

Antenna Specification

Project name:	BTS027
Antenna Name:	L-BT antenna
Antenna type:	FPC Antenna
Edition:	V1.0
Date:	2026.8.5
Manufacturer:	Shenzhen Cicent Communication Technology Co., Ltd.
Manufacturer Address:	Units 505–506, Building A, Donglian Building, Chuangye 2nd Road, Bao'an District, Shenzhen

Catalogue

I: Passive Test Report.....	3
II: Active Antenna OTA Test Data.....	6
III: Antenna Matching.....	6
IV: Installation Precautions.....	7
V: Structural Drawings.....	8

Change History Column			
Draft/Amendment Date	Reason for Change	Changes	Edition
2026.8.5	First edition release	First edition release	V1.0

I: Passive Test Report

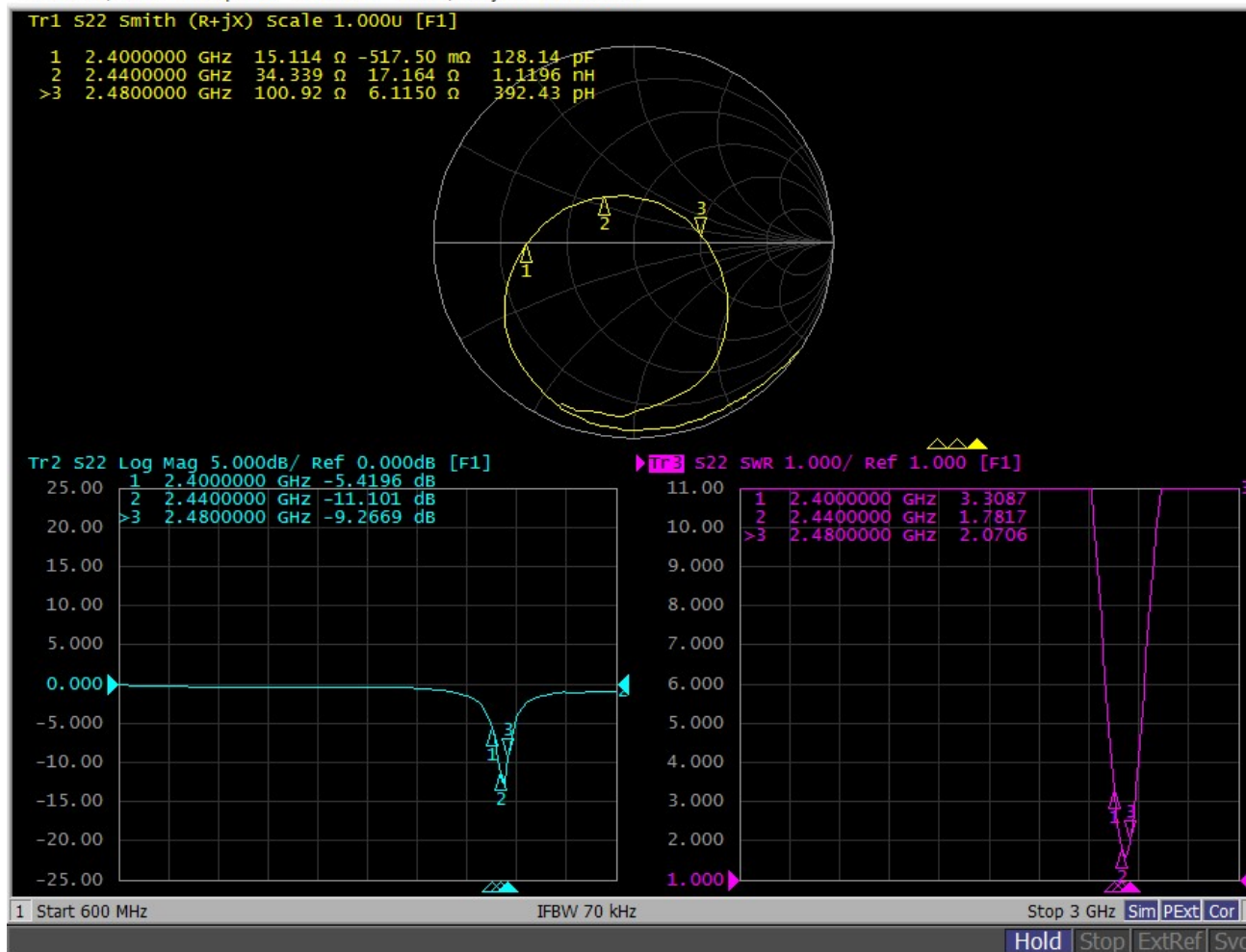


Agilent E5071C

Antenna S11 Parameters

E5071C Network Analyzer

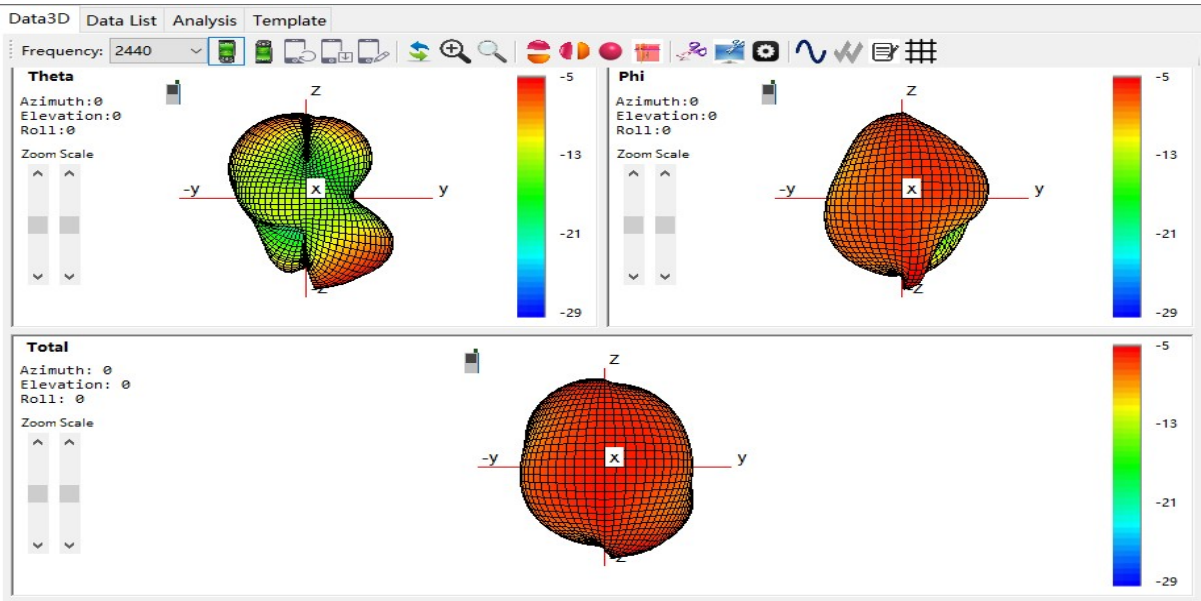
1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



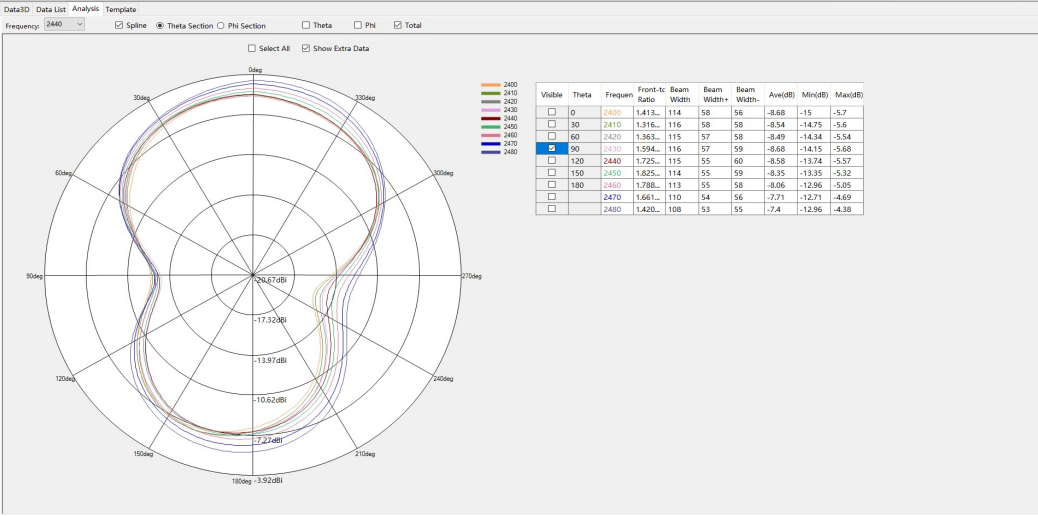
Antenna efficiency and gain:

Frequency pointMHz	Productiveness(dB)	Gain(dBi)	Productiveness(%)
2400	-6.34	-5.66	23.23
2410	-6.14	-5.33	24.32
2420	-5.98	-5.17	25.24
2430	-5.92	-5.14	25.58
2440	-5.98	-5.16	25.24
2450	-5.96	-5.29	25.33
2460	-6.06	-5.17	24.79
2470	-6.19	-4.98	24.04
2480	-6.31	-4.77	23.38
Average value	-6.10	-5.19	24.57

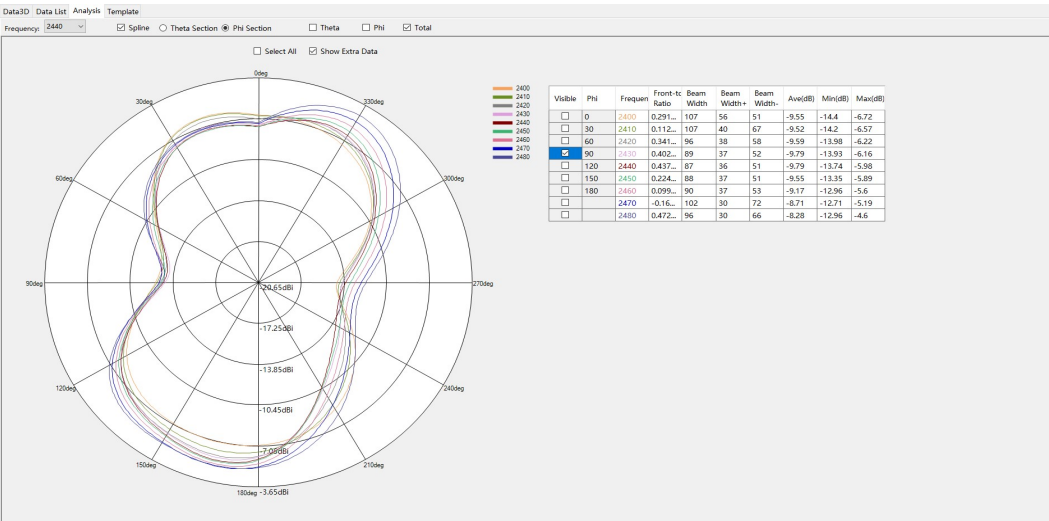
Antenna 3D Directional Pattern



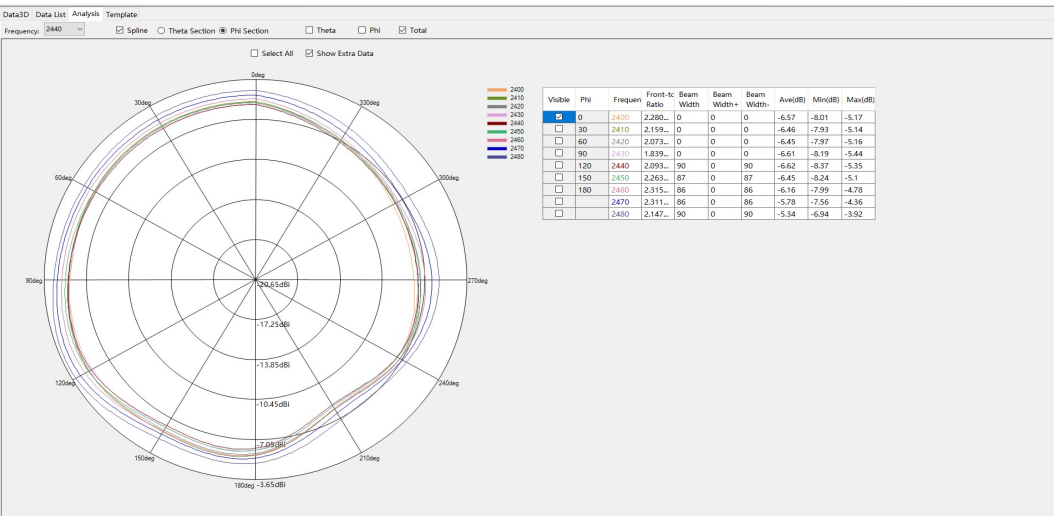
Antenna 2D
pattern – Theta =
90°



Phi=90°

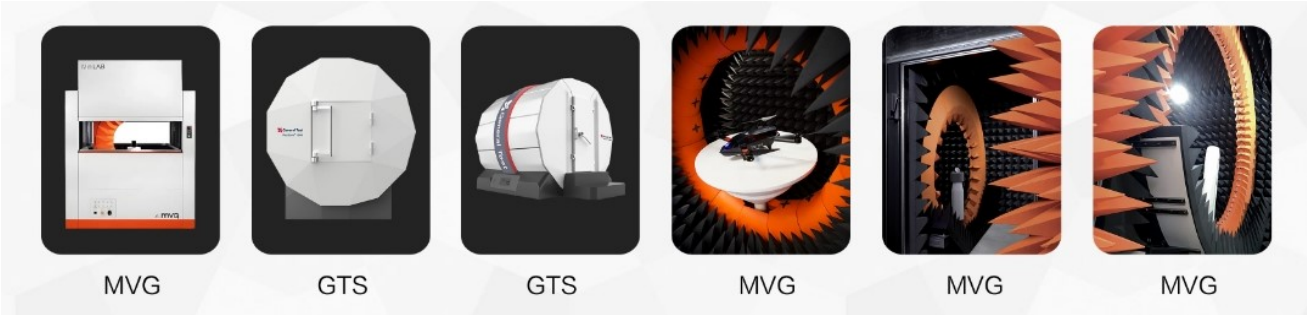


Phi=0°



