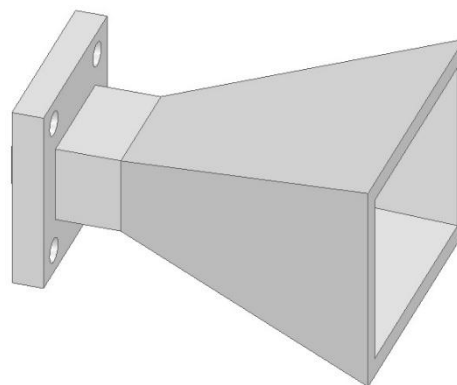


Electrical specifications

Frequency Range	15 – 22	[GHz]
VSWR (max.)	≤ 1.2	–
S_{11} (max.)	≤ -20	[dB]
Impedance	50	[Ω]
Connector	WR51	–
Power (CW)	10	[W]
Power (Impulse)	20	[W]
Gain	14.5	[dBi]
Polarization	Linear	–



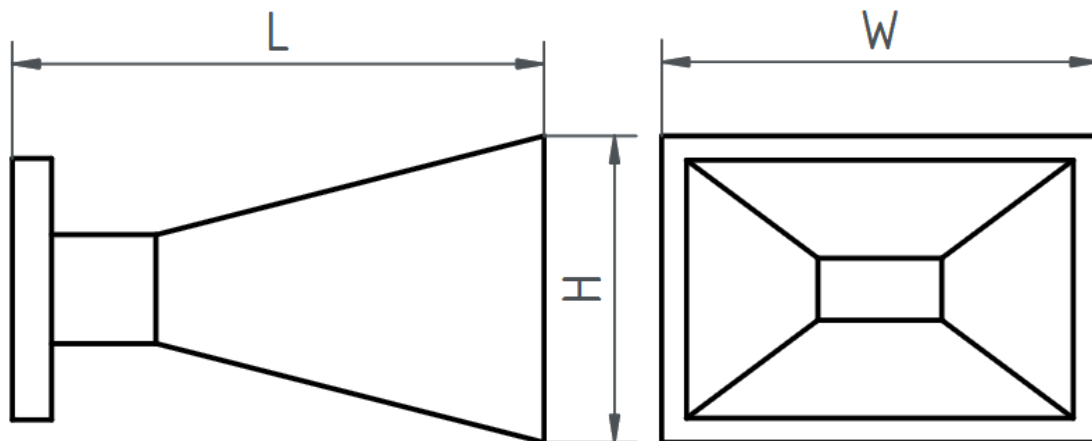
Physical specifications

W x L x H	see p. 2	[mm ³]
Weight	see p. 2	[g]

This antenna and its various versions are 3D-printed in plastic before undergoing a copper metallization process with a tin finish. They are also coated with a silicone layer.

All the following graphs are based on electromagnetic simulations

Technical Drawing





Pyramidal Horn Antenna

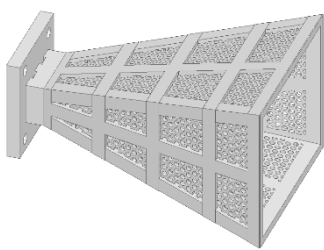
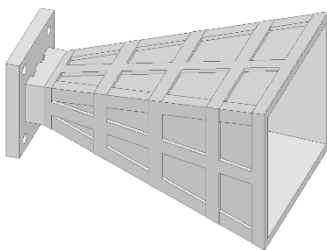
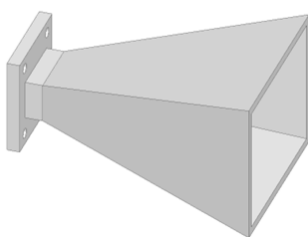
15 – 22 GHz

Design

Standard (STD)

Light Weight (LW)

Ultra Light Weight (ULW)



W x L x H
[mm³]

