

## Horn Antenna

### 2.92mm/18-40GHz

**Model:TL-180400DRHA20K**

TL-180400DRHA20K is a horn antenna that operates from 18 GHz to 40 GHz. The input of this antenna is a coax adapter structure with 2.92mm female. The standard gain horn is offered for antenna range calibration purpose mainly, but it can be also used for general purpose system set ups.

### Features:

- Operating Frequency 18 to 40 GHz
- Good Impedance Match

### Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

### Electrical Characteristics:

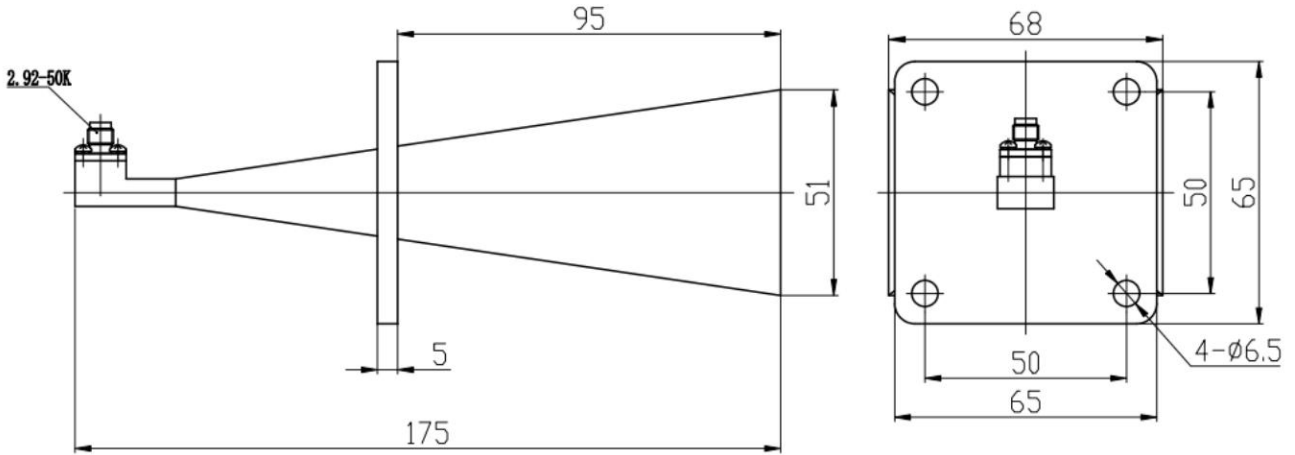
Parameter	Min	Typ	Max	Units
Frequency Range	18		40	GHz
Input VSWR			2.5	:1

### Environmental And Physical Characteristics:

Description	Parameter	Units
Material	Aluminum	
Finish	Conductive oxidation, spray white paint	
Connectors	2.92mm Female	
Size	175*65*65	mm

**Outline Drawing:**

Unit:mm



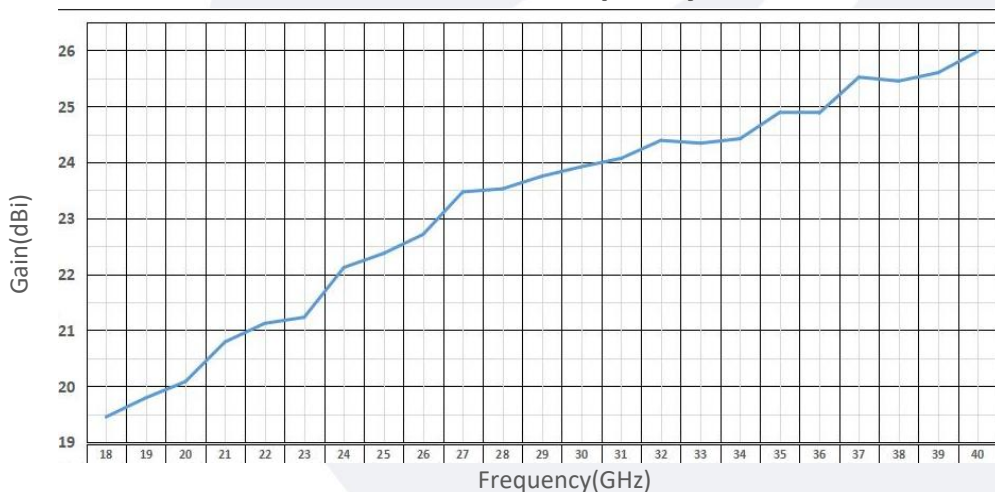
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

**Ordering Information:**

Base Number	Description	Revision
TL-180400DRHA20K	Horn Antenna, 18-40GHz.	Rev.1.0

**Typical Performance Data:**

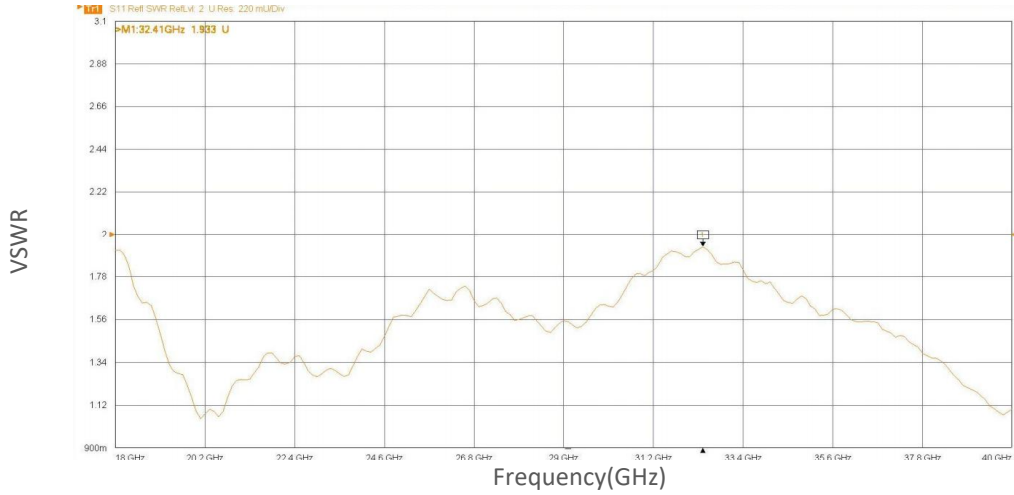
**Gain vs Frequency**



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.

