

SAH-1832731060-470-S1

K band Choke Flange Feed Horn Antenna, 18 to 26.5 GHz

SAH-1832731060-470-S1 is a K-band choke flange feed horn antenna that operates from 18 to 26.5 GHz. The antenna offers a 10 dBi nominal gain, 60 degree typical half power beamwidth in both E and H planes, and -25 dB typical sidelobe level for E plane and -35 dB for H Plane, respectively. The choke flange feed horn is equipped with a 0.470" diameter circular waveguide with UG-595/U flange that supports both linear and circular polarized waveforms.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	18 GHz	33 GHz	26.5 GHz
Gain		10 dBi	
3 dB Beamwidth, E-Plane @ 22 GHz		60°	
3 dB Beamwidth, H-Plane @ 22 GHz		60°	
Sidelobes, E-Plane		-25 dB	
Sidelobes, H-Plane		-35 dB	
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Antenna Port	0.470" Diameter Circular Waveguide with UG-595/U Flange
Material	Aluminum
Finish	Gold Plated
Weight	4 Oz
Outline	AH-CK10-470

ECCN

EAR99

FEATURES

- Full band Operation
- Circular Waveguide Interface
- Low Sidelobe Level
- Linear & Circular Polarizations

APPLICATIONS

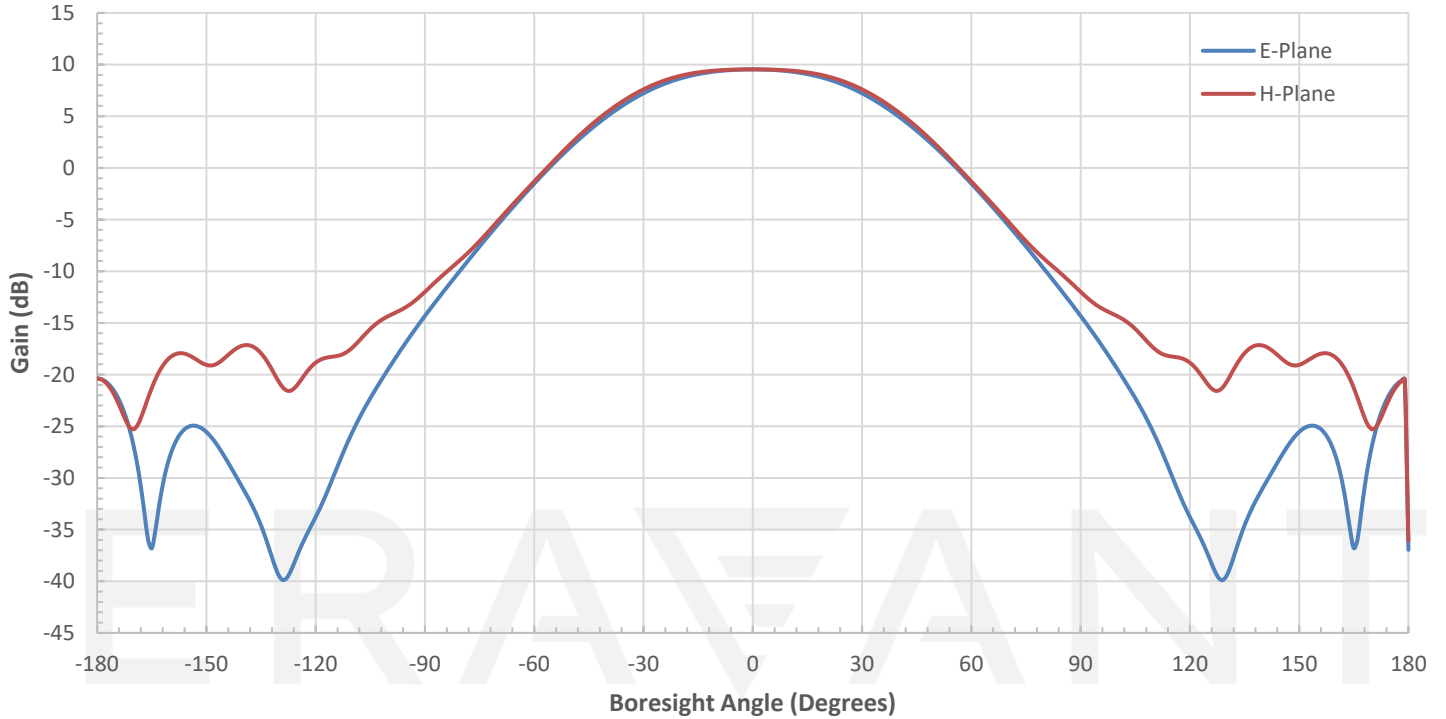
- Feed Horn for Gaussian Optical Antennas
- Feed Horn for Cassegrain Antennas
- Rapid System Setups
- Antenna Range Setups

