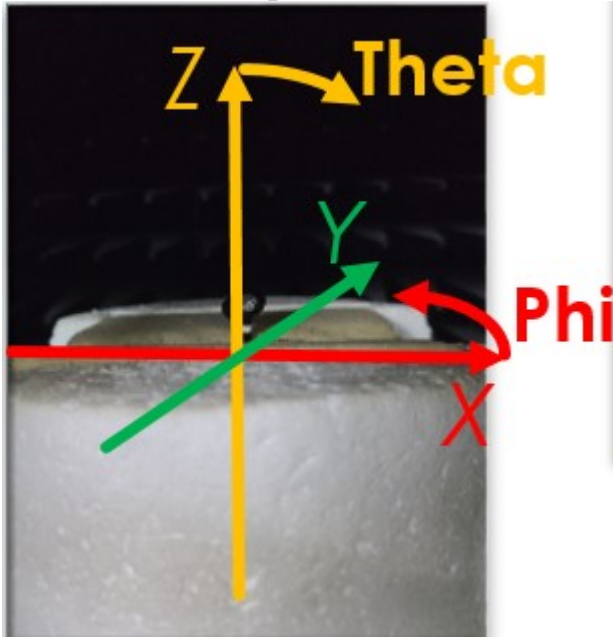
Efficiency:

L-free space			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-0.7	-6.6	21.7
2410	-0.7	-6.6	22.0
2420	-0.8	-6.5	22.4
2430	-0.9	-6.6	22.0
2440	-1.0	-6.6	21.7
2450	-0.8	-6.4	22.8
2460	-0.8	-6.4	22.8
2470	-0.4	-6.1	24.7
2480	-0.2	-5.8	26.3
Average value	-0.7	-6.4	22.9

L-headform			
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	Efficiency
2400	-5.8	-12.4	5.7
2410	-5.5	-12.2	6.0
2420	-5.4	-12.0	6.3
2430	-5.3	-11.9	6.5
2440	-5.3	-11.9	6.5
2450	-5.2	-11.7	6.7
2460	-5.3	-11.7	6.8
2470	-5.0	-11.3	7.5
2480	-4.7	-11.0	7.9
Average value	-5.3	-11.8	6.6

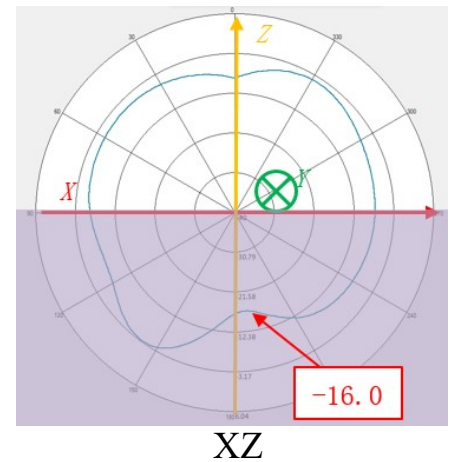
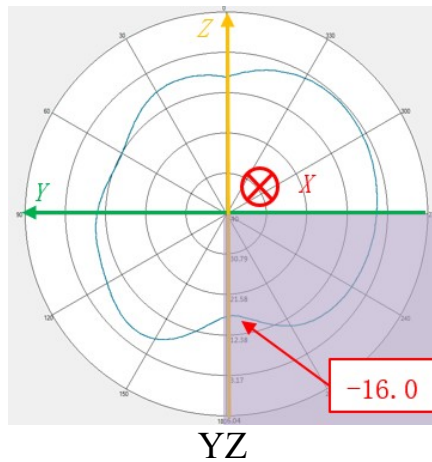
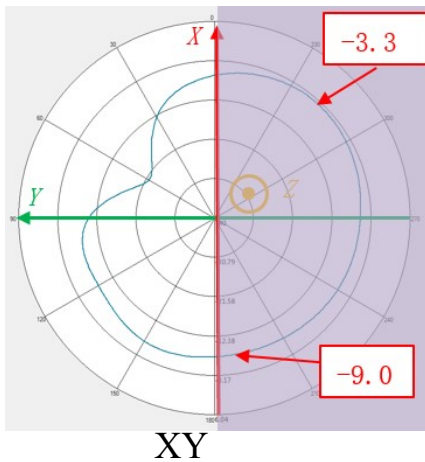


