RH28-292-20



20 dBi Gain, 26.3-40 GHz, WR28 Standard Gain Horn with 2.92mm Female Port

Rev 1

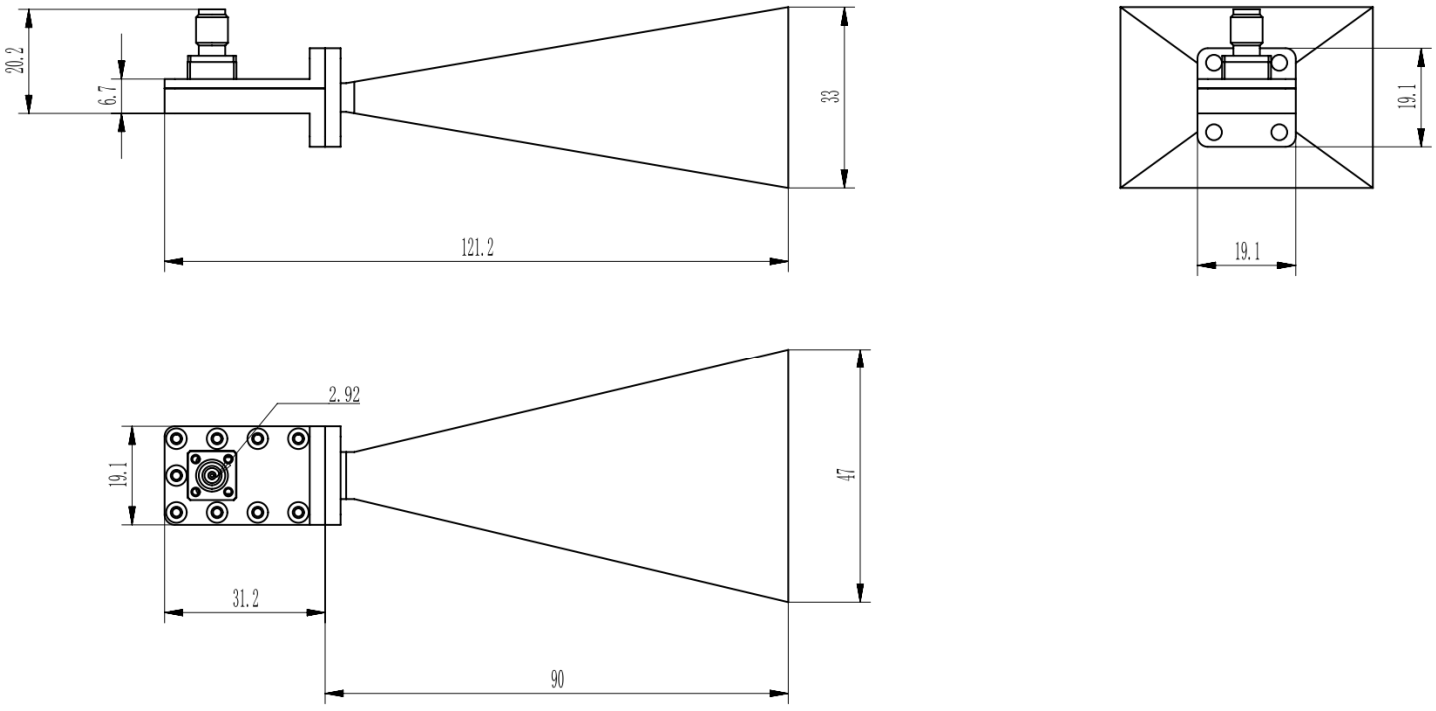
Electrical

Frequency Range	26.3-40 GHz
Norminal Gain	20 dBi
Polarization	Linear
VSWR	1.3 max
3dB Beamwidth	E-Plane: 11.9~17.2 deg, H-Plane: 11.6~17.7 deg
Operating Temperature	-40℃~+70℃

