



ACMR6001 DATASHEET

SPECIFICATION FOR APPROVAL

Part name: 智能空调雷达 (Intelligent air conditioning radar)

Model No.: ACMR6001

Manufacture: 深圳电目科技有限公司 (Shenzhen RadarEye Technology Co.,Ltd.)

公司地址: 深圳市南山区西丽九祥岭工业区九栋五楼

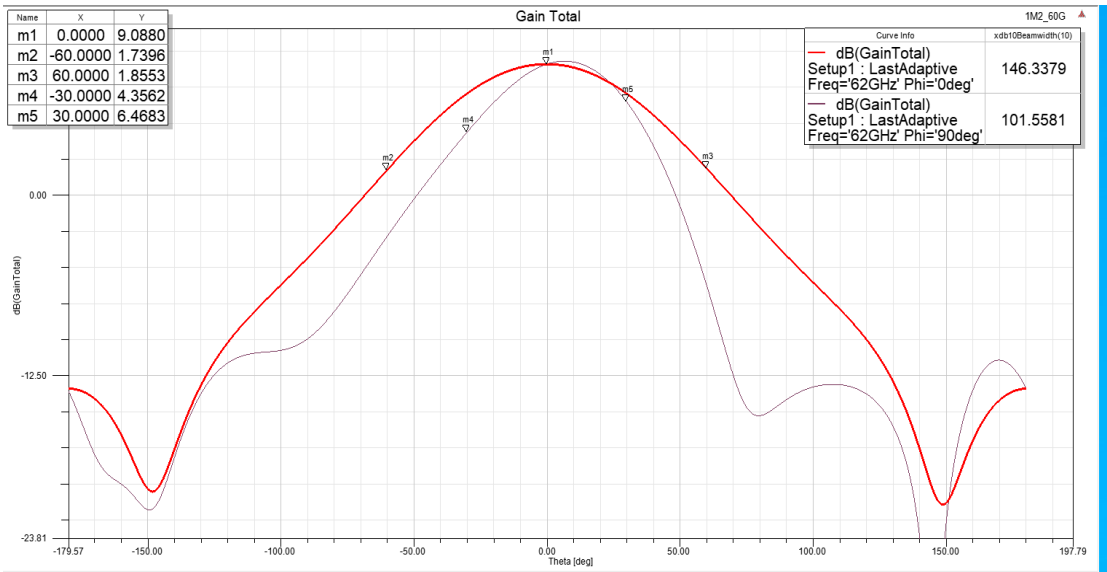
联系电话 (Tel) : 0755-86544120

电气性能 Electrical Specifications		
频率范围	Frequency Range	58.5G~64.5G
增益	Gain	5dBi
驻波比	VSWR	≤2.0
极化形式	Polarization	Horizontal
水平波瓣宽度	Horizontal beamwidth	120°
输出阻抗	Input Impedance	50Ω
功率容量	Max Input Power	1W
接口形式	Connector	Patch Antenna on Chip
机械性能 Mechanical Specifications		
天线尺寸	Dimensions	12*9mm
天线罩材料	Radome Material	——无天线罩
天线类型	Antenna type	Patch Antenna on Chip
多天线	MIMO	4 发 4 收
环境指标 Environmental Specifications		
工作温度	Operating Temperature	-40℃~ + 105℃
应用	Application	室内

