Suzhou Talent Microwave,Inc
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# High-Gain Lens Horn Antenna

## WR-2.8/260-400GHz/48dBi Gain  Model:TLHGLA-260400-48-2.8

The TLHGLA-260400-48-2.8 consists of a rectangular waveguide feed with a high-quality standard flange, which radiates electromagnetic waves to a plano-convex polytetrafluoroethylene (PTFE) lens. The lens is used for phase collimation and achieving excellent performance with minimal size. The lens adopts an optimized hyperbolic design to minimize aberrations. The entire system is enclosed in an aluminum cylinder, providing high ruggedness. One side of the cylinder is flat, allowing the antenna to stand upright on flat surfaces.

## Features:

- Operating Frequency 260 to 400GHz
- Nominal IF Gain: 48dBi Typ
- High Return Loss

## Applications:

- Radar/Communication Systems
- Antenna Gain Measurements
- System Setups

## Electrical Characteristics:

| Parameter | Min | Typ | Max | Units |
|---|---|---|---|---|
| Frequency Range | 260 | | 400 | GHz |
| Gain | | 48 | | dBi |
| Input Return Loss | | -20 | | dB |
| Sidelobe | | -20 | | dB |
| Antenna Beamwidth | | 0.6 | | ° |

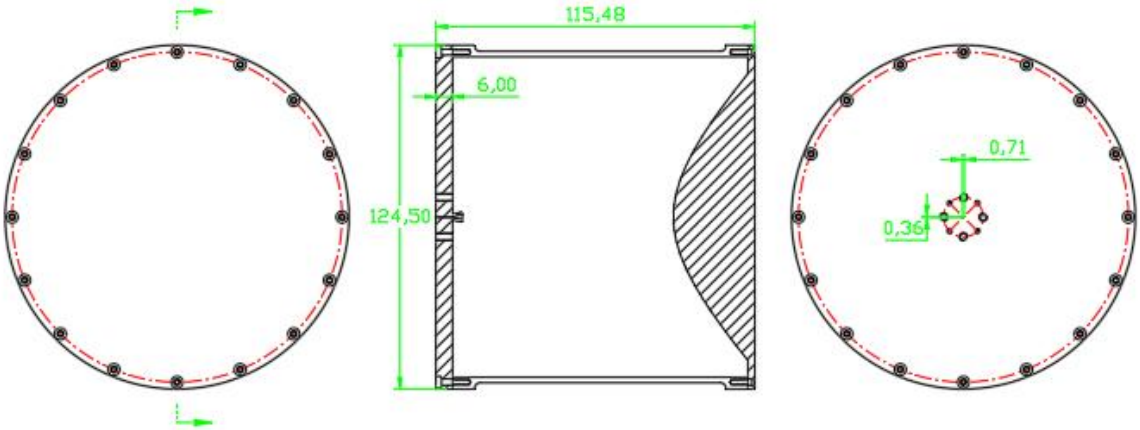
## Envrionmental And Physical Characteristics:

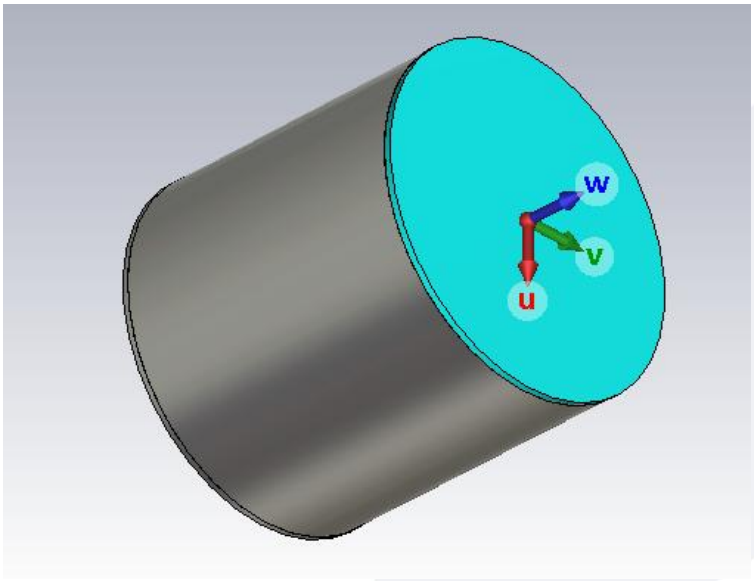
| Parameter | Value | Units |
|---|---|---|
| Material | Aluminium | |
| Connectors | WR-2.8/UG-387/U | |
| Size | 115.48*ø124.5 | mm |