SUPPLEMENTAL DETAILS

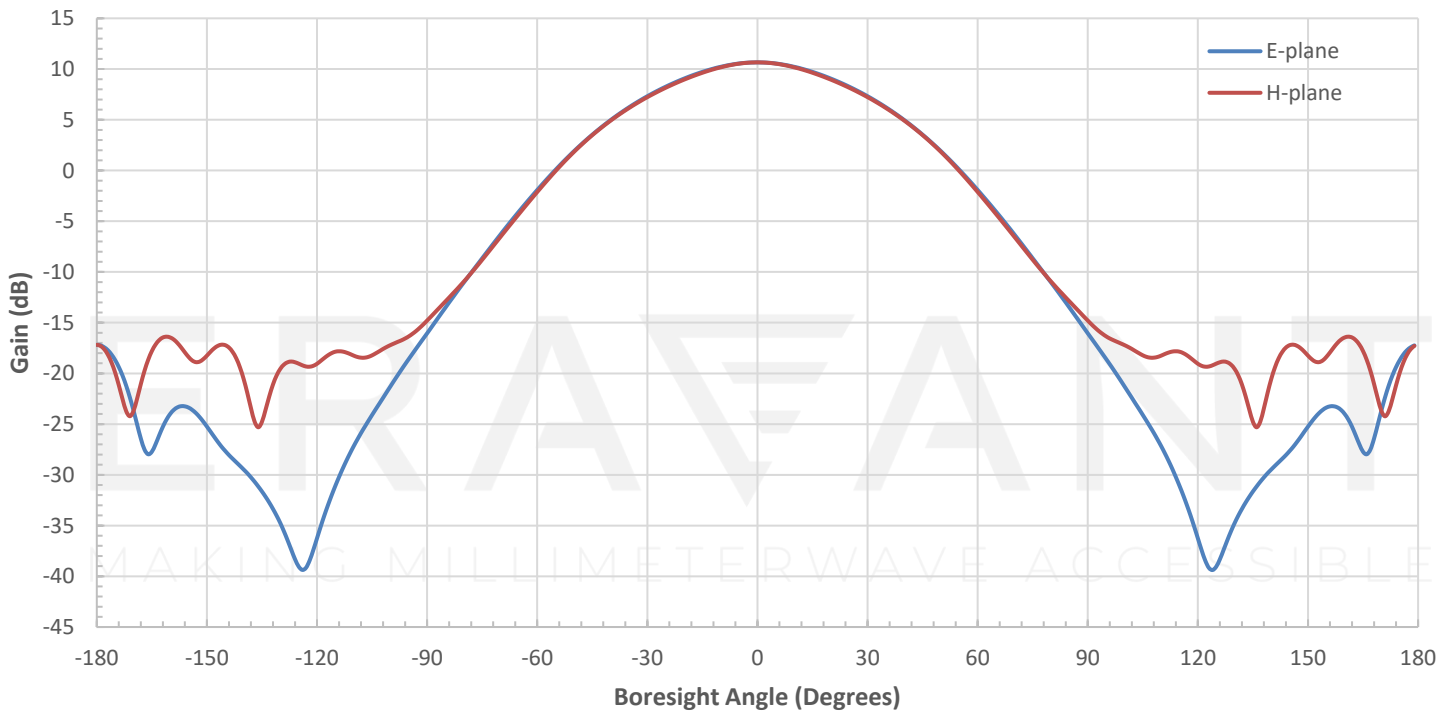


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