RH12-1-10

10 dBi Gain, 60.5-91.9 GHz, WR12 Standard Gain Horn with 1.0mm Female Port

Rev 1

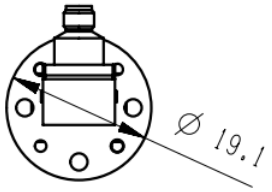
Electrical

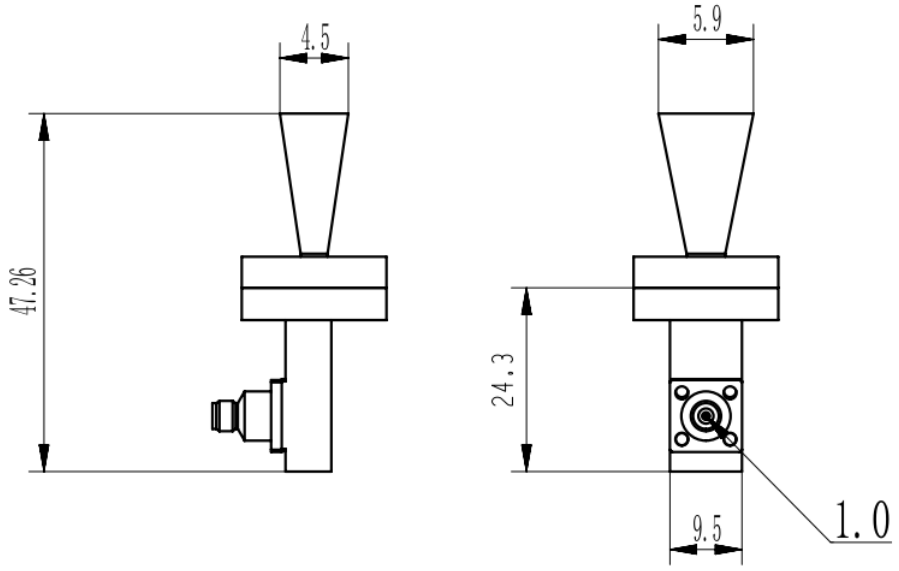
Frequency Range	60.5-91.9 GHz
Norminal Gain	10 dBi
Polarization	Linear
VSWR	1.5 max
3dB Beamwidth	E-Plane: 41.6~58 deg, H-Plane: 38.3~59.6 deg
Operating Temperature	-40℃~+70℃

Mechanical

Waveguide Size	WR12
Flange Type	UG387/U-Mod Round Cover Flange
Body Material and Finish	Copper, Gold Plated
RF Connector	1.0mm Female

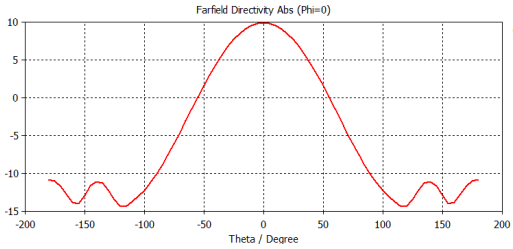
Dimensions(mm)





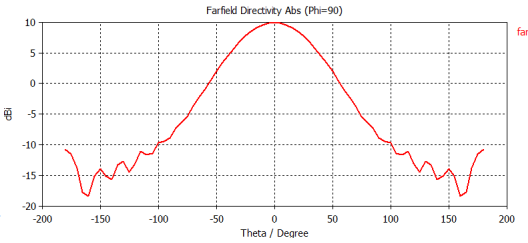
Simulated Antenna Patterns

60.5GHz E-Plane



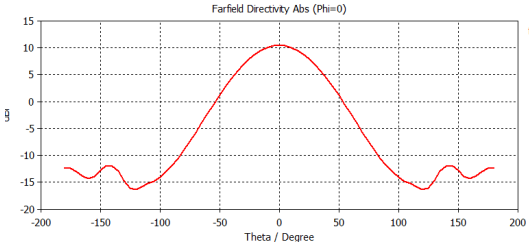
Frequency = 60.5
Main lobe magnitude = 9.9 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 58.0 deg.
Side lobe level = -20.7 dB