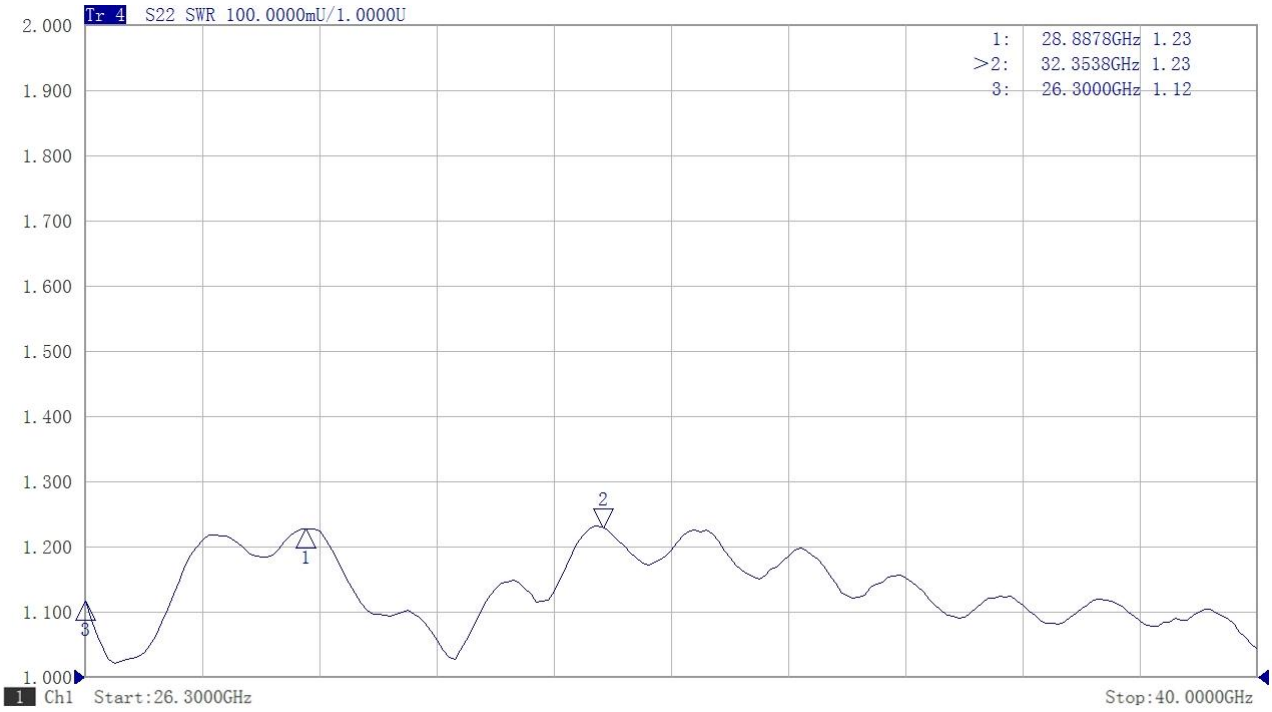
Mechanical

Waveguide Size	WR28
Flange Type	UBR320 Square Cover Flange
Body Material and Finish	Copper, Painted
RF Connector	2.92mm Female
Net Weight	115g

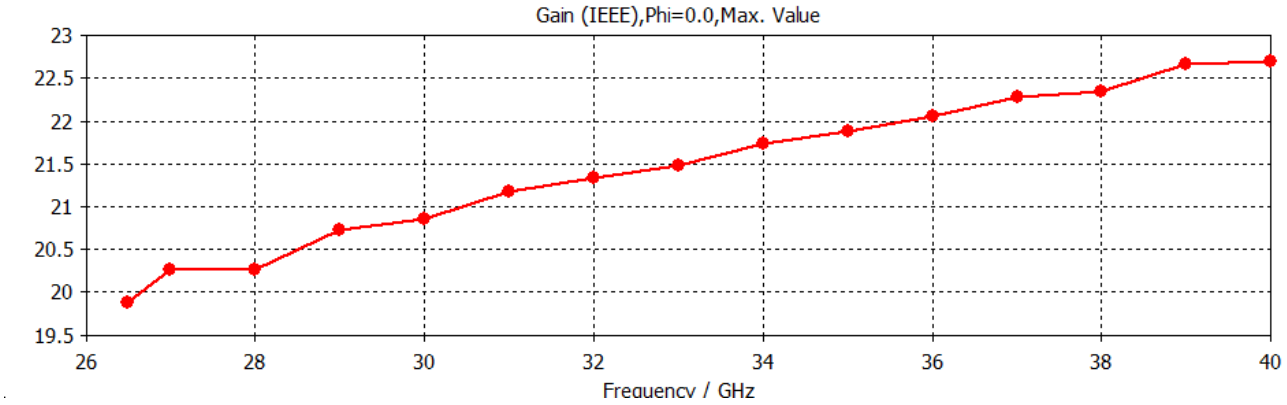
Dimensions(mm)