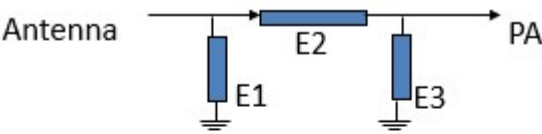
II: Active Antenna OTA Test Data

		freedom		headform	
2#	Channel	TRP (dBm)	TIS (dBm)	TRP (dBm)	TIS (dBm)
L	CH 0	7.1	-89.0	1.3	-83.5
	CH 39	7.2	-89.1	2.0	-84.0
	CH 78	6.7	-88.0	1.1	-83.2



OTA Standard Chamber

III: Antenna Matching

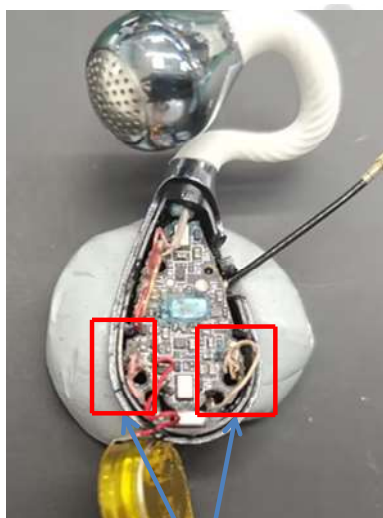


图示编号	匹配值
E1	N/A
E2	1 pF
E3	N/A

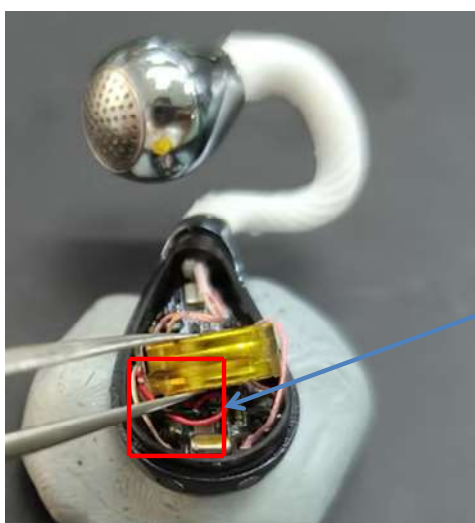
IV: Installation Precautions



Install the entire unit; orient the battery's positive terminal toward the motherboard's battery solder joint.

