HR12-10

10 dBi Gain, 60.5-91.9 GHz, WR12 Standard Gain Horn with UG387/U-Mod Flange

Electrical

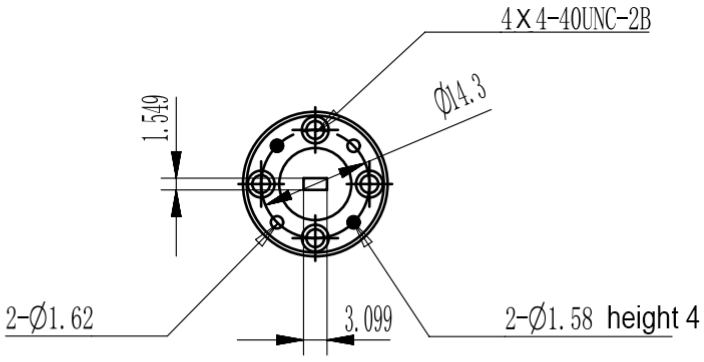
Frequency Range	60.5-91.9 GHz
Norminal Gain	10 dBi
Polarization	Linear
VSWR	1.25 max
3dB Beamwidth	H-Plane: 41.6~58 deg, E-Plane: 38.3~59.6 deg
Operating Temperature	-40℃~+70℃

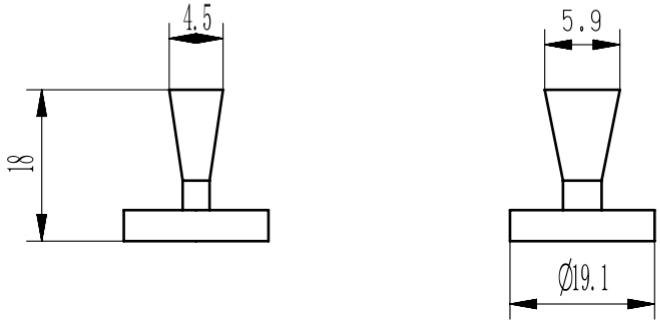
Note: Measured pattern data is not provided by default. CST simulated data & VSWR measurement available.

Mechanical

Waveguide Size	WR12
Flange Type	UG387/U-Mod Round Cover Flange
Body Material and Finish	Copper, Gold Plated

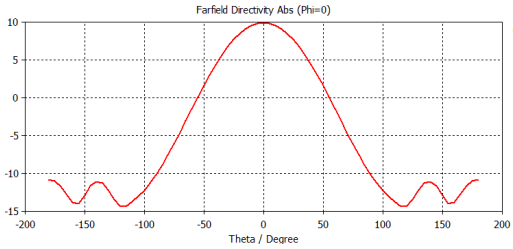
Dimensions(mm)





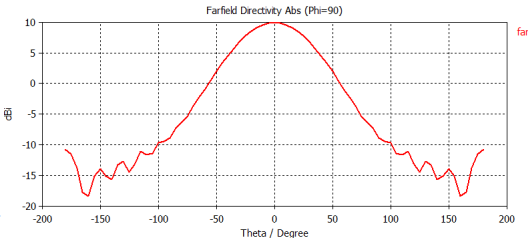
Simulated Antenna Patterns

60.5GHz H-Plane



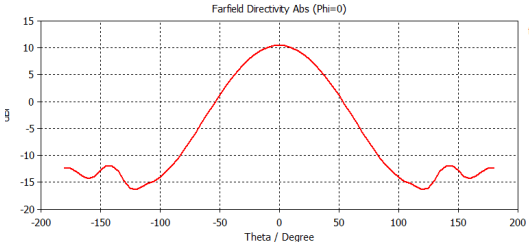
Frequency = 60.5
Main lobe magnitude = 9.9 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 58.0 deg.
Side lobe level = -20.7 dB

E-Plane



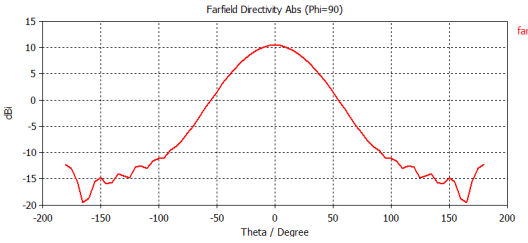
Frequency = 60.5
Main lobe magnitude = 9.9 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 59.6 deg.
Side lobe level = -20.7 dB

