RH90-SMA-15

15 dBi Gain, 8.2-12.5 GHz, WR90 Standard Gain Horn with SMA Female Port

Rev 3

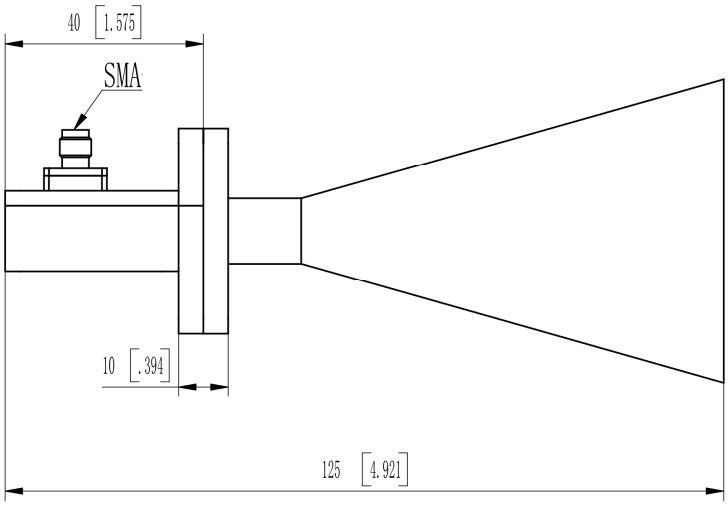
Electrical

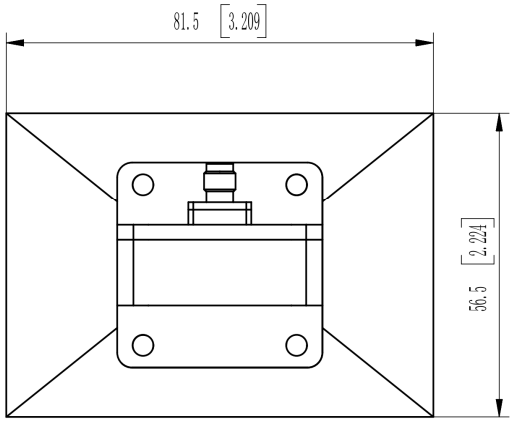
Frequency Range	8.2-12.5 GHz
Norminal Gain	15 dBi
Polarization	Linear
VSWR	1.3 max
3dB Beamwidth	E-Plane: 23.0~34.1 deg, H-Plane: 21.7~34.8 deg
Operating Temperature	-40℃~+70℃

Mechanical

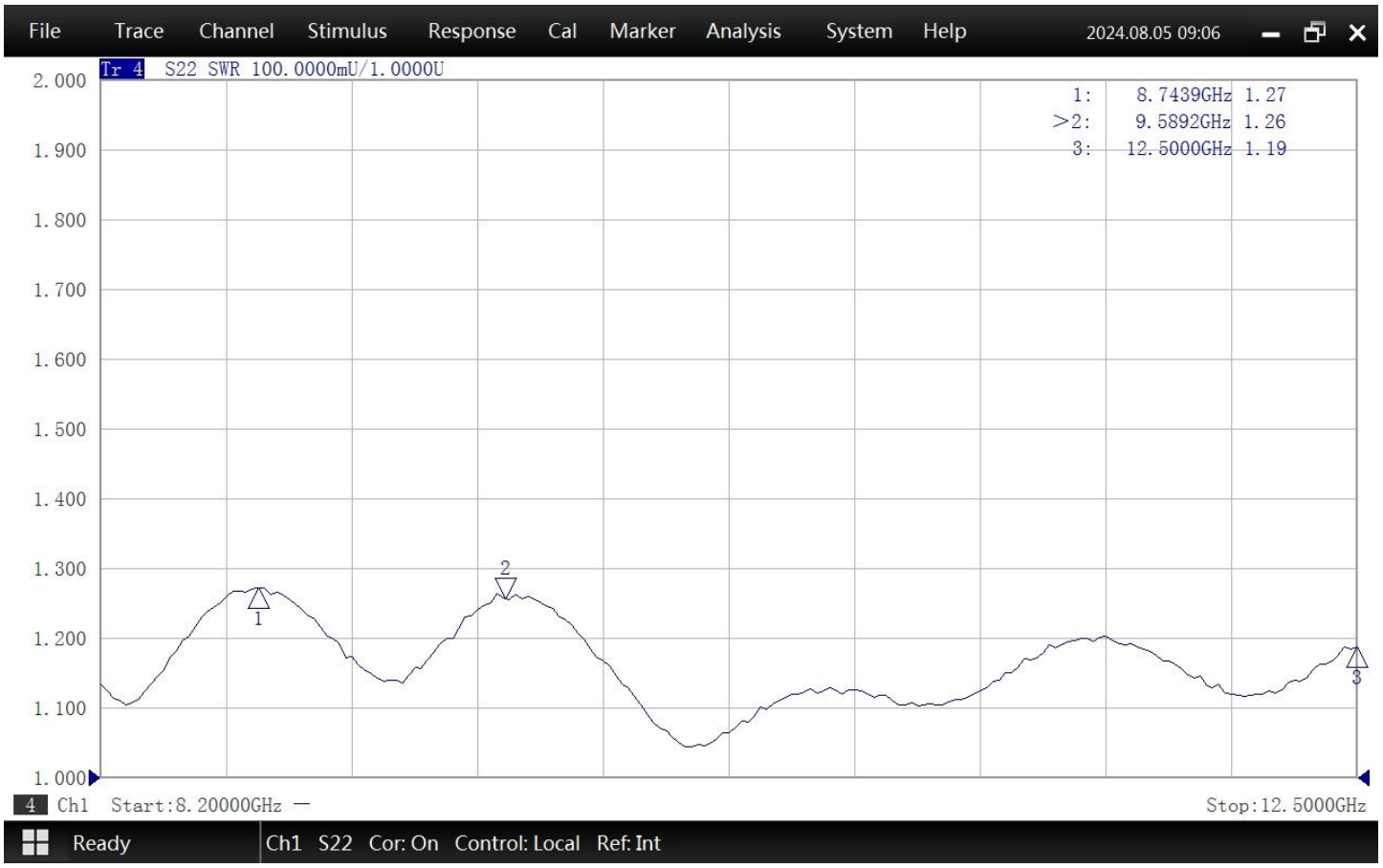
Waveguide Size	WR90
Flange Type	UBR100 Square Cover Flange
Body Material and Finish	Aluminum, Painted
RF Connector	SMA Female
Net Weight	140g