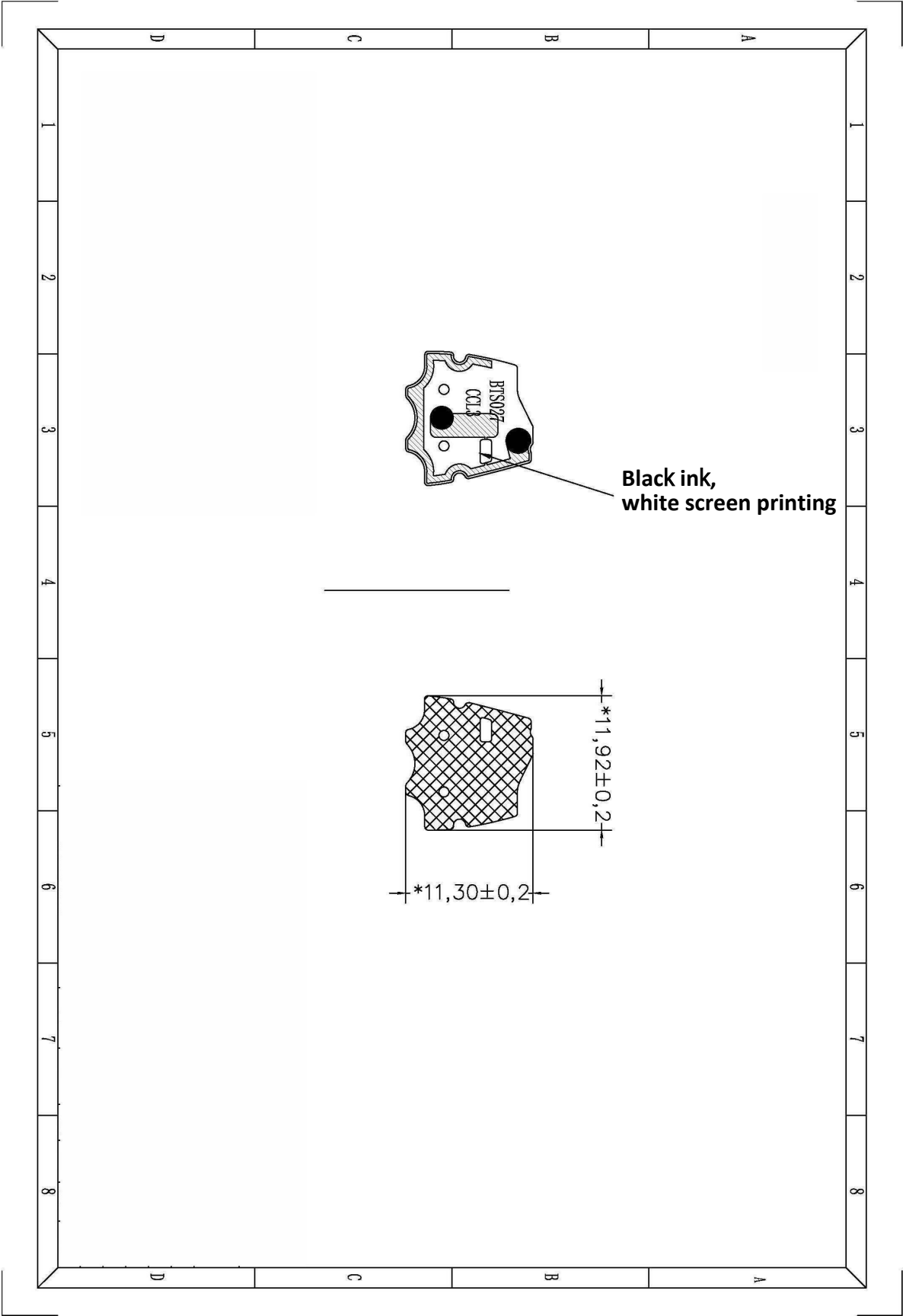


Place the two charging cables on opposite sides so they are not pressed down by the battery.



Wind the battery cable two to three times and place it in the lower left corner, where it will be held in place by the battery.