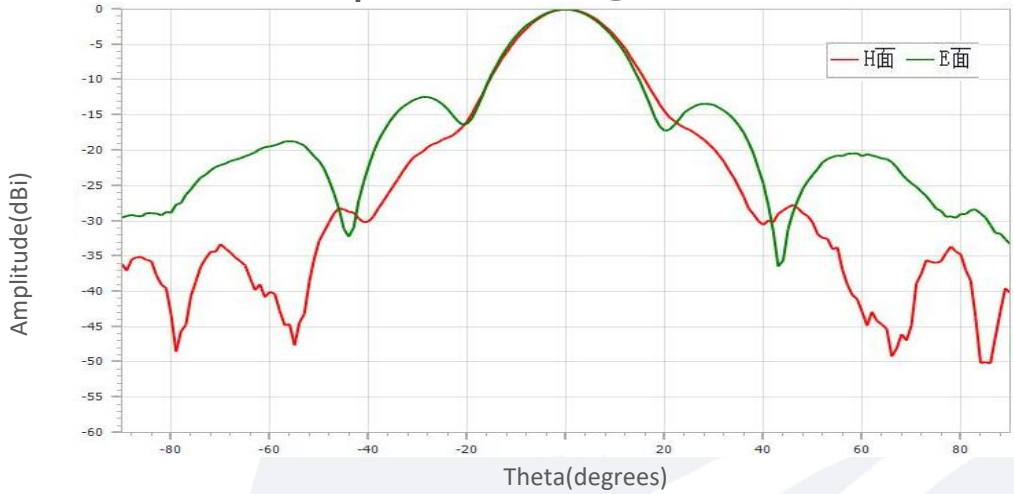
**Typical Performance Data:**

**VSWR vs Frequency**



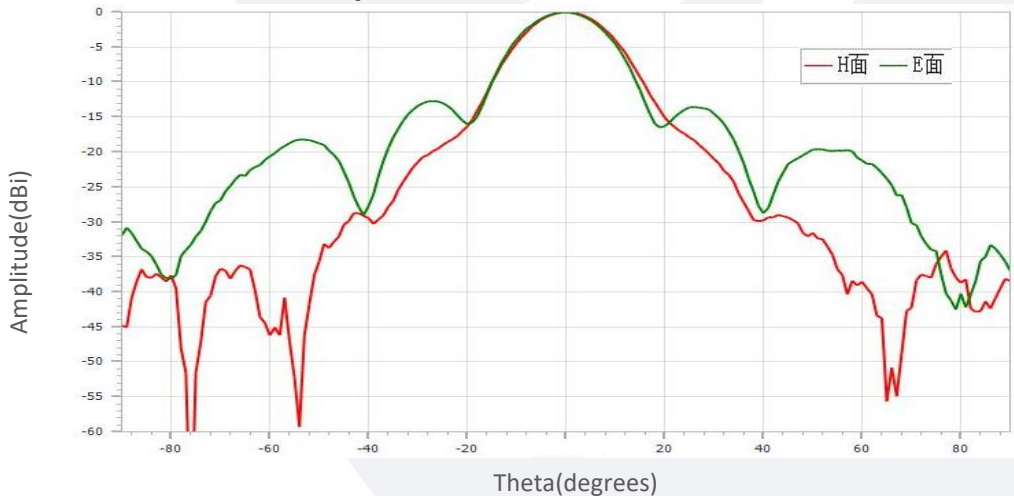
**18GHz:**

**Amplitude vs Theta@Gain=19.45dB**



**19GHz:**

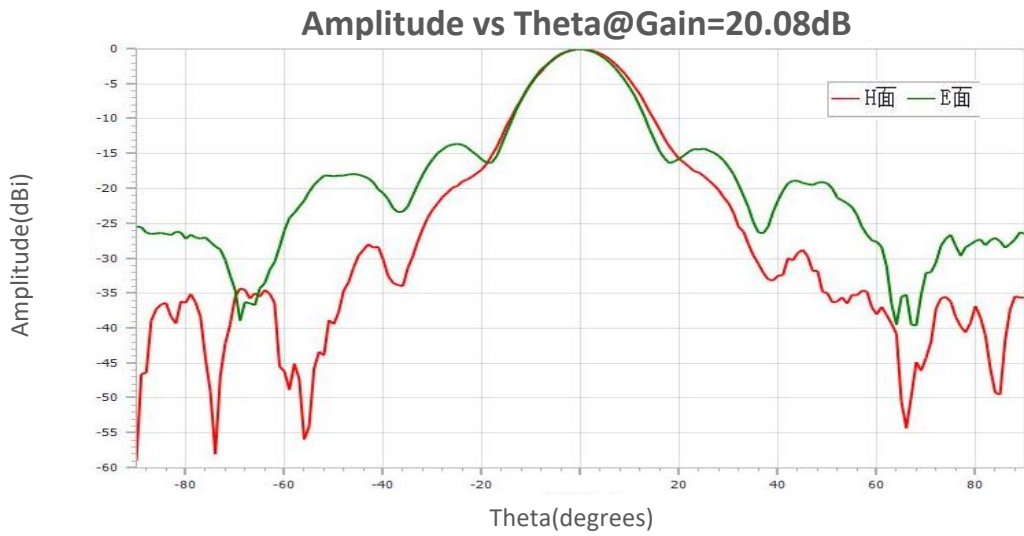
**Amplitude vs Theta@Gain=19.79dB**



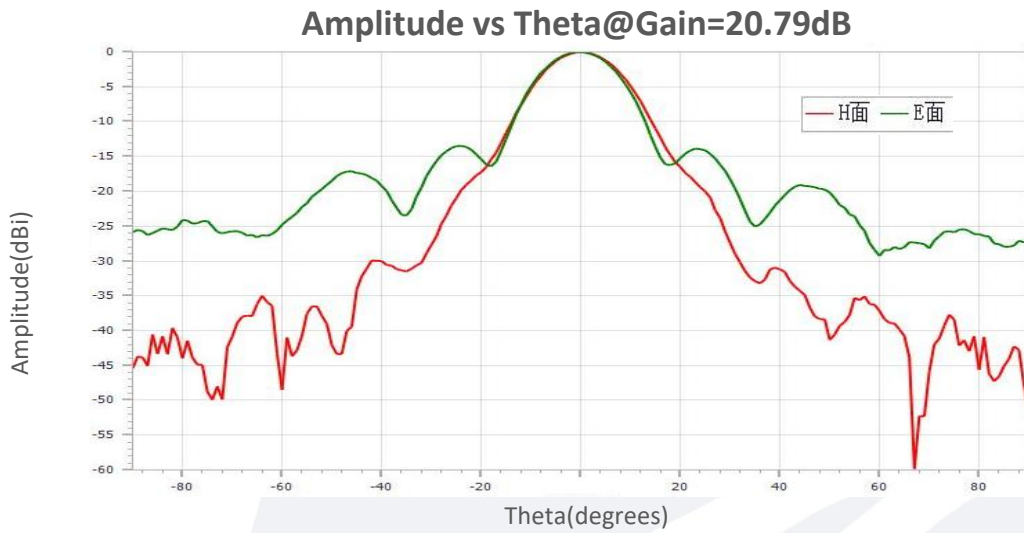
