RH75-SMA-20

20 dBi Gain, 9.84-15 GHz, WR75 Standard Gain Horn with SMA Female Port

Rev 2

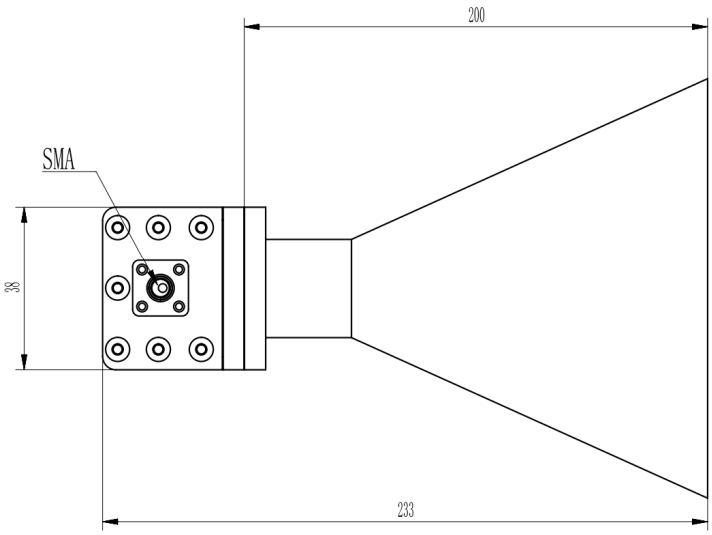
Electrical

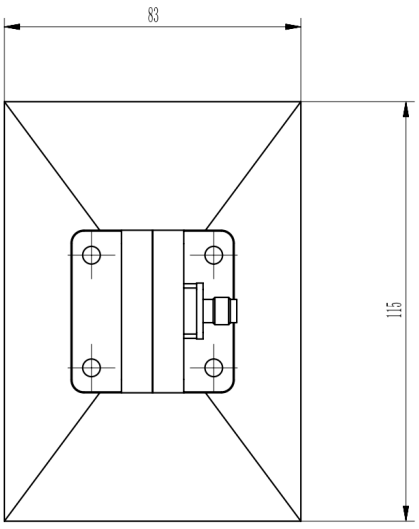
Frequency Range	9.84-15 GHz
Norminal Gain	20 dBi
Polarization	Linear
VSWR	1.2 max
3dB Beamwidth	E-Plane: 13.4~18.9 deg, H-Plane: 13.0~19.4 deg
Operating Temperature	-40℃~+70℃

Mechanical

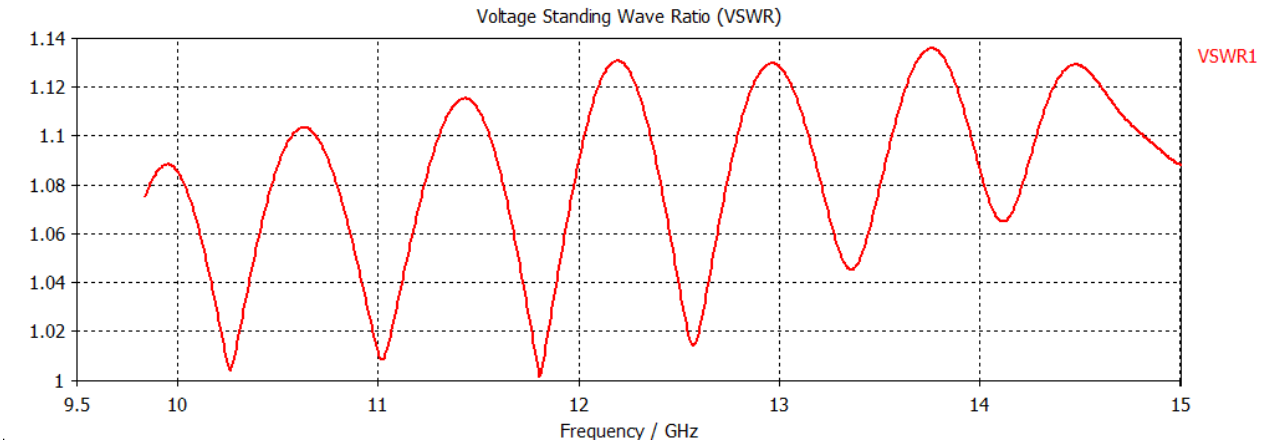
Waveguide Size	WR75
Flange Type	UBR120 Square Cover Flange
Body Material and Finish	Aluminum, Painted
RF Connector	SMA Female