V: Structural Drawings



Antenna Specification

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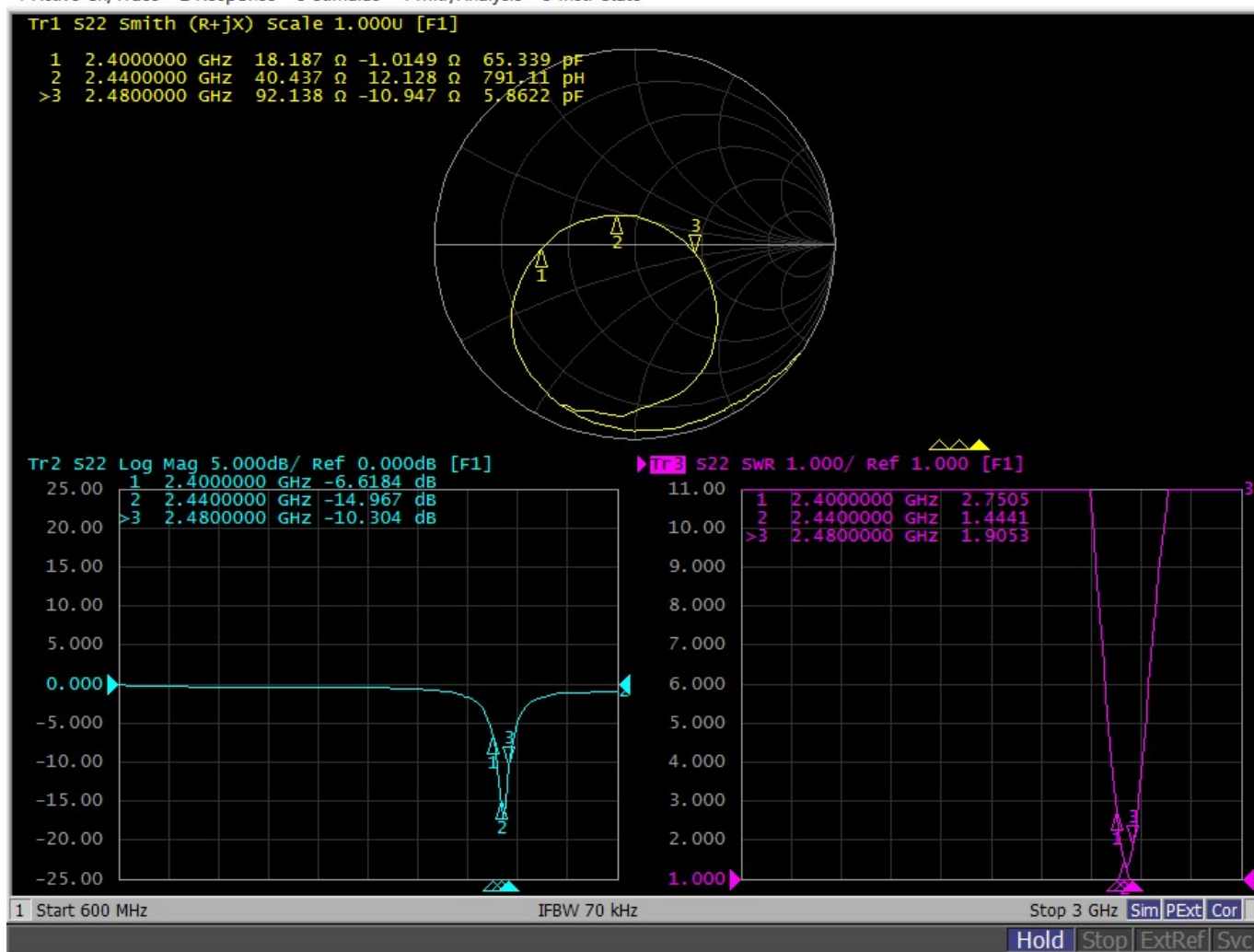