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## Outline Drawing:

Unit:mm; Tolerance:±0.1mm



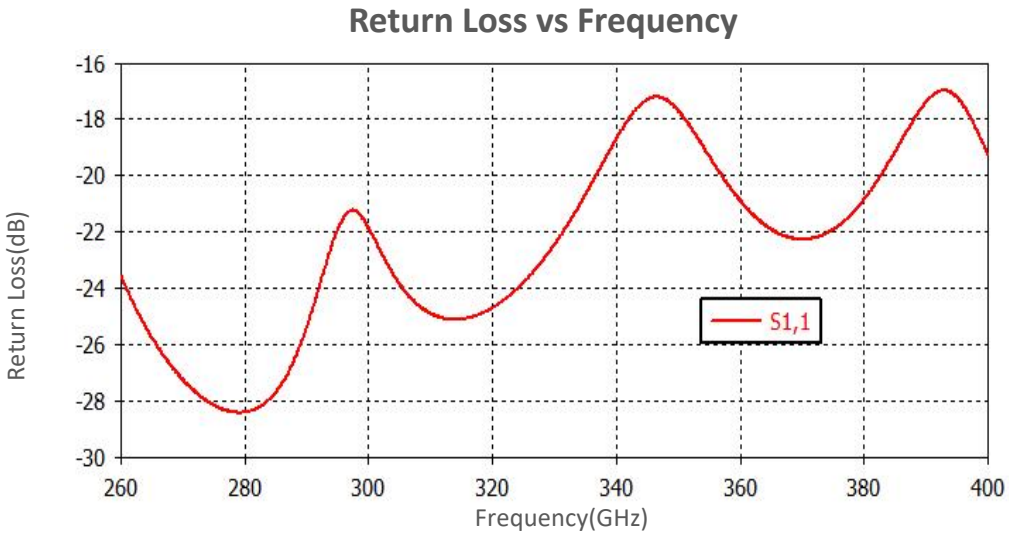

ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

## Ordering Information:

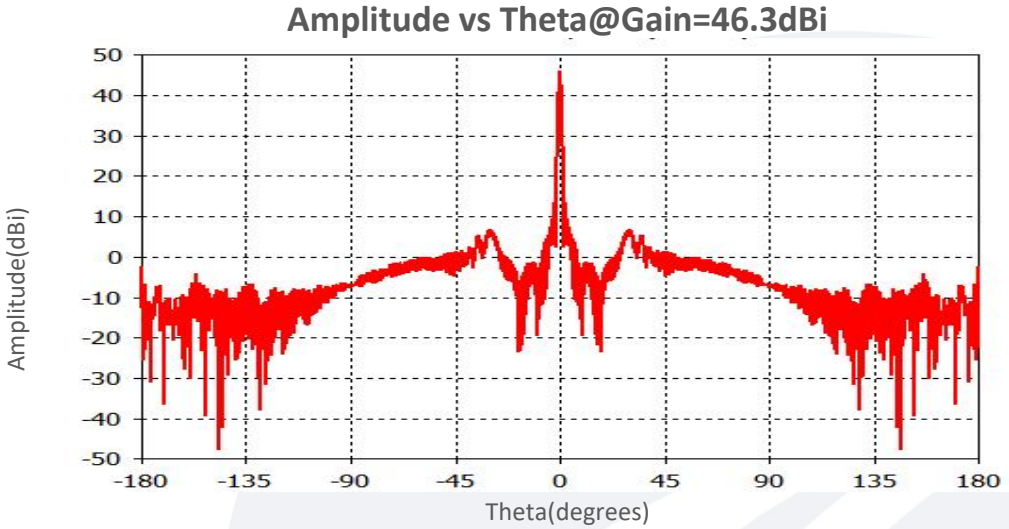
| Base Number | Description | Revision |
|---|---|---|
| TLHGLA-260400-48-2.8 | High-Gain Lens Horn Antenna, 260-400GHz, Gain: 48dBi Typ | Rev.1.0 |