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

**Typical Performance Data:**

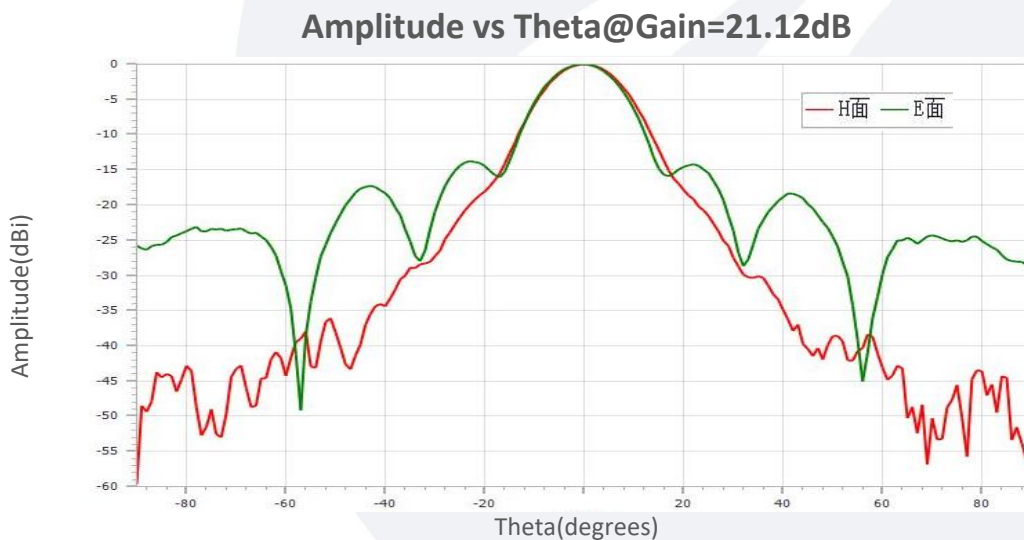
20GHz:



21GHz:



22GHz:

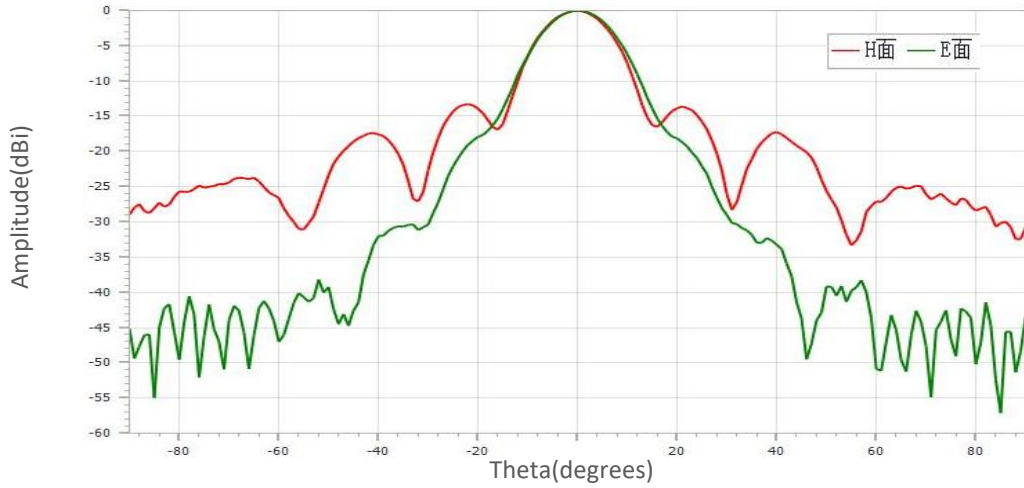


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**Typical Performance Data:**