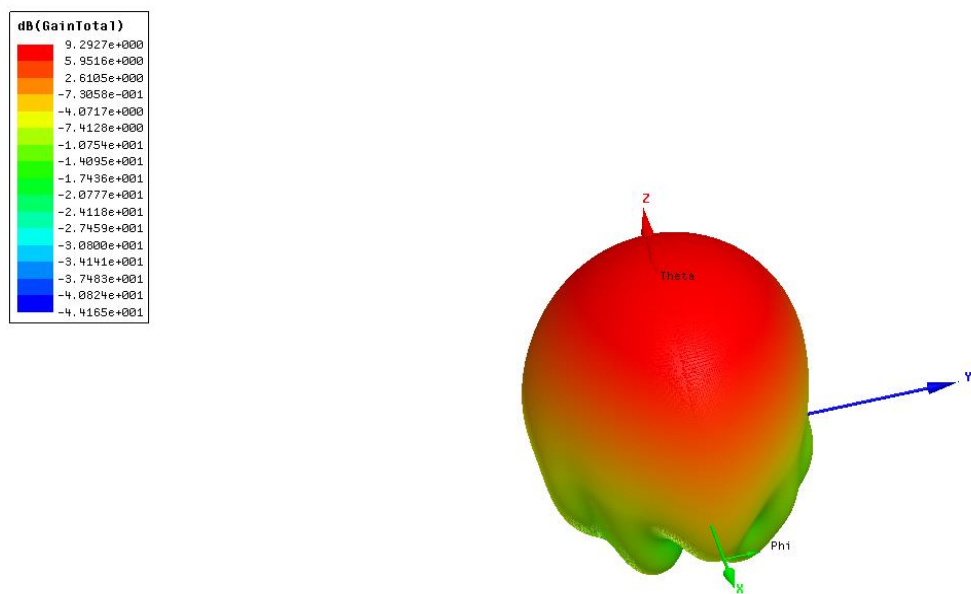
Radiation

1 Design values of antenna simulation

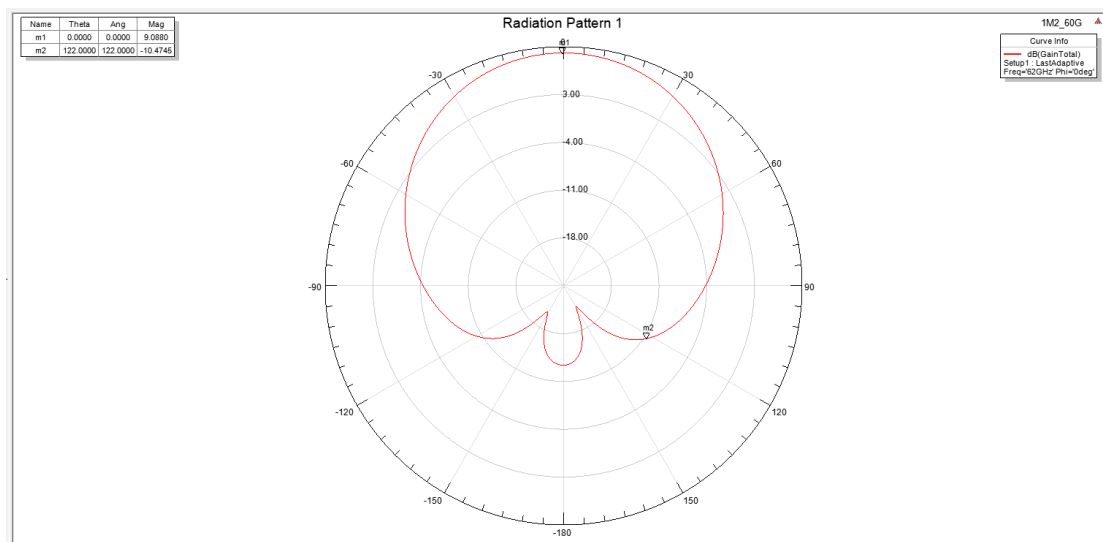
(1) 增益（Gain）



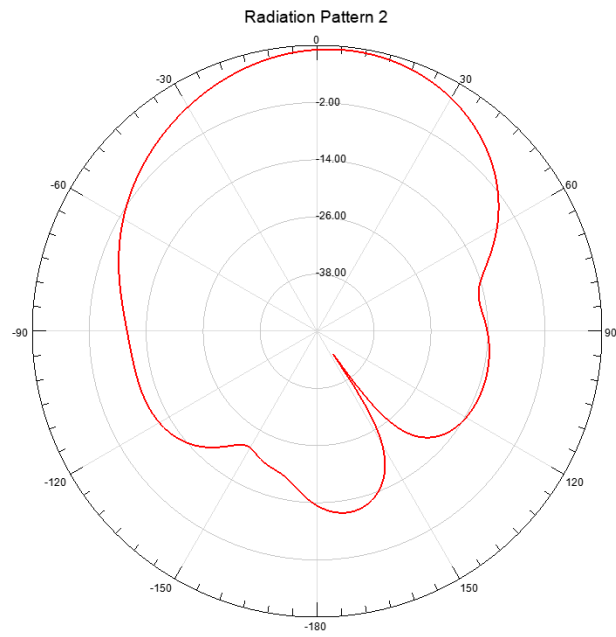
(2) 3D 辐射（3D Radiation）



(3) 各向方向图 (Pattern)