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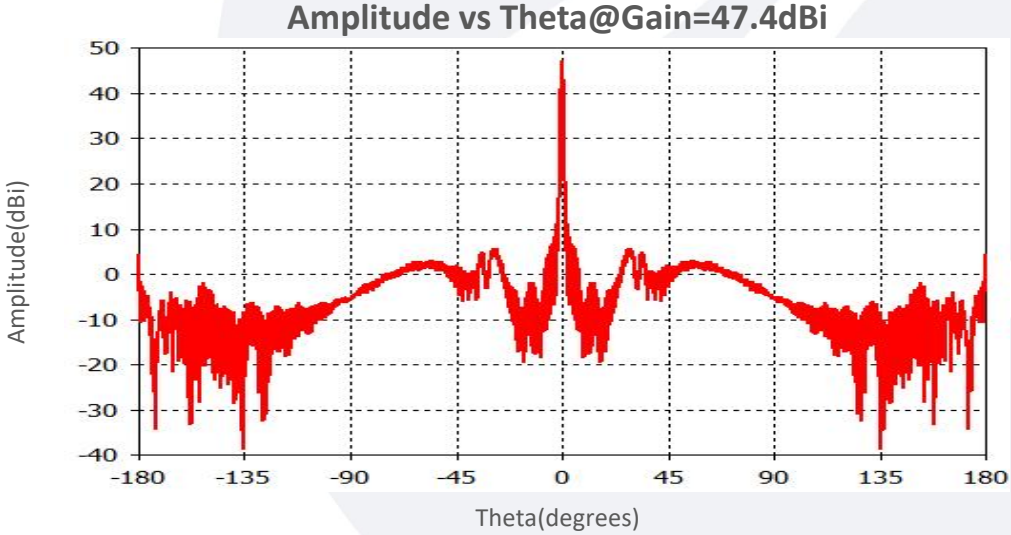
## Typical Performance Data:




**260GHz:**




**280GHz:**

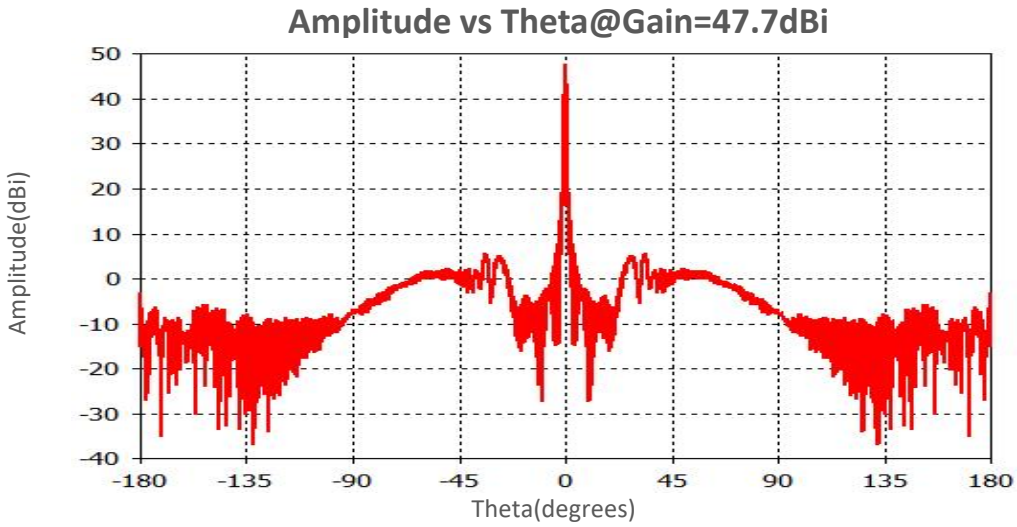



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

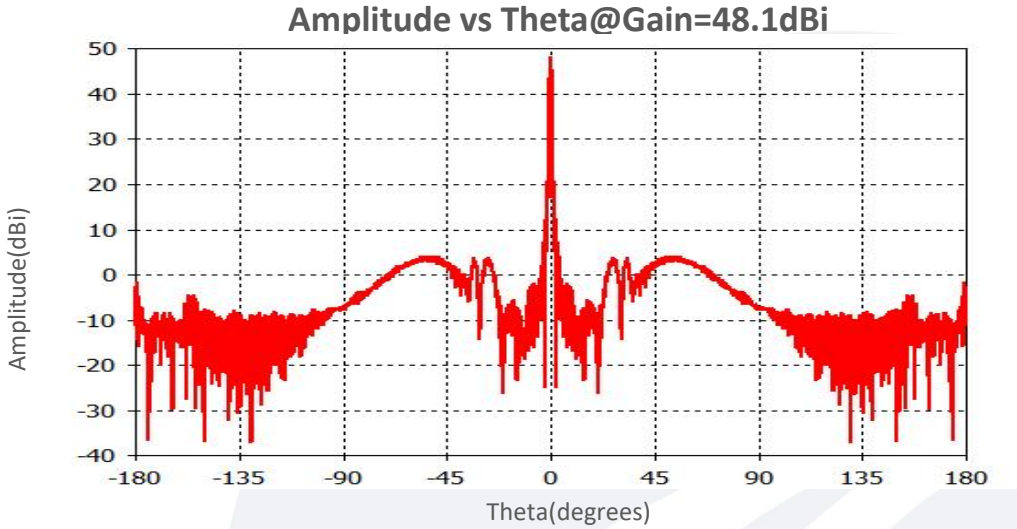
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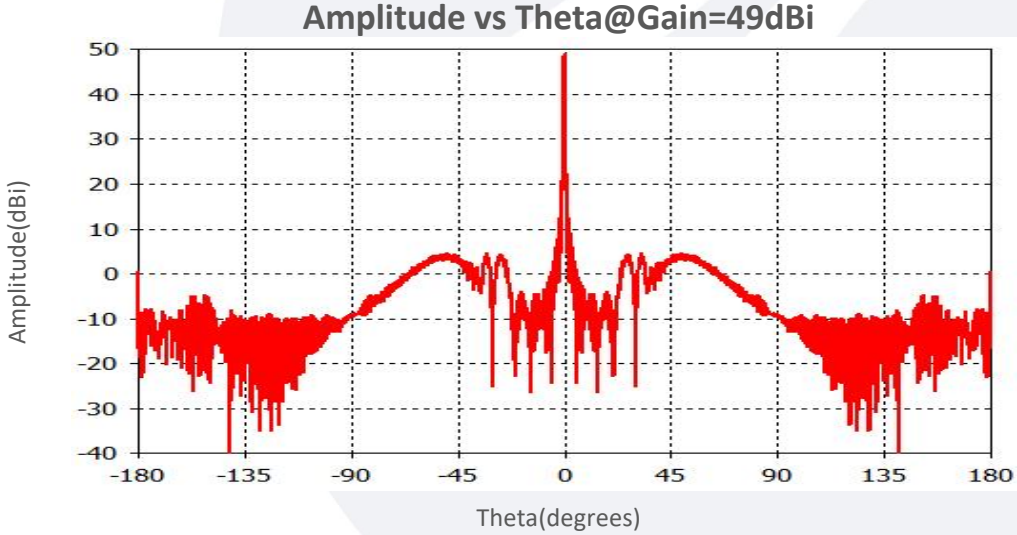
**300GHz:**




