



好天线 · 优比造

东莞市优比电子有限公司

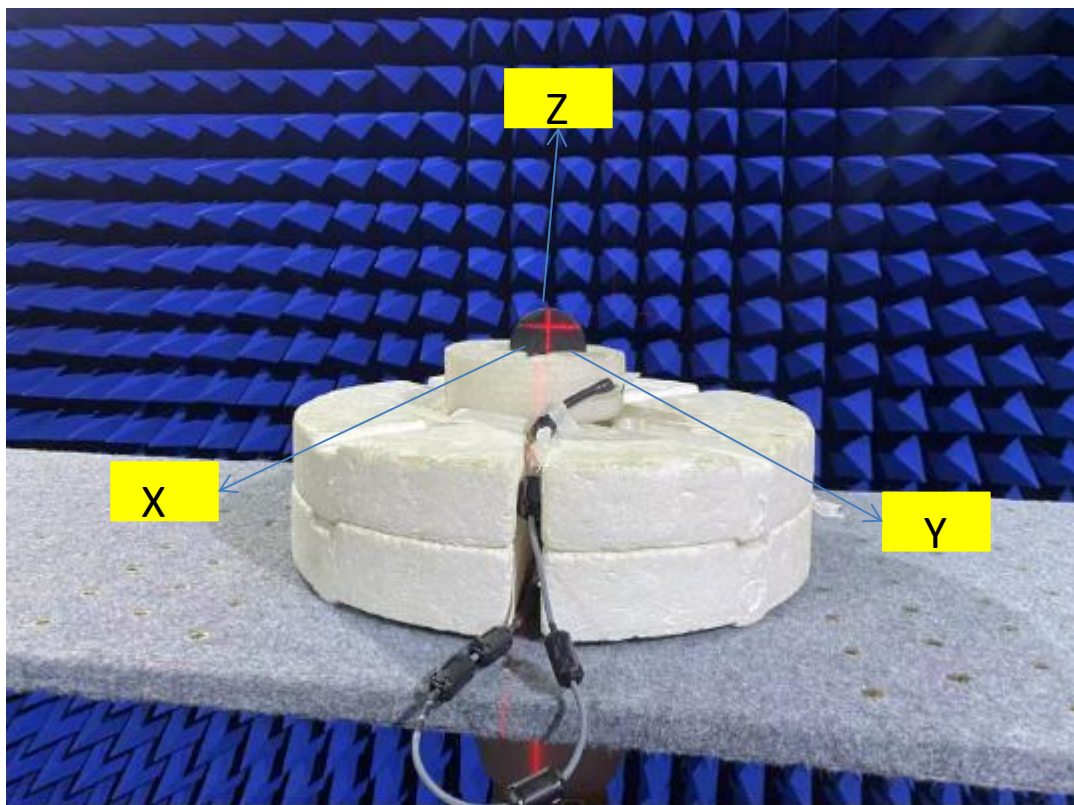
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Antenna Study

