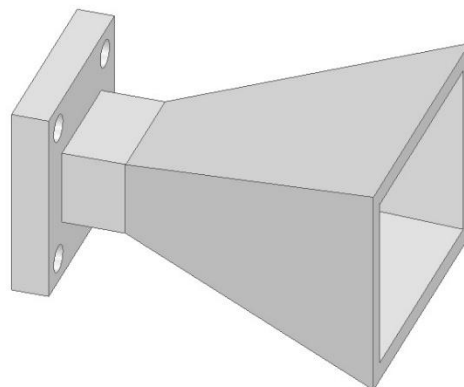


Electrical specifications

Frequency Range	26.5 – 40	[GHz]
VSWR (max.)	≤ 1.2	–
S_{11} (max.)	≤ -20	[dB]
Impedance	50	[Ω]
Connector	WR28	–
Power (CW)	10	[W]
Power (Impulse)	20	[W]
Gain	14.5	[dBi]
Polarization	Linear	–



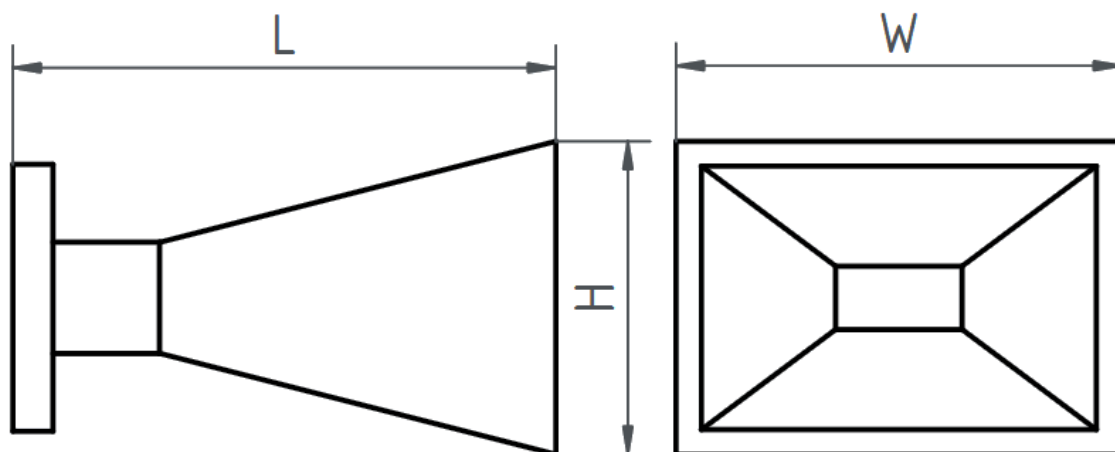
Physical specifications

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

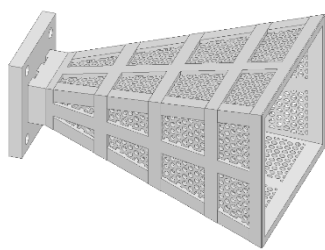
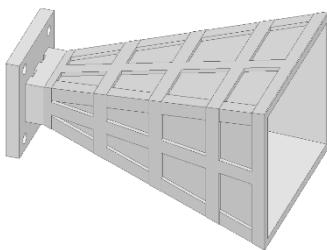
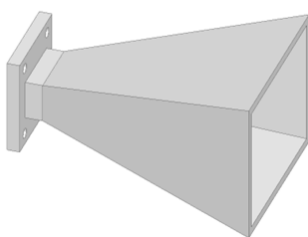
26.5 – 40 GHz

Design

Standard (STD)

Light Weight (LW)

Ultra Light Weight (ULW)



W x L x H
[mm³]

27 x 34 x 20

27 x 34 x 20

27 x 34 x 20

Weight [g]