Typical Test Data

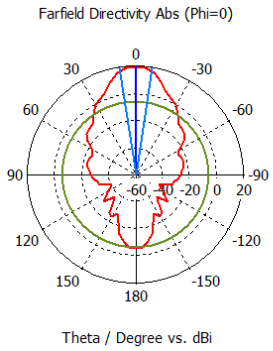


Gain



Simulated Antenna Patterns

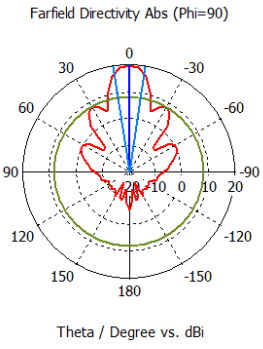
26.5GHz E-Plane



farfield (f=26.5) [1]

Frequency = 26.5
Main lobe magnitude = 20.0 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 17.2 deg.
Side lobe level = -25.9 dB

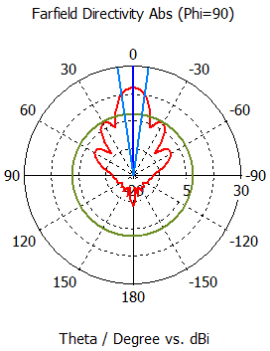
H-Plane



farfield (f=26.5) [1]

Frequency = 26.5
Main lobe magnitude = 20.0 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 17.7 deg.
Side lobe level = -11.8 dB

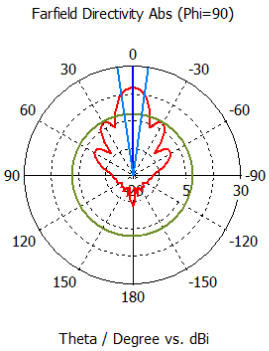
28GHz E-Plane



farfield (f=28) [1]

Frequency = 28
Main lobe magnitude = 20.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 16.7 deg.
Side lobe level = -12.3 dB

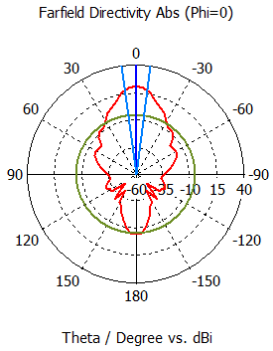
H-Plane



farfield (f=28) [1]

Frequency = 28
Main lobe magnitude = 20.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 16.7 deg.
Side lobe level = -12.3 dB

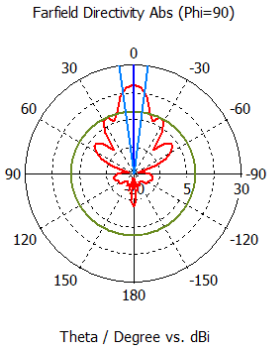
30GHz E-Plane



farfield (f=30) [1]

Frequency = 30
Main lobe magnitude = 21.0 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 15.0 deg.
Side lobe level = -26.0 dB

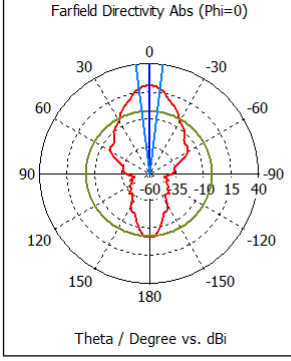
H-Plane



farfield (f=30) [1]

Frequency = 30
Main lobe magnitude = 21.0 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 15.4 deg.
Side lobe level = -12.2 dB

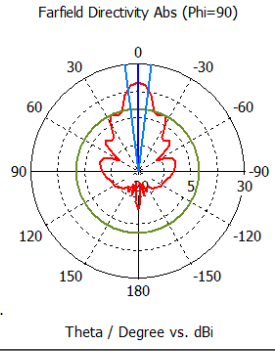
32GHz E-Plane



farfield (f=32) [1]