Dimensions(mm)

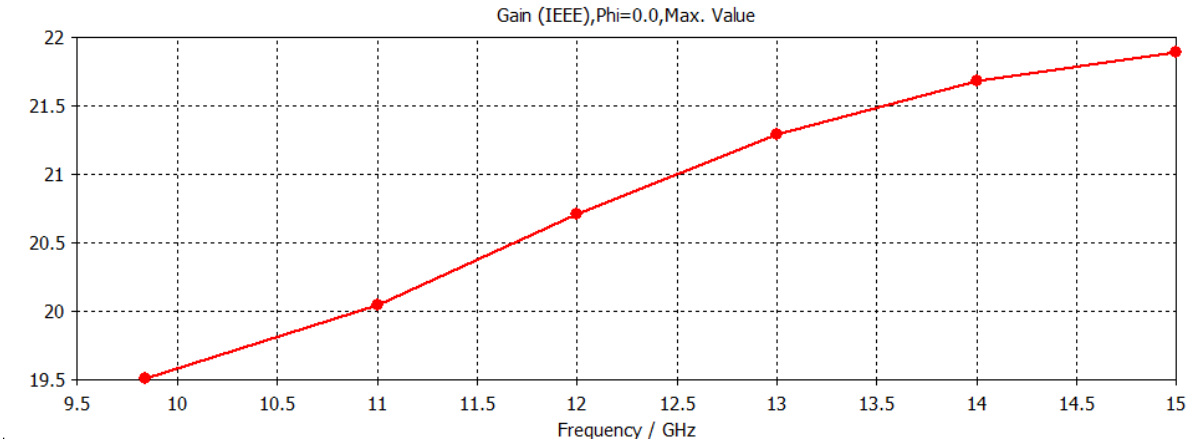




Typical VSWR

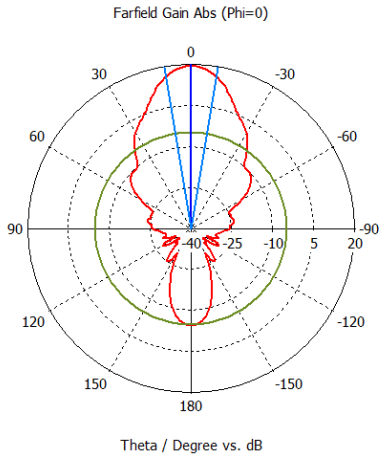


Gain



Simulated Antenna Patterns

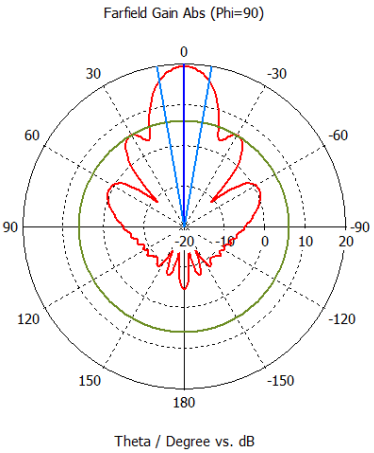
9.85GHz E-Plane



farfield (f=9.85) [1]

Frequency = 9.85
Main lobe magnitude = 19.5 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 18.9 deg.
Side lobe level = -24.1 dB