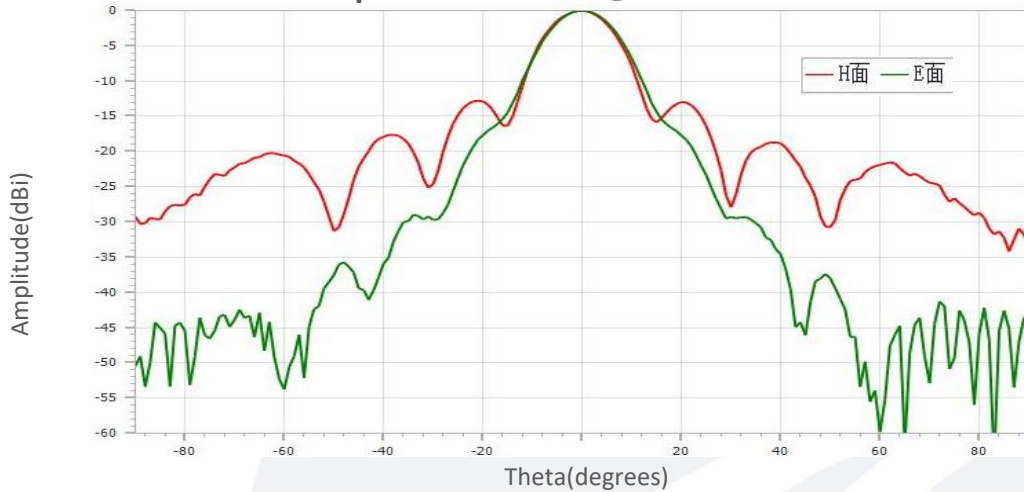
23GHz:

**Amplitude vs Theta@Gain=21.23dB**



24GHz:

**Amplitude vs Theta@Gain=22.12dB**



25GHz:

**Amplitude vs Theta@Gain=22.37dB**

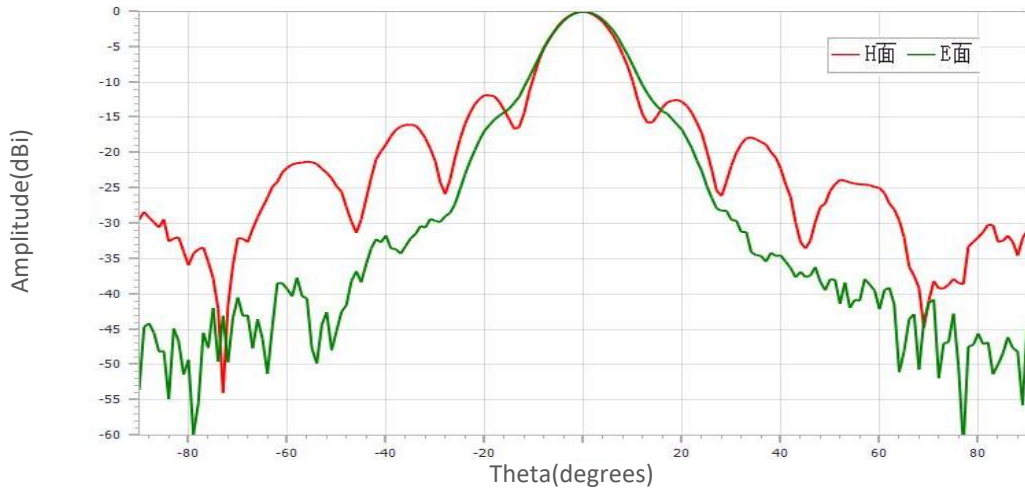


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

**Typical Performance Data:**

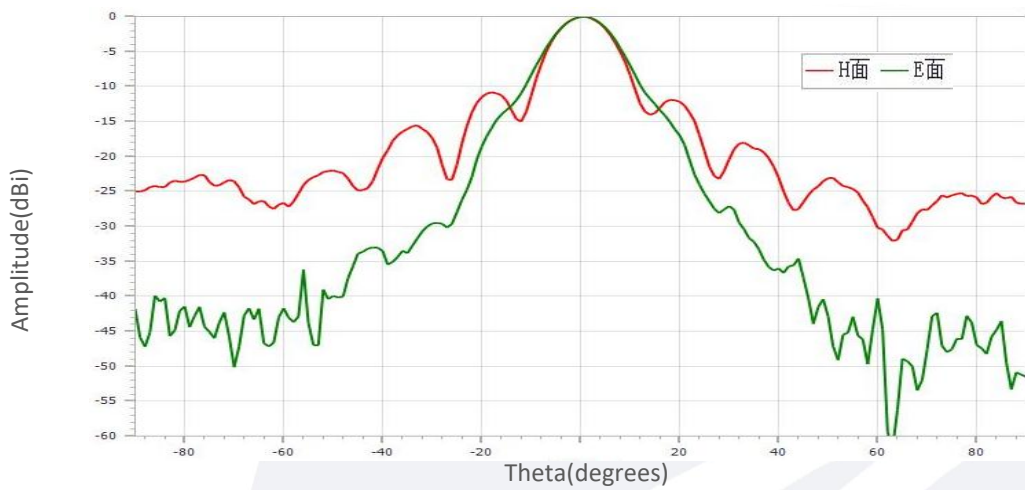
26GHz:

**Amplitude vs Theta@Gain=22.71dB**



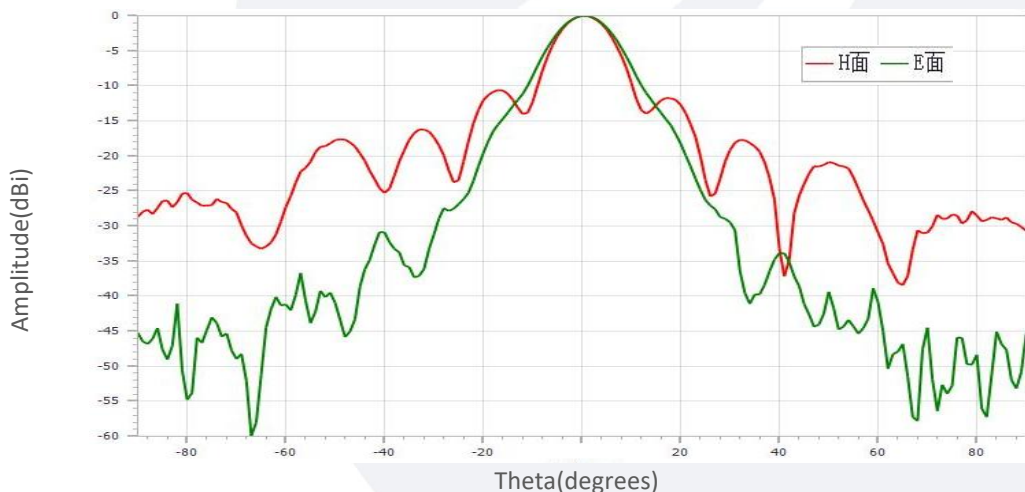
27GHz:

**Amplitude vs Theta@Gain=23.47dB**



28GHz:

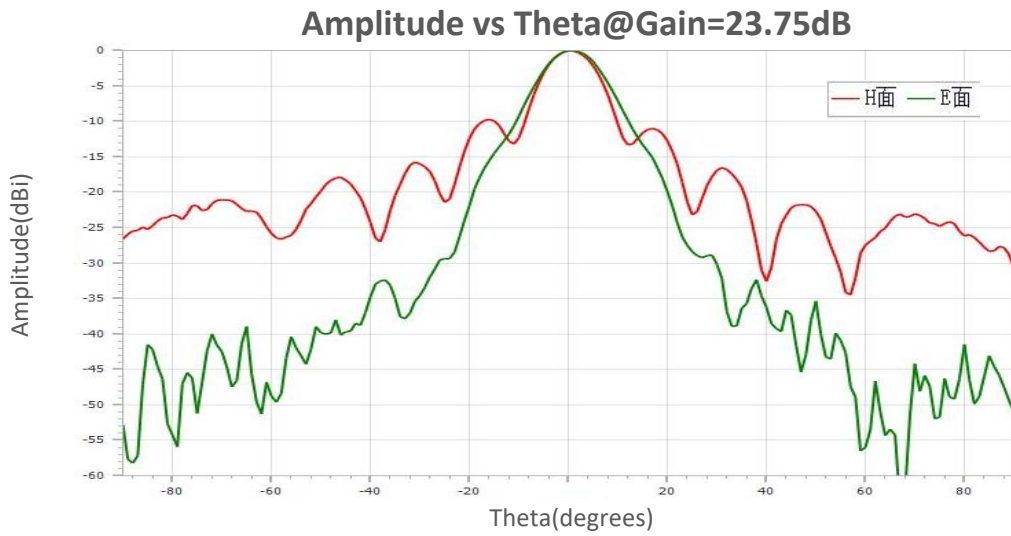
**Amplitude vs Theta@Gain=23.52dB**



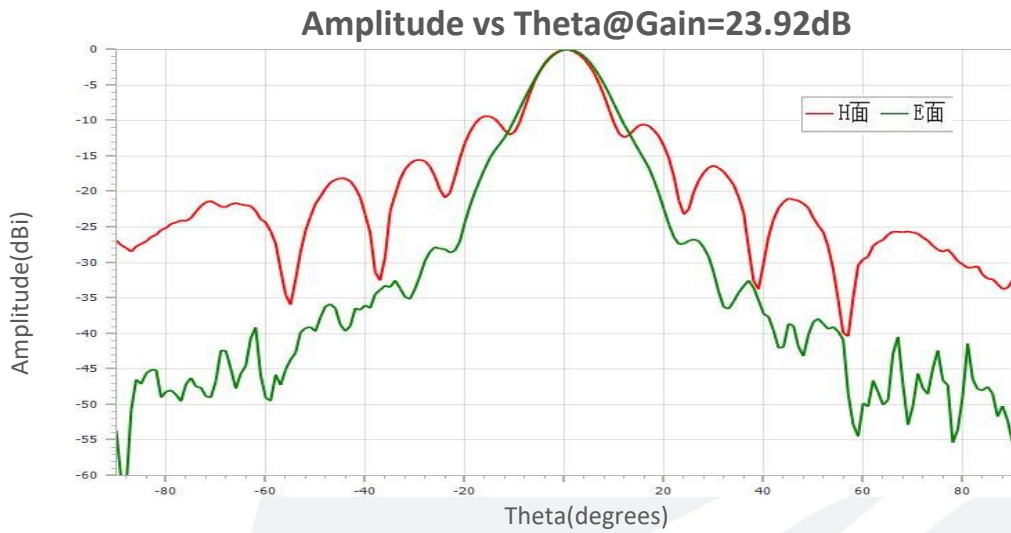
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

