RH22-24-25

25 dBi Gain, 32.9-50.1 GHz, WR22 Standard Gain Horn with 2.4mm Female Port

Rev 1

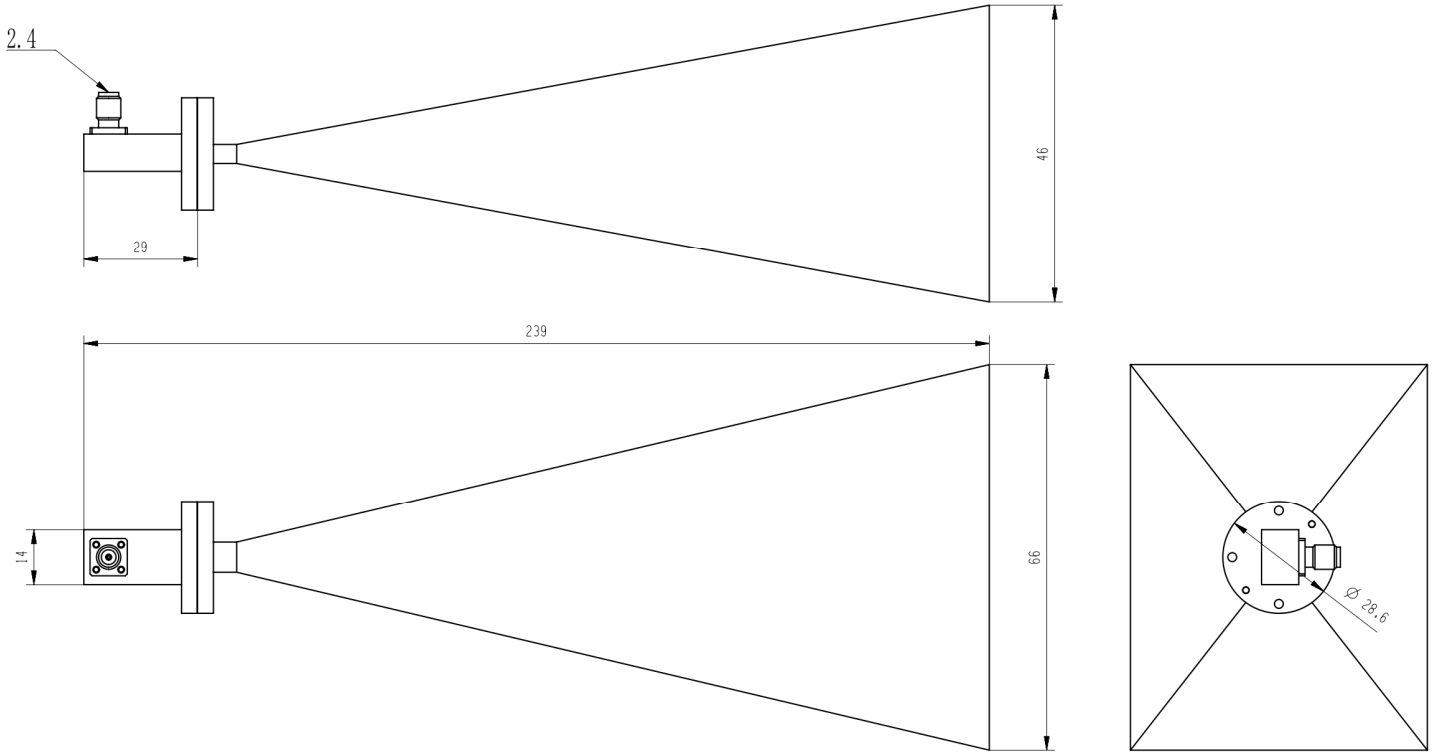
Electrical

Frequency Range	32.9-50.1 GHz
Norminal Gain	25 dBi
Polarization	Linear
VSWR	1.3 max
3dB Beamwidth	E-Plane: 7.0~10.3 deg, H-Plane: 7.0~10.5 deg
Operating Temperature	-40℃~+70℃

Mechanical

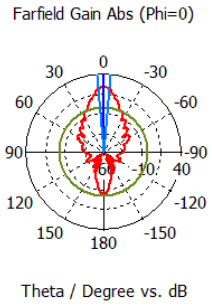
Waveguide Size	WR22
Flange Type	UG383/U Round Cover Flange
Body Material and Finish	Painting over gold plating
RF Connector	2.4mm Female

Dimensions(mm)



Simulated Antenna Patterns

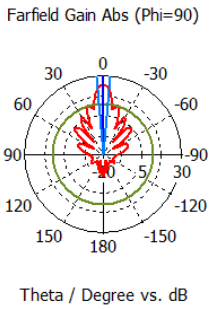
32.9GHz E-Plane



farfield (f=32.9) [1]

