

902-928MHz Passive antenna report

client:	Mail delivery
item:	PB01
Antenna modification:	A1
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date:	2024.11.20

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This report is to debug the performance of PB01, antenna operating frequency of 902-928MHz

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1、Product graphics

Front view



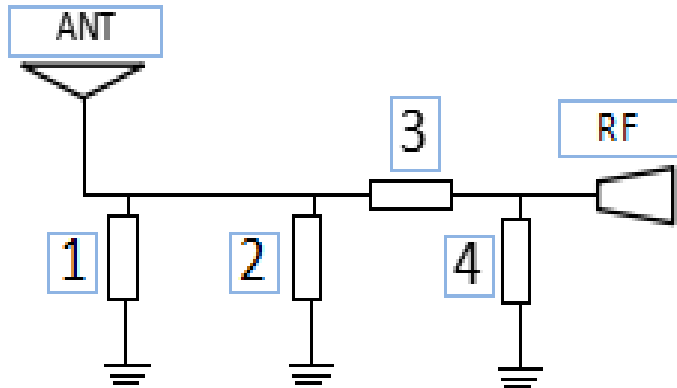
Main antenna



2、Test system

Serial number	Testing instrument
S11 Parameters	Agilent 5071B
OTA testing	Agilent 5071B & CMW500 & Agilent 8960 & Feitu darkroom
Gain and efficiency	Agilent 5071B & Feitu darkroom