~8

~7

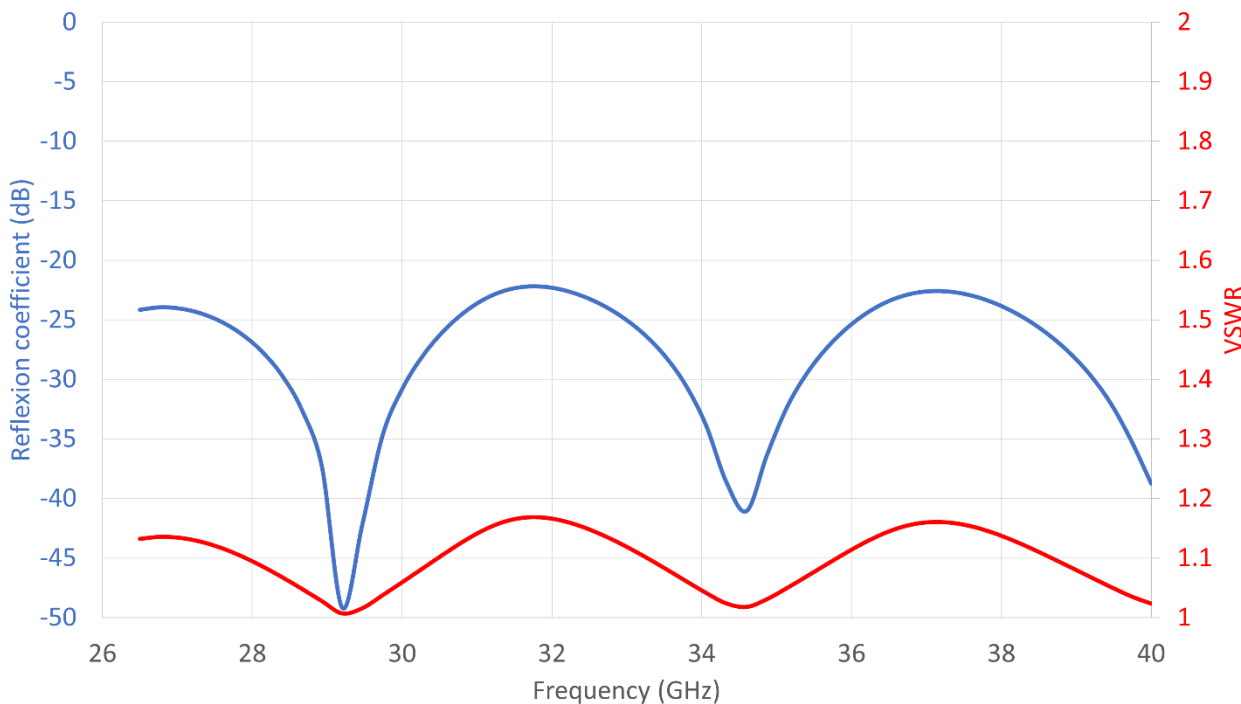
~6



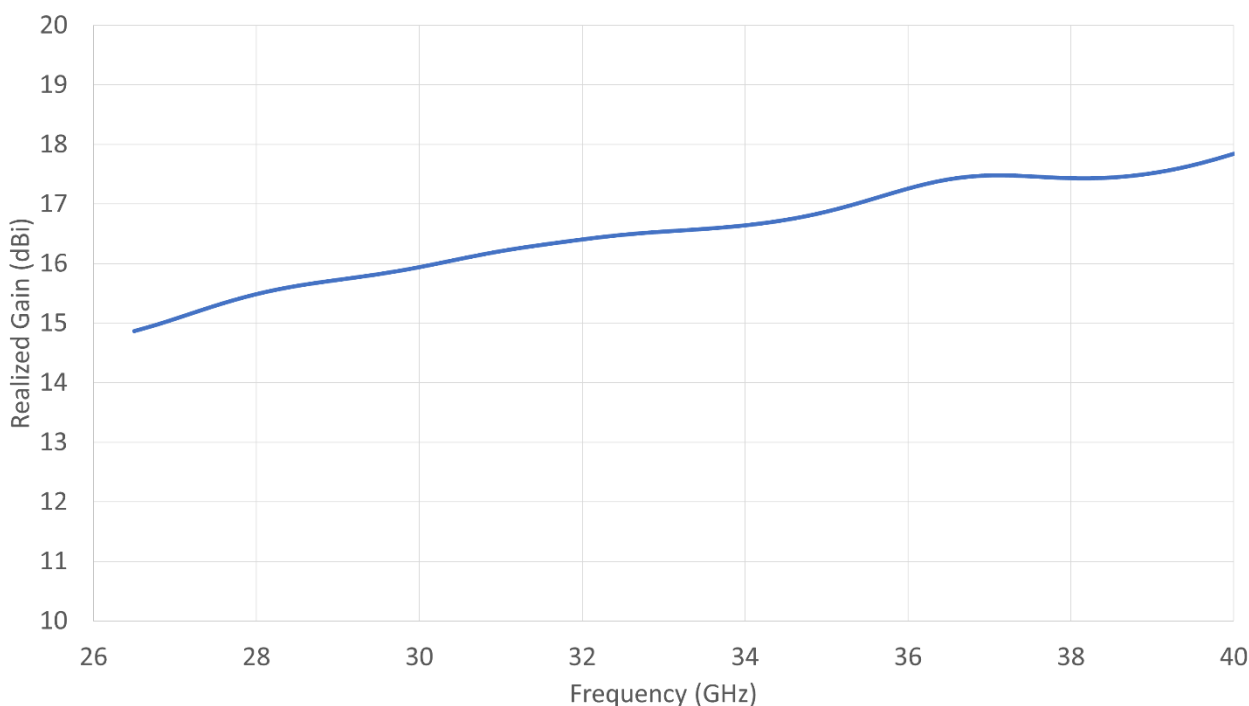
Pyramidal Horn Antenna

26.5 – 40 GHz

Reflexion coefficient



Gain