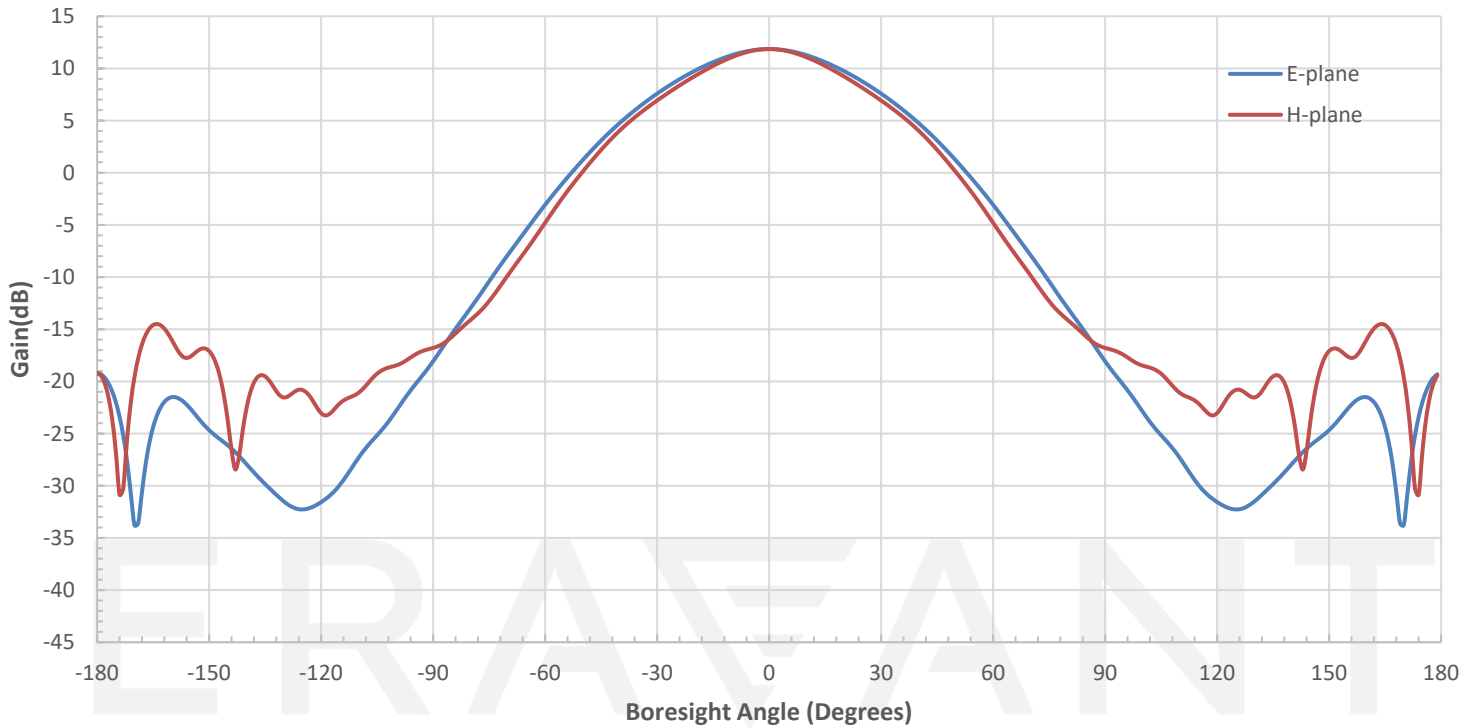
Simulated Patterns @ 18 GHz