46 x 60 x 35

46 x 60 x 35

46 x 60 x 35

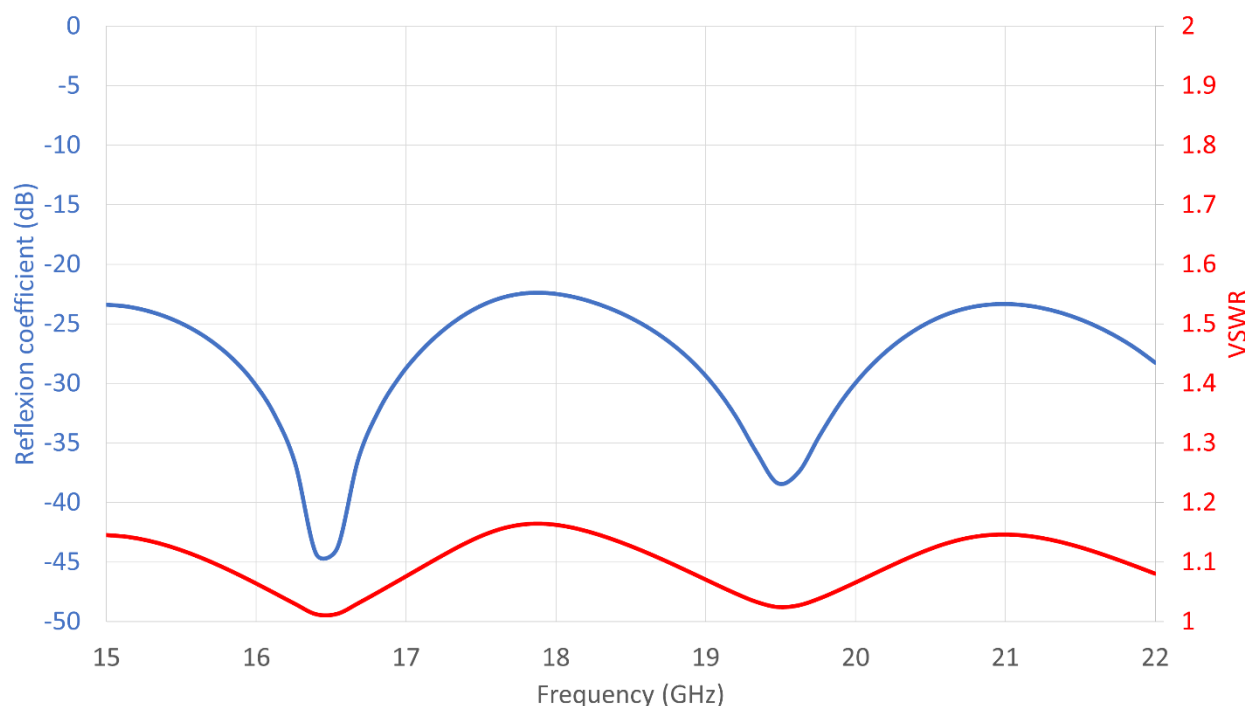
Weight [g]

