

Standard Gain Horn Antenna

WR-4.3/170-260GHz/25dBi Typ, Gain

Model:TL-4SHA25

TL-4SHA25 is a standard gain horn antenna that operates from 170 GHz to 260GHz. The antenna offers 25 dBi nominal gain. The input of this antenna is a WR-4.3 waveguide with UG-387/U-M anti-cocking flange. 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 170 to 260 GHz
- Linear Polarization
- Good Impedance Match

Applications:

- Antenna Ranges
- Antenna Gain Measurements
- System Setups

电气特性 Electrical Characteristics:

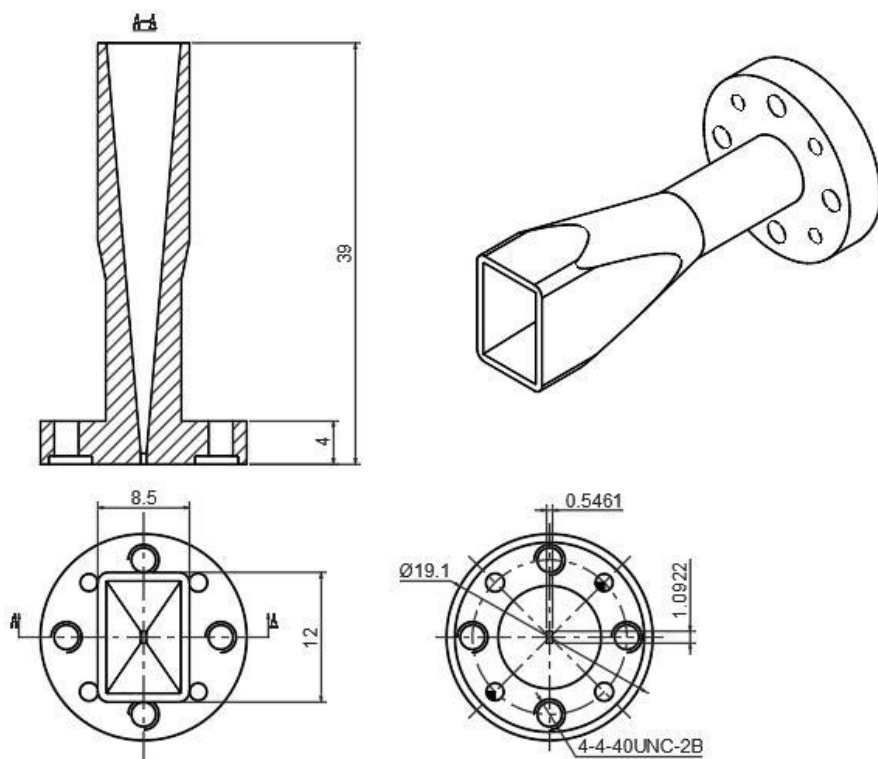
参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency Range	170		260	GHz
增益 Gain		25		dBi
极化方式 Polarization mode	Linear			
驻波 Input VSWR			1.15	:1
输出形式 Output mode	APF4			
3dB波束宽度 Antenna Beamwidth		10		°

环境和机械特性 Envirionmental And Physical Characteristics:

类型 Description	参数 Parameter	单位 Units
材质 Material	Brass	
接口 Connectors	WR-4.3/UG-387/U	
尺寸 Size	Ø19.1*39	mm
重量 Weight	20	g

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



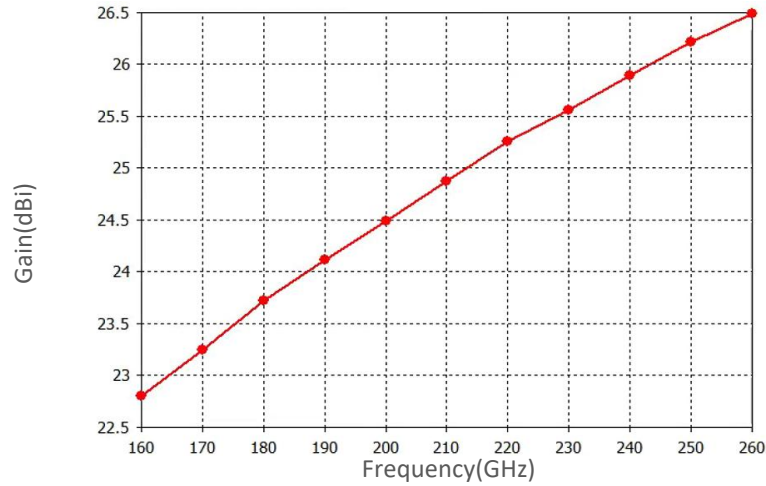
ESD Protection: Strictly
adhere to ESD precautions
to prevent electrostatic
damage.