65GHz H-Plane



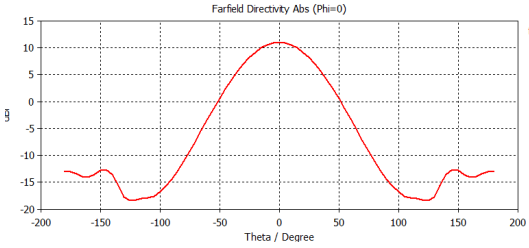
Frequency = 65
Main lobe magnitude = 10.4 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 54.5 deg.
Side lobe level = -22.4 dB

E-Plane



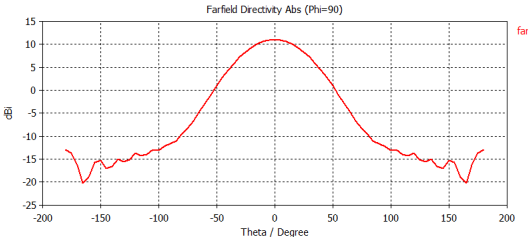
Frequency = 65
Main lobe magnitude = 10.4 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 55.7 deg.
Side lobe level = -22.7 dB

70GHz H-Plane



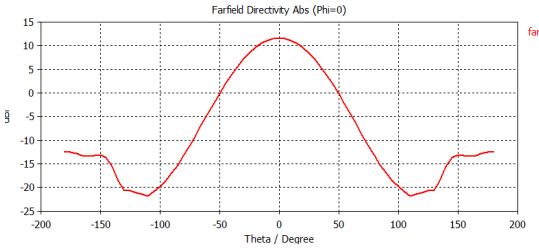
Frequency = 70
Main lobe magnitude = 11.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 51.9 deg.
Side lobe level = -23.6 dB

E-Plane



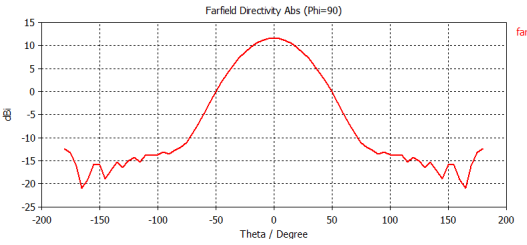
Frequency = 70
Main lobe magnitude = 11.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 53.3 deg.
Side lobe level = -23.9 dB

75GHz H-Plane



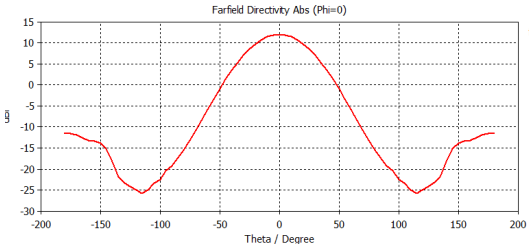
Frequency = 75
Main lobe magnitude = 11.5 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 48.8 deg
Side lobe level = -23.9 dB

E-Plane



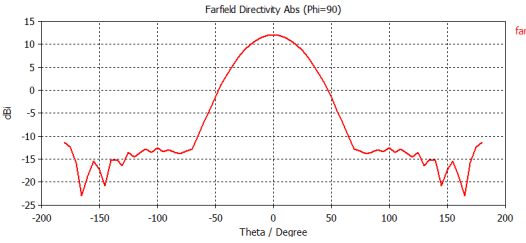
Frequency = 75
Main lobe magnitude = 11.5 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 49.5 deg.
Side lobe level = -23.9 dB

80GHz H-Plane



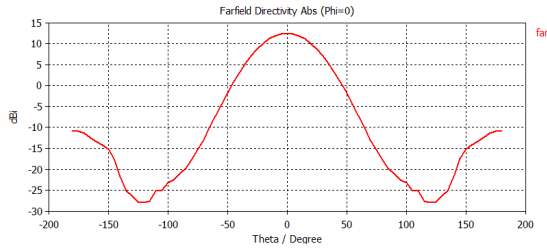
Frequency = 80
Main lobe magnitude = 12.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 46.3 deg
Side lobe level = -23.4 dB

