

Antenna test report

Customer Name:802

Project model:SRC-1238

Date:2025-8-9

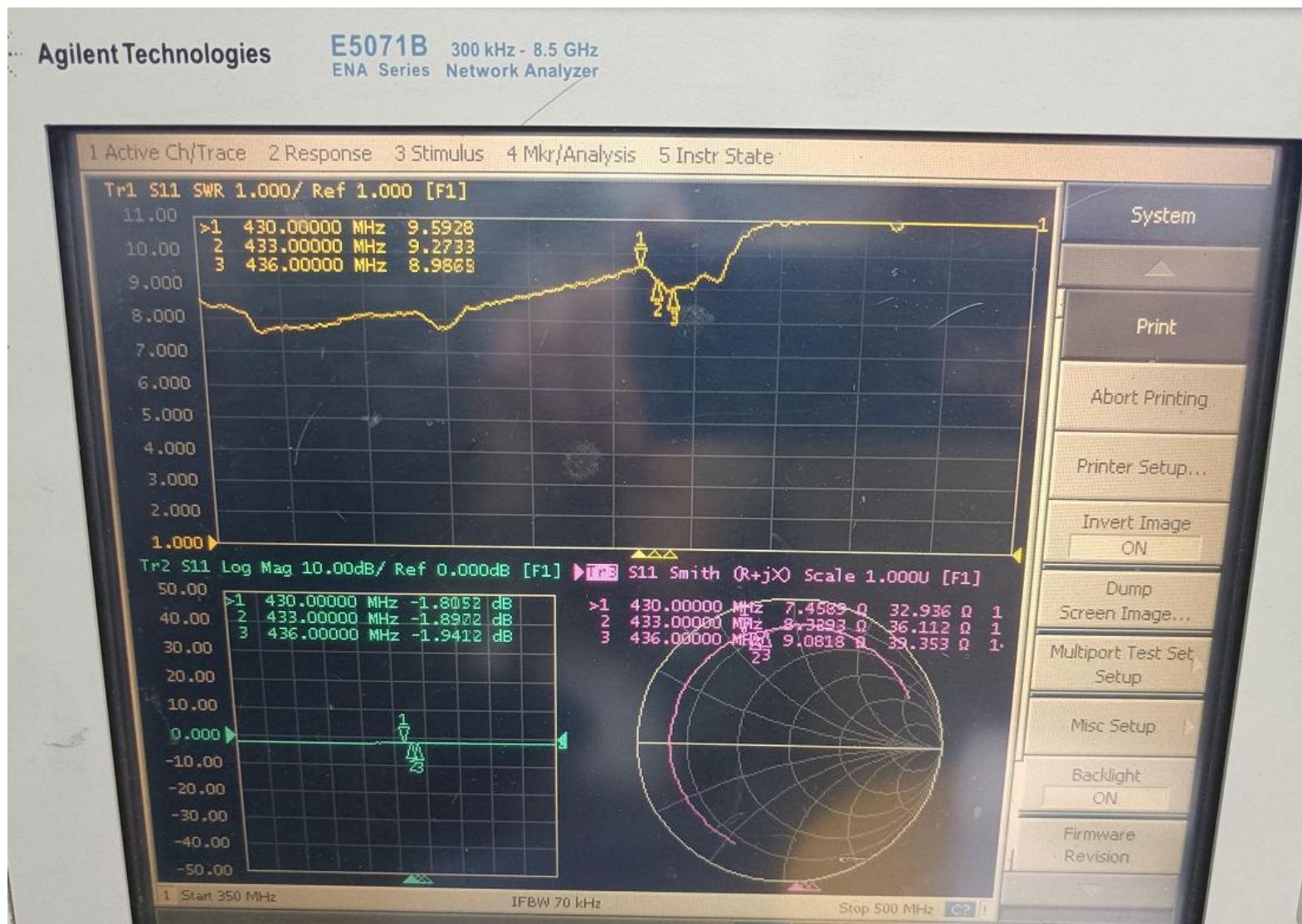
edition	content	Update reason	Date
1.0	Antenna test	Initial issue	2025-8-9

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Customer Name	802
Project name	SRC-1238
Number of antennas	1
Antenna band	2400–2500 MHz
Structural form	Onboard antenna
Antenna specification	433 MHz, 1.8mm wire diameter & length 173mm, with dust-proof cap.

