



# Antenna Part Specification

Customer name:	GuoGuang
Project name:	L02 Dongle
Materialcategory:	BT Antenna
Version:	V4.0
Date:	2024.01.26



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Change record			
Compile / change date	Reason for change	Changed content	Version
2023.10.11	First edition	First edition	V1.0
2023.11.14	Trial Production Specification	Structural drawing file update	V2.0
2023.12.20	RF optimization	Line optimization	V3.0
2024.01.25	Structural adjustment	Line optimization	V4.0

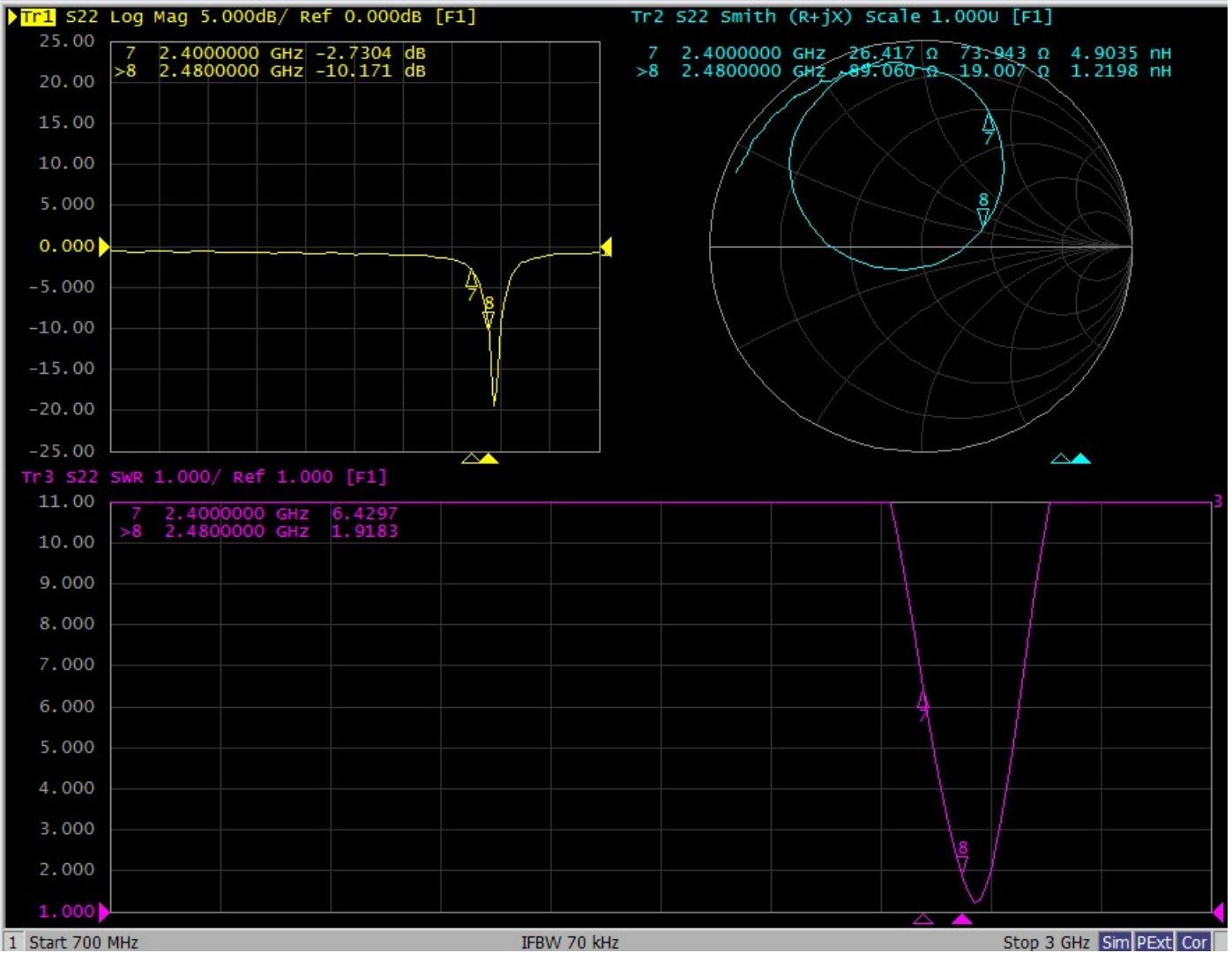


I: The report of passive data



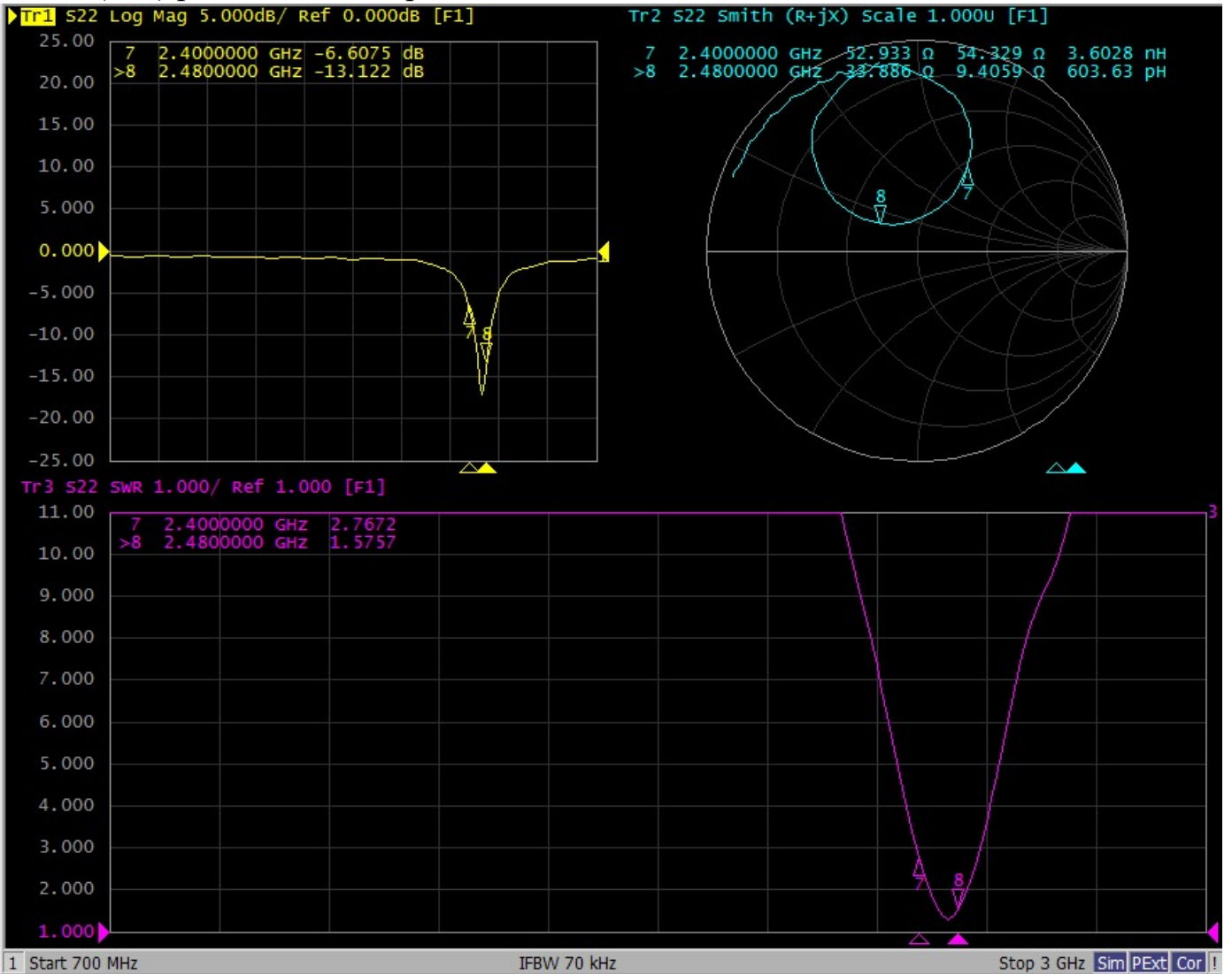
Angilent E5071C

VSWR(S11) parameter (Free space) :





