



25 dBi Gain, 32.9-50.1 GHz, WR22 Standard Gain Horn with UG383/U Flange

Rev 1

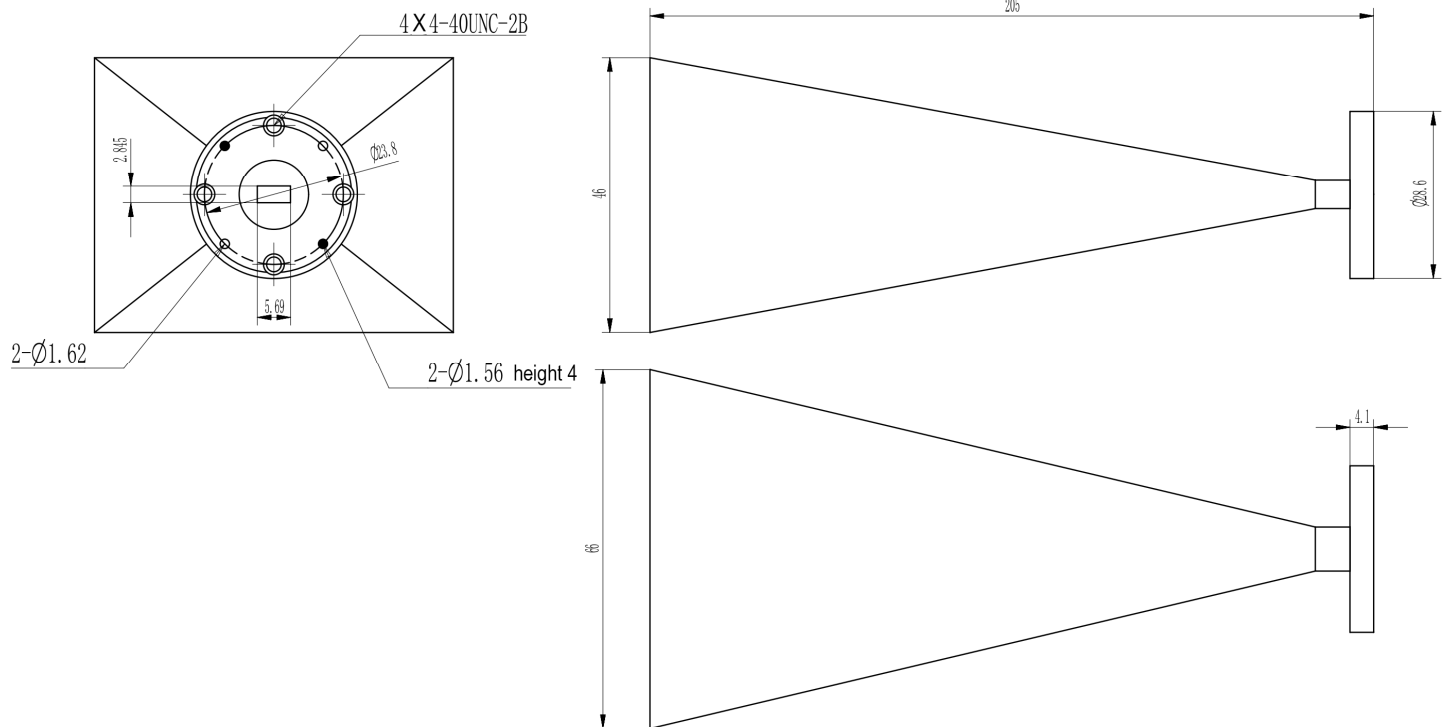
Electrical

| | |
|-----------------------|--|
| Frequency Range | 32.9-50.1 GHz |
| Norminal Gain | 25 dBi |
| Polarization | Linear |
| VSWR | 1.2 max |
| 3dB Beamwidth | H-Plane: 7.0~10.3 deg, E-Plane: 7.0~10.5 deg |
| Operating Temperature | -40°C~+70°C |

Mechanical

| | |
|--------------------------|------------------------------------|
| Waveguide Size | WR22 |
| Flange Type | UG383/U Round Cover Flange |
| Body Material and Finish | Copper, painting over gold plating |

Dimensions(mm)