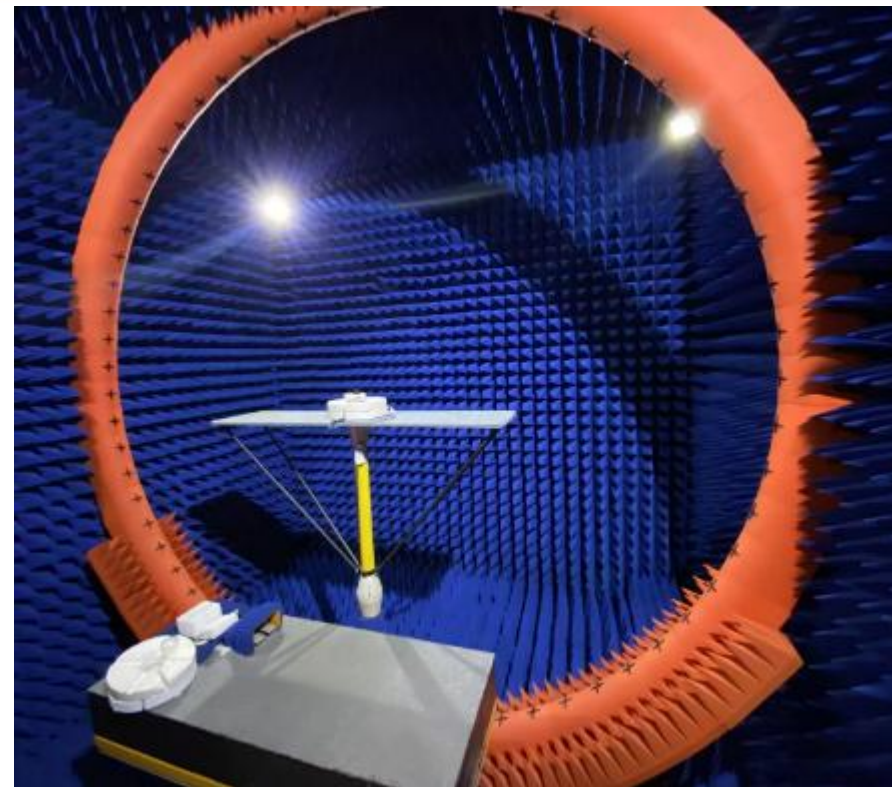
- **Client Name:**先智科技
- **Project Name:** S309-RX
- **Debugging frequency band:** 5.8G
- **Valuation date:** 2025.07.09

Internal Antenna

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Testing environment



Testing 3D microwave darkroom(6m*6m*6m)

External Antenna

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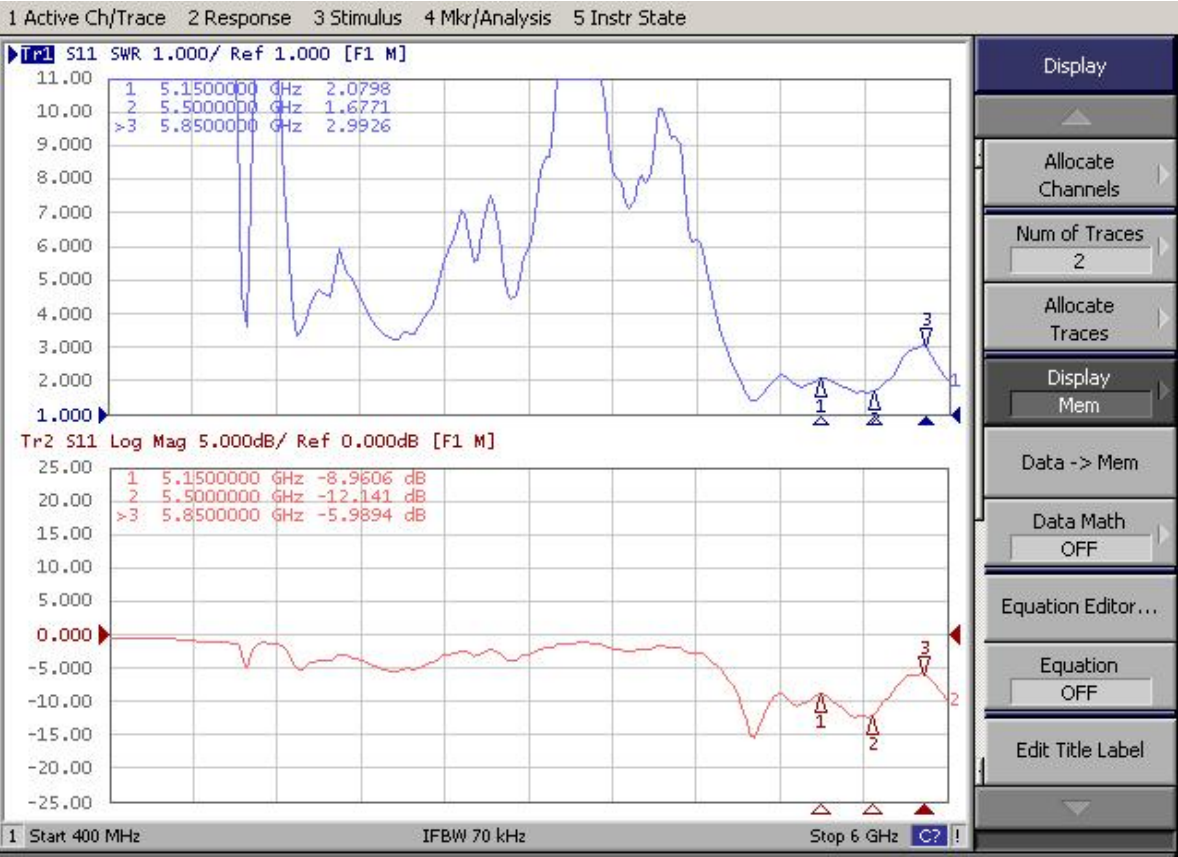


