

Standard Gain Horn Antenna
20dBi Typ. Gain, 14.5-22 GHz Frequency Range

Standard Gain Horn Antenna Data Sheet

RM-SGHA51-20

Features

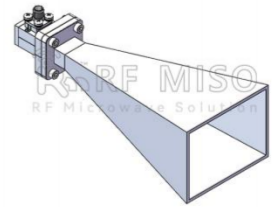
- Wave-guide and Connector Interface
- Low Side-lobe
- Linear Polarization
- High Return Loss

Descriptions

RF MISO's **Model RM-SGHA51-20** is a linear polarized standard gain horn antenna that operates from 14.5 to 22 GHz. The antenna offers a typical gain of 20 dBi and low VSWR 1.3:1. The antenna has a typical 3dB beamwidth of 17.3 degrees on the E plane and 17.5 degrees on H plane. This antenna has flange input and coaxial input for customers to rotate. Antenna mounting brackets include ordinary L-type mounting bracket and rotating L-type bracket①

Specifications

| Parameters | Specification | | Unit |
|-------------------------|-------------------|--------------------|------|
| Frequency Range | 14.5-22 | | GHz |
| Wave-guide | WR42 | | |
| Gain | 20 Typ. | | dBi |
| VSWR | 1.3 Typ. | | |
| Polarization | Linear | | |
| 3 dB Beamwidth, E-Plane | 17.3° Typ. | | |
| 3 dB Beamwidth, H-Plane | 17.5° Typ. | | |
| Interface | FBP180(F Type) | SMA-Female(C Type) | |
| Material | Al | | |
| Finishing | Paint | | |
| C Type Size (L*W*H) | 158.2*67.4*51(±5) | | mm |
| Weight | 0.106(F Type) | 0.131(C Type) | kg |
| C Type Average Power | 50 | | W |
| C Type Peak Power | 3000 | | W |
| Operating Temperature | -40° ~+85° | | ° C |

