

DATASHEET

ELECTRICAL SPECIFICATIONS

Frequency range	8.2 – 12.5 GHz
Impedance	50 Ω
Nominal gain	20 dBi
VSWR	≤ 1.20
Polarization	Linear
3dB bandwidth	E-Plane: 13.5 - 19.2 deg H-Plane: 12.8 - 19.9 deg



MECHANICAL SPECIFICATIONS

Waveguide type	WR90
Flange type	UBR100
Weight	320 g

MATERIAL SPECIFICATIONS

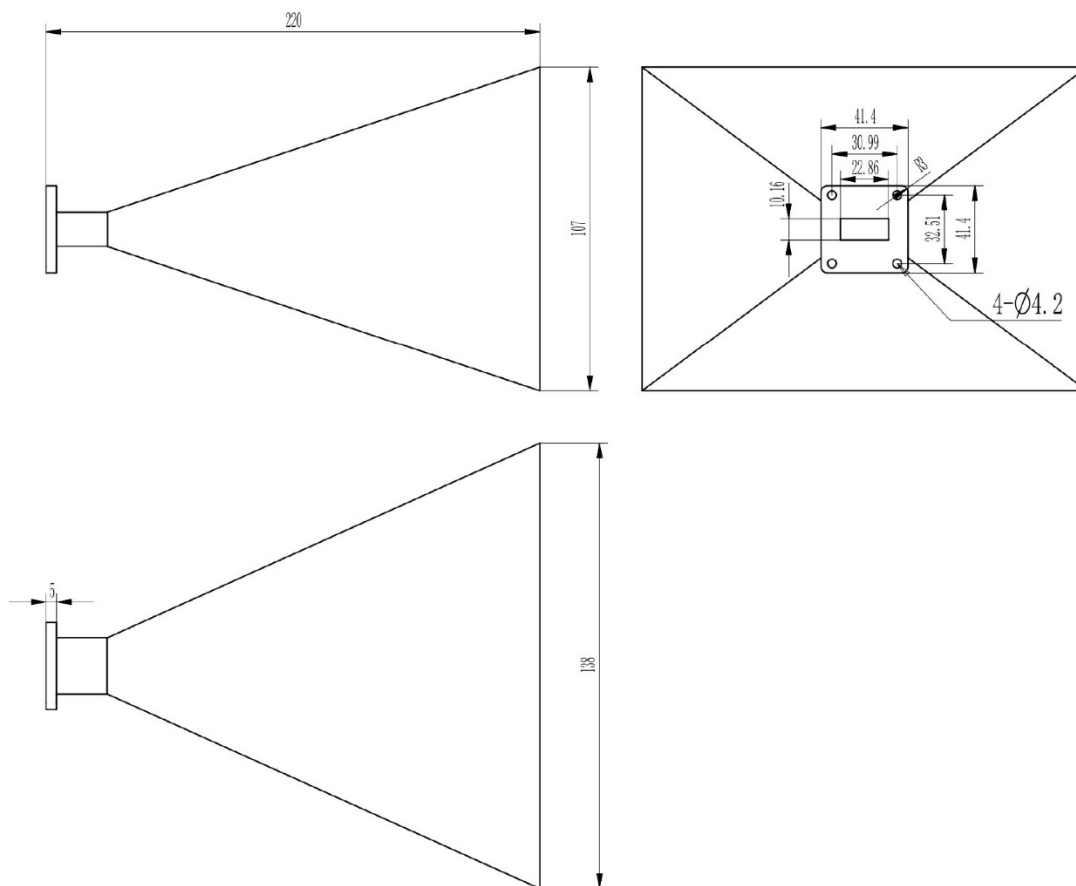
COMPONENT	MATERIAL	PLATING
Body	Aluminium	Gray paint
Flange	Aluminium	Gray paint