~33

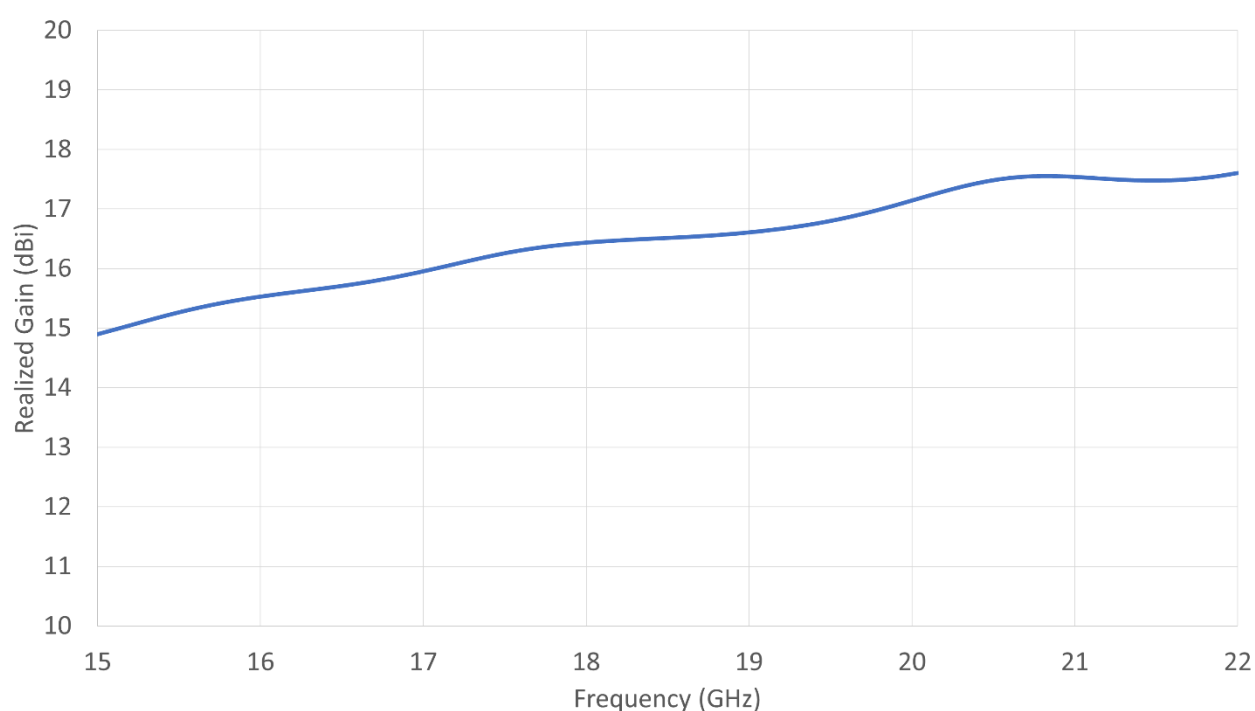
~28

~26

Reflexion coefficient



Gain

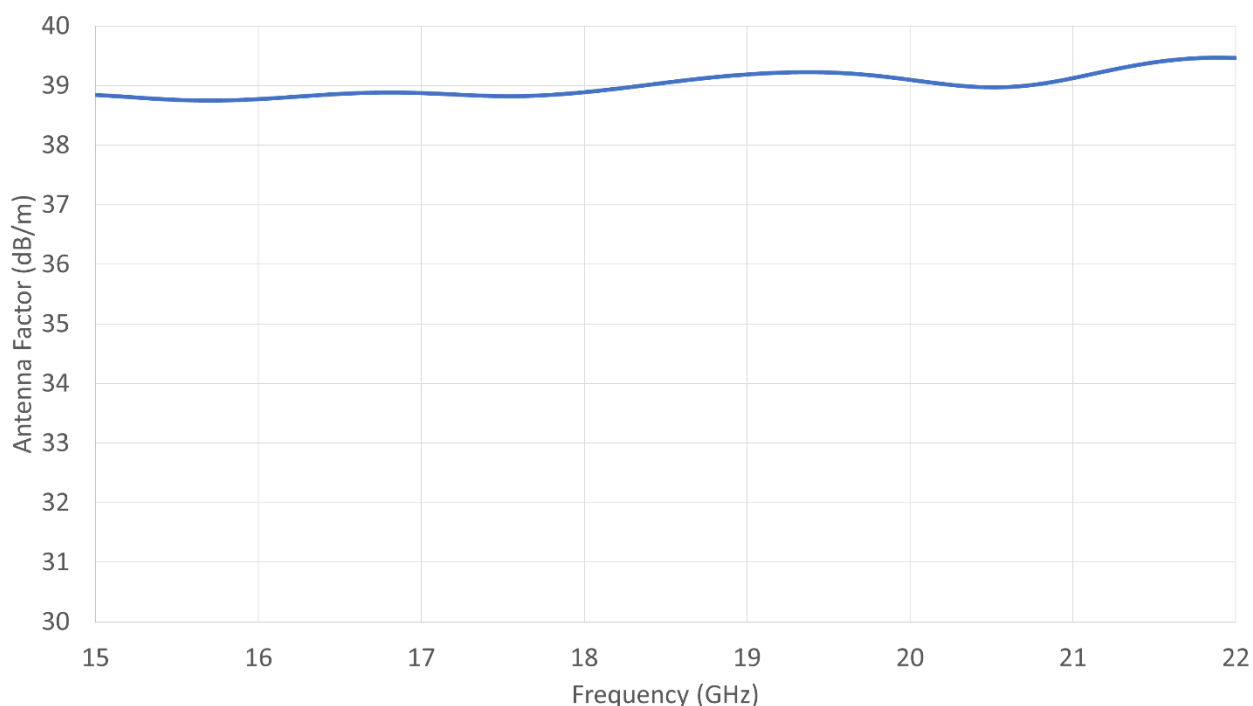




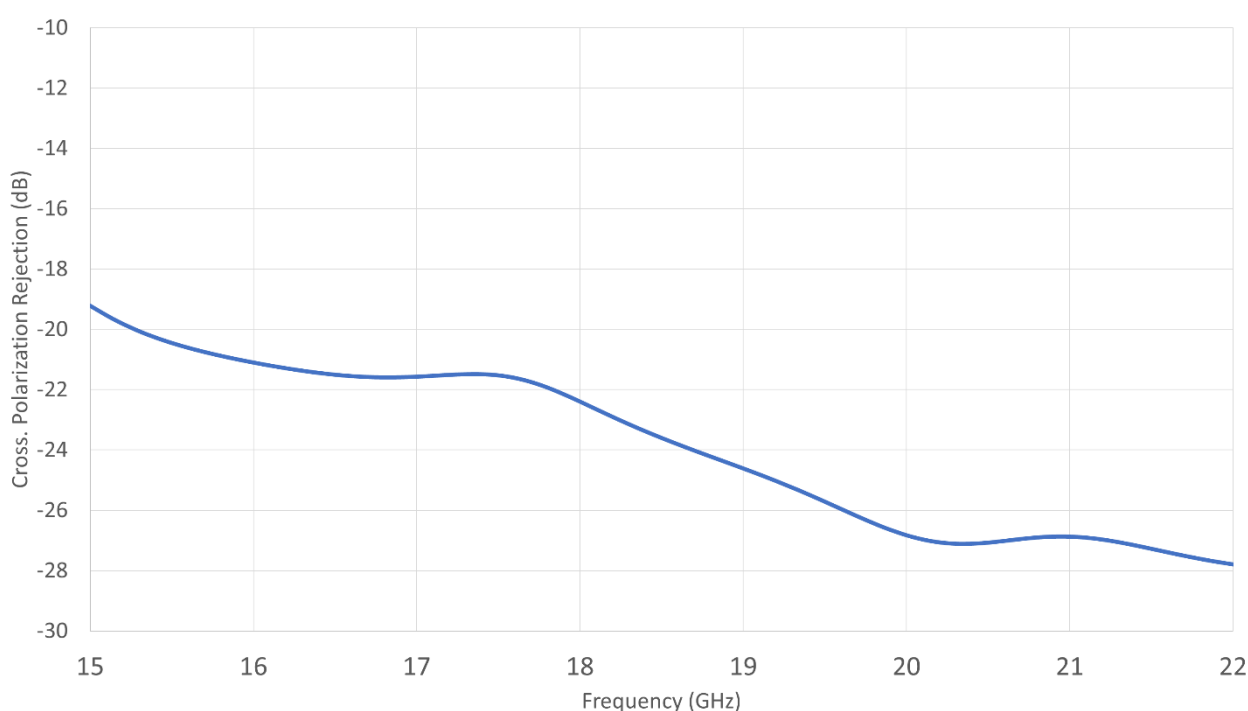
Pyramidal Horn Antenna

15 – 22 GHz

Antenna Factor