订货信息 Ordering Information:

标准型号 Base Number	描述 Description	版本号 Revision
TL-4SHA25	Standard Gain Horn Antenna, 170-260GHz, Gain: 25dBi Typ.	Rev.1.0

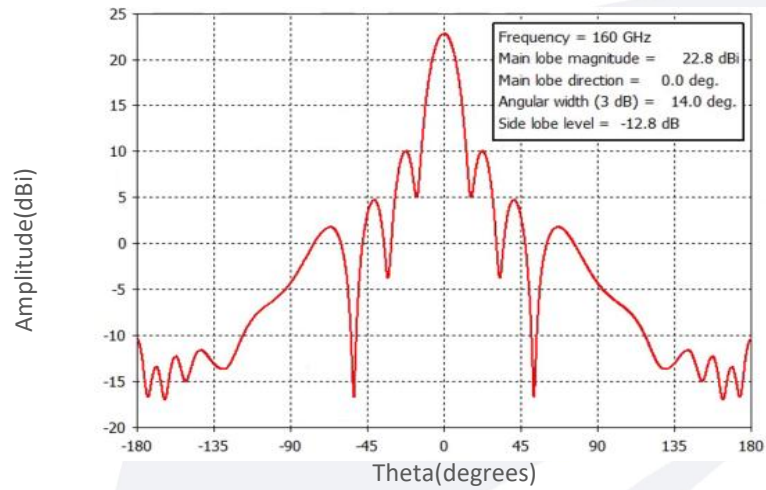
典型曲线 Typical Performance Data:

Gain vs Frequency



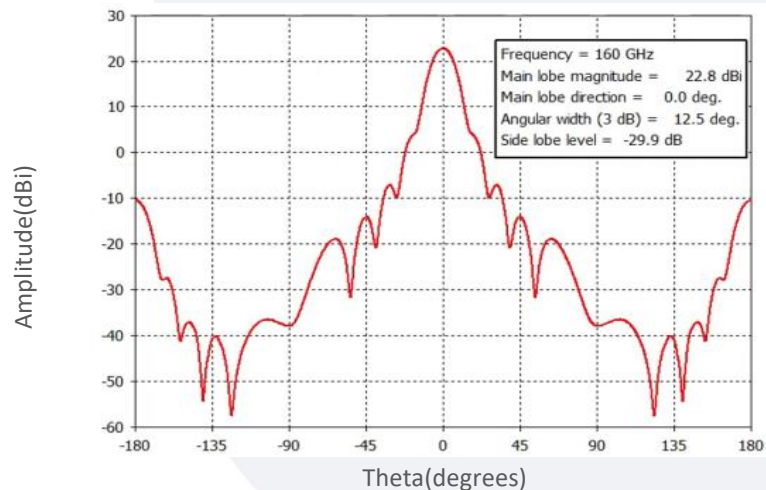
E plane, 160GHz, Gain=22.8dB:

Amplitude vs Theta



H plane, 160GHz, Gain=22.8dB:

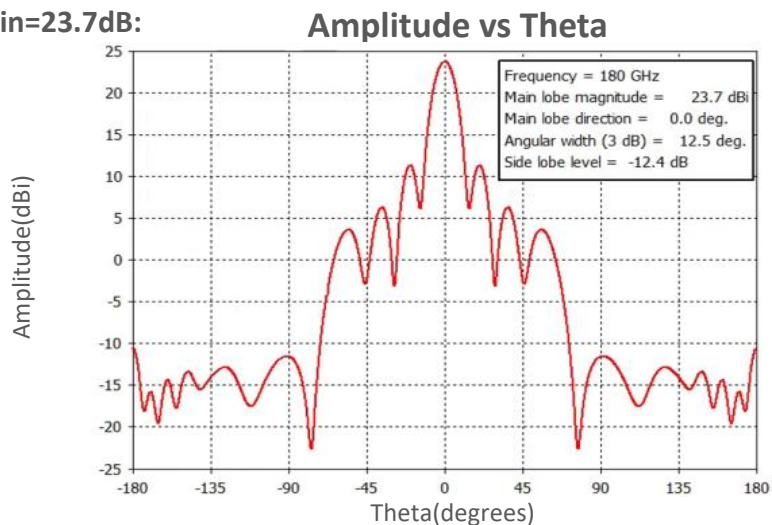
Amplitude vs Theta



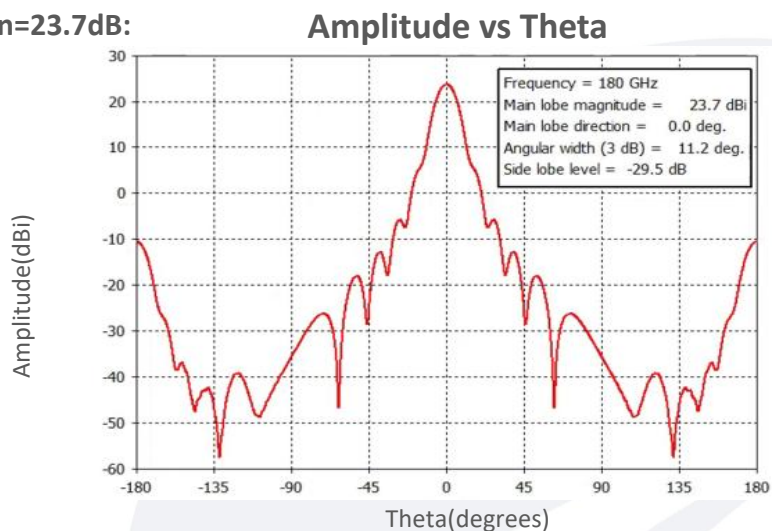
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

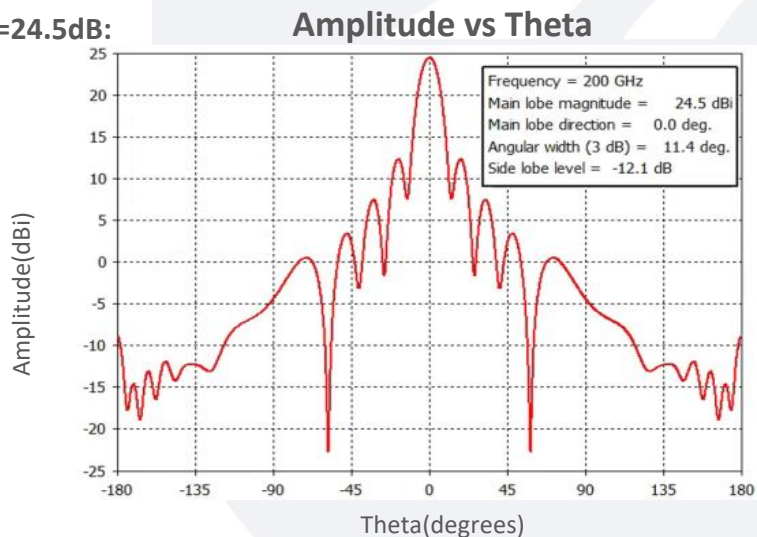
E plane, 180GHz, Gain=23.7dB:



H plane, 180GHz, Gain=23.7dB:



E plane, 200GHz, Gain=24.5dB:

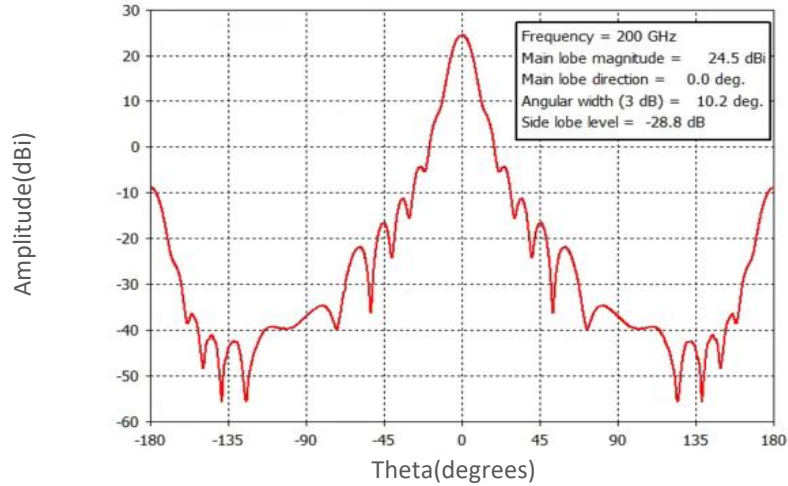


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典型曲线 Typical Performance Data:

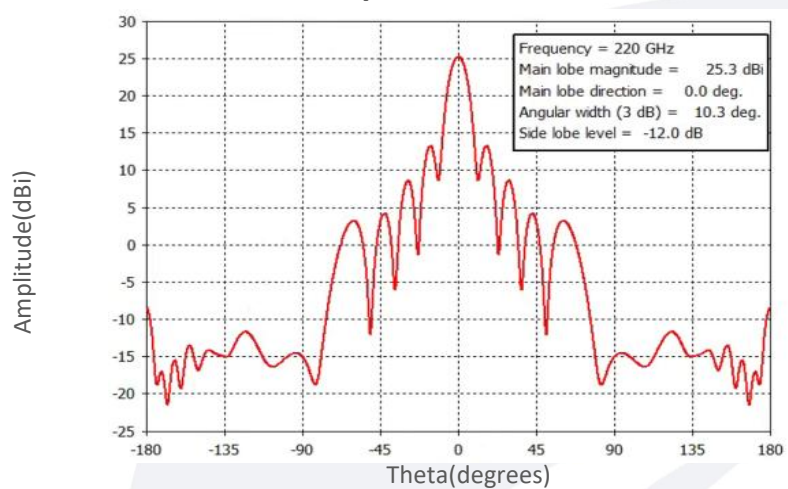
H plane, 200GHz, Gain=24.5dB:

Amplitude vs Theta



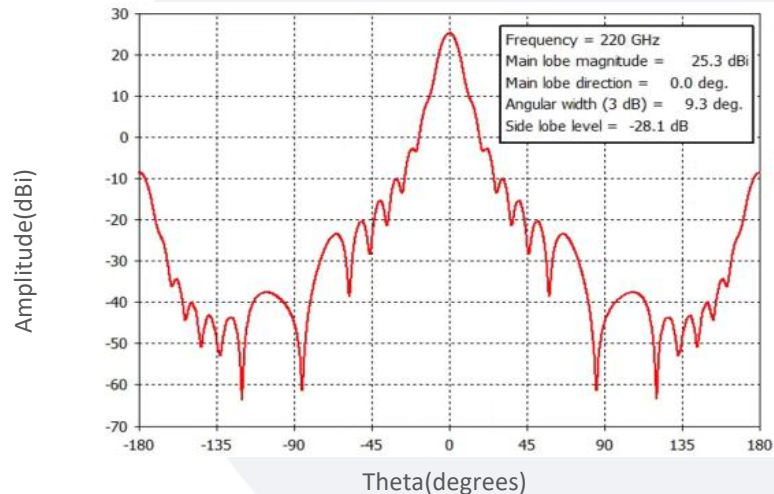
E plane, 220GHz, Gain=25.3dB:

Amplitude vs Theta



H plane, 220GHz, Gain=25.3dB:

Amplitude vs Theta

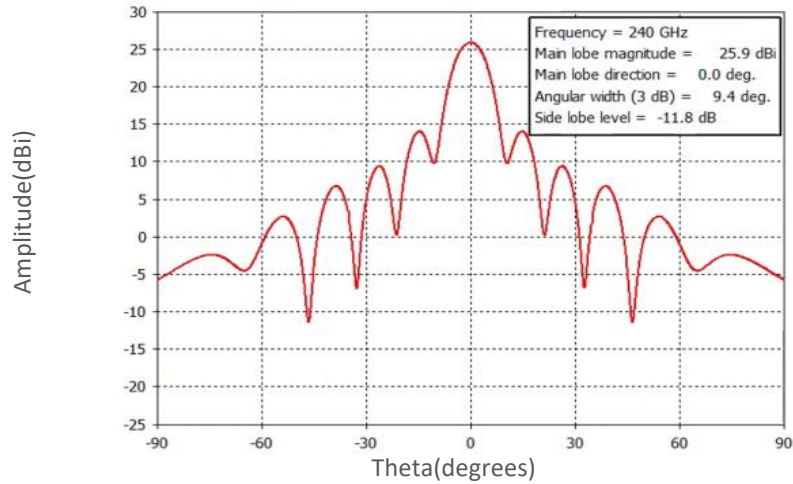


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

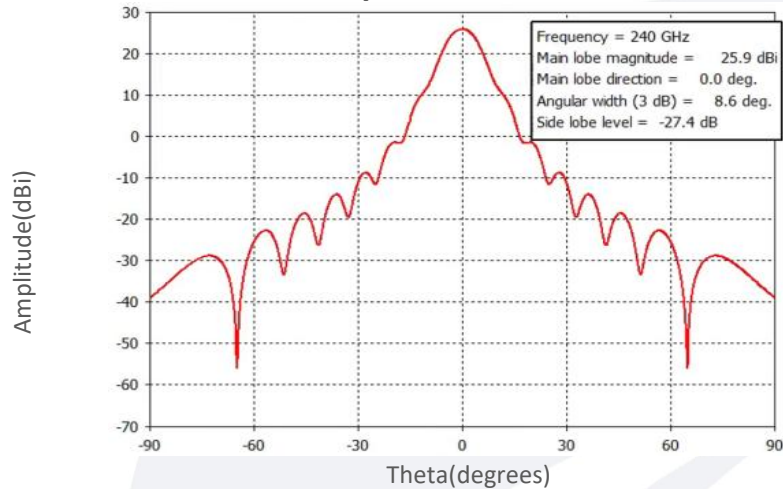
E plane, 240GHz, Gain=25.9dB:

Amplitude vs Theta



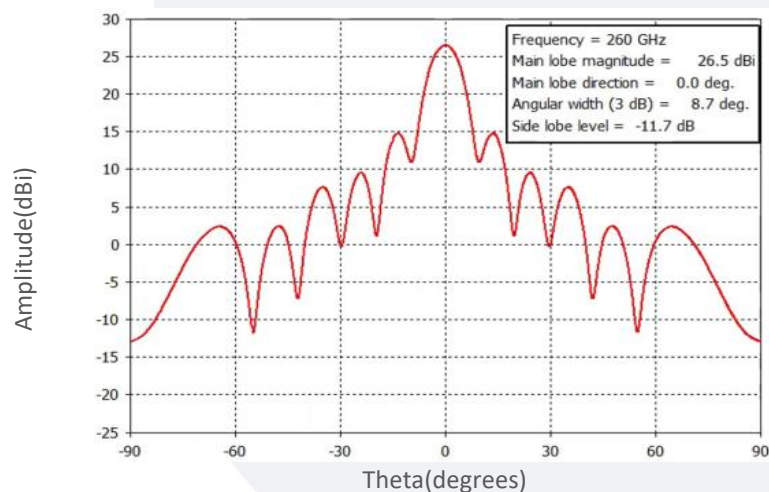
H plane, 240GHz, Gain=25.9dB:

Amplitude vs Theta



E plane, 260GHz, Gain=26.5dB:

Amplitude vs Theta

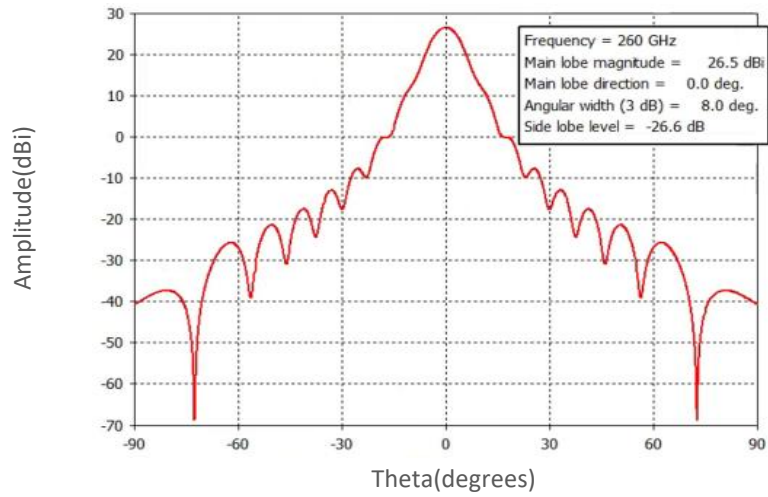


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典型曲线 Typical Performance Data:

H plane, 260GHz, Gain=26.5dB:

Amplitude vs Theta



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