H-Plane



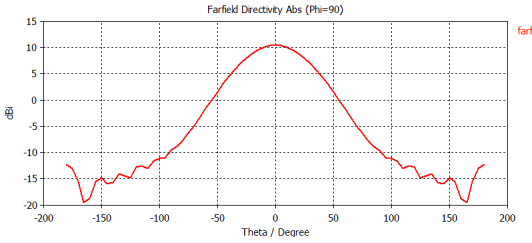
Frequency = 60.5
Main lobe magnitude = 9.9 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 59.6 deg.
Side lobe level = -20.7 dB

65GHz E-Plane



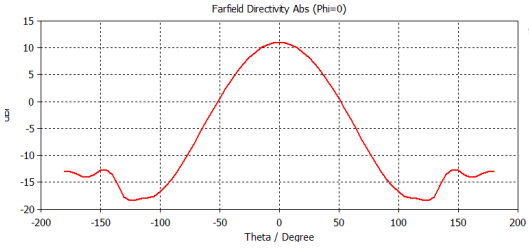
Frequency = 65
Main lobe magnitude = 10.4 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 54.5 deg.
Side lobe level = -22.4 dB

H-Plane



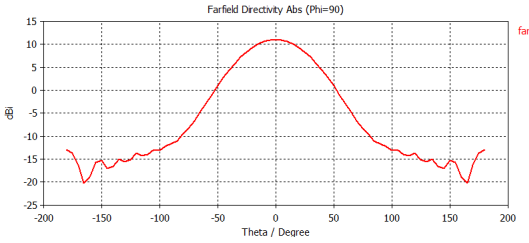
Frequency = 65
Main lobe magnitude = 10.4 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 55.7 deg.
Side lobe level = -22.7 dB

70GHz E-Plane



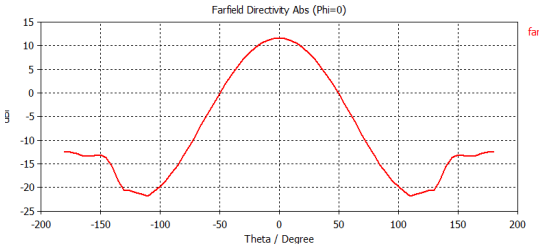
Frequency = 70
Main lobe magnitude = 11.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 51.9 deg.
Side lobe level = -23.6 dB

H-Plane



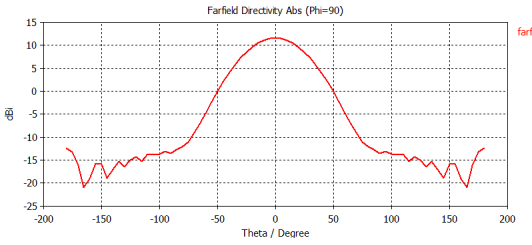
Frequency = 70
Main lobe magnitude = 11.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 53.3 deg.
Side lobe level = -23.9 dB

75GHz E-Plane



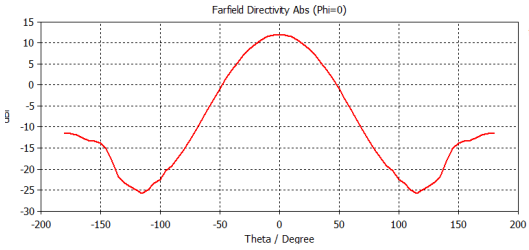
Frequency = 75
Main lobe magnitude = 11.5 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 48.8 deg.
Side lobe level = -23.9 dB