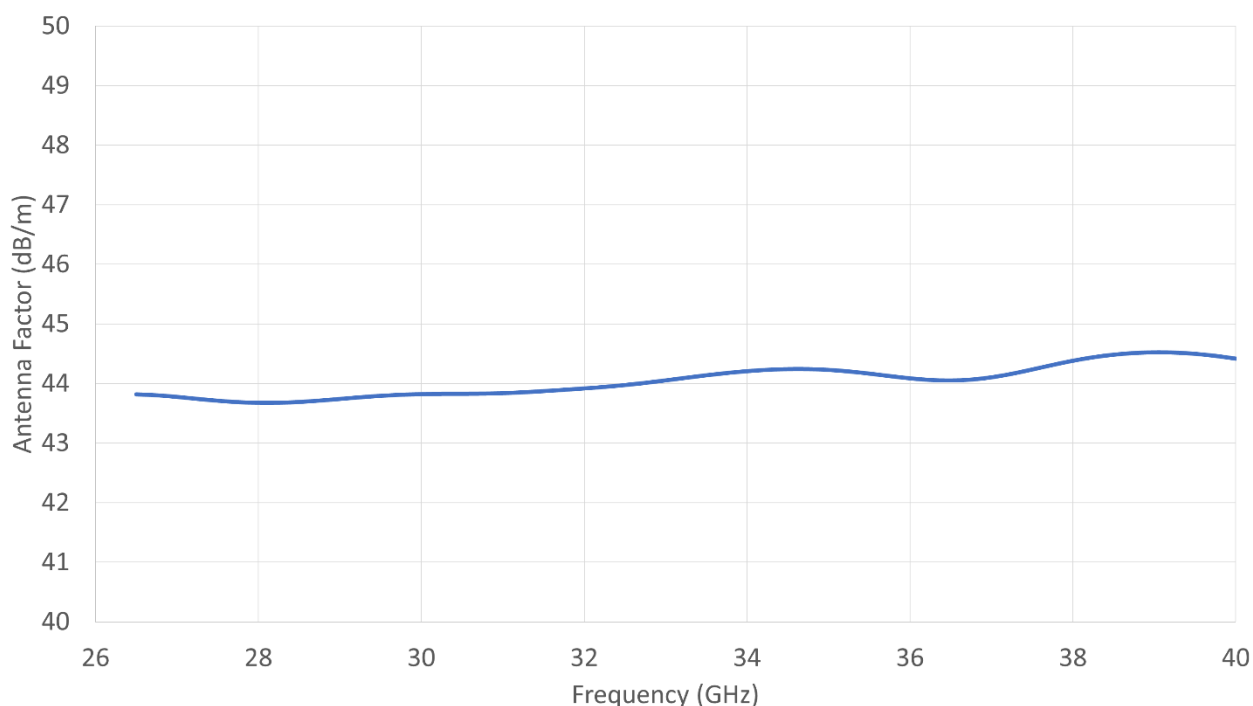




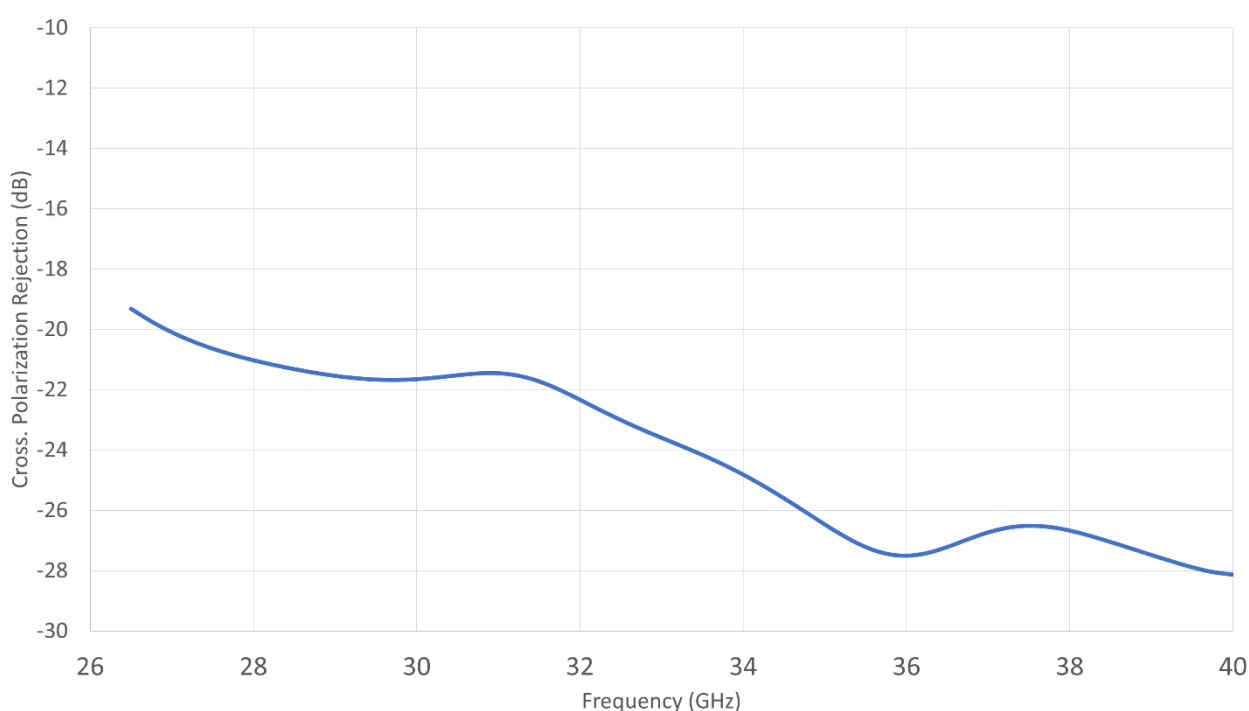
Pyramidal Horn Antenna

26.5 – 40 GHz

Antenna Factor

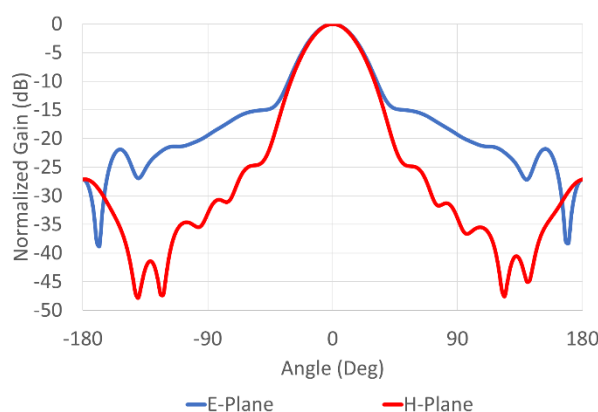