E-Plane

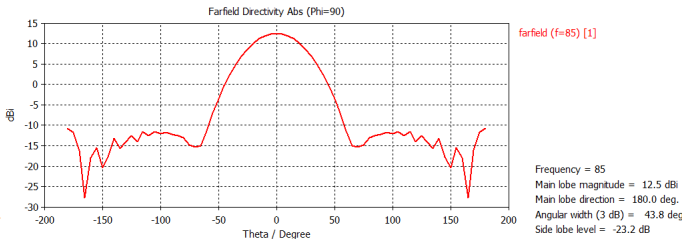


Frequency = 80
Main lobe magnitude = 12.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 46.8 deg.
Side lobe level = -23.4 dB

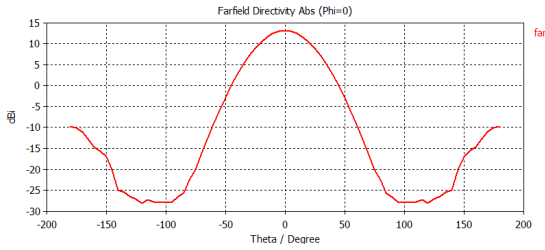
85GHz H-Plane



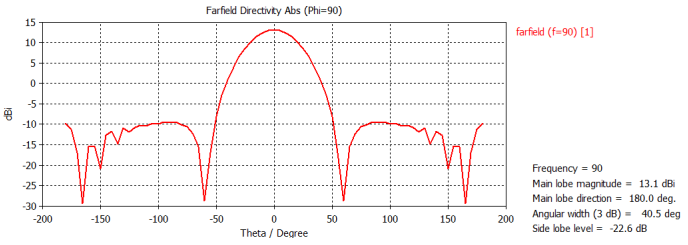
E-Plane



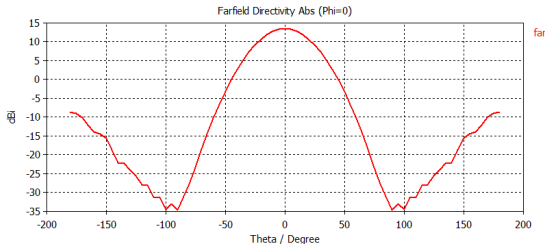
90GHz H-Plane



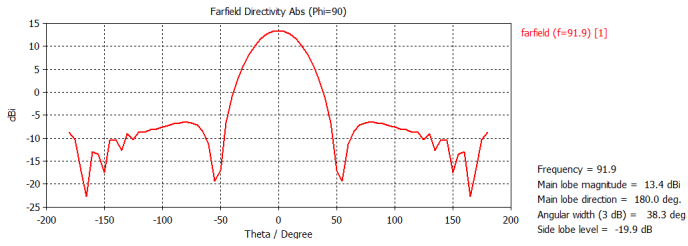
E-Plane



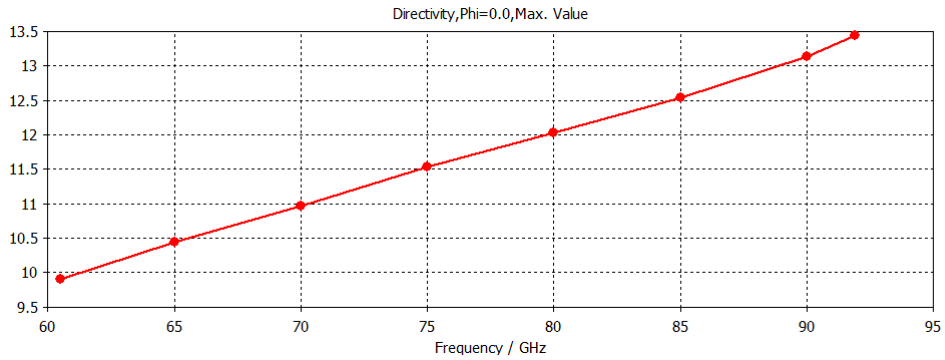
91.9GHz H-Plane



E-Plane



Typical Gain



Typical VSWR