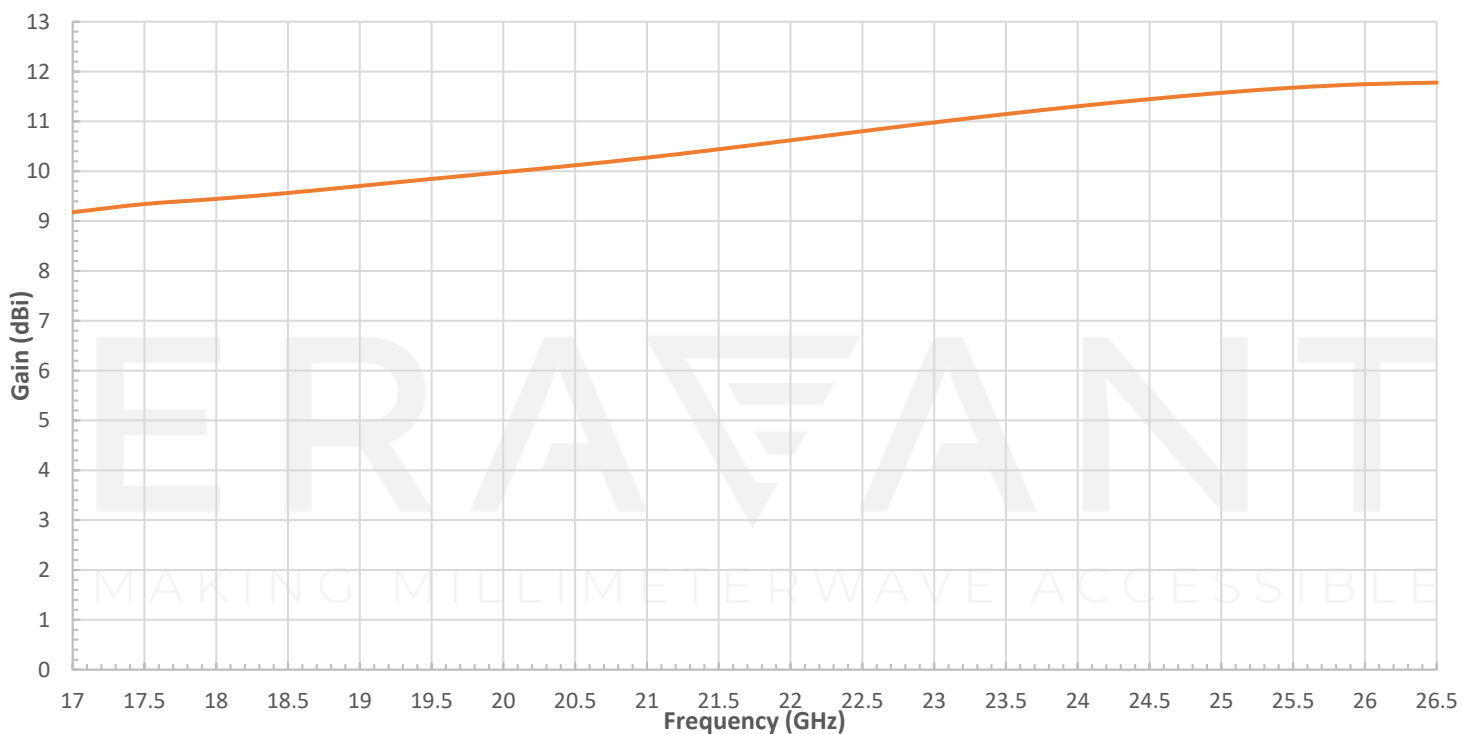
Simulated Patterns @ 22 GHz



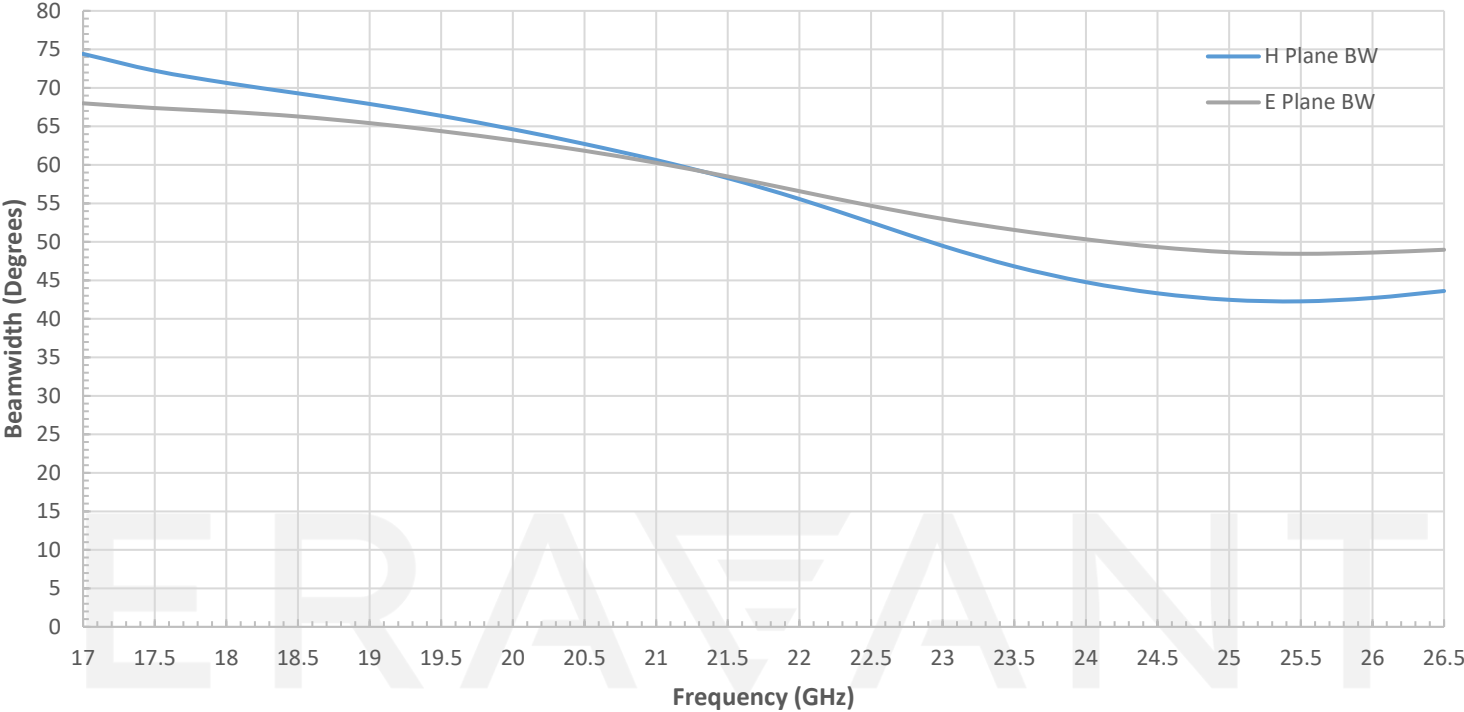
Simulated Patterns @ 26.5 GHz



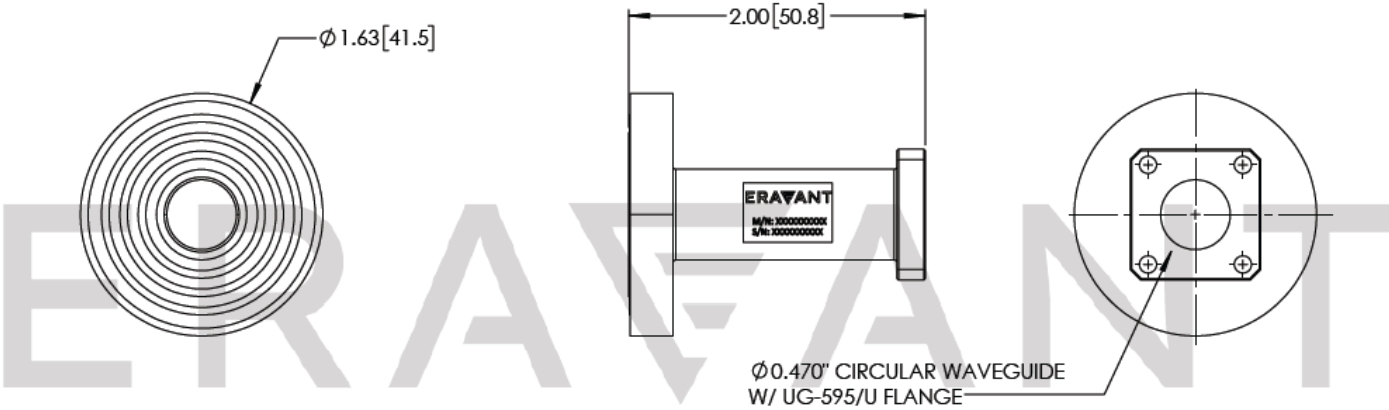
Simulated Gain vs. Frequency



Simulated Beamwidth vs. Frequency



Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the antenna will cause performance degradation and possible device damage.