VSWR(S11) parameter (Computer) :

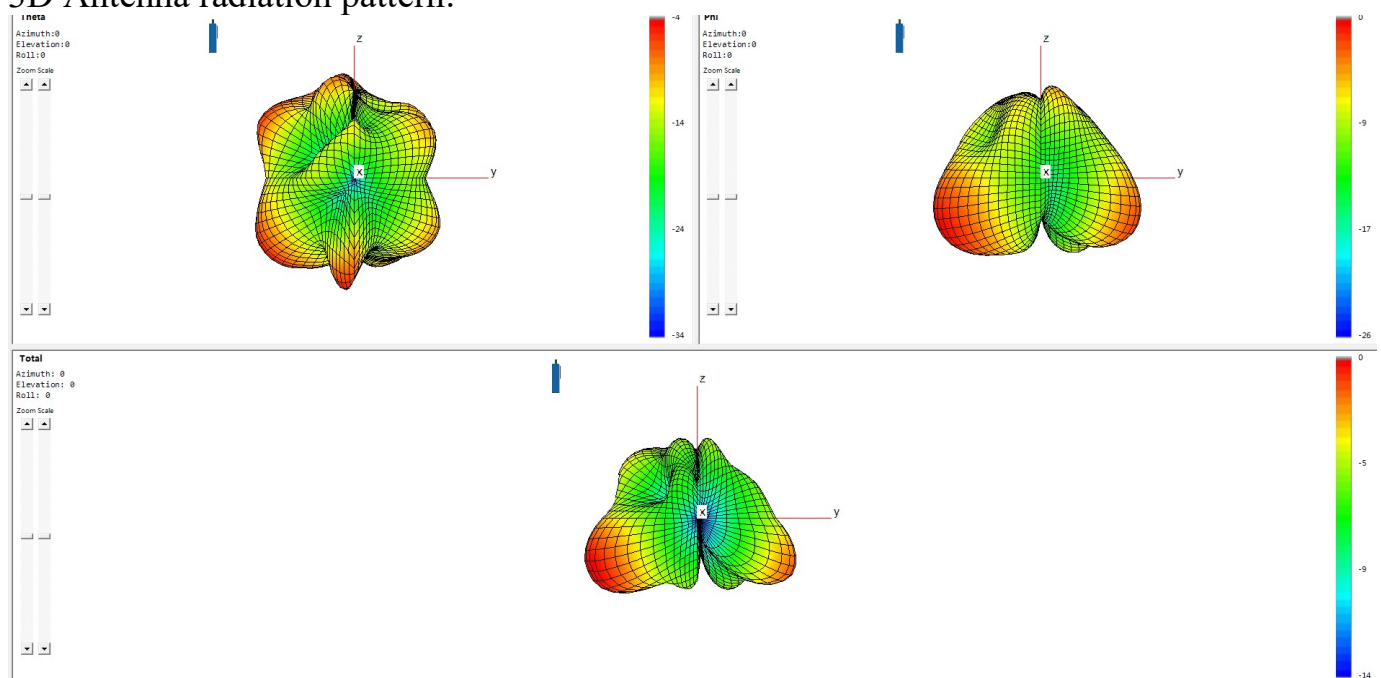




Efficiency:

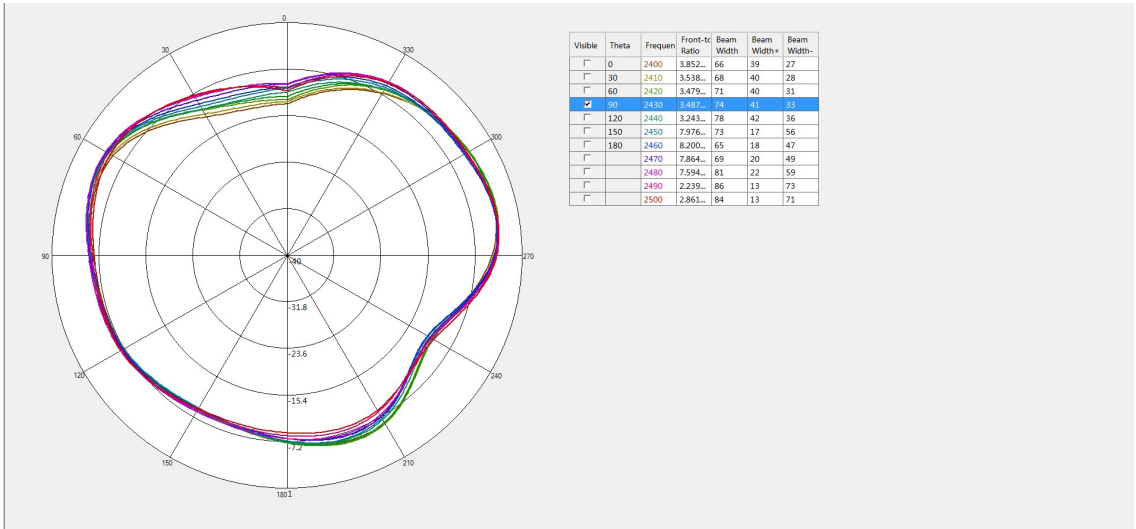
2.4G BT (with laptop plugged in)			
Frequency (MHz)	Efficiency	Efficiency (dB )	Gain (dBi)
2400	25.05	-6.01	-0.07
2410	26.38	-5.79	0.01
2420	27.47	-5.61	-0.05
2430	27.35	-5.63	-0.27
2440	26.86	-5.71	-0.60
2450	27.41	-5.62	-0.78
2460	26.79	-5.72	-1.03
2470	28.20	-5.50	-0.92
2480	28.69	-5.42	-0.90
Average value	27.13	-5.67	-0.51

3D Antenna radiation pattern:

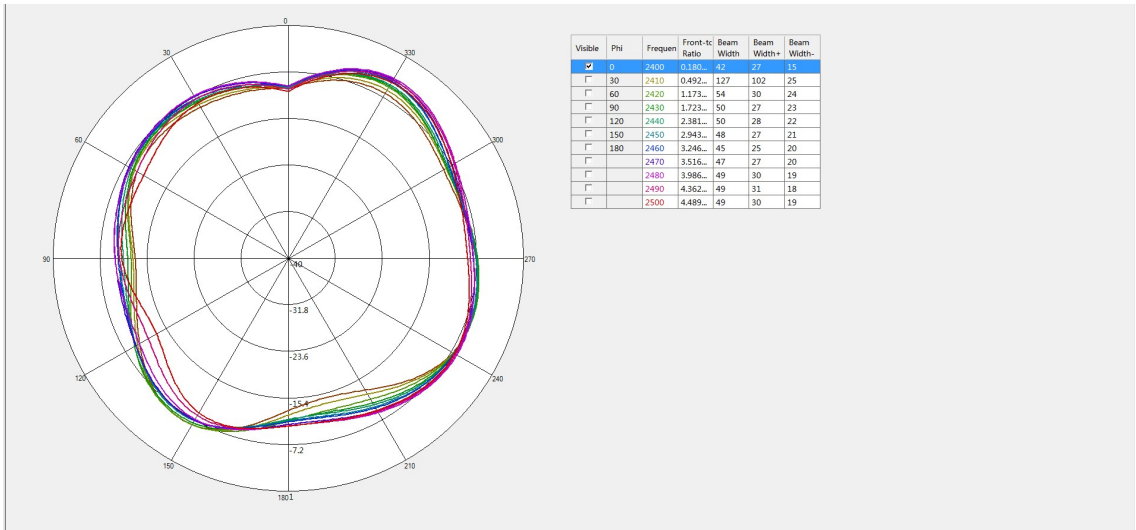




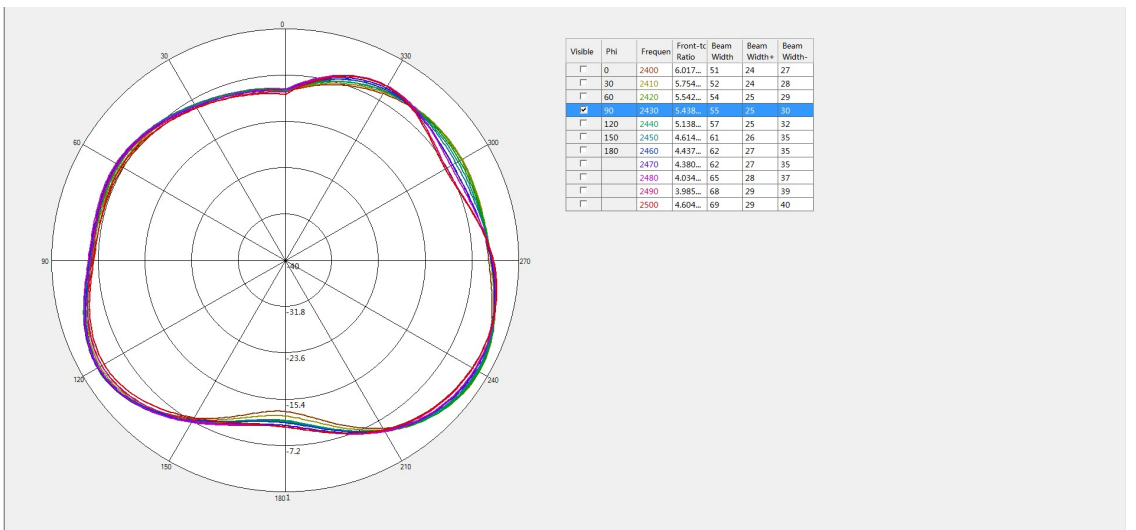
2D Antenna radiation pattern:  
Theta=90°



Phi=0°



Phi=90°





II: 3D Active test report of antenna

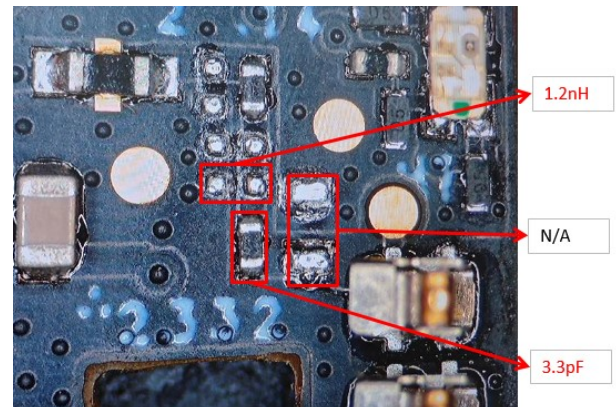
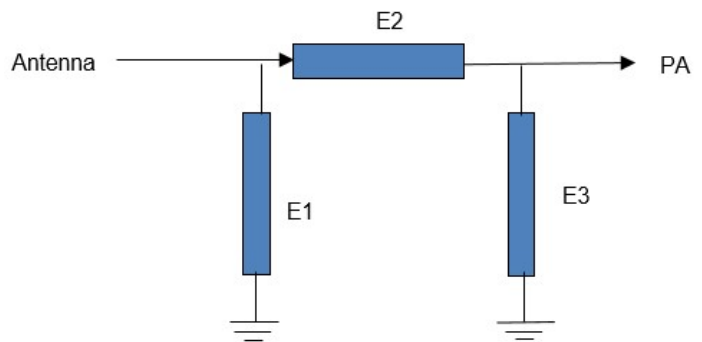
	Channel	TRP (dBm)	TIS (dBm)
BT	CH 0	5.1	-90.1
	CH 39	6.2	-91.0
	CH 78	6.0	-90.5



OTA Standard Chamber

III: Matching circuit

Element	Value
E1(0402)	N/A
E2(0201)	3.3pF
E3(0202)	1.2nH





IV: Structure file

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