Mark the relative position of DUT XYZ

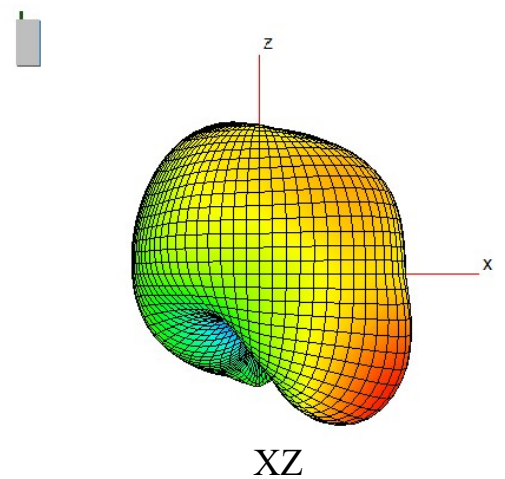
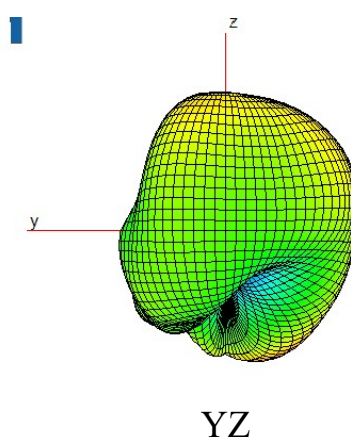
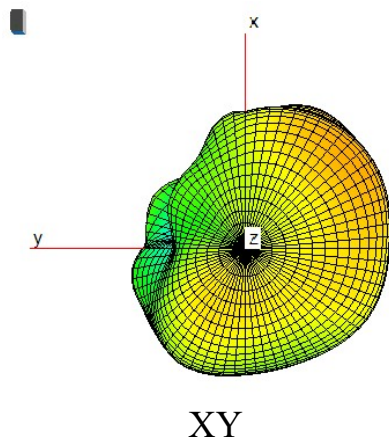


Radiation Pattern @ 2450 MHz (unit: dBi) in FreeSpace (L)

2D

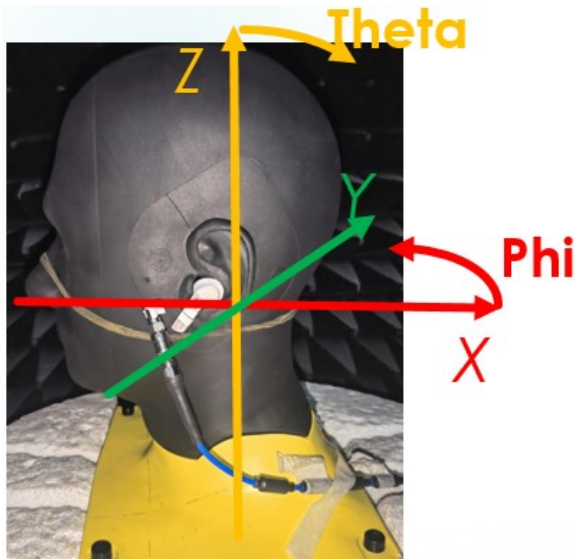


3D



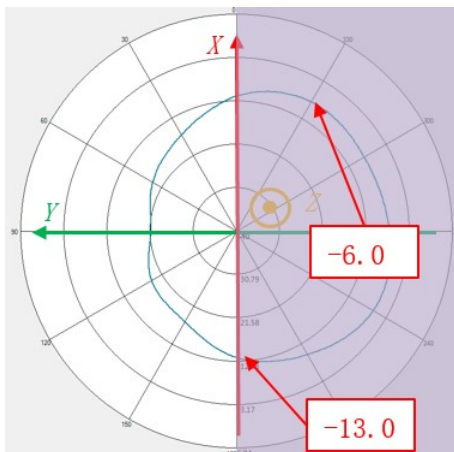


Mark the relative position of DUT XYZ

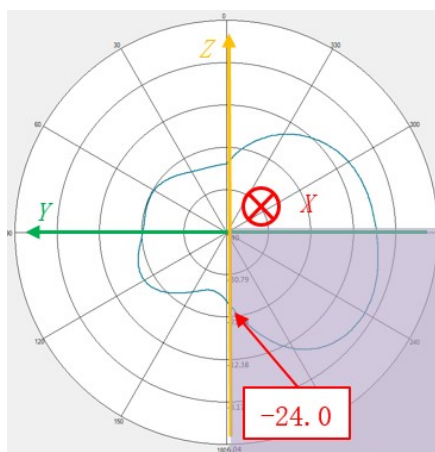


Radiation Pattern @ 2450 MHz (unit: dBi) in headform (L)