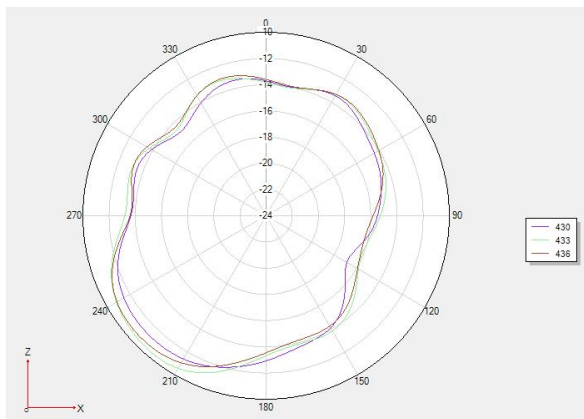




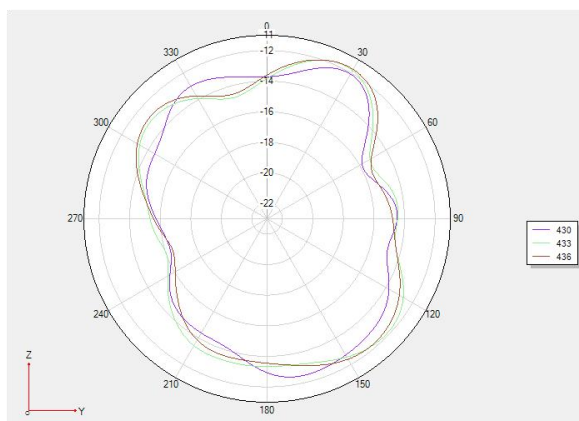
Frequency / MHz	Efficiency / %	Gain/ dBi
430	3.86	-10.75
433	4.39	-10
436	4.32	-10.35