3、Antenna matching

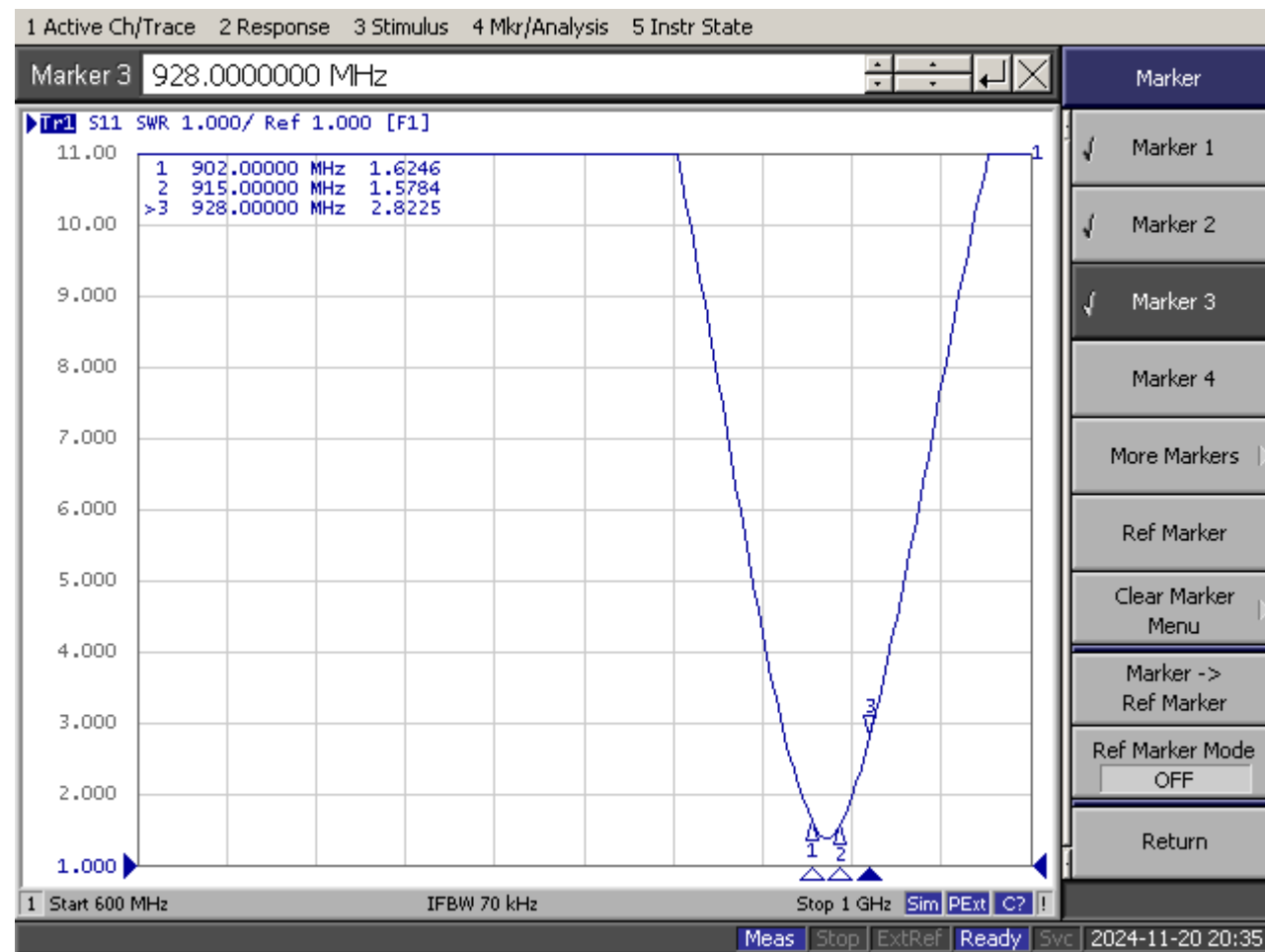


Serial number	capacitance	inductance
1	N/A	N/A
2	N/A	N/A
3	N/A	N/A
4	N/A	N/A

PCB end matching circuit is unchanged

4、The antenna test results

4.1 S11 Parameters



Frequency (工作频段)	902	915	928
VSWR (驻波比)	1.62	1.57	2.82

4、Antenna test result

4.2 Efficiency gain

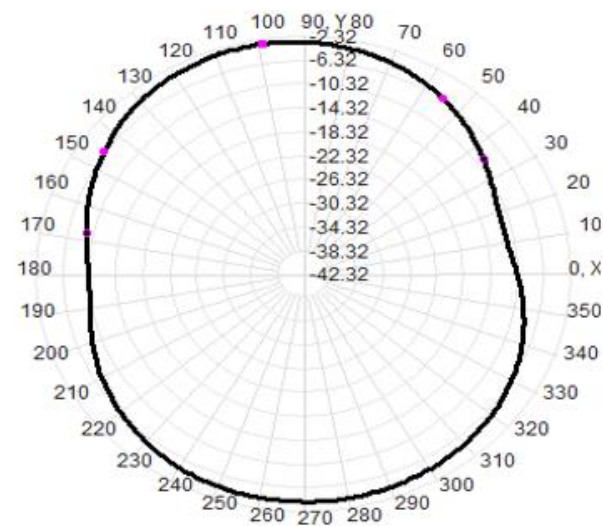
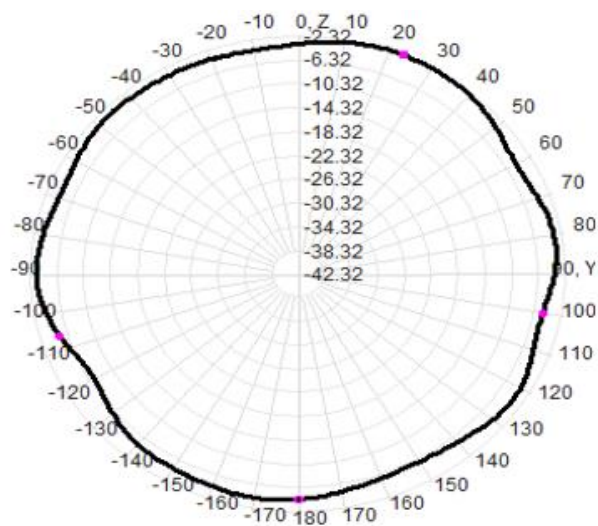
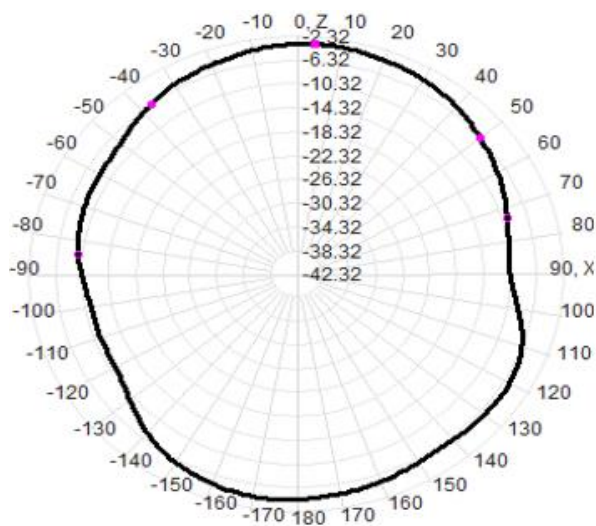
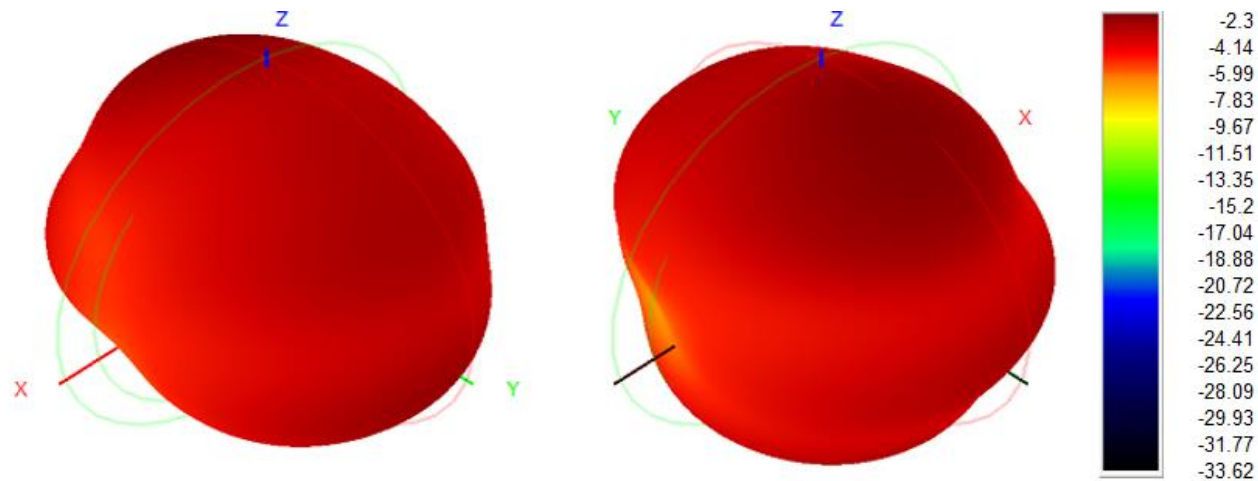
Frequency (MHz) (工作频段)	Efficiency (%) (效率)	Peak GAIN (dBi) (增益)
902	27.06	-2.30
903	27.15	-2.30
904	27.18	-2.30
905	27.15	-2.31
906	27.07	-2.33
907	26.93	-2.37
908	26.74	-2.41
909	26.51	-2.45
910	26.24	-2.51
911	25.93	-2.56
912	25.58	-2.62
913	25.19	-2.70
914	24.75	-2.78
915	24.28	-2.85

Frequency (MHz) (工作频段)	Efficiency (%) (效率)	Peak GAIN (dBi) (增益)
916	23.78	-2.93
917	23.25	-3.02
918	22.70	-3.12
919	22.14	-3.21
920	21.60	-3.31
921	21.03	-3.41
922	20.49	-3.51
923	19.96	-3.61
924	19.46	-3.92
925	18.97	-3.81
926	18.49	-3.91
927	18.02	-4.00
928	17.55	-4.10