Antenna

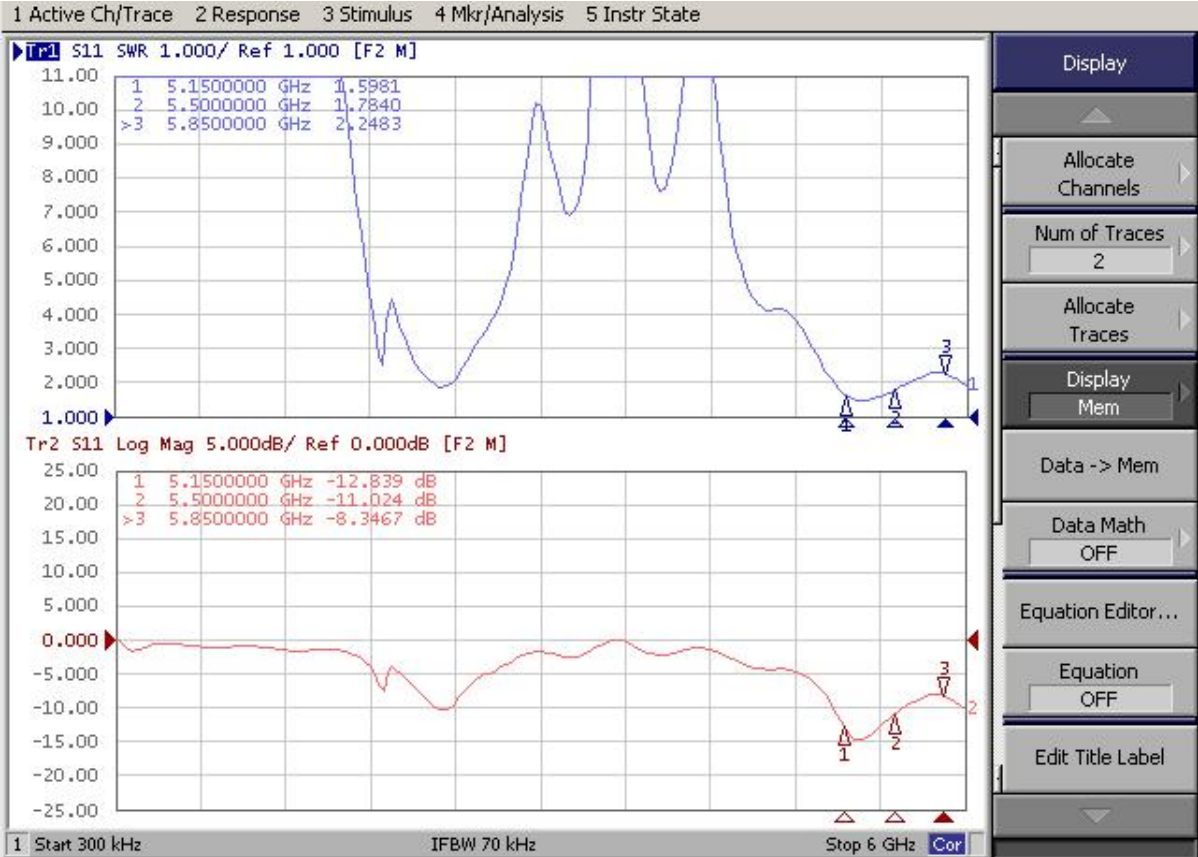
- Antenna name: 5.8G
- Antenna Type: PIFA
- Covers: 5150/5850MHz