**320GHz:**




**340GHz:**

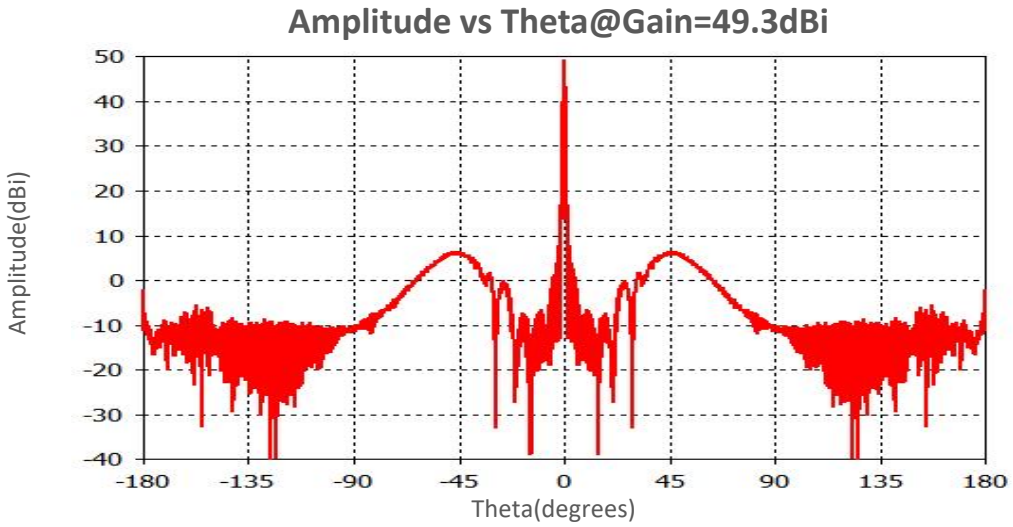



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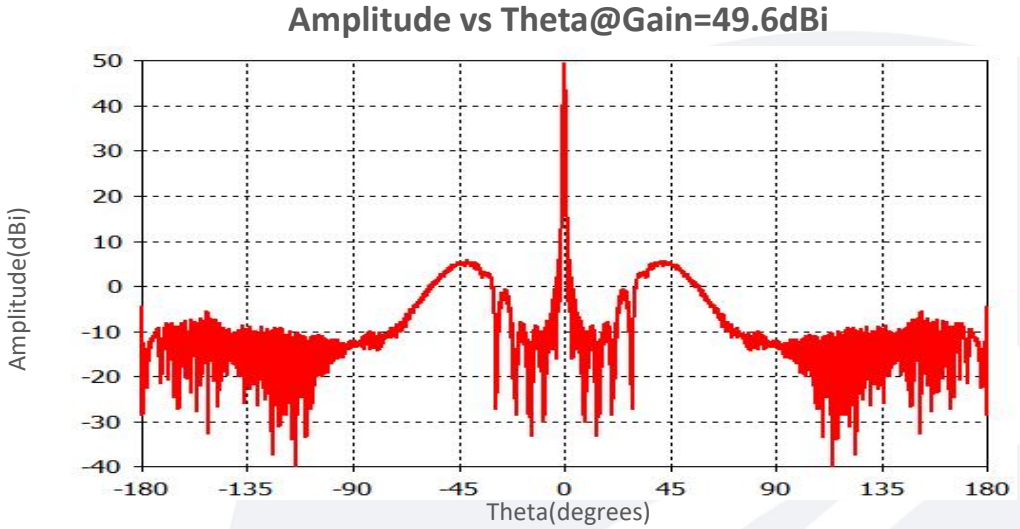
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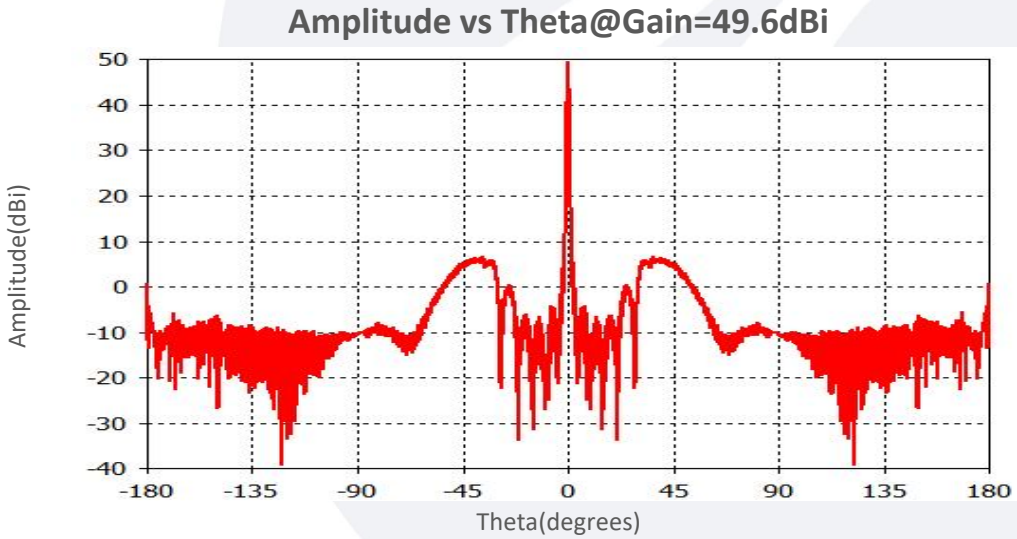
**360GHz:**




**380GHz:**




**400GHz:**




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