Angilent E5071C

Antenna S11 Parameters

E5071C Network Analyzer

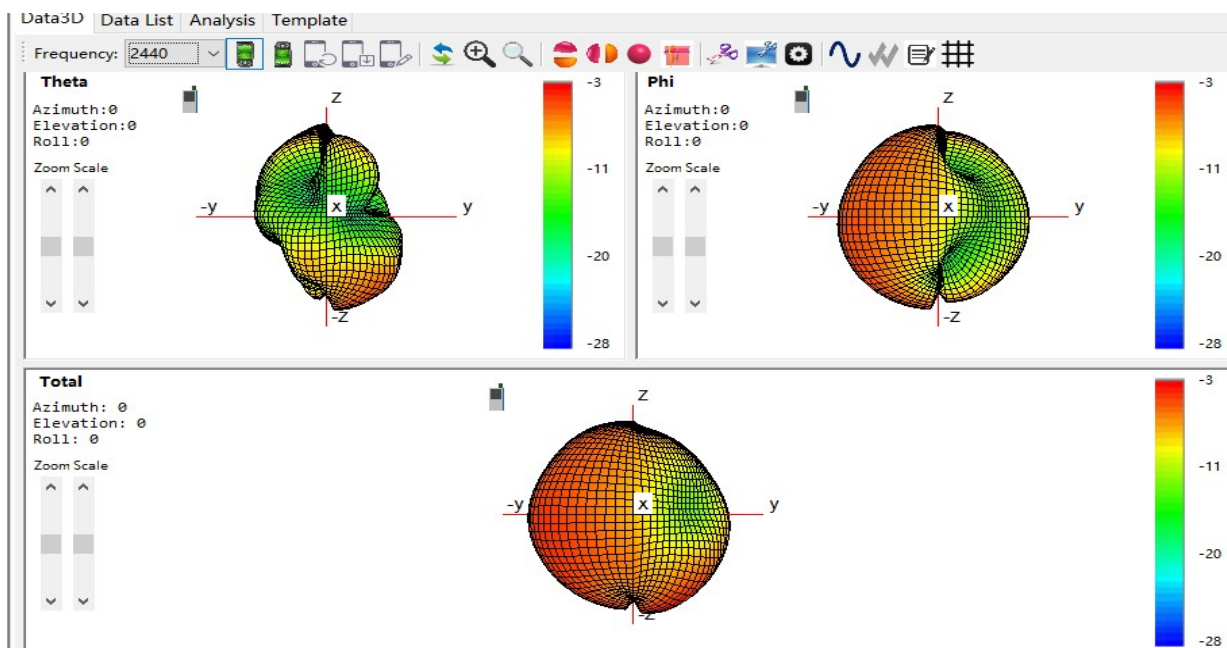
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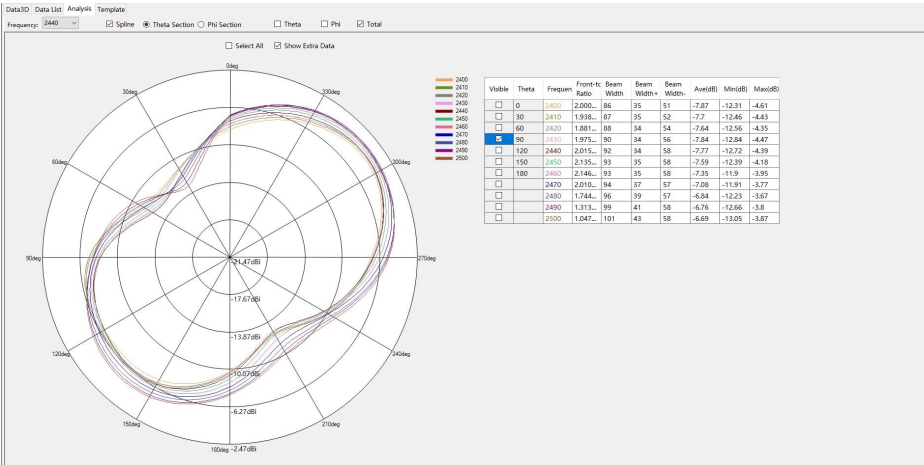
Antenna efficiency and gain:

频点 MHz	效率 (dB)	增益 (dBi)	效率 (%)
2400	-6.03	-3.45	24.94
2410	-5.90	-3.30	25.69
2420	-5.76	-3.27	26.52
2430	-5.67	-3.48	27.09
2440	-5.66	-3.48	27.15
2450	-5.76	-3.48	26.55
2460	-5.76	-3.34	26.55
2470	-5.85	-3.18	26.00
2480	-5.99	-2.95	25.19
平均值	-5.82	-3.33	26.19