Frequency = 32.9
Main lobe magnitude = 24.7 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 10.3 deg.
Side lobe level = -27.2 dB

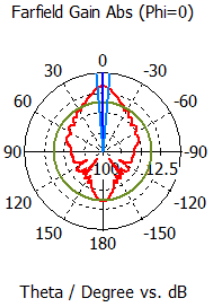
H-Plane



farfield (f=32.9) [1]

Frequency = 32.9
Main lobe magnitude = 24.7 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 10.5 deg.
Side lobe level = -12.1 dB

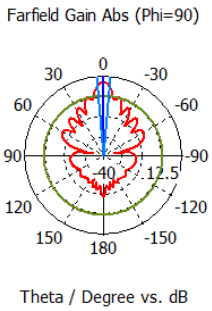
35GHz E-Plane



farfield (f=35) [1]

Frequency = 35
Main lobe magnitude = 25.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 9.7 deg.
Side lobe level = -29.3 dB

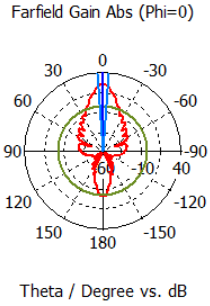
H-Plane



farfield (f=35) [1]

Frequency = 35
Main lobe magnitude = 25.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 9.9 deg.
Side lobe level = -11.9 dB

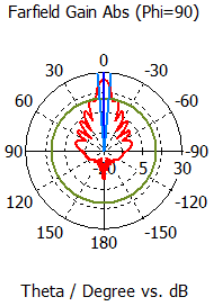
38GHz E-Plane



farfield (f=38) [1]

Frequency = 38
Main lobe magnitude = 25.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 9.1 deg.
Side lobe level = -27.4 dB

H-Plane

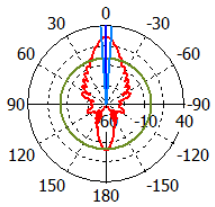


farfield (f=38) [1]

Frequency = 38
Main lobe magnitude = 25.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 9.2 deg.
Side lobe level = -11.6 dB

41GHz E-Plane

Farfield Gain Abs (Phi=0)



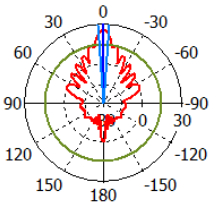
Theta / Degree vs. dB

farfield (f=41) [1]

Frequency = 41
Main lobe magnitude = 26.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 8.5 deg.
Side lobe level = -27.0 dB

H-Plane

Farfield Gain Abs (Phi=90)



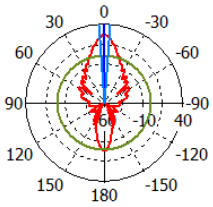
Theta / Degree vs. dB

farfield (f=41) [1]

Frequency = 41
Main lobe magnitude = 26.1 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 8.5 deg.
Side lobe level = -11.3 dB

44GHz E-Plane

Farfield Gain Abs (Phi=0)



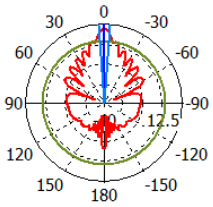
Theta / Degree vs. dB

farfield (f=44) [1]

Frequency = 44
Main lobe magnitude = 26.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 8.1 deg.
Side lobe level = -25.8 dB

H-Plane

Farfield Gain Abs (Phi=90)



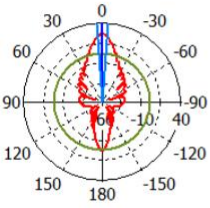
Theta / Degree vs. dB

farfield (f=44) [1]

Frequency = 44
Main lobe magnitude = 26.6 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 8.0 deg.
Side lobe level = -11.0 dB

50.1GHz E-Plane

Farfield Gain Abs (Phi=0)



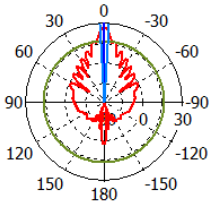
Theta / Degree vs. dB

farfield (f=50.1) [1]

Frequency = 50.1
Main lobe magnitude = 27.2 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 7.0 deg.
Side lobe level = -25.2 dB

H-Plane

Farfield Gain Abs (Phi=90)



Theta / Degree vs. dB

farfield (f=50.1) [1]

Frequency = 50.1
Main lobe magnitude = 27.2 dB
Main lobe direction = 0.0 deg.
Angular width (3 dB) = 7.0 deg.
Side lobe level = -10.5 dB