ENVIRONMENTAL SPECIFICATIONS

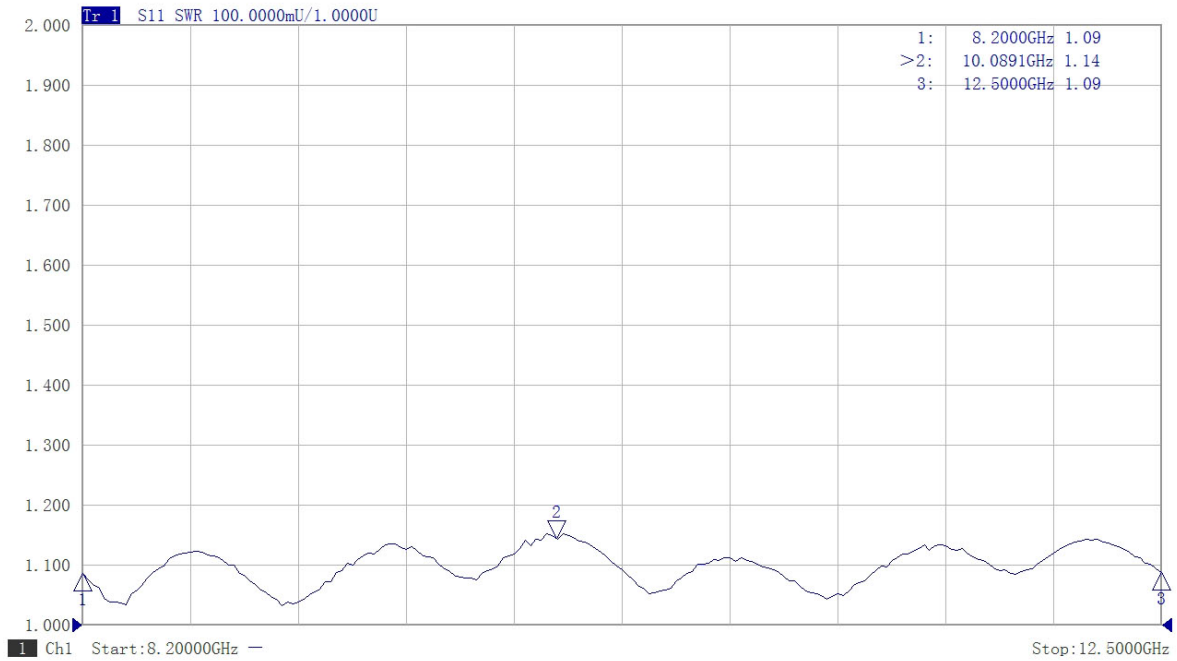
Temperature range	-40 / +70 °C	

DRAWING

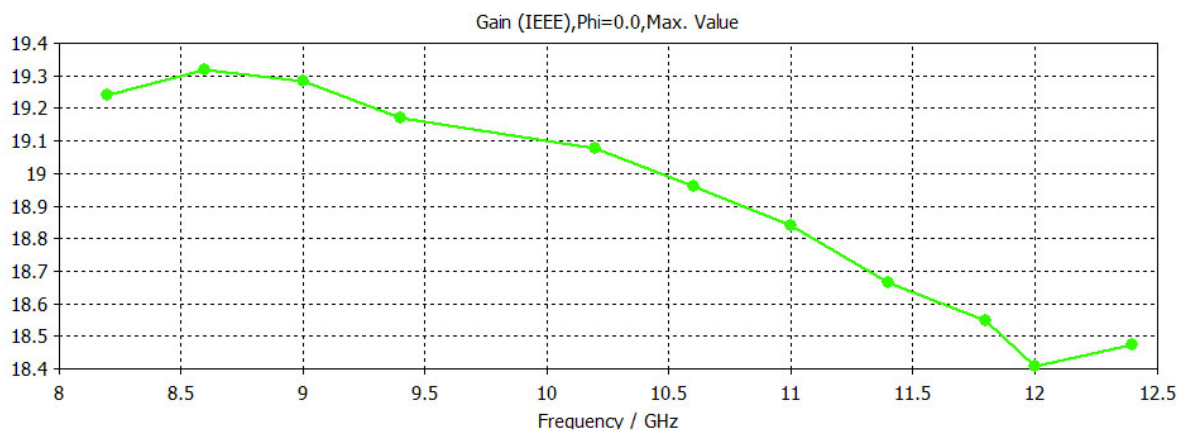
Unit: mm



TYPICAL VSWR

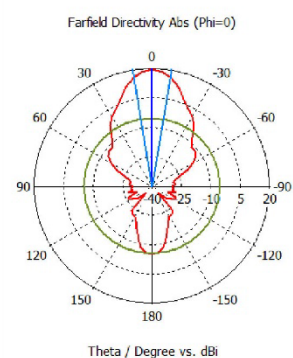


TYPICAL GAIN



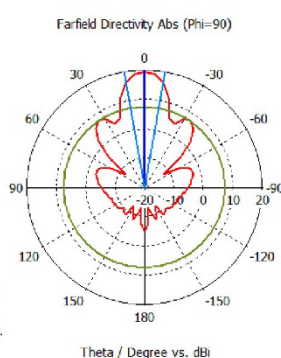
SIMULATED ANTENNA PATTERNS

8.2GHz E-Plane



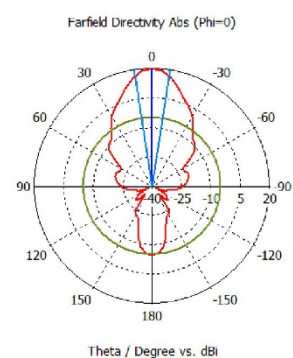
Frequency = 8.2
Main lobe magnitude = 19.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 19.2 deg.
Side lobe level = -24.6 dB