Dimensions mm[inch]

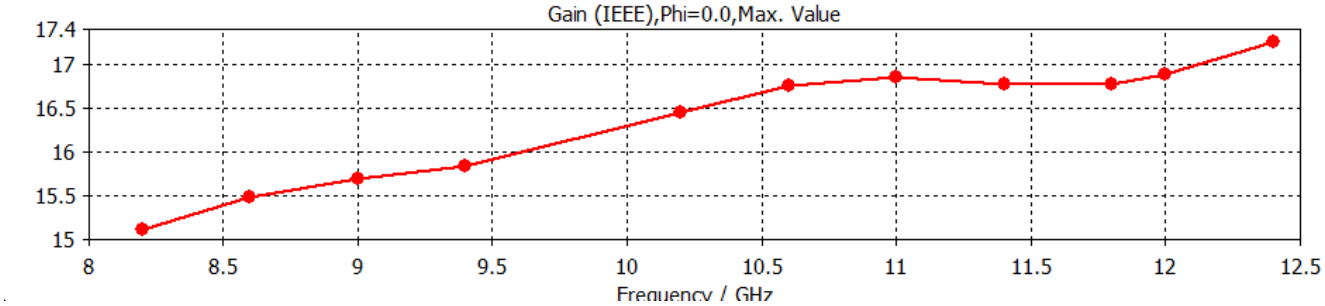




Typical VSWR

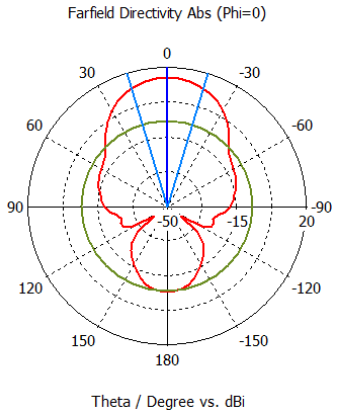


Gain



Simulated Antenna Patterns

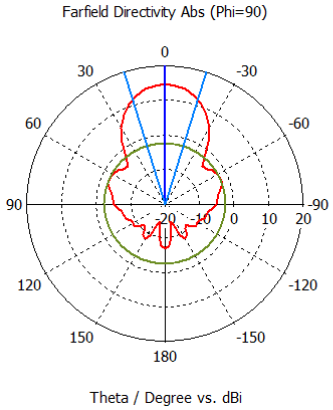
8.2GHz E-Plane



farfield (f=8.2) [1]

Frequency = 8.2
Main lobe magnitude = 14.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 34.1 deg.
Side lobe level = -21.5 dB

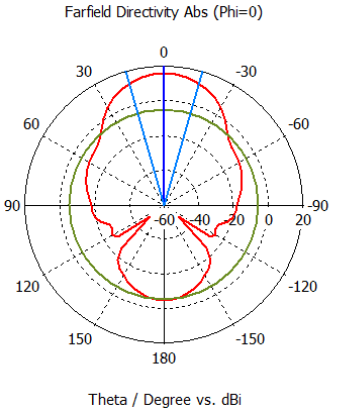
H-Plane



farfield (f=8.2) [1]