H-Plane



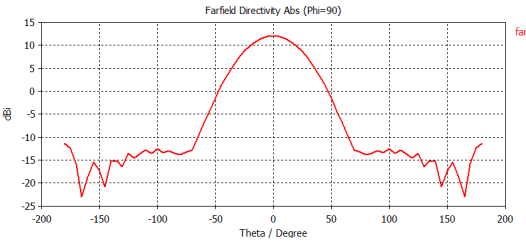
Frequency = 75
Main lobe magnitude = 11.5 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 49.5 deg.
Side lobe level = -23.9 dB

80GHz E-Plane



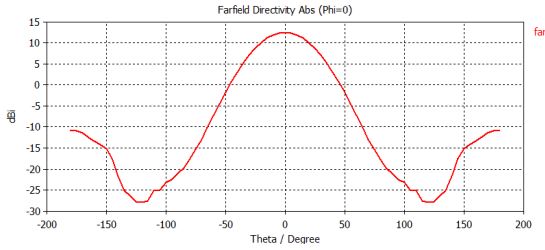
Frequency = 80
Main lobe magnitude = 12.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 46.3 deg
Side lobe level = -23.4 dB

H-Plane

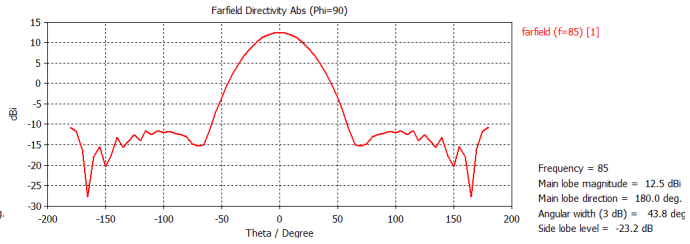


Frequency = 80
Main lobe magnitude = 12.0 dBi
Main lobe direction = 180.0 deg.
Angular width (3 dB) = 46.8 deg.
Side lobe level = -23.4 dB

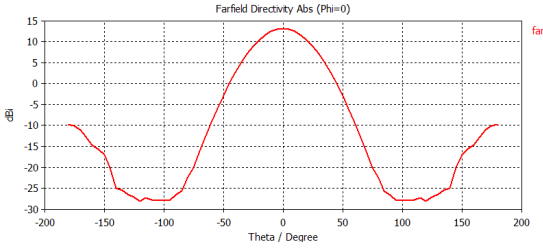
85GHz E-Plane



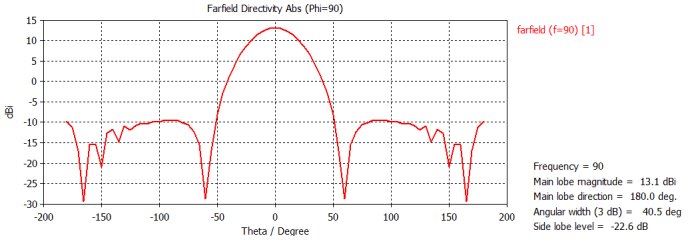
H-Plane



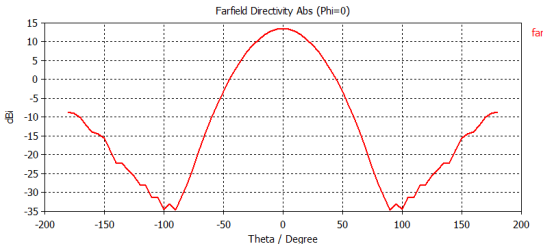
90GHz E-Plane



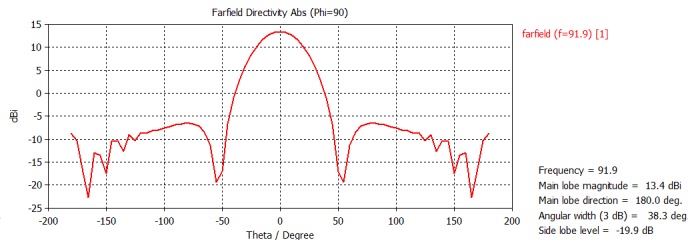
H-Plane



91.9GHz E-Plane



H-Plane



Typical Gain