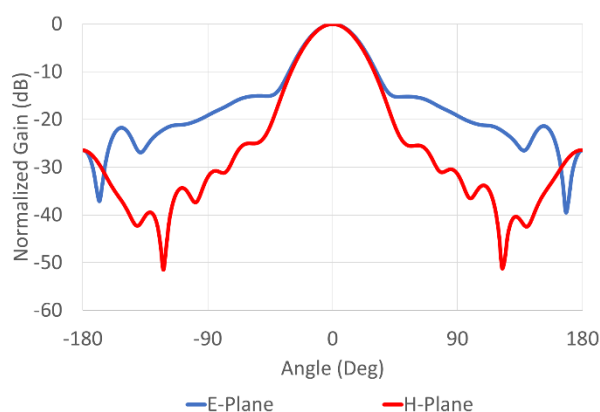


Cross. Pol. Rejection

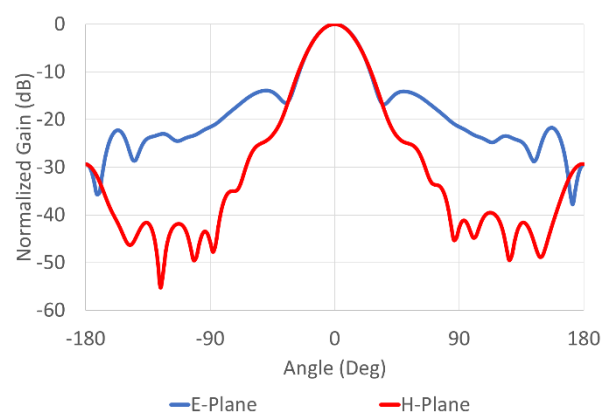


Radiation patterns

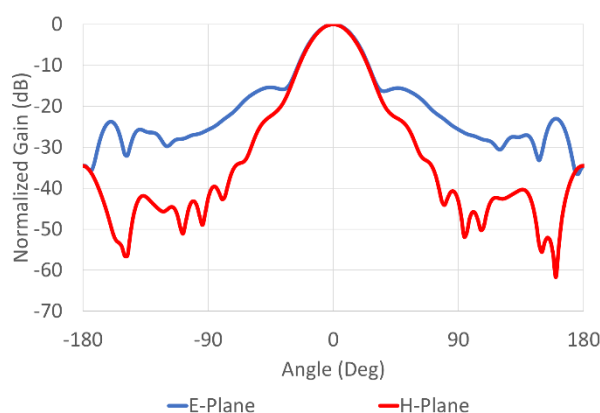
15 GHz



17.5 GHz



19.5 GHz



22 GHz