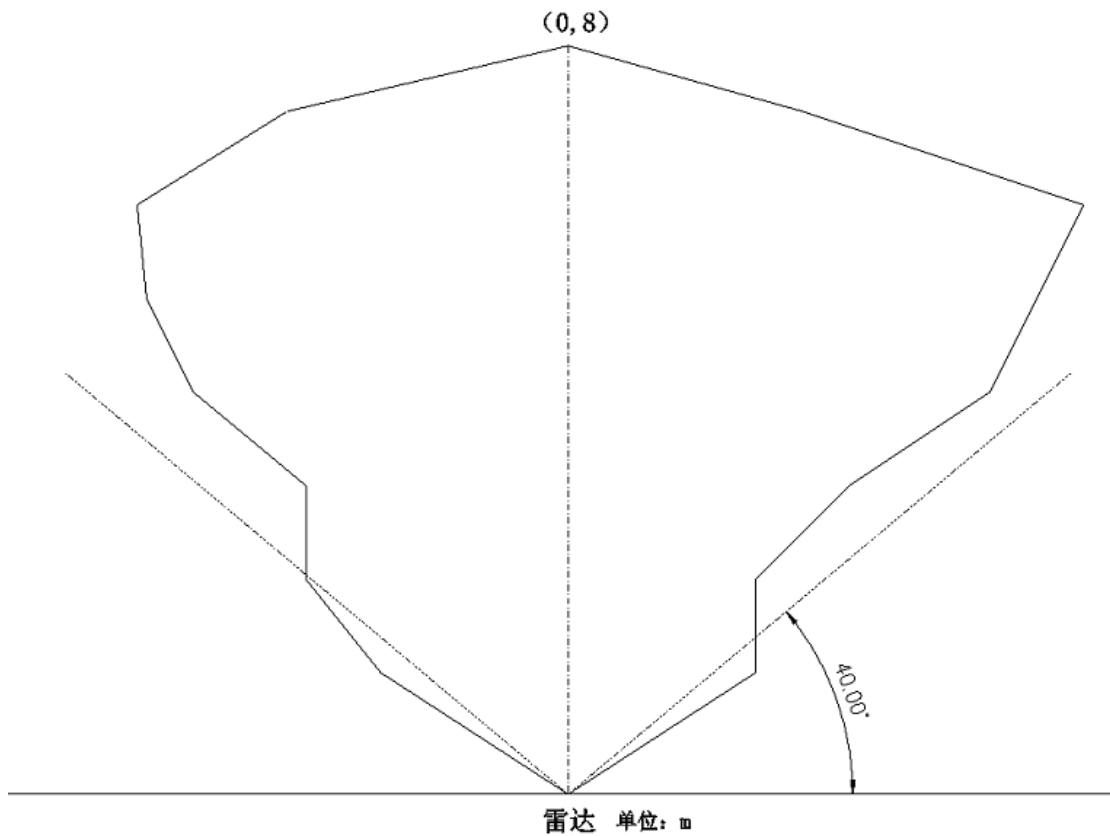
A. Horizontal pattern ($\phi=0^\circ$)



B. Pitching pattern ($\phi=90^\circ$)

2. Actual radiation range

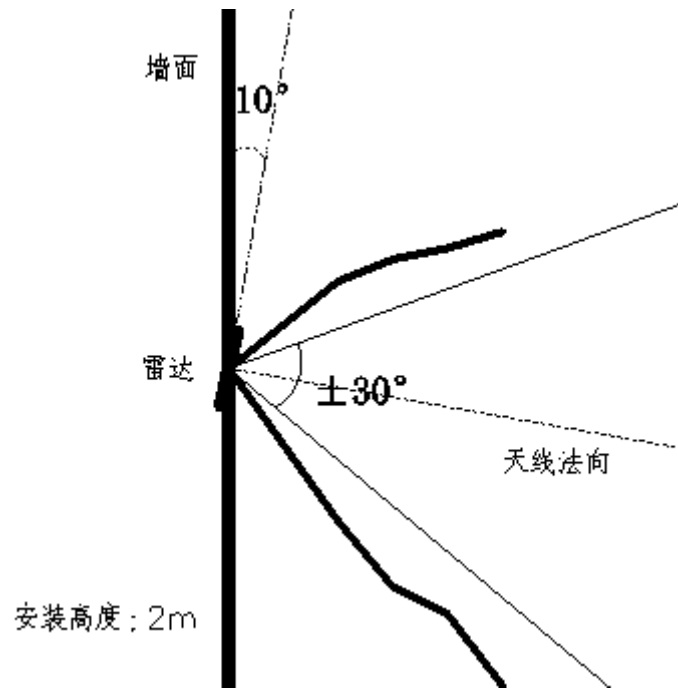
(1) Horizontal radiation



The horizontal radiation range of the radar module is shown in the figure above, and the horizontal width of the antenna beam covers the range of $\pm 50^\circ$.

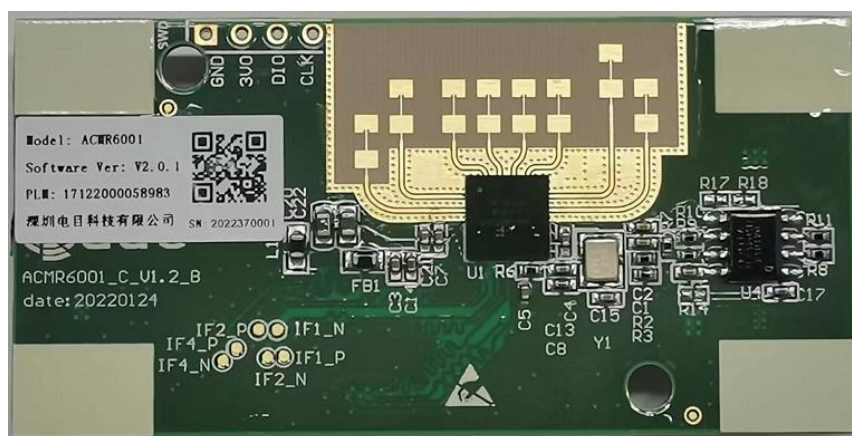
(2) Pitching radiation

Noting: when installing, The module forms an inclination angle of 10° with the wall, and the algorithm also makes an artificial correction of 10° in the elevation angle.



The pitching radiation range of the radar module is shown in the above figure, and the pitching width of the antenna beam covers the range of $\pm 30^\circ$.

3 Physical photo



模组正面 (Top View)



模组底面（Bottom View）