S Parameter_Return Loss&VSWR

带磁铁



不带磁铁



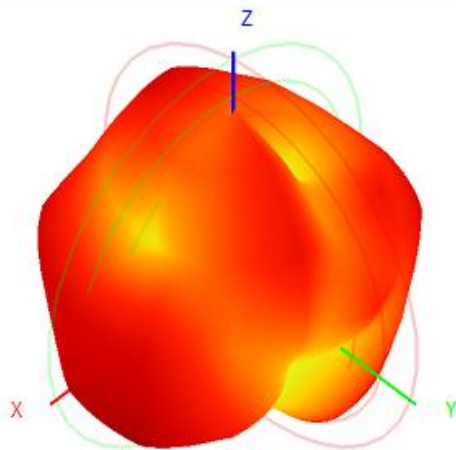
Efficiency and Gain

不带磁铁

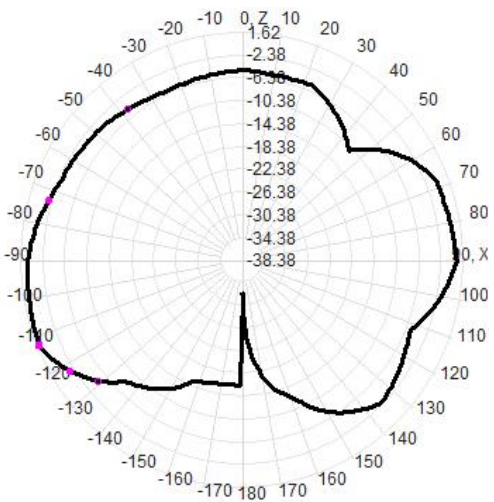
Frequency ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency (MHz)	5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
Gain (dBi)	3.83	3.90	4.54	5.17	5.22	5.12	4.89	5.41	5.39	5.14	4.89	4.19	4.22	4.79	4.14
Efficiency (%)	56.26	53.04	55.09	60.33	57.41	53.52	51.85	55.19	52.02	53.68	52.48	47.23	48.54	52.06	45.92

2D/3D方向图-5500MHz-带磁铁

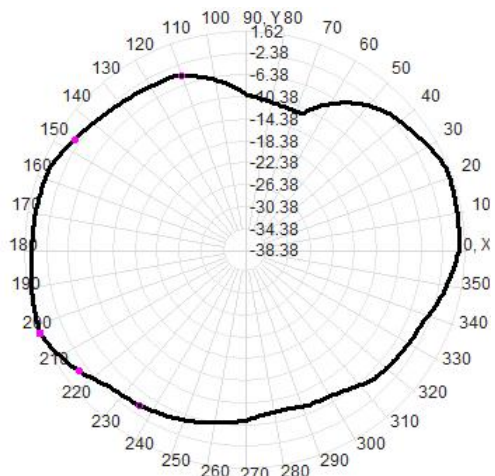
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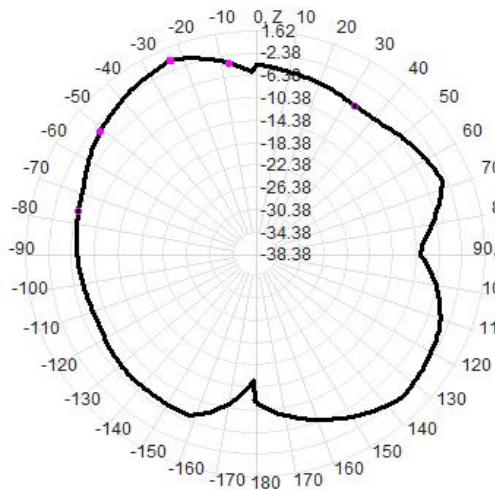
远场方向图