2D3D image of the original antenna test

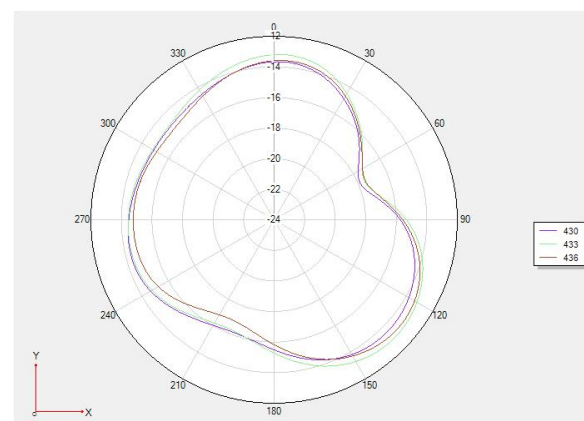
Phi 0 2Dfigure



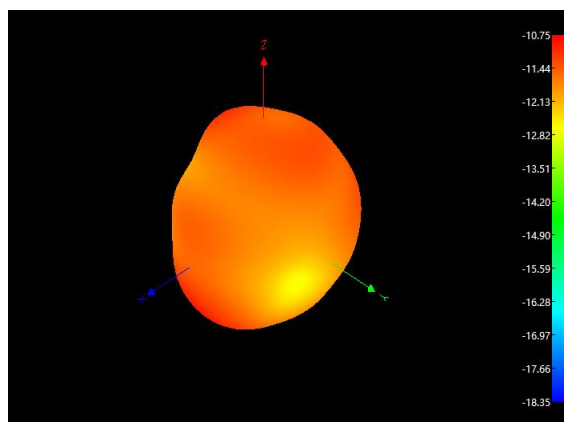
Phi 90 2Dfigure



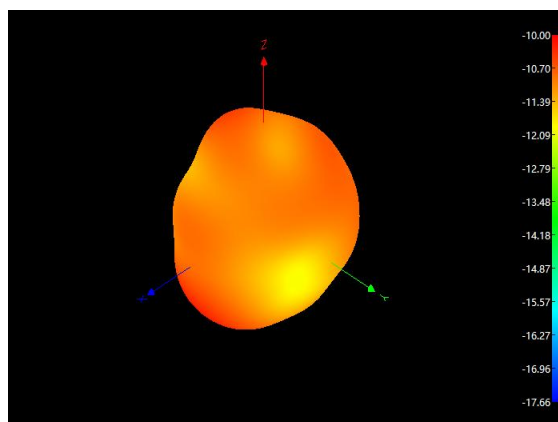
Theta 90 2Dfigure



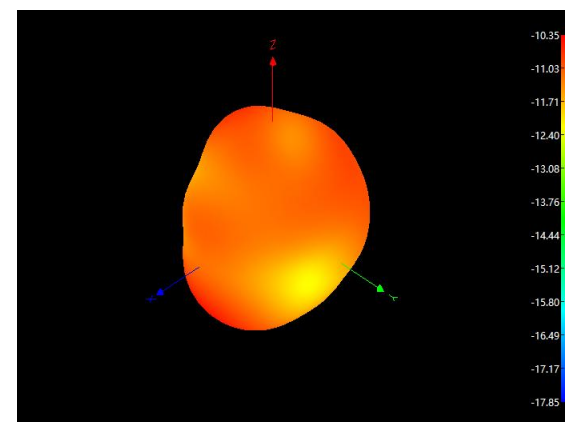
430



433



436



New antenna and structure form

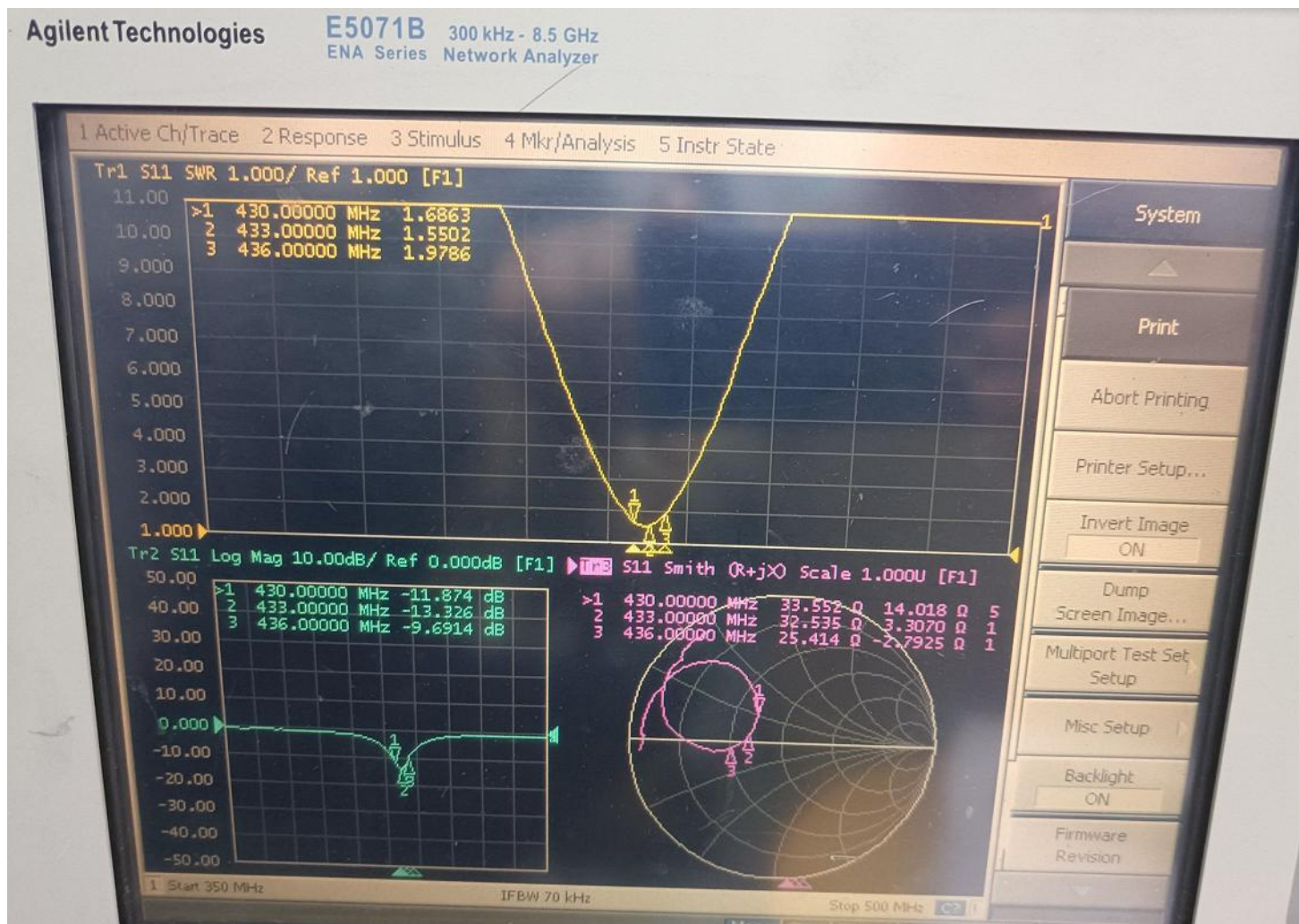
At position C14, connect a 6pF capacitor.

At position L2, connect a 2.4pF capacitor in series.

Remove the matching at position C16.