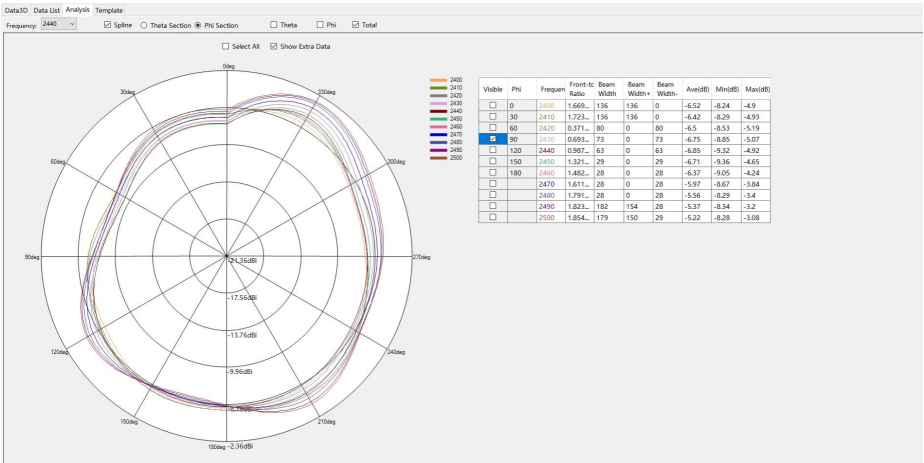
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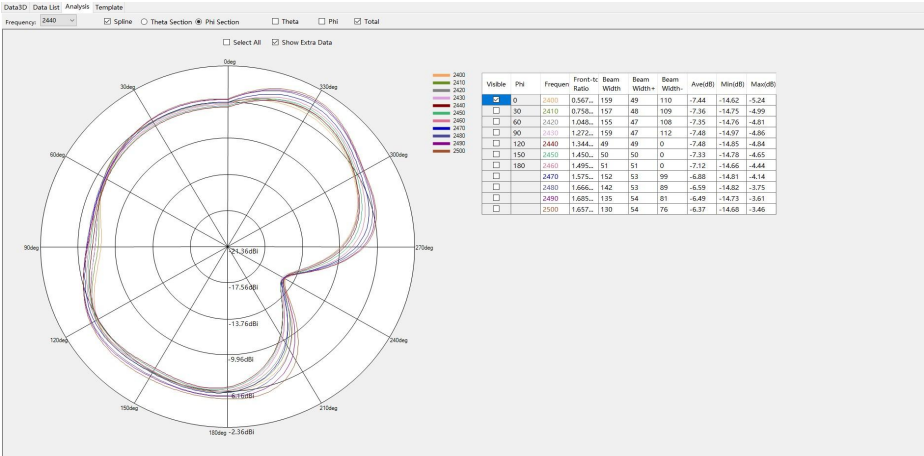
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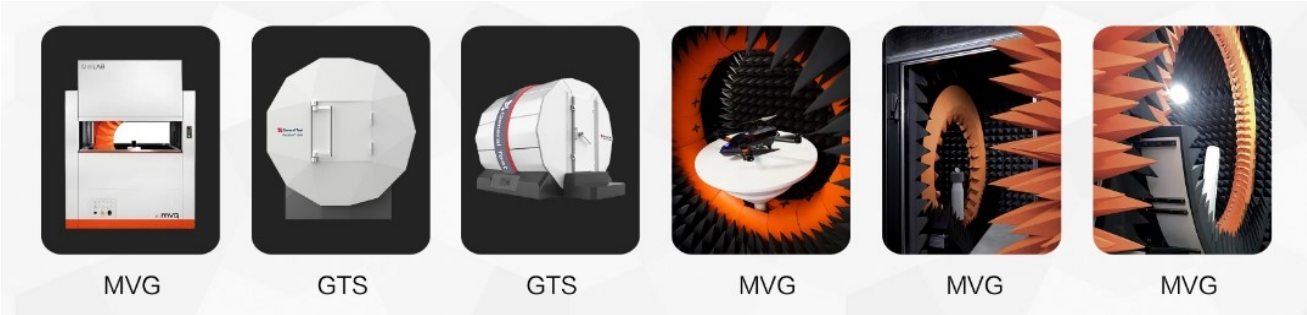


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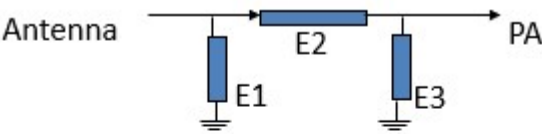
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OTA Standard Chamber

III: Antenna Matching

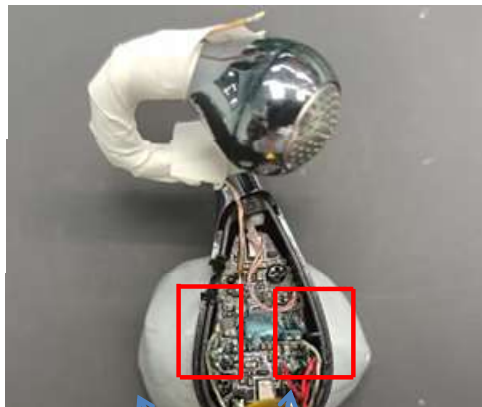


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motherboard's battery
solder joint.



Place the two charging cables on
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pressed down by the battery.



Wind the battery cable two to
three times and place it in the
lower left corner, where it will
be held in place by the battery.

V: Structural Drawings