**Typical Performance Data:**

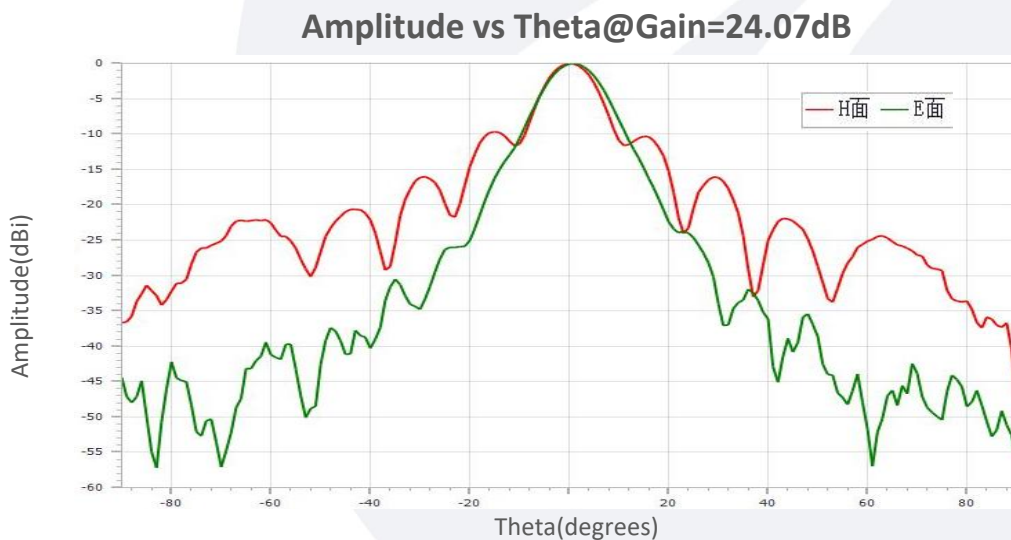
29GHz:



30GHz:



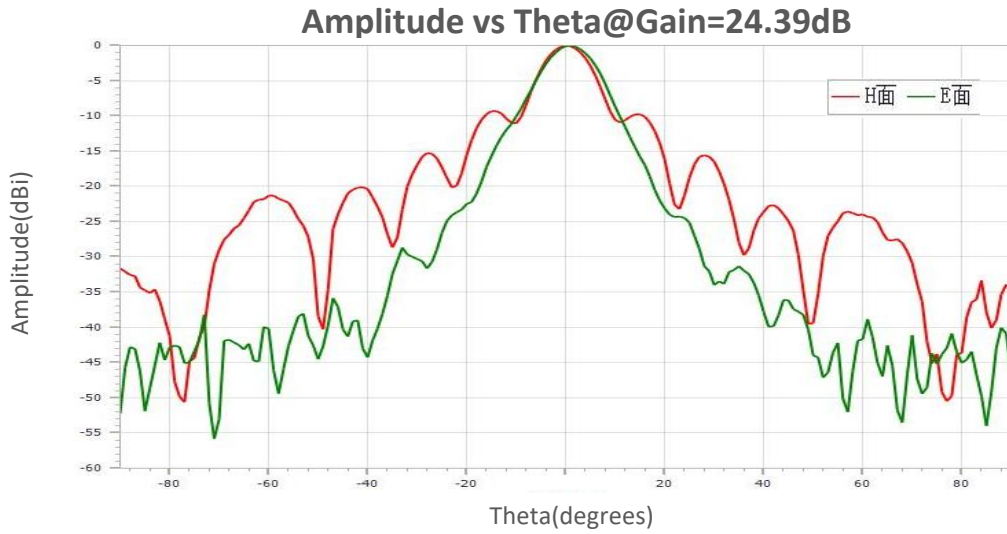
31GHz:



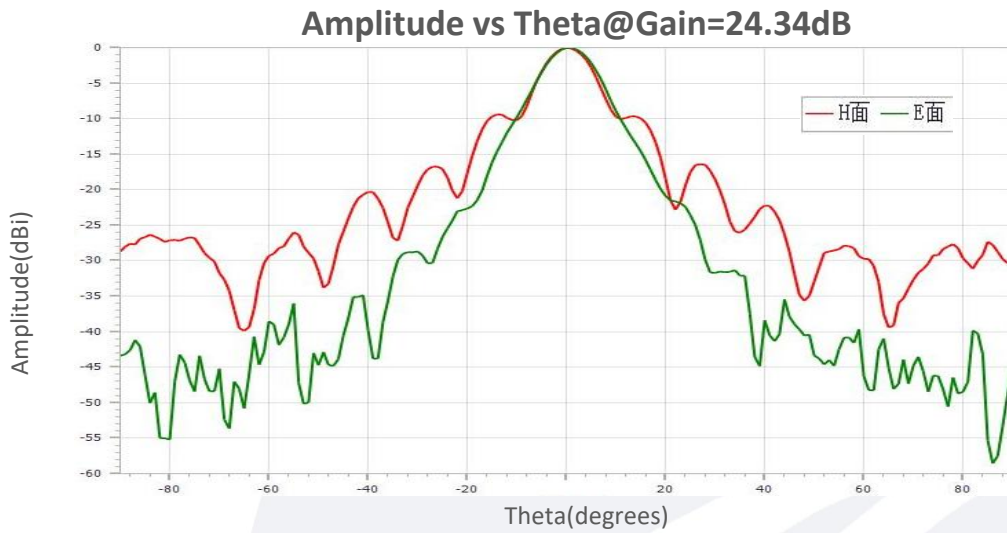
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**Typical Performance Data:**

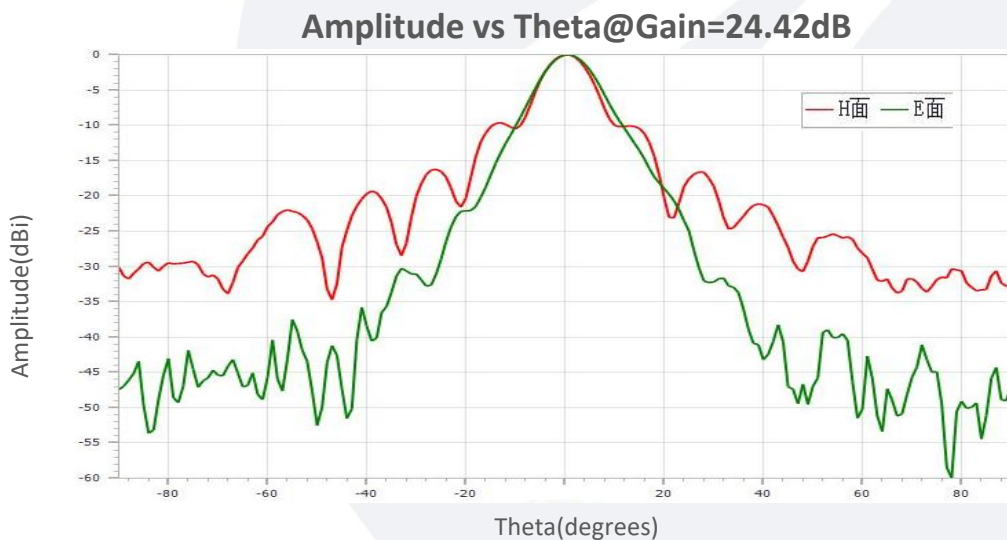
32GHz:



33GHz:



34GHz:

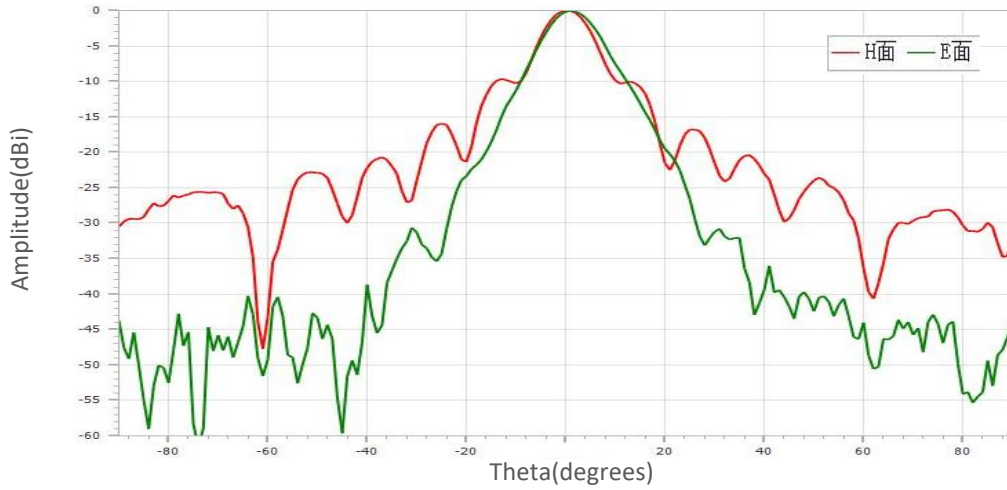


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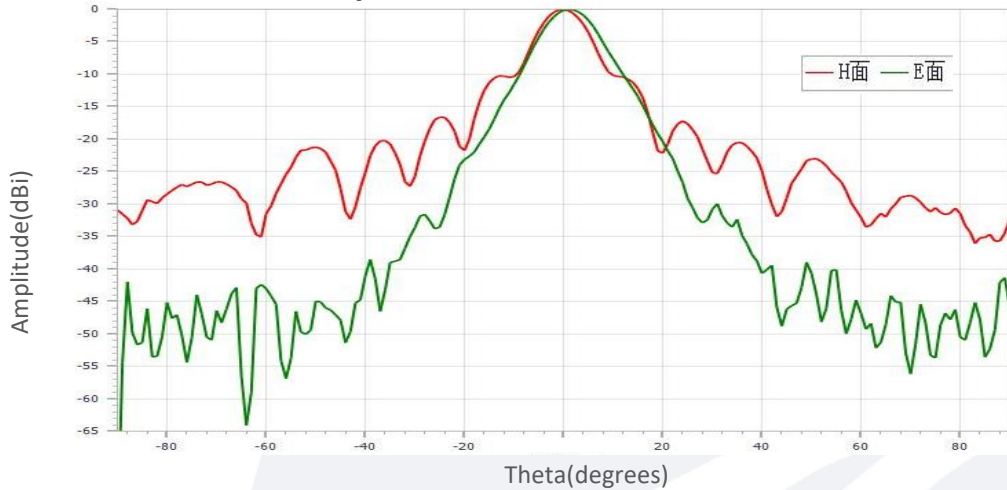
35GHz:

**Amplitude vs Theta@Gain=24.89dB**



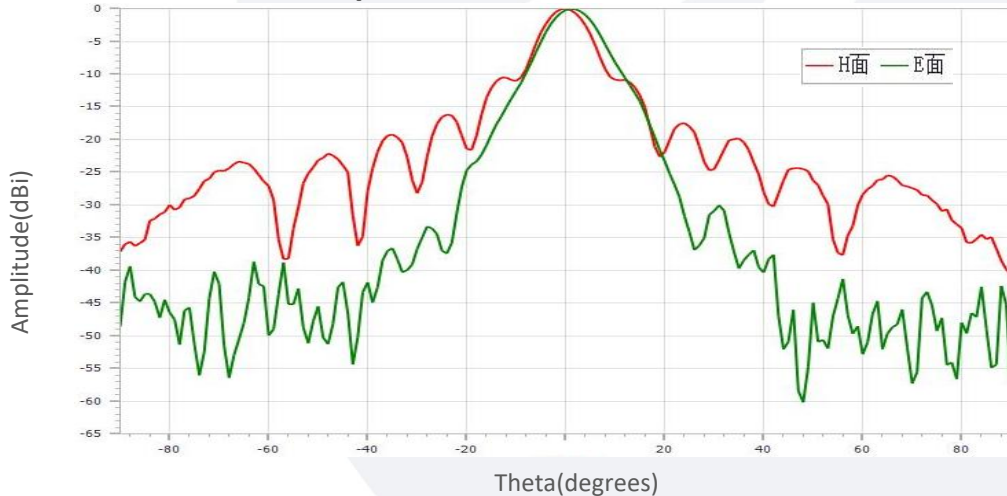
36GHz:

**Amplitude vs Theta@Gain=24.88dB**



37GHz:

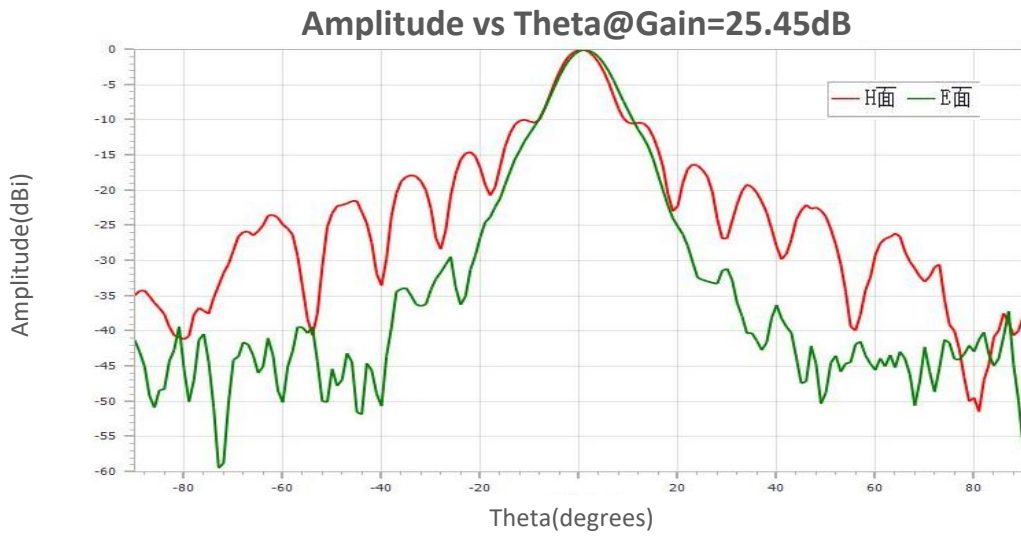
**Amplitude vs Theta@Gain=25.52dB**



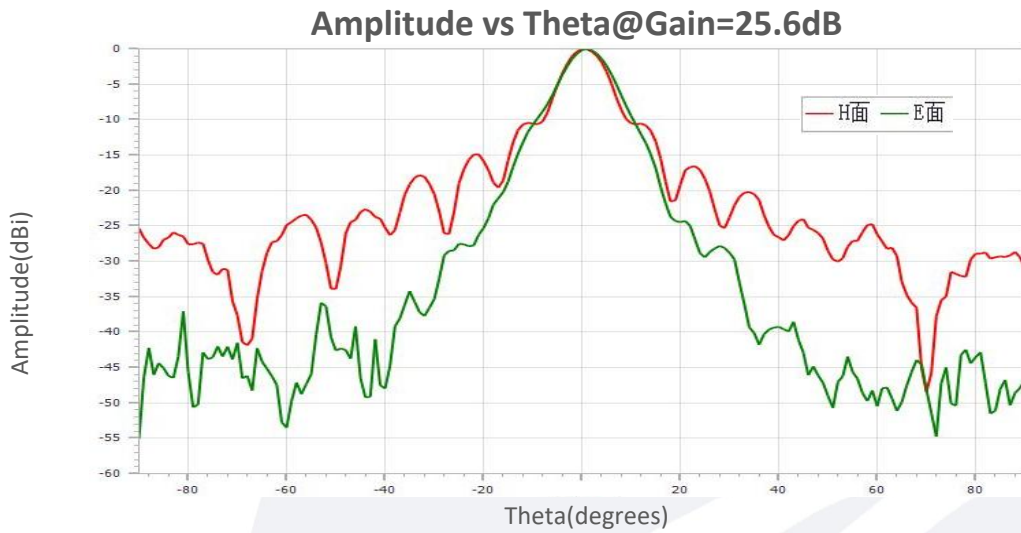
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**Typical Performance Data:**

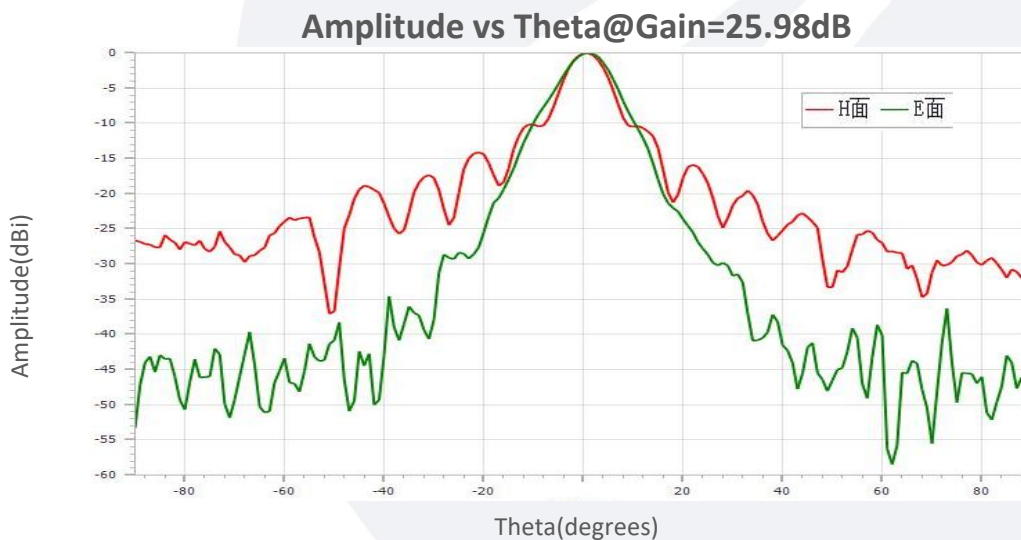
38GHz:



39GHz:



40GHz:



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