RH229-SMA-10

10 dBi Gain, 3.22-4.9 GHz, WR229 Standard Gain Horn with SMA Female Port

Rev 2

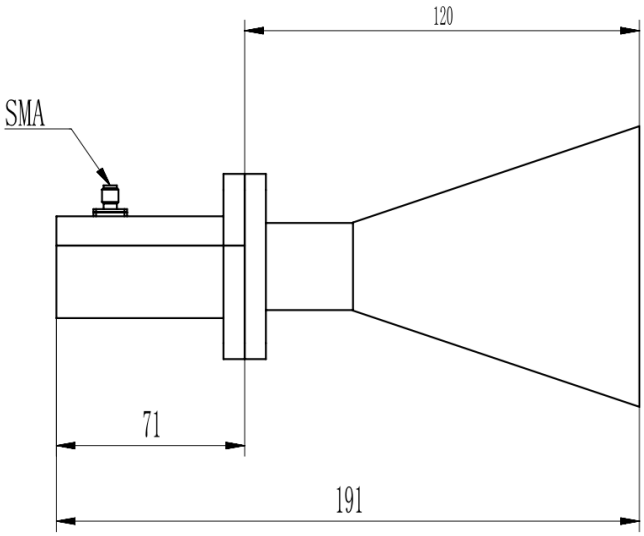
Electrical

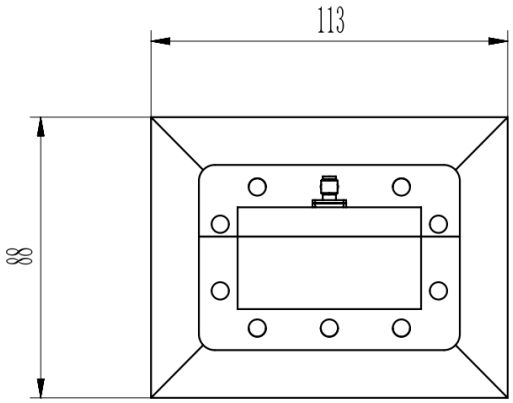
Frequency Range	3.22-4.9 GHz
Norminal Gain	10 dBi
Polarization	Linear
VSWR	1.4 max
3dB Beamwidth	E-Plane: 36.1~54.2 deg, H-Plane: 33.6~56.1 deg
Operating Temperature	-40℃~+70℃

Mechanical

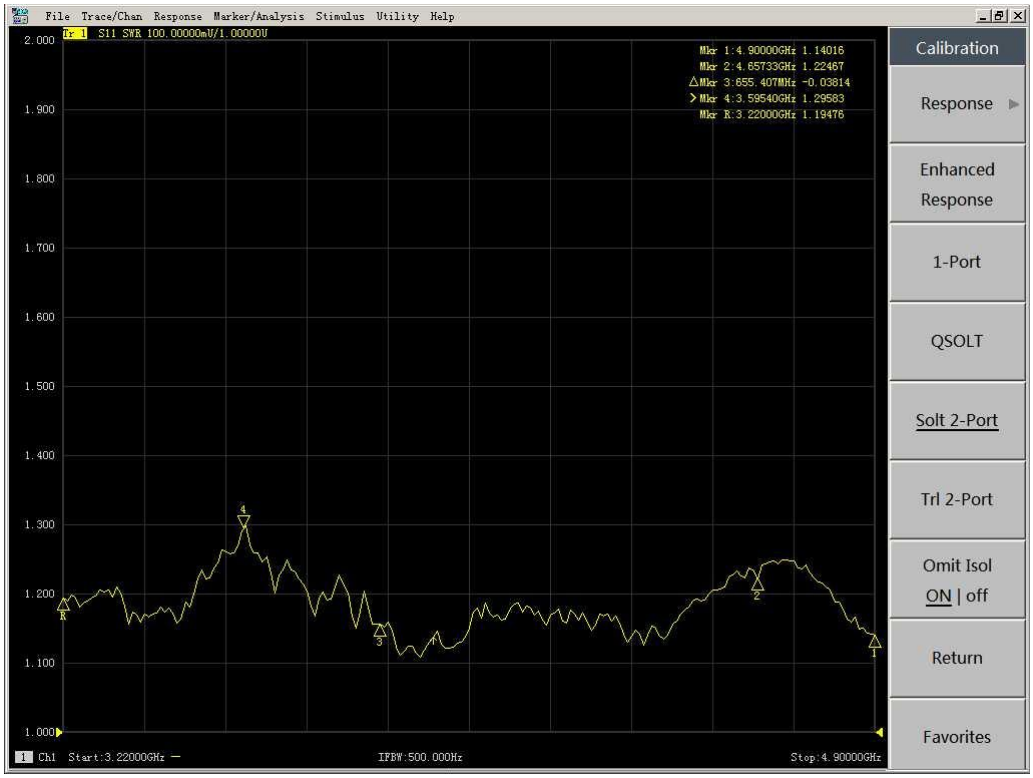
Waveguide Size	WR229
Flange Type	UDR40 Rectangular Cover Flange
Body Material and Finish	Aluminum, Painted
RF Connector	SMA Female
Net Weight	2.5kg

