



Antenna Part Specification

Project name:	GW170 Dongle
Antenna name:	2.4G antenna
Antenna type:	monopole
Version:	V1.0
Date:	2026.04.02
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer address:	505-506 ,ABlock,Donglian Building,Chuangye 2 road,Baoan District,Shenzhen,Guangdong,P.R china



Index

I: Passive test data	3
II: Active test data.....	6
III: Antenna matching circuit.....	6
IV: Antenna structure diagram file	7

Change record			
Compile / change date	Reason for change	Changed content	Version
2026.04.02	First edition	First edition	V1.0



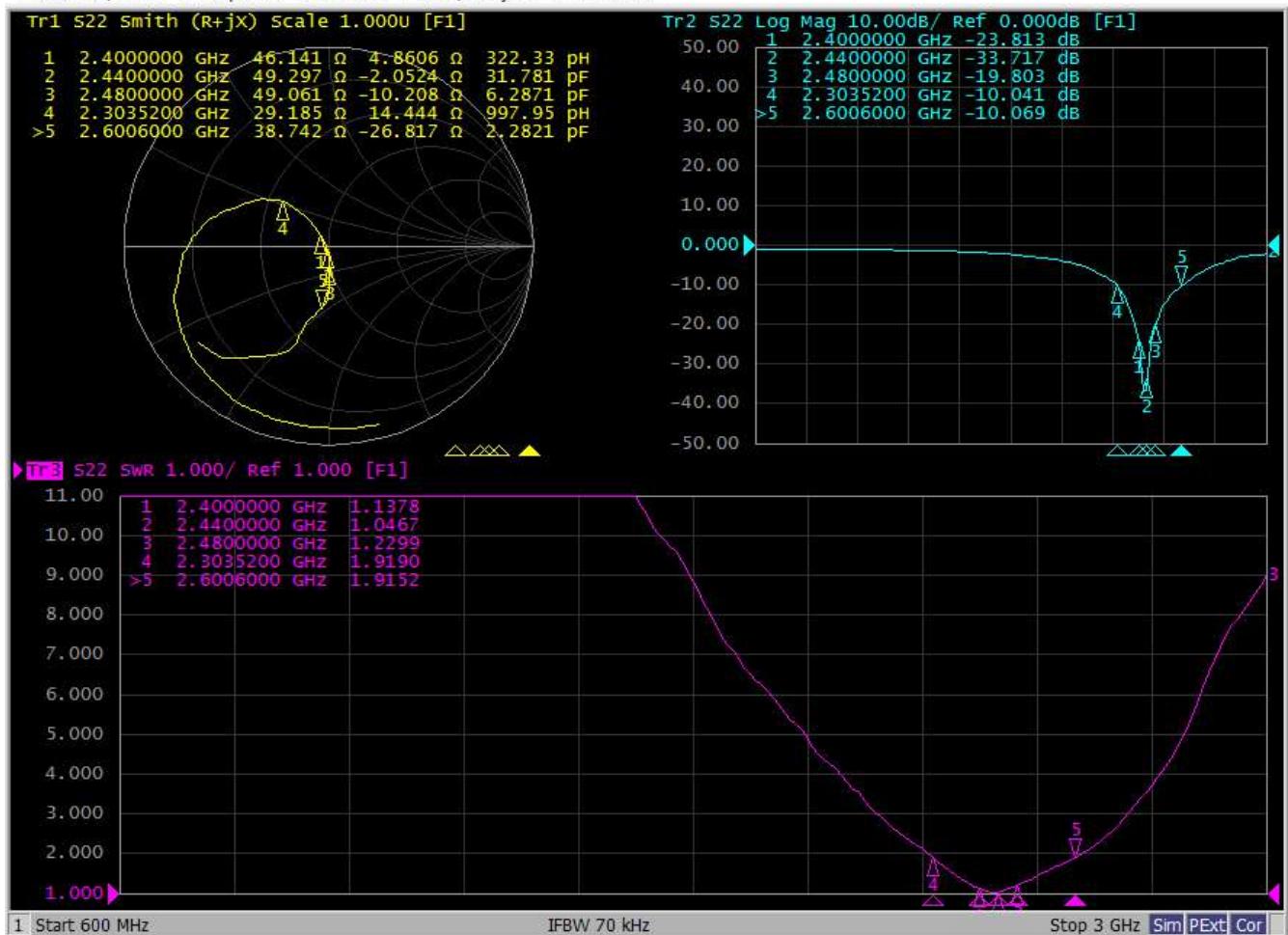
I: Passive test data



Agilent E5071C

Antenna S11 parameter:

1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

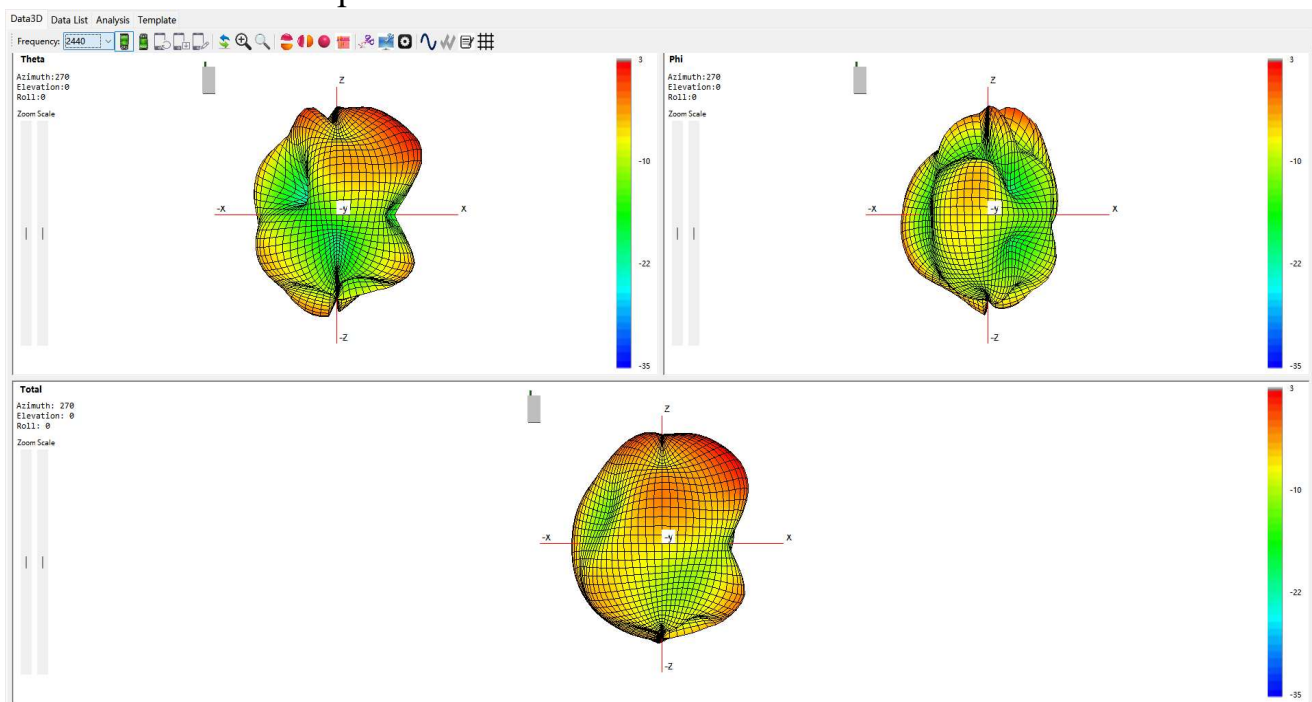




Antenna efficiency and gain:

Frequency (MHz)	Efficiency (dB)	Gain (dBi)	Efficiency (%)
2400	-3.3	1.4	46.5%
2410	-3.3	1.4	47.0%
2420	-3.2	1.4	47.5%
2430	-3.2	1.6	48.4%
2440	-3.1	1.6	49.2%
2450	-3.3	2.2	47.1%
2460	-3.3	2.2	47.1%
2470	-3.3	2.1	46.5%
2480	-3.4	1.9	45.8%
average	-3.3	1.8	47.2%

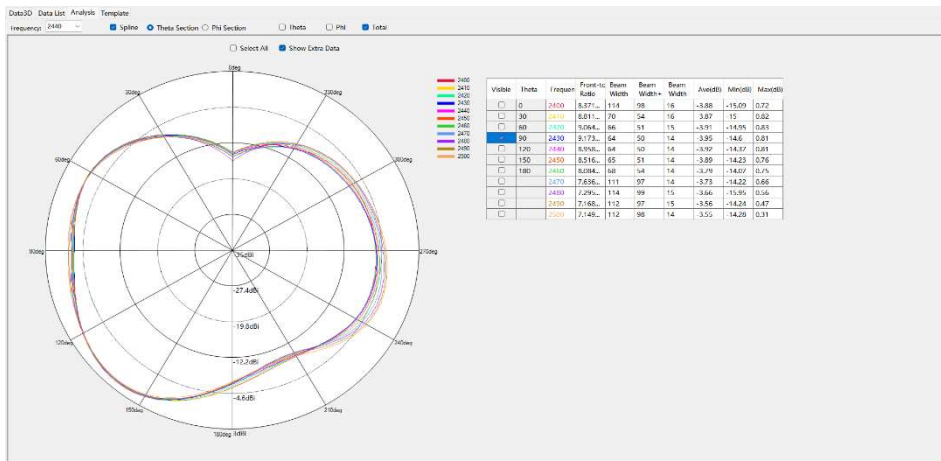
3D Antenna radiation pattern:



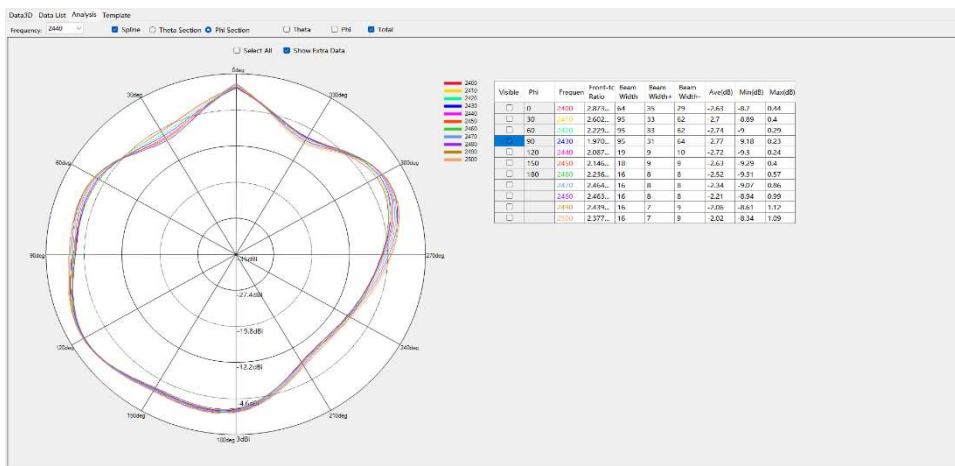


2D Antenna radiation pattern:

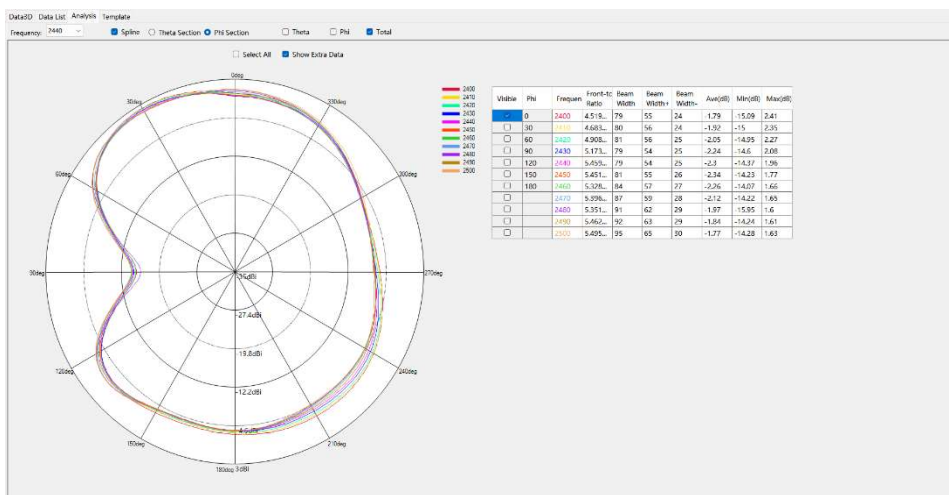
Theta = 90°



Phi=90°



Phi=0°

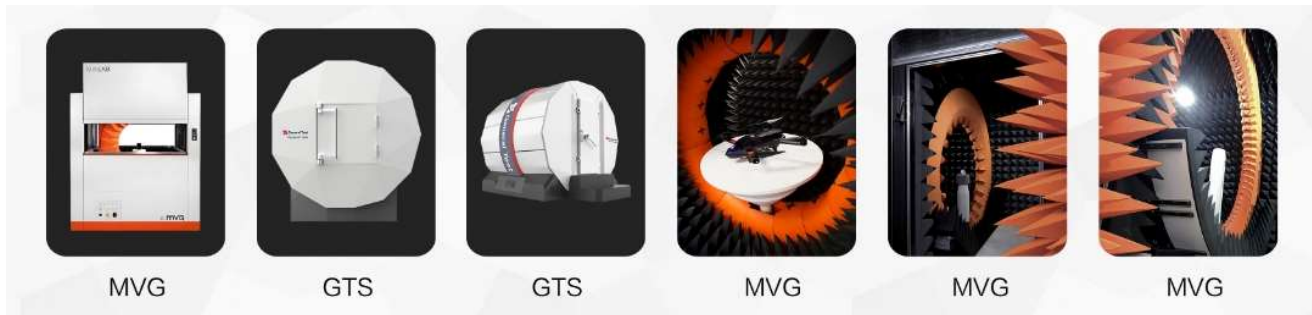




II: Active test data

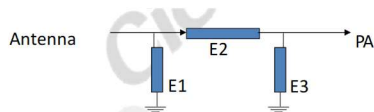
BT	Channel	front		back	
		TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
DONGLE	CH 0	6.1	-85.2	6.1	-84.9
	CH 39	6.5	-85.8	6.8	-85.1
	CH 78	6.4	-85.6	6.6	-84.6

BT	Channel	Airplane mode -front		Airplane mode -back	
		TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
DONGLE	CH 0	6.0	-85.2	6.2	-84.4
	CH 39	6.5	-85.6	6.8	-84.3
	CH 78	6.3	-86.1	6.6	-85.1

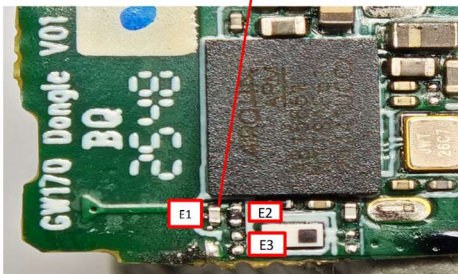


OTA Standard Chamber

III: Antenna matching circuit



number	matching value
E1	2.2PF
E2	0Ω
E3	NA





IV: Antenna structure diagram file