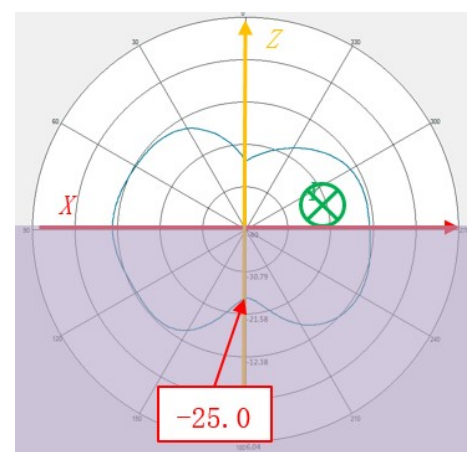
2D



XY

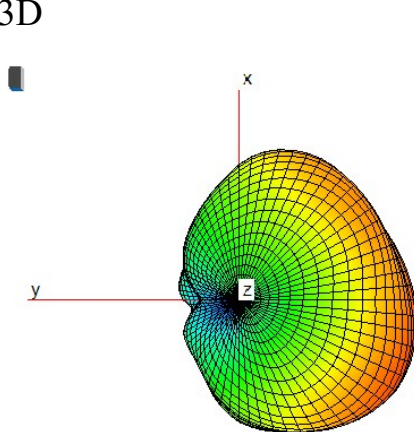


YZ

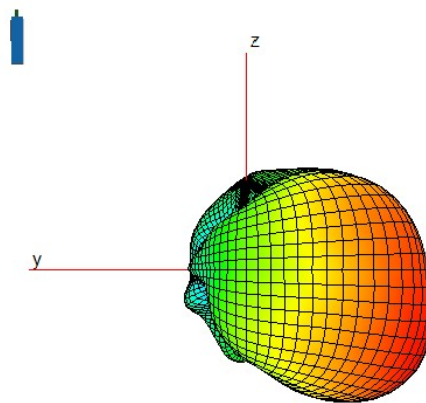


XZ

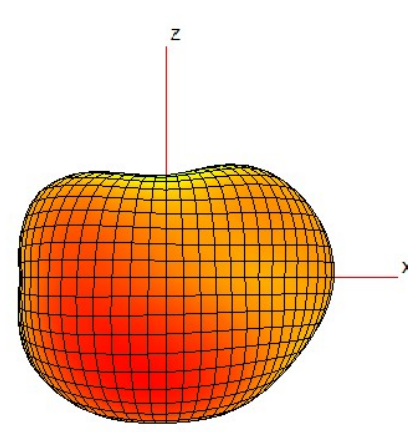
3D



XY



YZ



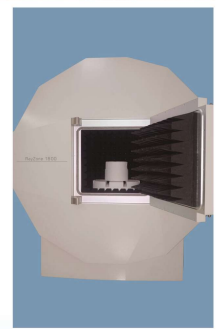
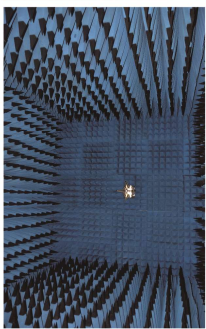
XZ



II: 3D Active test report of antenna

free space	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	1.6	-89.3
	CH 39	1.6	-88.6
	CH 78	-0.8	-88.5

headform	Channel	TRP (dBm)	TIS (dBm)
L	CH 0	-4.4	-83.6
	CH 39	-4.0	-82.1
	CH 78	-5.1	-83.5



OTA Standard Chamber

III: Matching circuit

Matching Circuits Components(L)

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





IV: Structure file