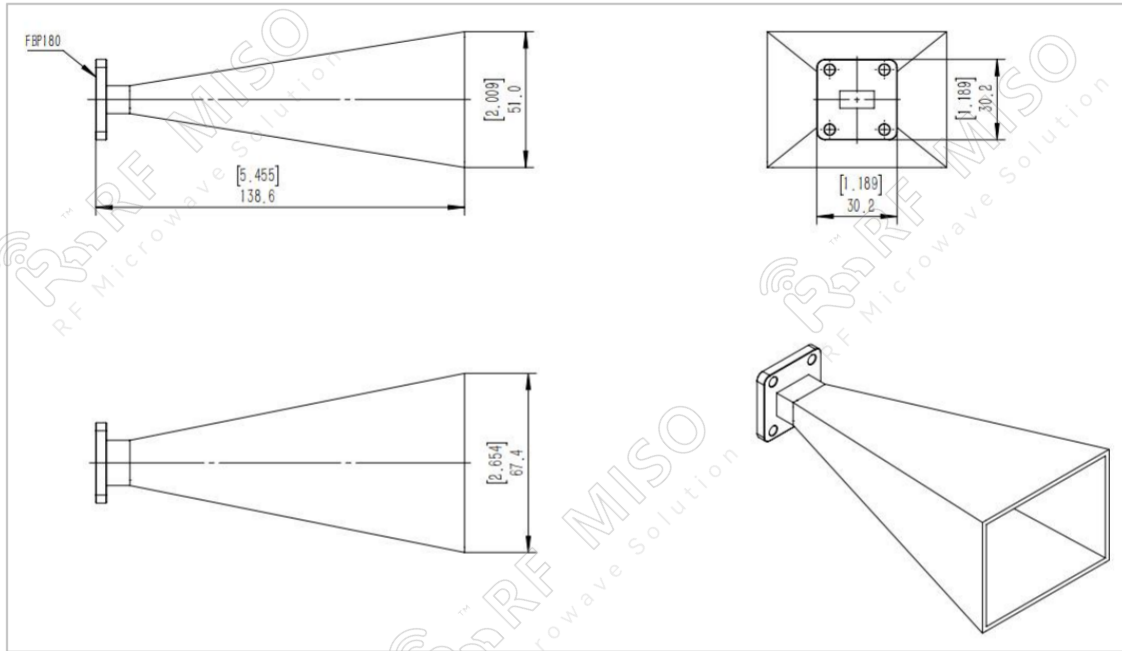


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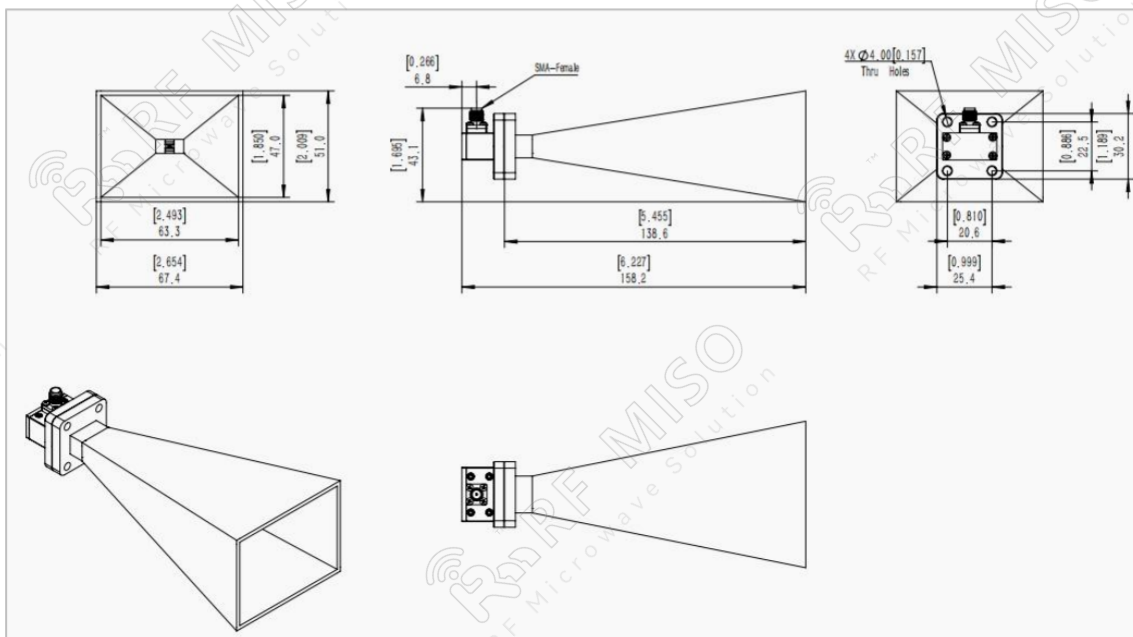
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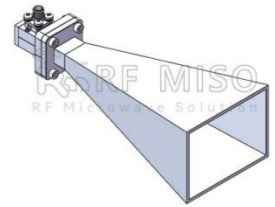
F-Type Mechanical Drawing (P/N: RM-SGHA51-20F)



C-Type Mechanical Drawing (P/N: RM-SGHA51-20C)

N-type connector is available, please contact RF Miso.