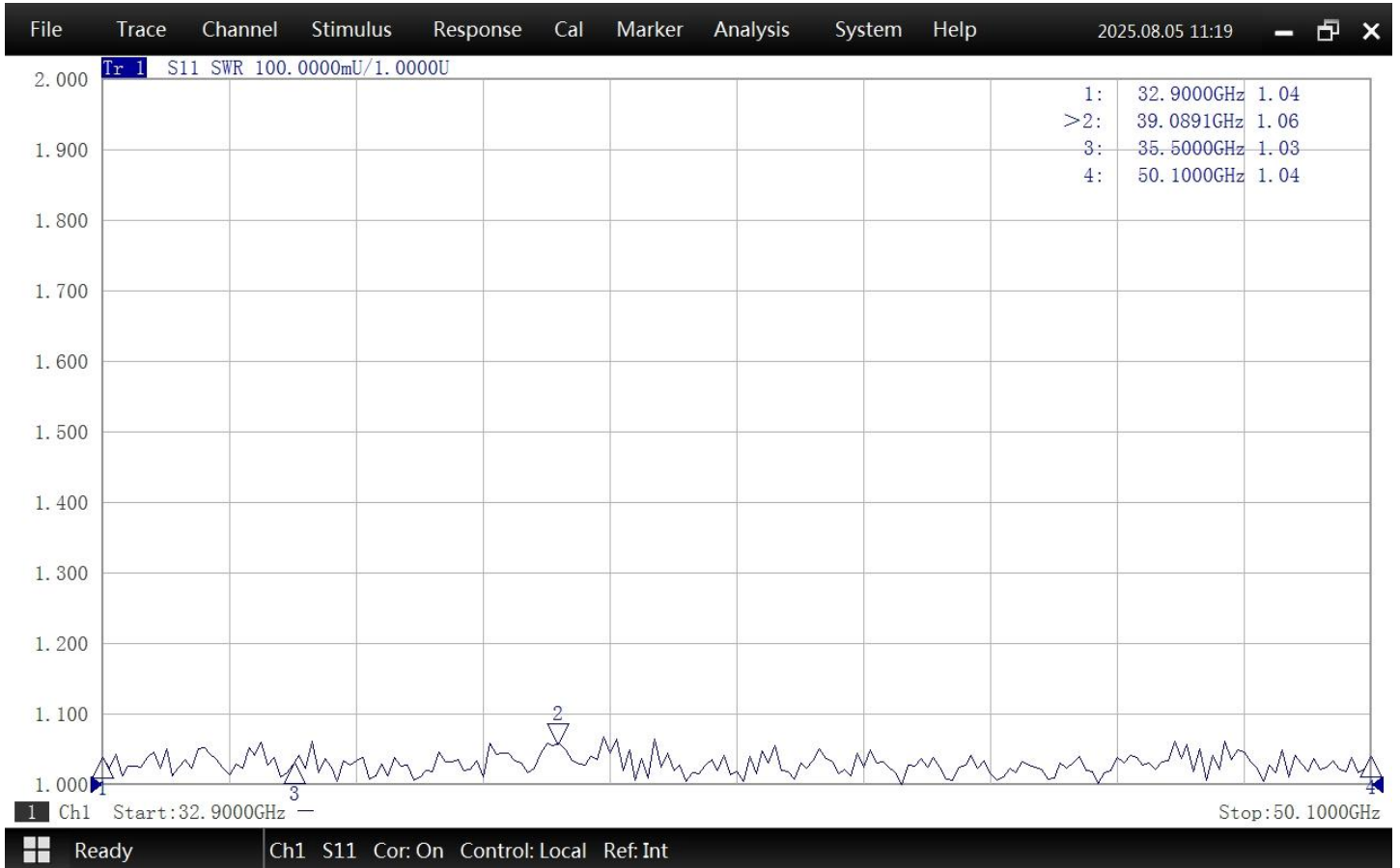




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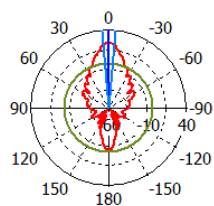
Typical Test Data



Simulated Antenna Patterns

32.9GHz H-Plane

Farfield Gain Abs (Phi=0)



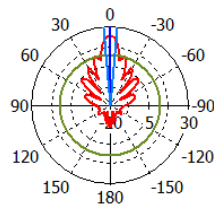
Theta / Degree vs. dB

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

E-Plane

Farfield Gain Abs (Phi=90)



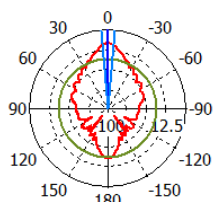
Theta / Degree vs. dB

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 H-Plane

Farfield Gain Abs (Phi=0)



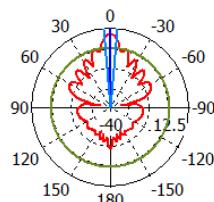
Theta / Degree vs. dB

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

E-Plane

Farfield Gain Abs (Phi=90)



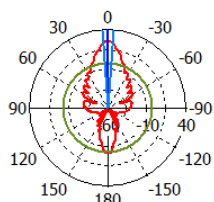
Theta / Degree vs. dB

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 H-Plane

Farfield Gain Abs (Phi=0)



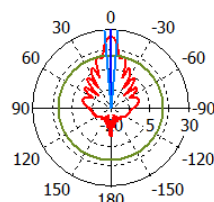
Theta / Degree vs. dB

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

E-Plane

Farfield Gain Abs (Phi=90)



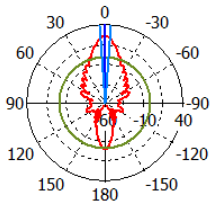
Theta / Degree vs. dB

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 H-Plane

Farfield Gain Abs (Phi=0)



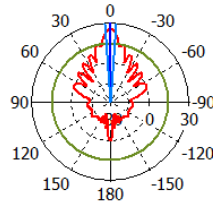
Theta / Degree vs. dB

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

E-Plane

Farfield Gain Abs (Phi=90)



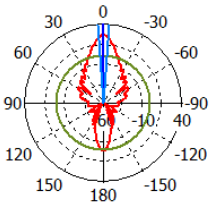
Theta / Degree vs. dB

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 H-Plane

Farfield Gain Abs (Phi=0)



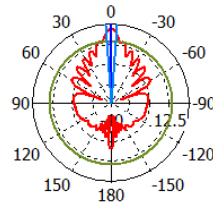
Theta / Degree vs. dB

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

E-Plane

Farfield Gain Abs (Phi=90)



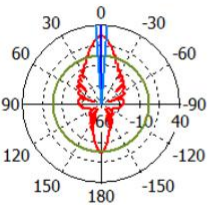
Theta / Degree vs. dB

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 H-Plane

Farfield Gain Abs (Phi=0)



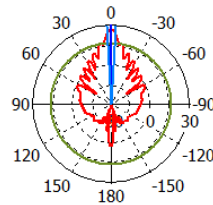
Theta / Degree vs. dB

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

E-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