E1-XZ



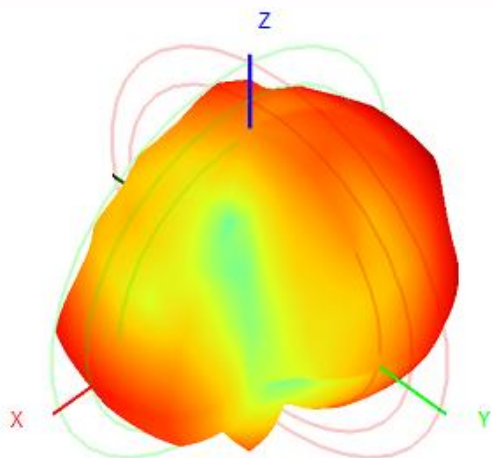
H-XY



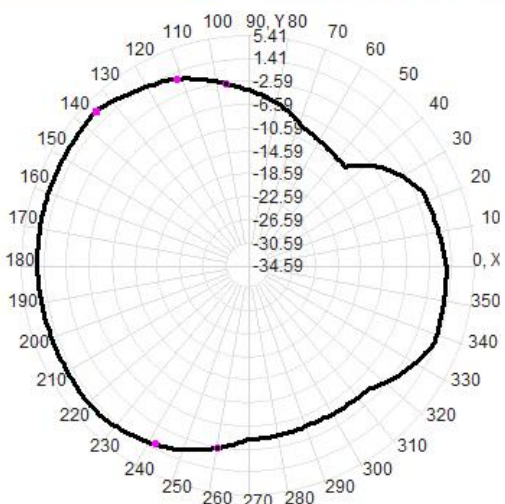
E2-YZ

2D/3D方向图-5500MHz-不带磁铁

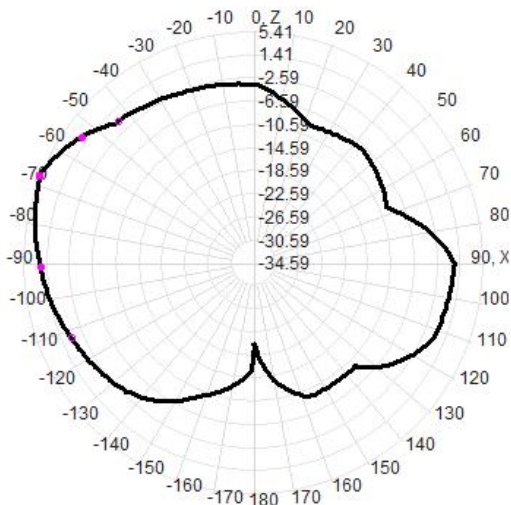
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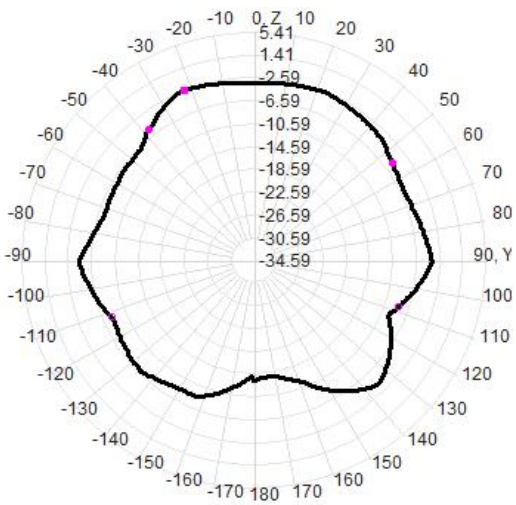
远场方向图



H-XY



E1-XZ



E2-YZ

Conclusion

Dongguan UB Electronics Co., Ltd

- Antenna covers 5.8G
- Test shows excellent performance, VSWR match < 3.0in working band.

11. Mechanical Specification