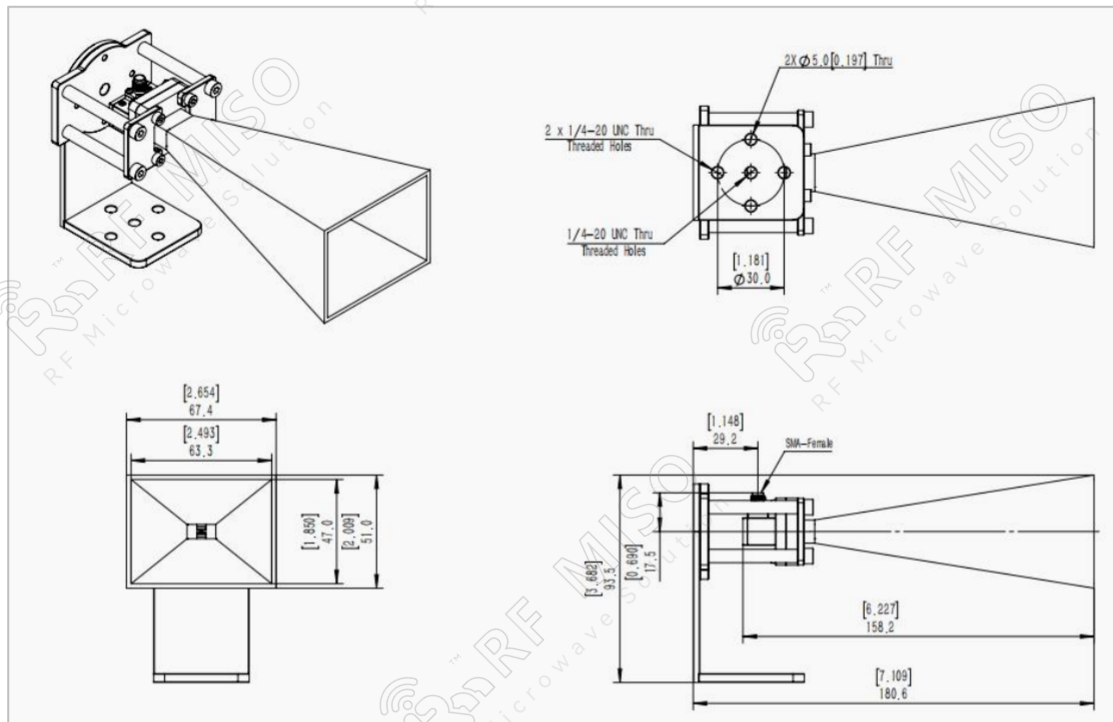


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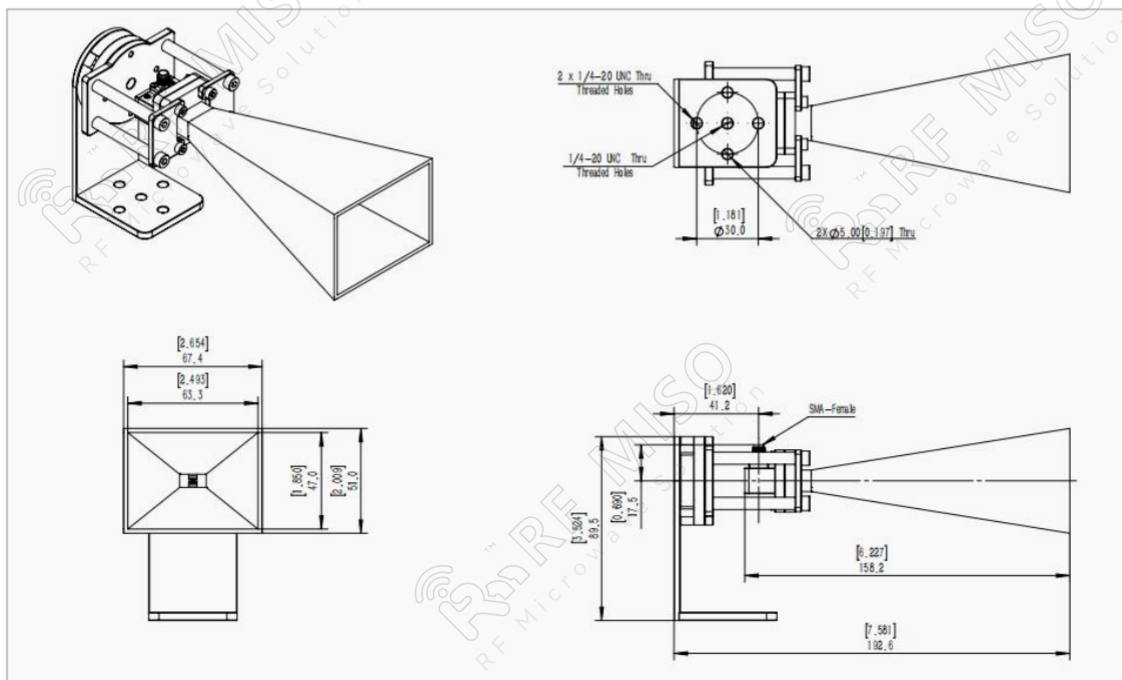
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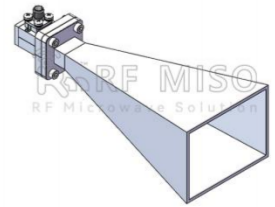
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Mechanical Drawing with Ordinary L-type Mounting Bracket (P/N: RM-SGHA51-20CL)



Mechanical Drawing with Rotating L-type Mounting Bracket (P/N: RM-SGHA51-20CR)