4、Antenna test result

4.3 Two, three-dimensional graphics

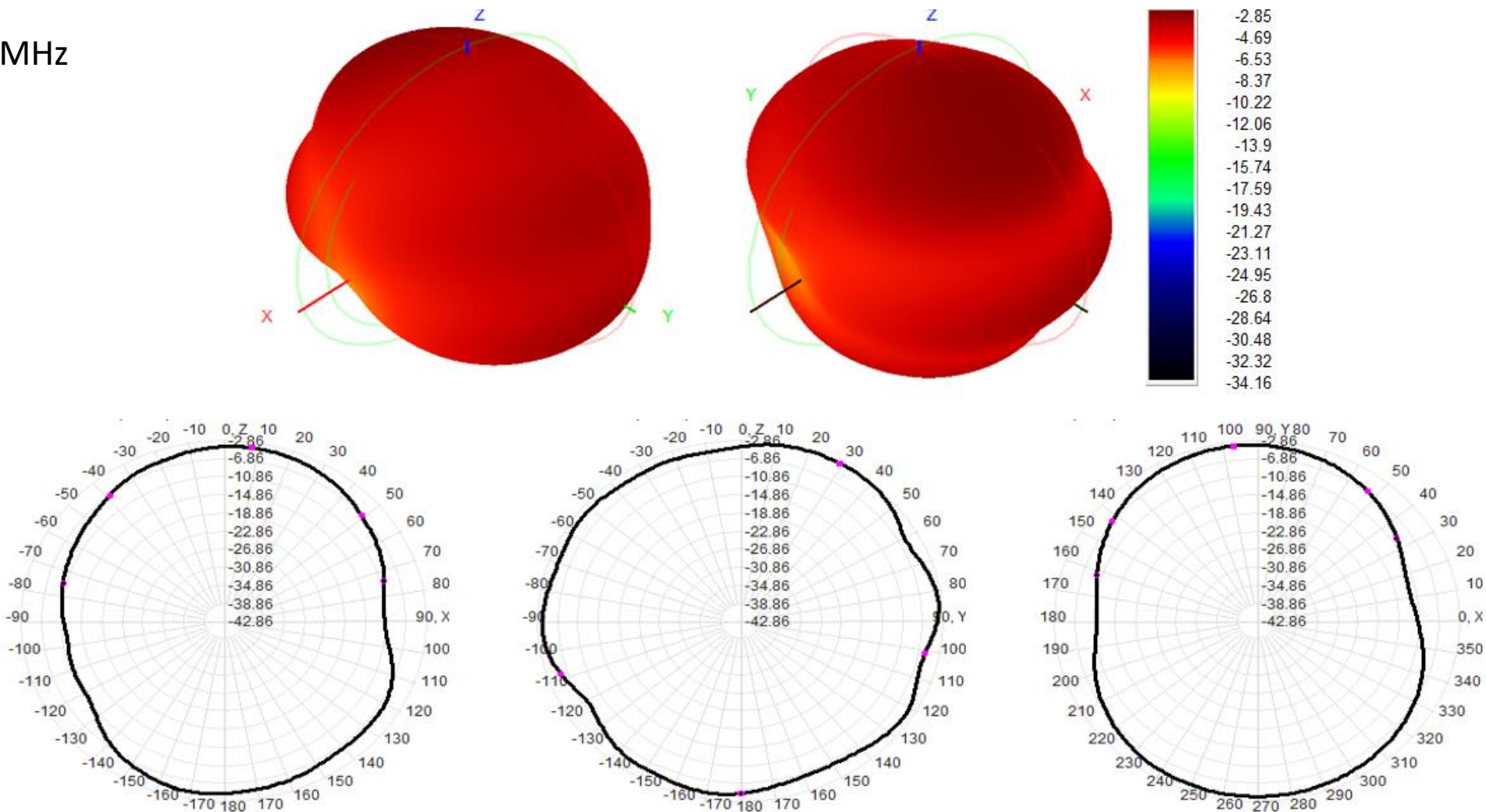
902MHz



4、Antenna test result

4.3 Two, three-dimensional graphics

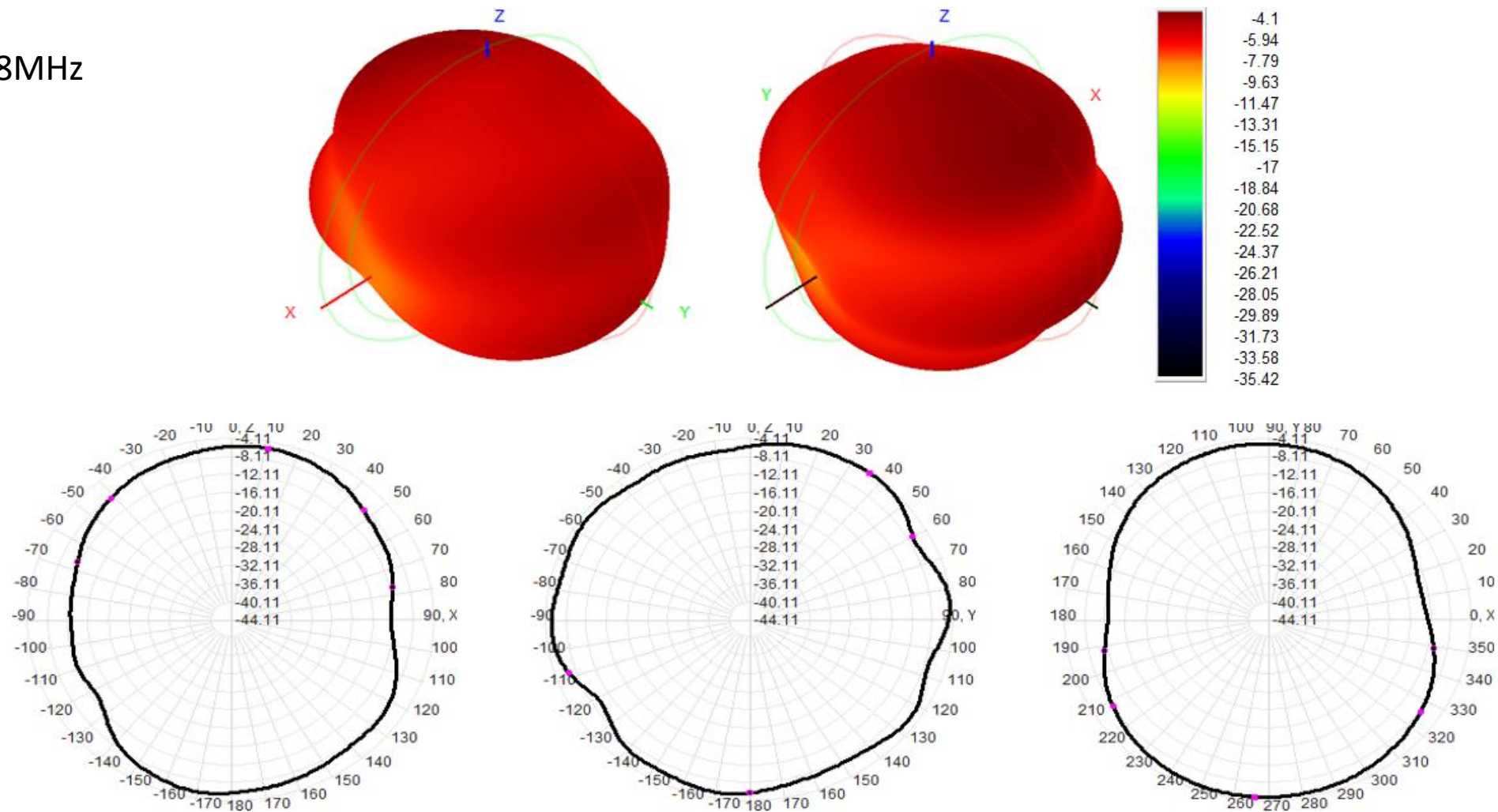
915MHz



4、Antenna test result

4.3 Two, three-dimensional graphics

928MHz



5、 conclusion

The passive test shows that the antenna works well. If you have any other questions, please contact us. Thank you.