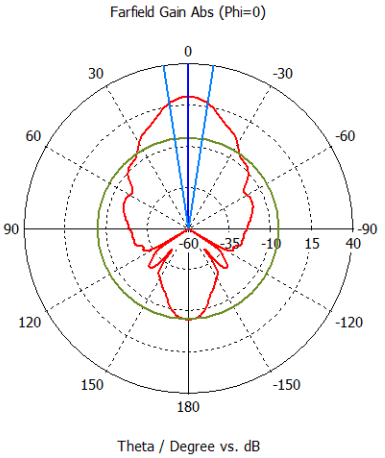
H-Plane



farfield (f=9.85) [1]

Frequency = 9.85
Main lobe magnitude = 19.5 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 19.4 deg.
Side lobe level = -13.4 dB

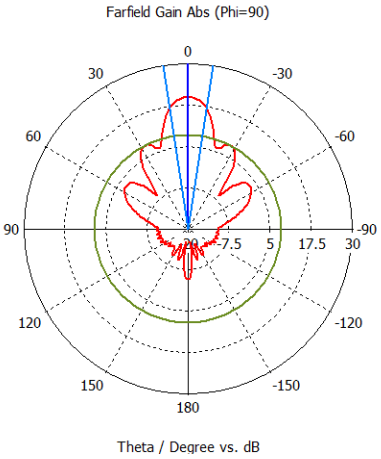
11GHz E-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 20.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 17.2 deg.
Side lobe level = -25.0 dB

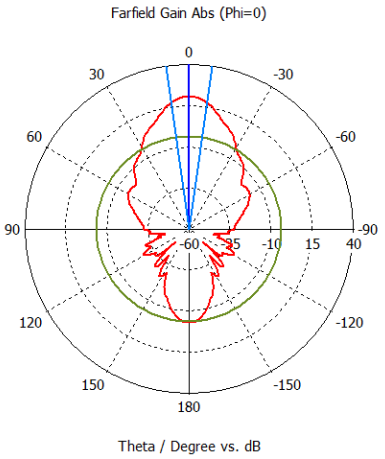
H-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 20.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 17.3 deg.
Side lobe level = -11.6 dB

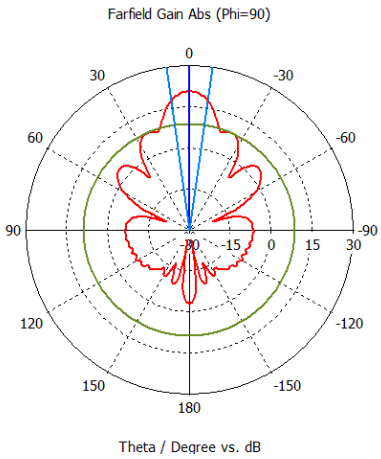
12GHz E-Plane



farfield (f=12) [1]

Frequency = 12
Main lobe magnitude = 20.8 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 16.1 deg.
Side lobe level = -23.9 dB

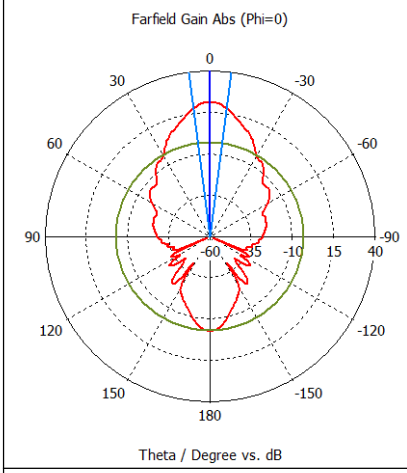
H-Plane



farfield (f=12) [1]

Frequency = 12
Main lobe magnitude = 20.8 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 16.1 deg.
Side lobe level = -12.0 dB