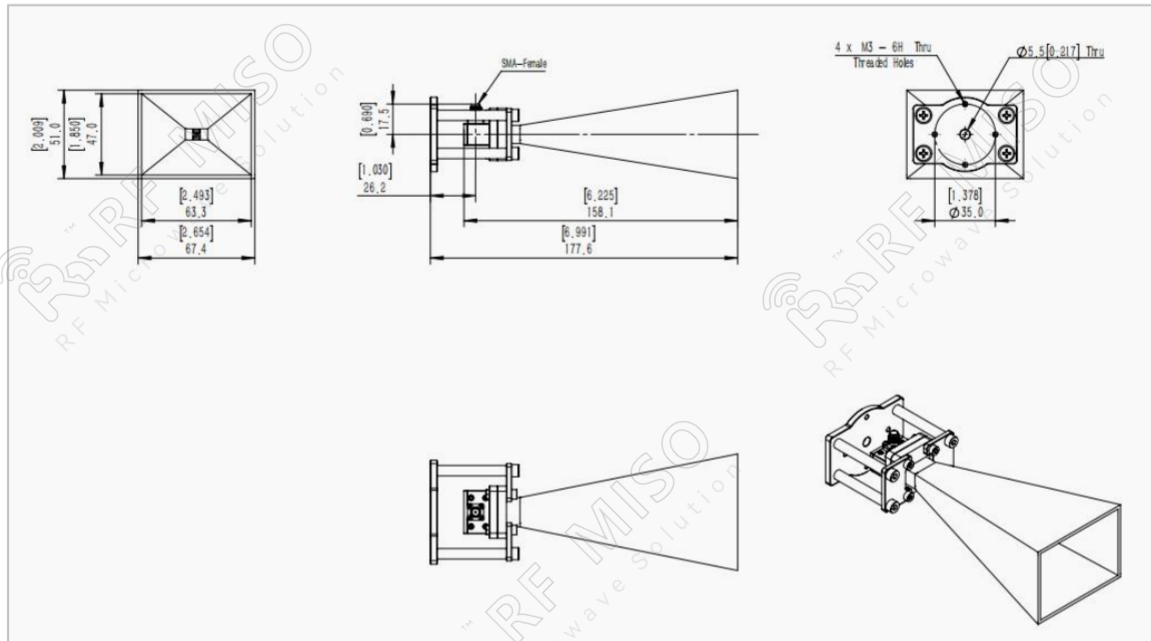


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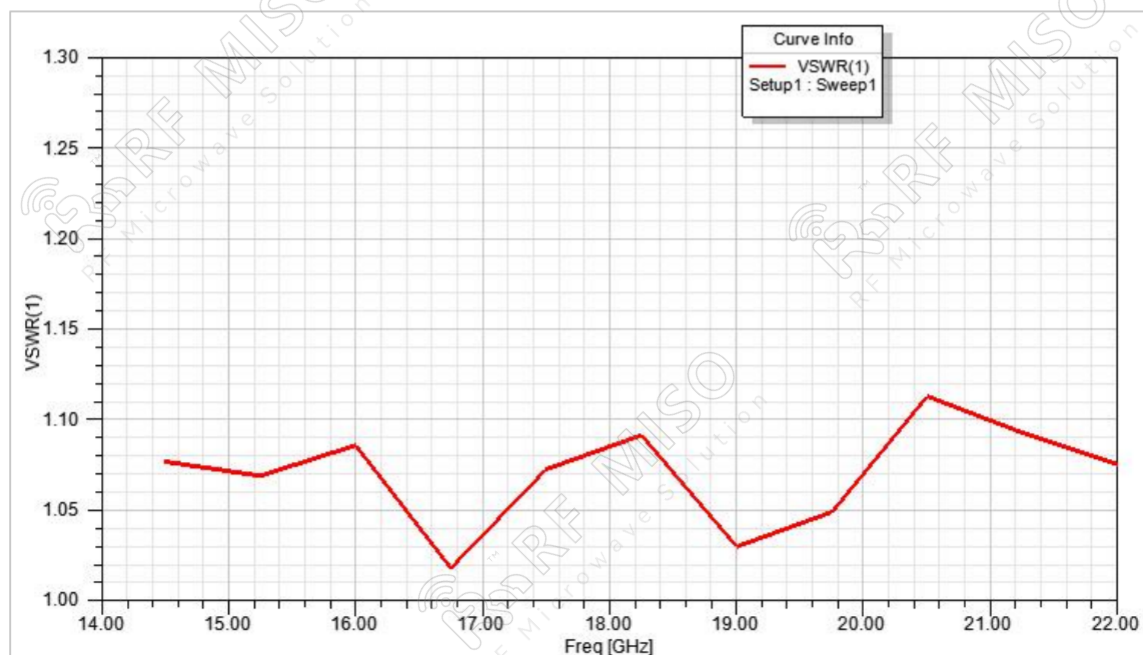
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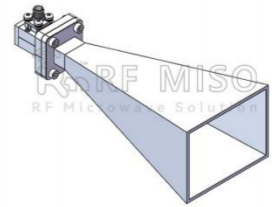
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Mechanical Drawing with Ordinary I-type Mounting Bracket (P/N: RM-SGHA51-20CI)