Dimensions(mm)

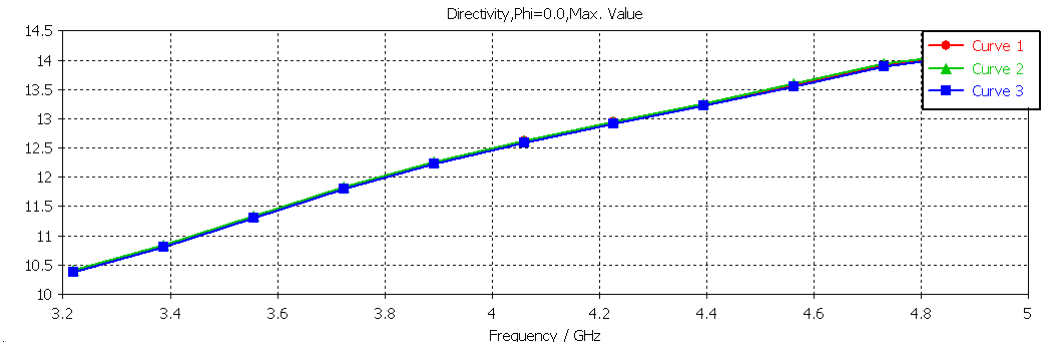




Typical VSWR

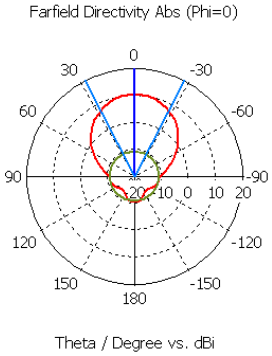


Gain



Simulated Antenna Patterns

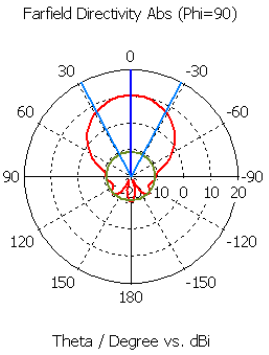
3.22GHz E-Plane



farfield (f=03.2200) [1]

Frequency = 3.22
Main lobe magnitude = 10.4 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 54.2 deg
Side lobe level = -21.1 dB

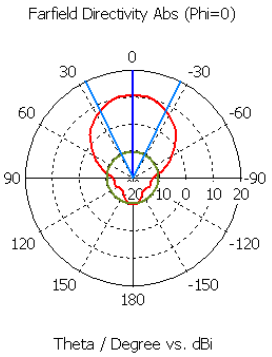
H-Plane



farfield (f=03.2200) [1]

Frequency = 3.22
Main lobe magnitude = 10.4 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 56.1 deg.
Side lobe level = -21.1 dB

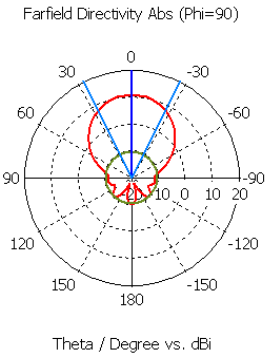
3.388GHz E-Plane



farfield (f=03.3880) [1]

Frequency = 3.388
Main lobe magnitude = 10.8 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 51.8 deg.
Side lobe level = -21.1 dB

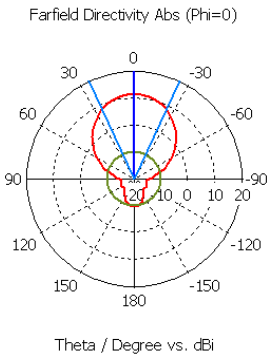
H-Plane



farfield (f=03.3880) [1]