Frequency = 32
Main lobe magnitude = 21.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.1 deg.
Side lobe level = -23.6 dB

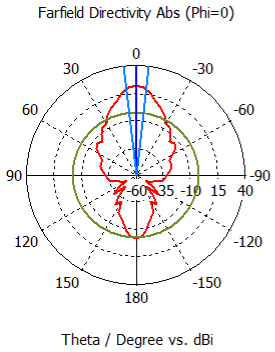
H-Plane



farfield (f=32) [1]

Frequency = 32
Main lobe magnitude = 21.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.3 deg.
Side lobe level = -12.2 dB

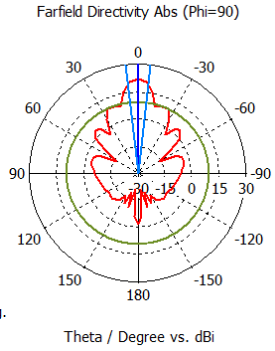
34GHz E-Plane



farfield (f=34) [1]

Frequency = 34
Main lobe magnitude = 21.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 13.4 deg.
Side lobe level = -24.2 dB

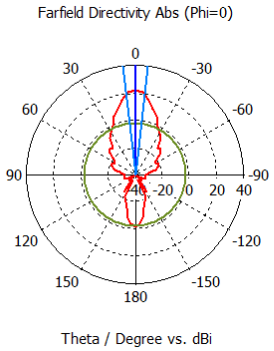
H-Plane



farfield (f=34) [1]

Frequency = 34
Main lobe magnitude = 21.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 13.5 deg.
Side lobe level = -12.4 dB

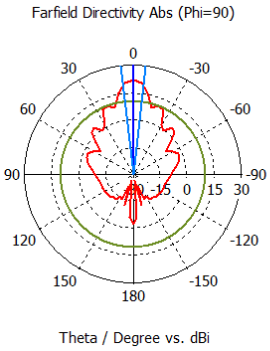
36GHz E-Plane



farfield (f=36) [1]

Frequency = 36
Main lobe magnitude = 22.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 12.8 deg.
Side lobe level = -24.6 dB

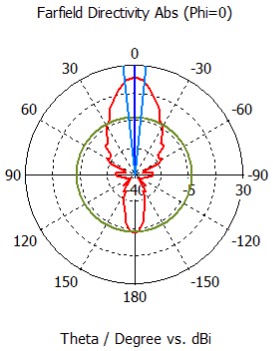
H-Plane



farfield (f=36) [1]

Frequency = 36
Main lobe magnitude = 22.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 12.9 deg.
Side lobe level = -11.9 dB

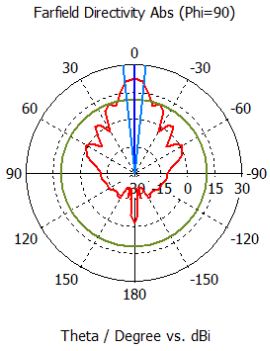
38GHz E-Plane



farfield (f=38) [1]

Frequency = 38
Main lobe magnitude = 22.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 12.3 deg.
Side lobe level = -25.3 dB

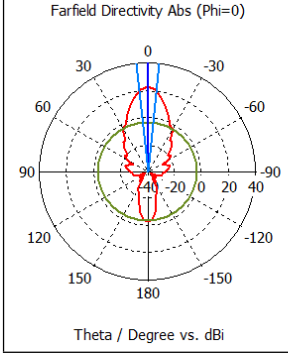
H-Plane



farfield (f=38) [1]

Frequency = 38
Main lobe magnitude = 22.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 12.3 deg.
Side lobe level = -11.6 dB

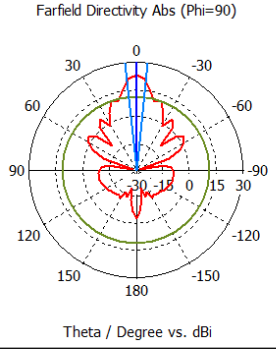
40GHz E-Plane



farfield (f=40) [1]

Frequency = 40
Main lobe magnitude = 23.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 11.9 deg.
Side lobe level = -26.3 dB

H-Plane



farfield (f=40) [1]

Frequency = 40
Main lobe magnitude = 23.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 11.6 deg.
Side lobe level = -12.0 dB