VSWR



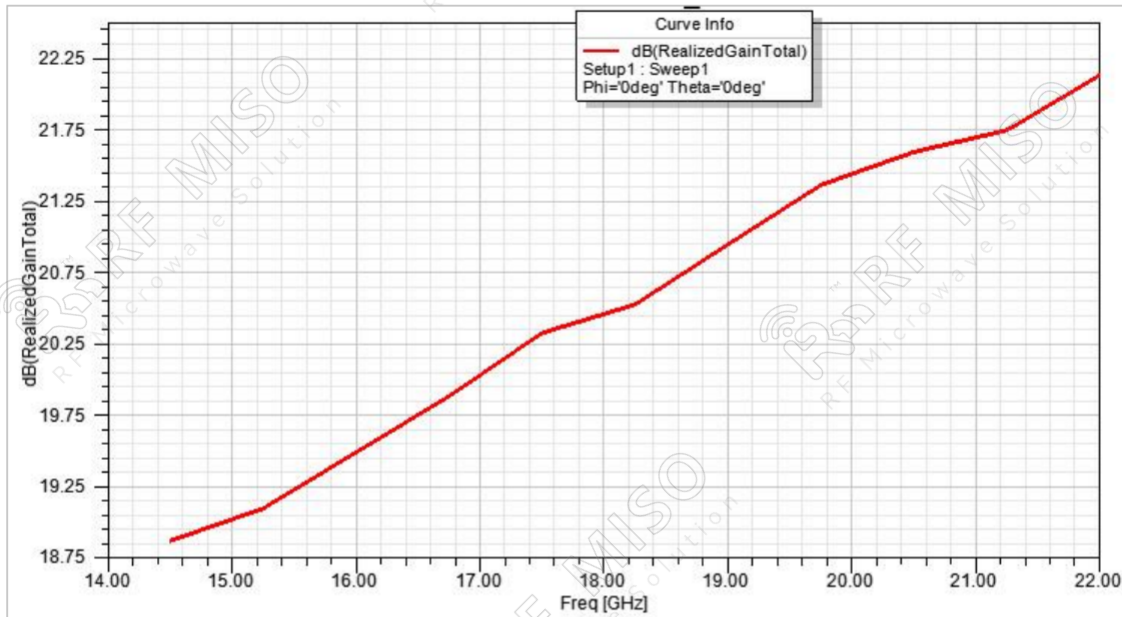


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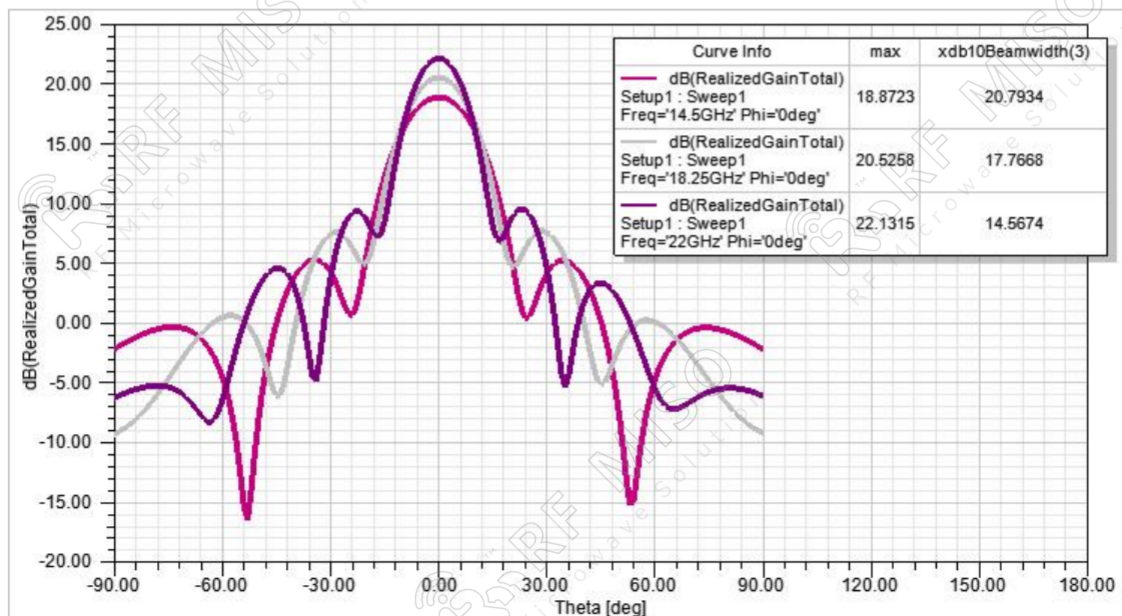
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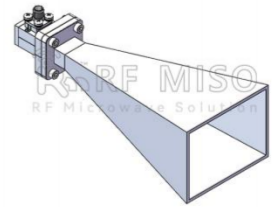
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Gain



Gain Pattern E-plane



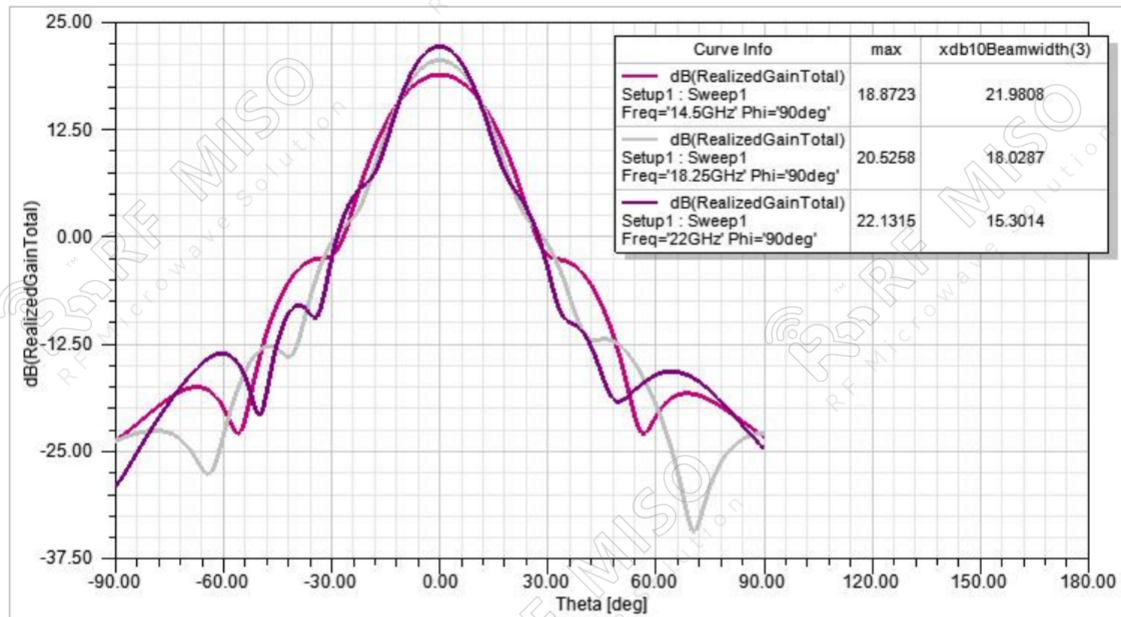


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Gain Pattern H-plane



① **Rotating L-type bracket:** The rotating bracket is used for antenna polarization adjustment, and the tooling integrated with the bracket can precisely adjust the polarization directions of 0°, 45°, and 90° to ensure the accuracy and consistency of the calibration results.

Note:

- If the data presented is simulated. Actual data may vary unit to unit, slightly.
- Any foreign objects in the wave-guide will cause performance degradation and possible device damage.
- We can customize antennas according to your specific needs.