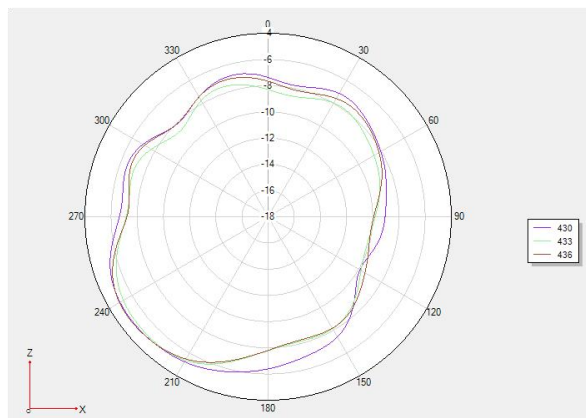
New antenna grid test diagram



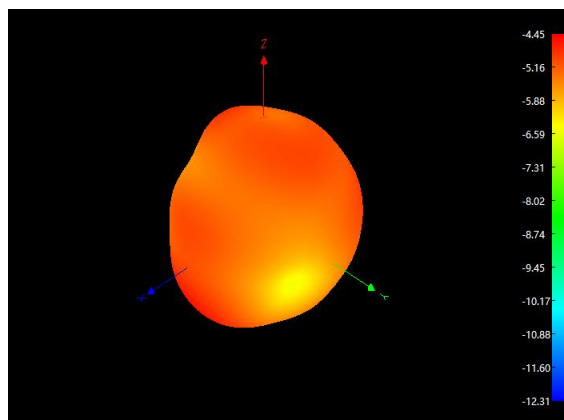
Frequency / MHz	Efficiency / %	Gain/ dBi
430	13.04	-4.45
433	12.82	-4.59
436	12.68	-4.48

New antenna test 2D3D image

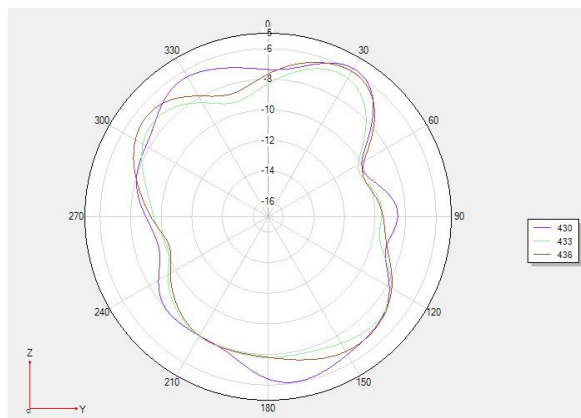
Phi 0 2Dfigure



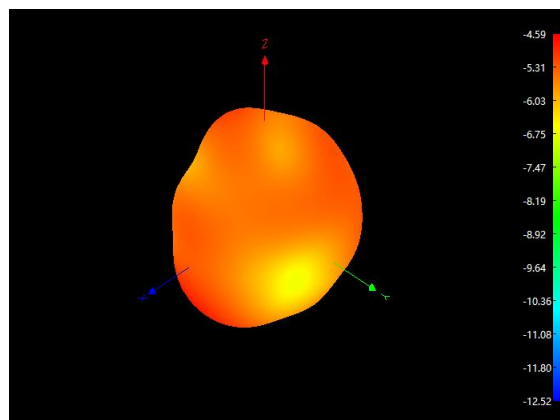
430



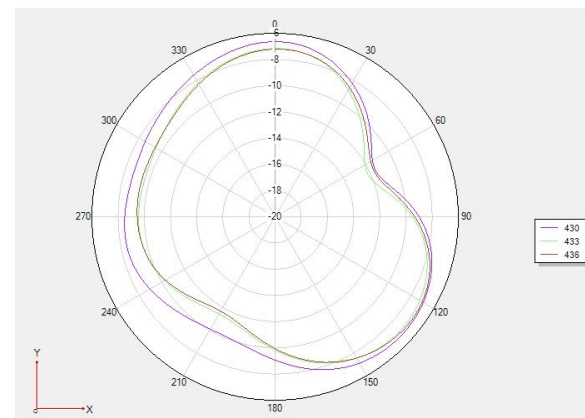
Phi 90 2Dfigure



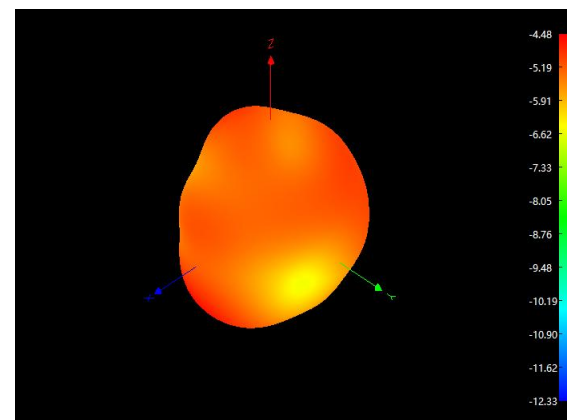
433



Theta 90 2Dfigure



436





Thank you!

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