Frequency = 8.2
Main lobe magnitude = 14.6 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 34.8 deg.
Side lobe level = -16.9 dB

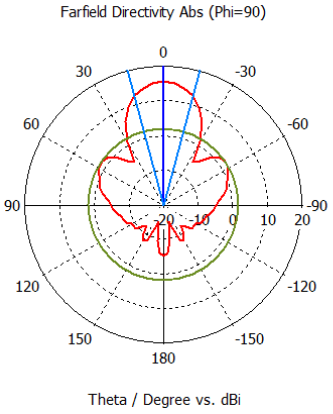
9GHz E-Plane



farfield (f=9) [1]

Frequency = 9
Main lobe magnitude = 15.4 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 32.0 deg.
Side lobe level = -20.6 dB

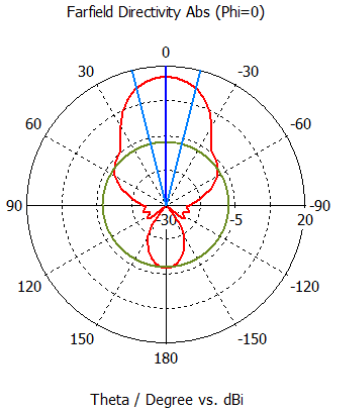
H-Plane



farfield (f=9) [1]

Frequency = 9
Main lobe magnitude = 15.4 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 30.2 deg.
Side lobe level = -13.6 dB

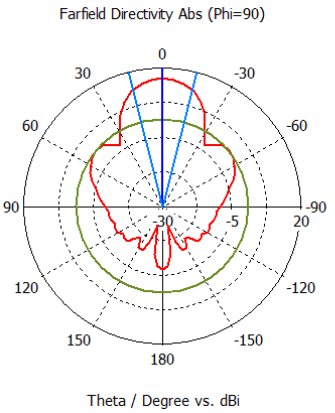
10GHz E-Plane



farfield (f=10) [1]

Frequency = 10
Main lobe magnitude = 16.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 28.8 deg.
Side lobe level = -23.5 dB

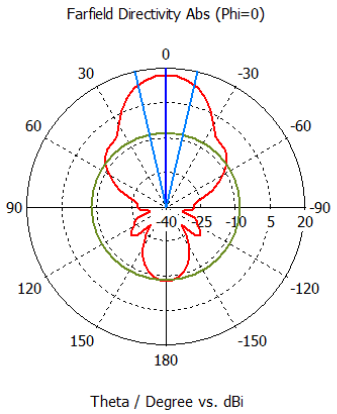
H-Plane



farfield (f=10) [1]

Frequency = 10
Main lobe magnitude = 16.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 28.3 deg.
Side lobe level = -14.9 dB

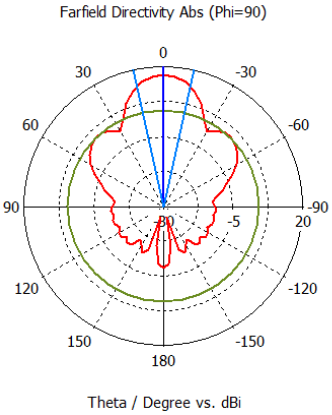
11GHz E-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 16.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 25.9 deg.
Side lobe level = -24.9 dB

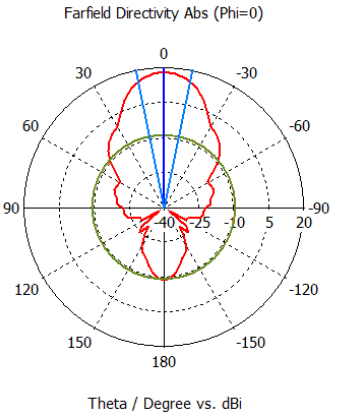
H-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 16.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 25.0 deg.
Side lobe level = -12.5 dB

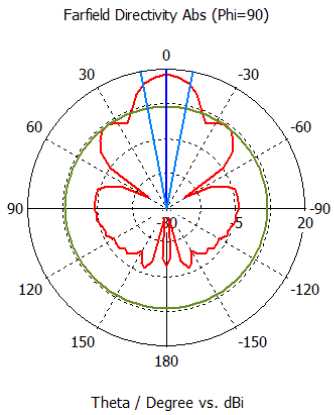
12.4GHz E-Plane



farfield (f=12.4) [1]

Frequency = 12.4
Main lobe magnitude = 17.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 23.0 deg.
Side lobe level = -26.9 dB

H-Plane



farfield (f=12.4) [1]

Frequency = 12.4
Main lobe magnitude = 17.9 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 21.7 deg.
Side lobe level = -11.3 dB