Cross. Pol. Rejection

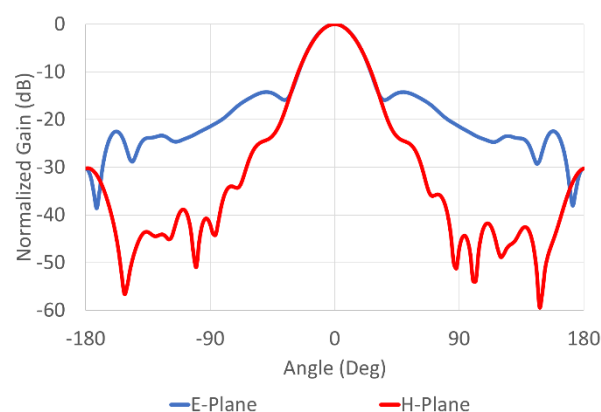


Radiation patterns

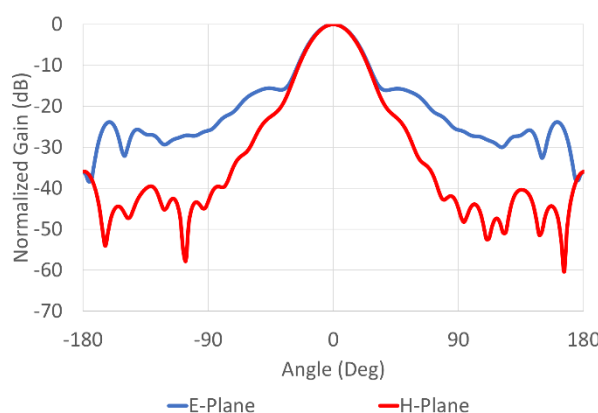
400 MHz



412 MHz



423 MHz



435 MHz