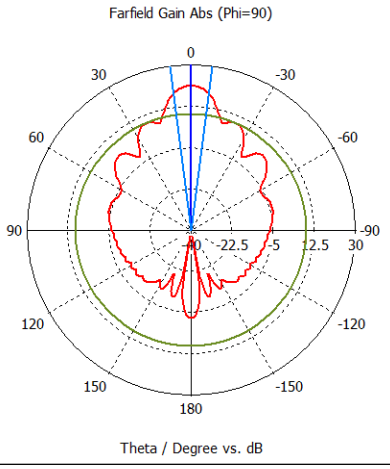
13GHz E-Plane



farfield (f=13) [1]

Frequency = 13
Main lobe magnitude = 21.4 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.8 deg.
Side lobe level = -24.3 dB

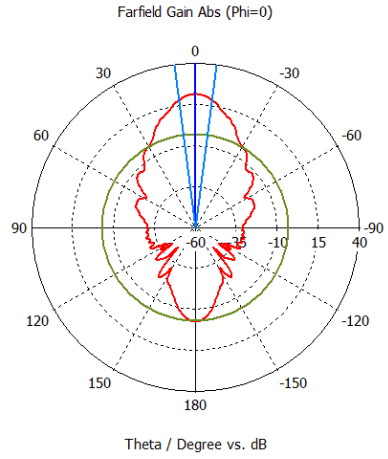
H-Plane



farfield (f=13) [1]

Frequency = 13
Main lobe magnitude = 21.4 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.9 deg.
Side lobe level = -12.0 dB

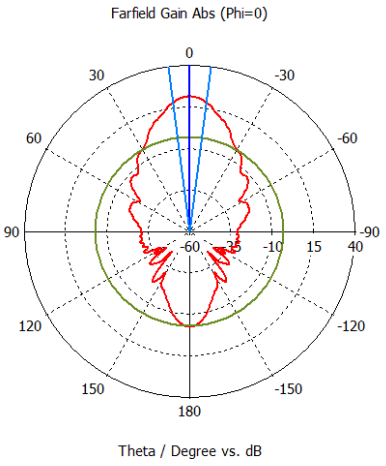
14GHz E-Plane



farfield (f=14) [1]

Frequency = 14
Main lobe magnitude = 21.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.4 deg.
Side lobe level = -24.5 dB

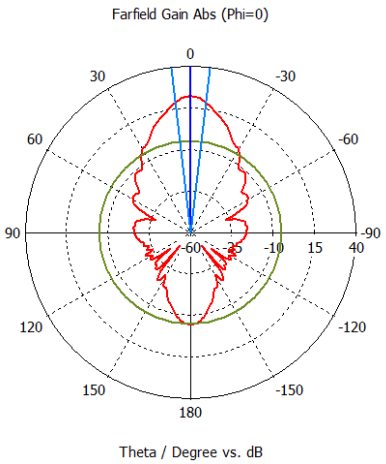
H-Plane



farfield (f=14) [1]

Frequency = 14
Main lobe magnitude = 21.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.4 deg.
Side lobe level = -24.5 dB

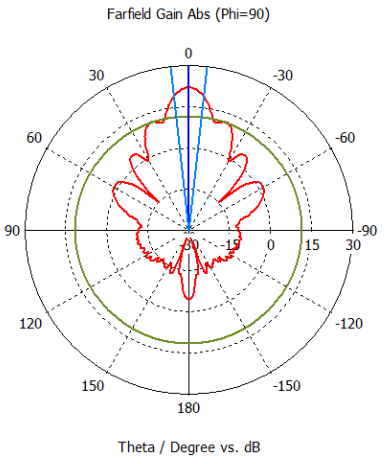
15GHz E-Plane



farfield (f=15) [1]

Frequency = 15
Main lobe magnitude = 22.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 13.4 deg.
Side lobe level = -26.8 dB

H-Plane



farfield (f=15) [1]

Frequency = 15
Main lobe magnitude = 22.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 13.0 deg.
Side lobe level = -10.4 dB