



Antenna Part Specification

Project name:	DH30-D
Material category:	BT antenna
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
Version:	V1.0
Date:	2025.7.1



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Change record			
Compile / change date	Reason for change	Changed content	Version
2025.7.1	First edition	First edition	V1.0

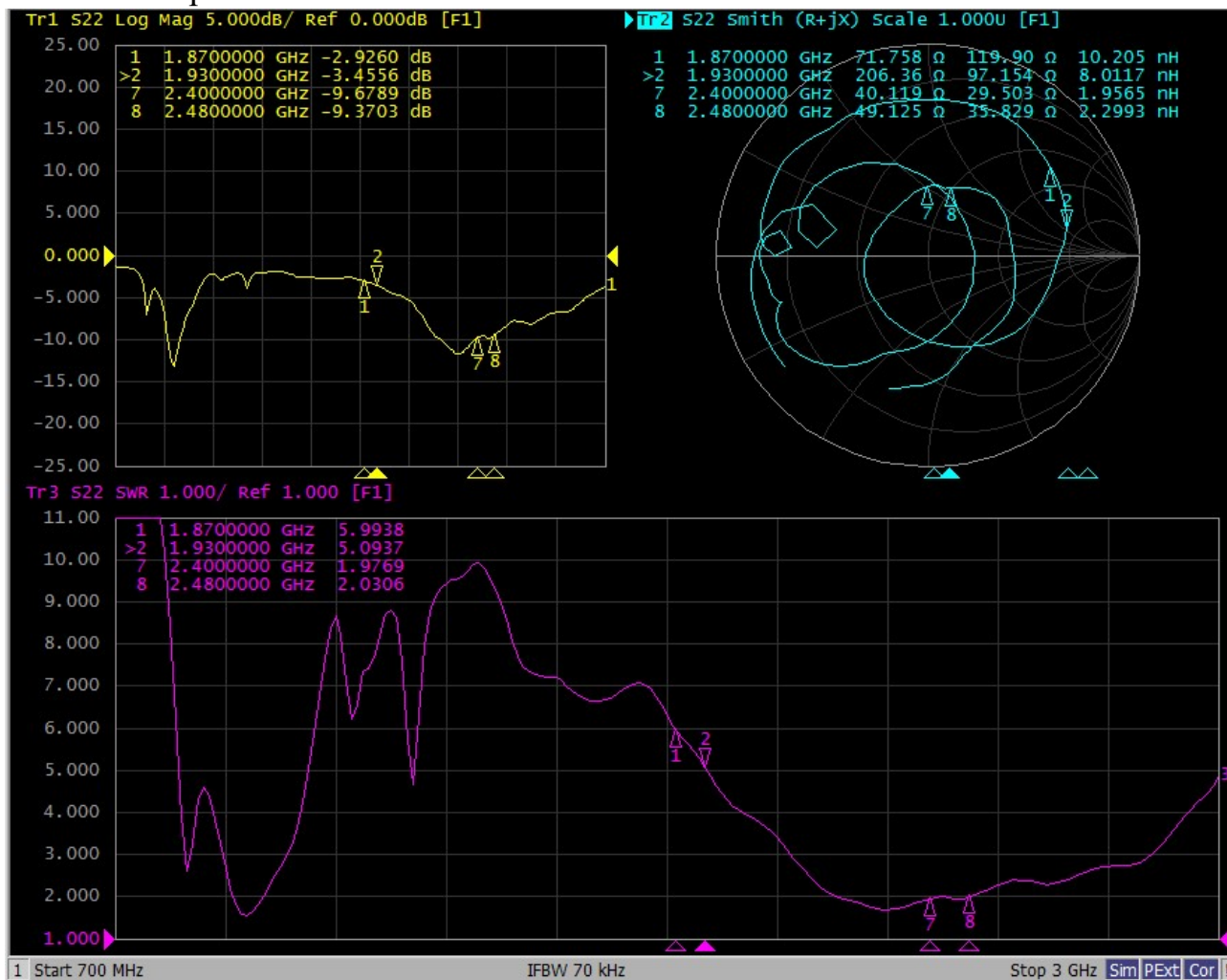


I: The report of passive data



Angilent E5071C

antenna S11 parameter:

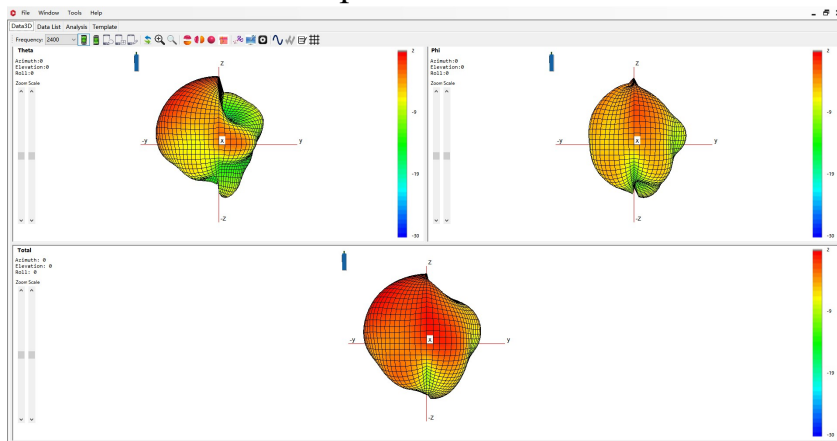




Efficiency:

2400-2480 MHz			
Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
2400	49.6	-3.0	1.7
2410	49.6	-3.0	1.8
2420	49.4	-3.1	1.8
2430	46.5	-3.3	1.5
2440	43.5	-3.6	1.2
2450	43.1	-3.7	1.3
2460	41.2	-3.9	1.0
2470	42.9	-3.7	1.2
2480	44.8	-3.5	1.4
AVG	45.6	-3.4	1.4

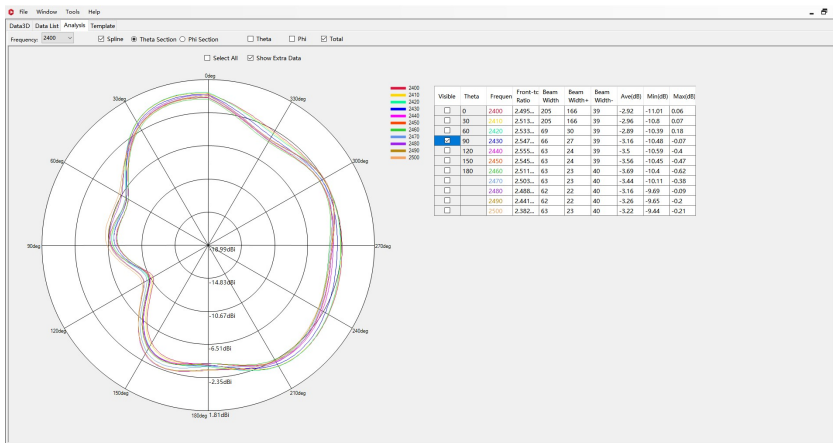
3D Antenna radiation pattern:



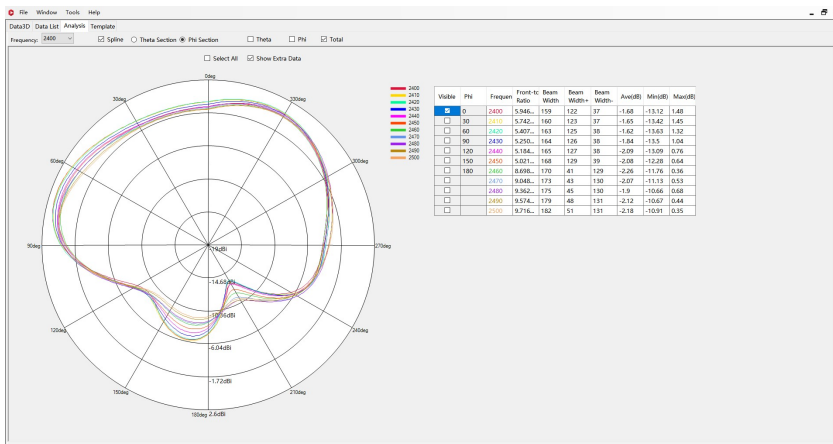


2D Antenna radiation pattern:

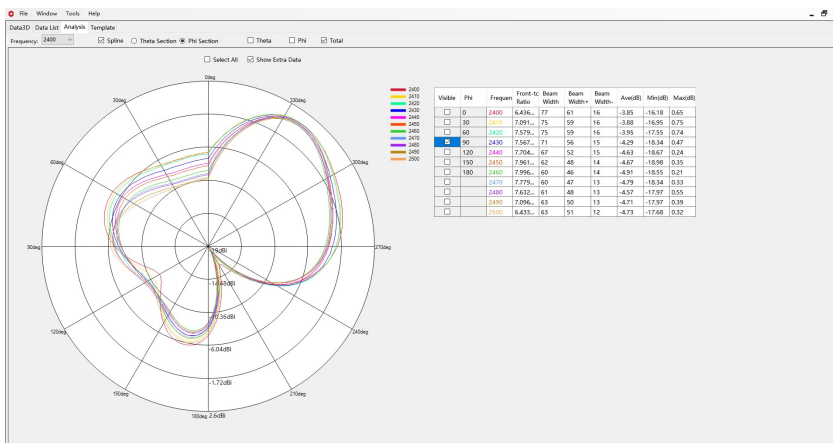
Theta=90°



Phi=0°



Phi=90°





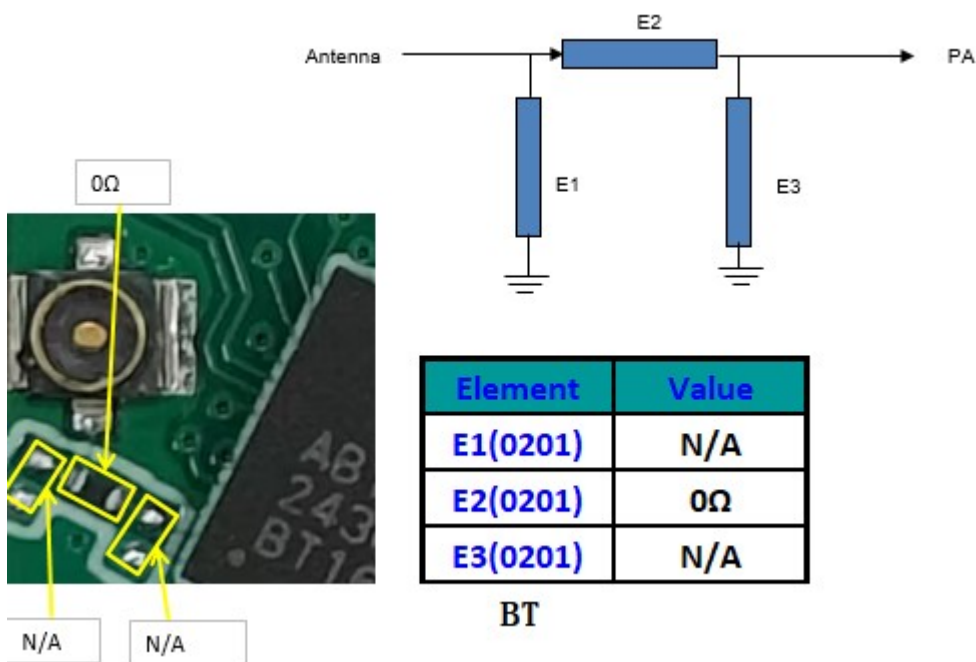
II: 3D Active test report of antenna

free	Channel	TRP (dBm)	TIS (dBm)	headform	Channel	TRP (dBm)	TIS (dBm)
BT	CH 0	7.3	-92.5	BT	CH 0	5.4	-90.3
	CH 39	8.0	-93.5		CH 39	6.1	-90.9
	CH 78	8.6	-93.6		CH 78	6.3	-91.0



OTA Standard Chamber

III: Matching circuit





IV: Antenna placement and environmental treatment

The coaxial line is forcefully pulled and bent into an S shape, resulting in partial fracture at the welding point of the coaxial line, which poses a risk of antenna damage.

Do not install it in this way. Suggest placing and installing the coaxial line as shown in the following figure.



2 # Machine



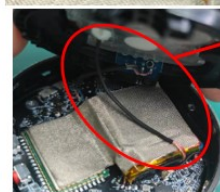
1 # Machine

The assembly can generally follow the assembly method of this production line. However, the length of the connecting wire should be kept consistent and as short as possible, and assembled at 45mm.

It was found that the BT antenna was not positioned along the vertical bone position during installation, which makes it easy for the placement to be unstable and prone to tilting. Please proceed with the installation according to the bone position shown in the diagram.



The horn connecting wire is pressed onto the conductive cloth as shown in the figure. Because this wire is relatively long, it may be placed close to the antennas on both sides, which may cause frequency deviation and affect consistency.



V: Antenna structure diagram file