8.2GHz H-Plane



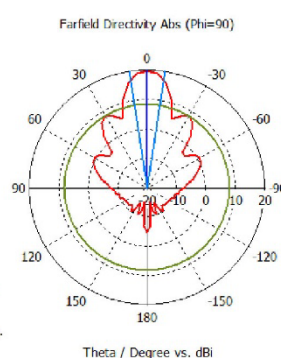
Frequency = 8.2
Main lobe magnitude = 19.2 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 19.9 deg.
Side lobe level = -11.7 dB

9GHz E-Plane



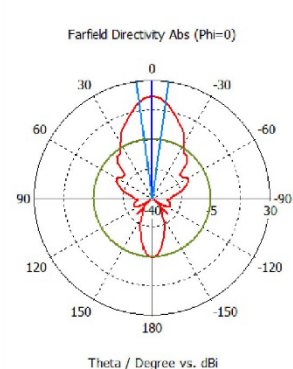
Frequency = 9
Main lobe magnitude = 19.7 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 17.6 deg.
Side lobe level = -24.6 dB

9GHz H-Plane



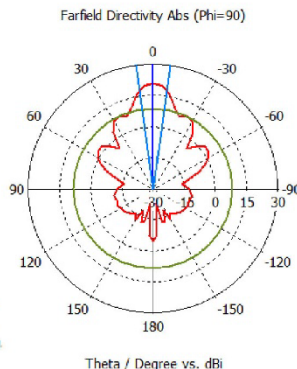
Frequency = 9
Main lobe magnitude = 19.7 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 17.9 deg.
Side lobe level = -11.5 dB

10GHz E-Plane



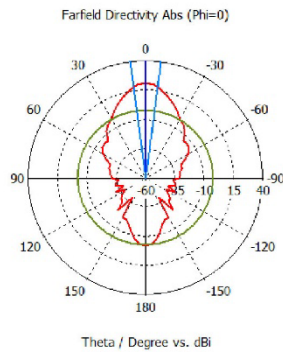
Frequency = 10
Main lobe magnitude = 20.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 15.6 deg.
Side lobe level = -25.4 dB

10GHz H-Plane



Frequency = 10
Main lobe magnitude = 20.5 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 16.2 deg.
Side lobe level = -12.1 dB

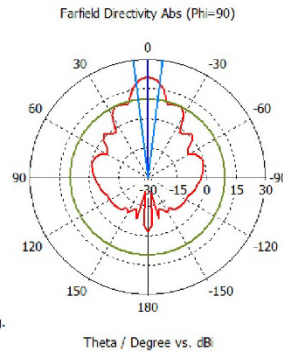
11GHz E-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 21.0 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 15.0 deg.
Side lobe level = -23.2 dB

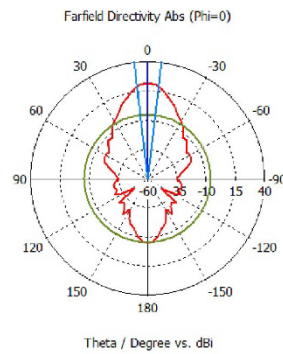
11GHz H-Plane



farfield (f=11) [1]

Frequency = 11
Main lobe magnitude = 21.0 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 14.1 deg.
Side lobe level = -11.3 dB

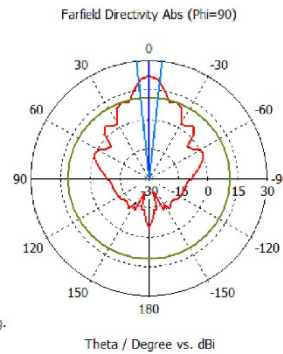
12.4GHz E-Plane



farfield (f=12.4) [1]

Frequency = 12.4
Main lobe magnitude = 21.8 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 13.5 deg.
Side lobe level = -27.3 dB

12.4GHz H-Plane



farfield (f=12.4) [1]

Frequency = 12.4
Main lobe magnitude = 21.8 dBi
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 12.8 deg.
Side lobe level = -10.6 dB