Frequency = 3.388
Main lobe magnitude = 10.8 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 53.5 deg.
Side lobe level = -21.1 dB

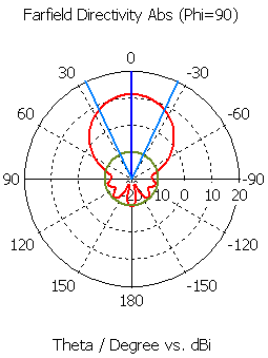
3.556GHz E-Plane



farfield (f=03.5560) [1]

Frequency = 3.556
Main lobe magnitude = 11.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 49.2 deg.
Side lobe level = -21.0 dB

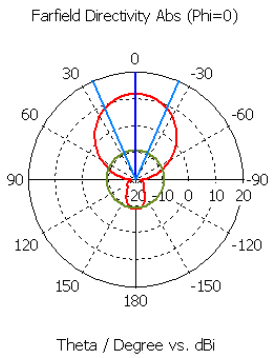
H-Plane



farfield (f=03.5560) [1]

Frequency = 3.556
Main lobe magnitude = 11.3 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 50.4 deg.
Side lobe level = -21.0 dB

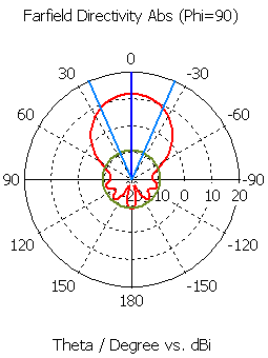
3.724GHz E-Plane



farfield (f=03.7240) [1]

Frequency = 3.724
Main lobe magnitude = 11.8 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 46.9 deg.
Side lobe level = -20.8 dB

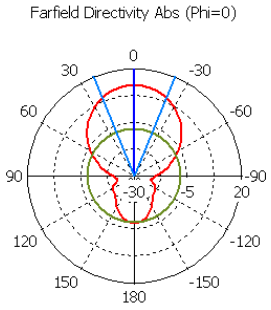
H-Plane



farfield (f=03.7240) [1]

Frequency = 3.724
Main lobe magnitude = 11.8 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 47.6 deg.
Side lobe level = -20.8 dB

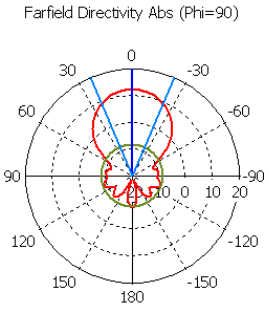
3.892GHz E-Plane



farfield (f=03.8920) [1]

Frequency = 3.892
Main lobe magnitude = 12.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 45.0 deg.
Side lobe level = -20.5 dB

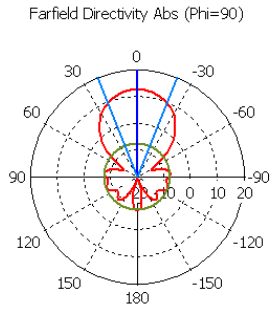
H-Plane



farfield (f=03.8920) [1]

Frequency = 3.892
Main lobe magnitude = 12.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 45.7 deg.
Side lobe level = -20.5 dB

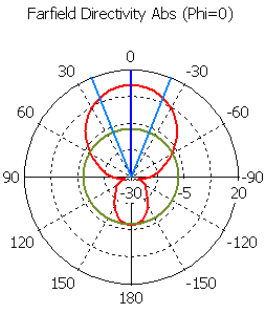
4.06GHz E-Plane



farfield (f=04.0600) [1]

Frequency = 4.06
Main lobe magnitude = 12.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 44.1 deg.
Side lobe level = -20.1 dB

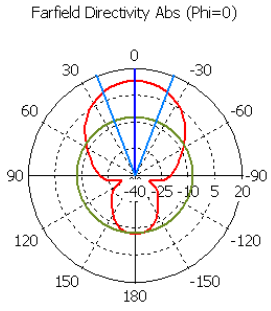
H-Plane



farfield (f=04.0600) [1]

Frequency = 4.06
Main lobe magnitude = 12.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 43.4 deg.
Side lobe level = -20.3 dB

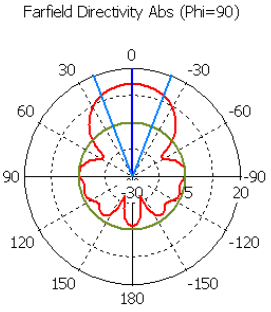
4.228GHz E-Plane



farfield (f=04.2280) [1]

Frequency = 4.228
Main lobe magnitude = 12.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 42.0 deg.
Side lobe level = -20.1 dB

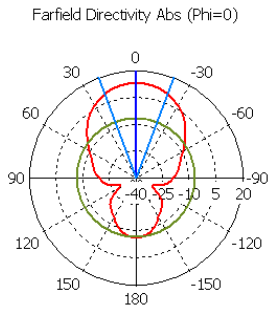
H-Plane



farfield (f=04.2280) [1]

Frequency = 4.228
Main lobe magnitude = 12.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 42.4 deg.
Side lobe level = -18.3 dB

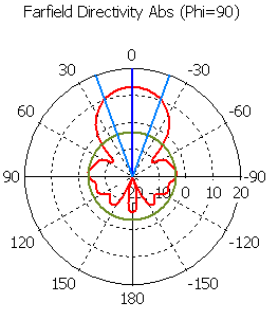
4.396GHz E-Plane



farfield (f=04.3960) [1]

Frequency = 4.396
Main lobe magnitude = 13.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 40.8 deg.
Side lobe level = -20.0 dB

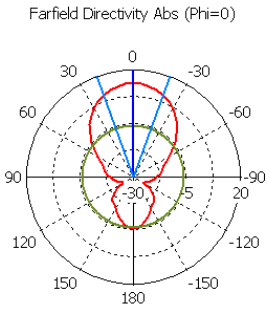
H-Plane



farfield (f=04.3960) [1]

Frequency = 4.396
Main lobe magnitude = 13.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 40.2 deg.
Side lobe level = -16.8 dB

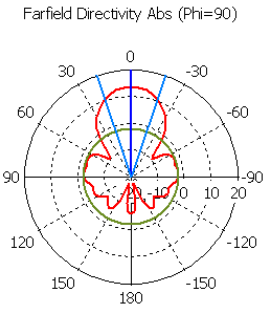
4.564GHz E-Plane



farfield (f=04.5640) [1]

Frequency = 4.564
Main lobe magnitude = 13.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 39.5 deg.
Side lobe level = -19.9 dB

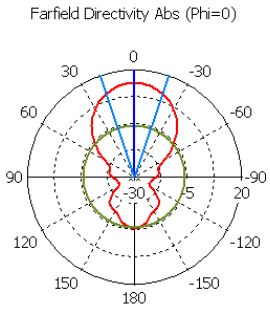
H-Plane



farfield (f=04.5640) [1]

Frequency = 4.564
Main lobe magnitude = 13.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 37.2 deg.
Side lobe level = -15.8 dB

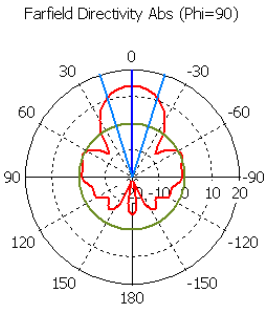
4.732GHz E-Plane



farfield (f=04.7320) [1]

Frequency = 4.732
Main lobe magnitude = 13.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 37.8 deg.
Side lobe level = -19.9 dB

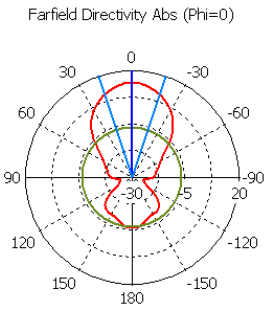
H-Plane



farfield (f=04.7320) [1]

Frequency = 4.732
Main lobe magnitude = 13.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 34.7 deg.
Side lobe level = -13.8 dB

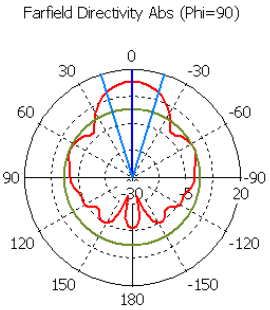
4.9GHz E-Plane



farfield (f=04.9000) [1]

Frequency = 4.9
Main lobe magnitude = 14.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 36.1 deg.
Side lobe level = -20.5 dB

H-Plane



farfield (f=04.9000) [1]

Frequency = 4.9
Main lobe magnitude = 14.1 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 33.6 deg.
Side lobe level = -12.6 dB