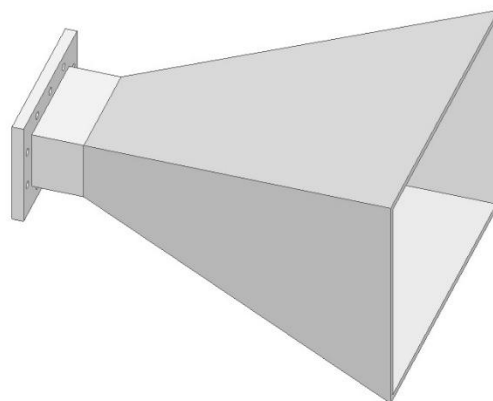


## Electrical specifications

|                 |             |              |
|-----------------|-------------|--------------|
| Frequency Range | 4.9 – 7.05  | [GHz]        |
| VSWR (max.)     | $\leq 1.28$ | –            |
| $S_{11}$ (max.) | $\leq -18$  | [dB]         |
| Impedance       | 50          | [ $\Omega$ ] |
| Connector       | WR159       | –            |
| Power (CW)      | 10          | [W]          |
| Power (Impulse) | 20          | [W]          |
| Gain            | 14.5        | [dBi]        |
| Polarization    | Linear      | –            |

## Physical specifications

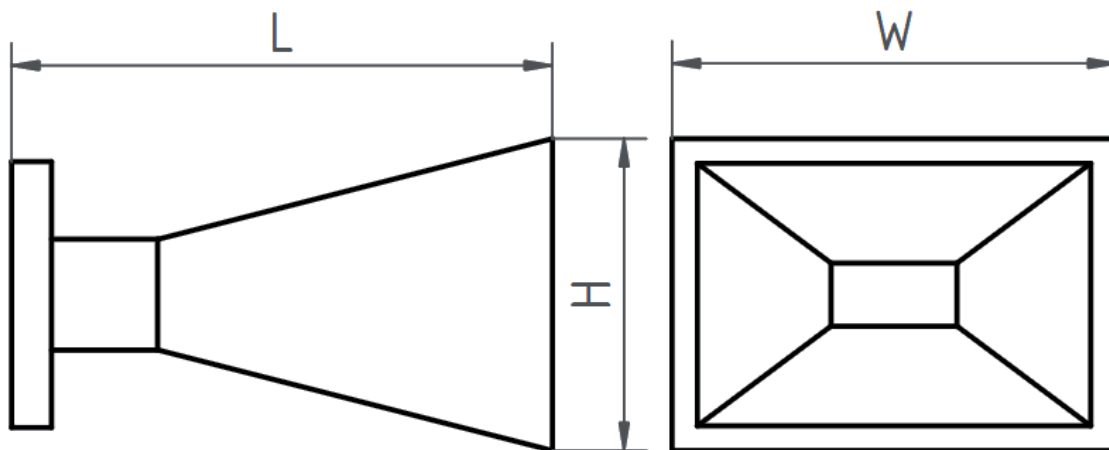
|           |          |                    |
|-----------|----------|--------------------|
| W x L x H | see p. 2 | [mm <sup>3</sup> ] |
| Weight    | see p. 2 | [g]                |



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

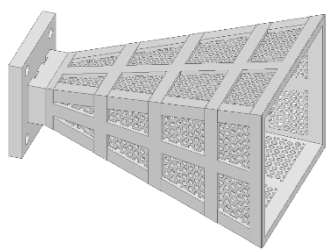
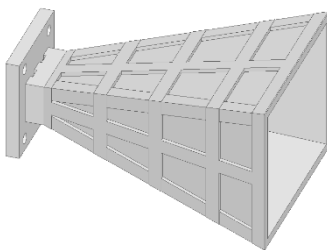
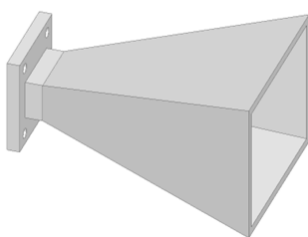
4.9 – 7.05 GHz

### Design

Standard (STD)

Light Weight (LW)

Ultra Light Weight (ULW)



W x L x H  
[mm<sup>3</sup>]

128 x 156 x 94

128 x 156 x 94

128 x 156 x 94

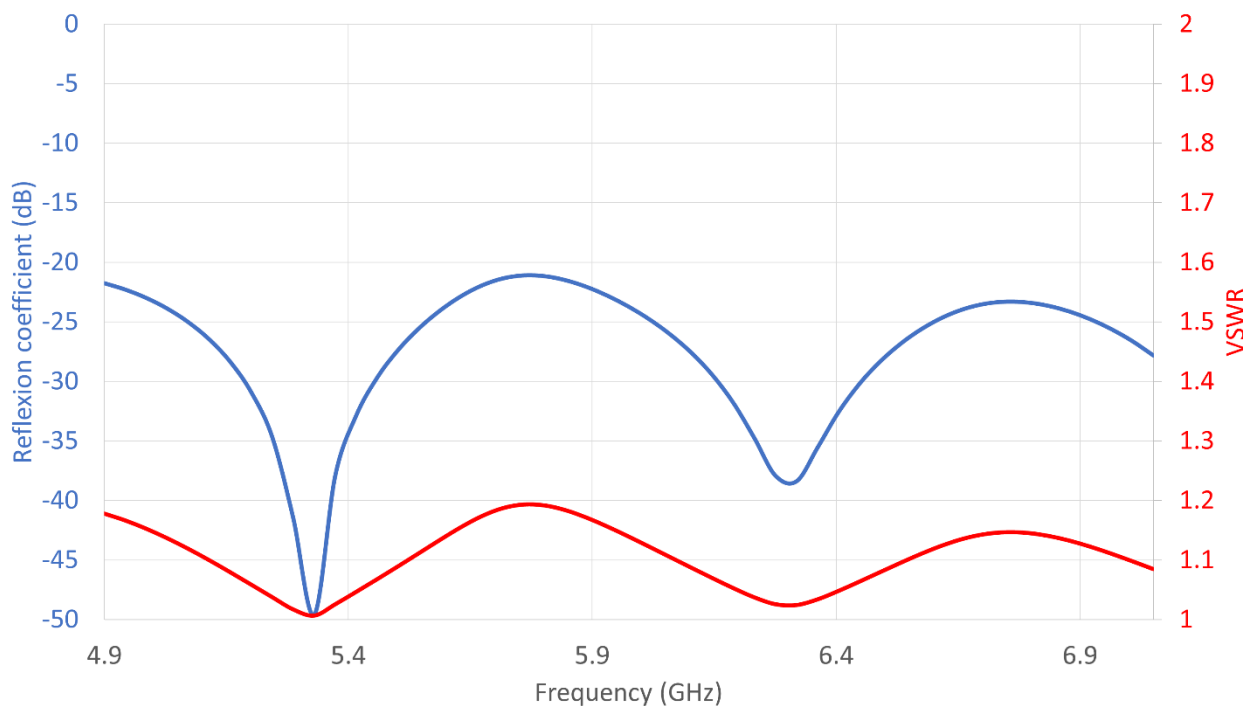
Weight [g]

~290

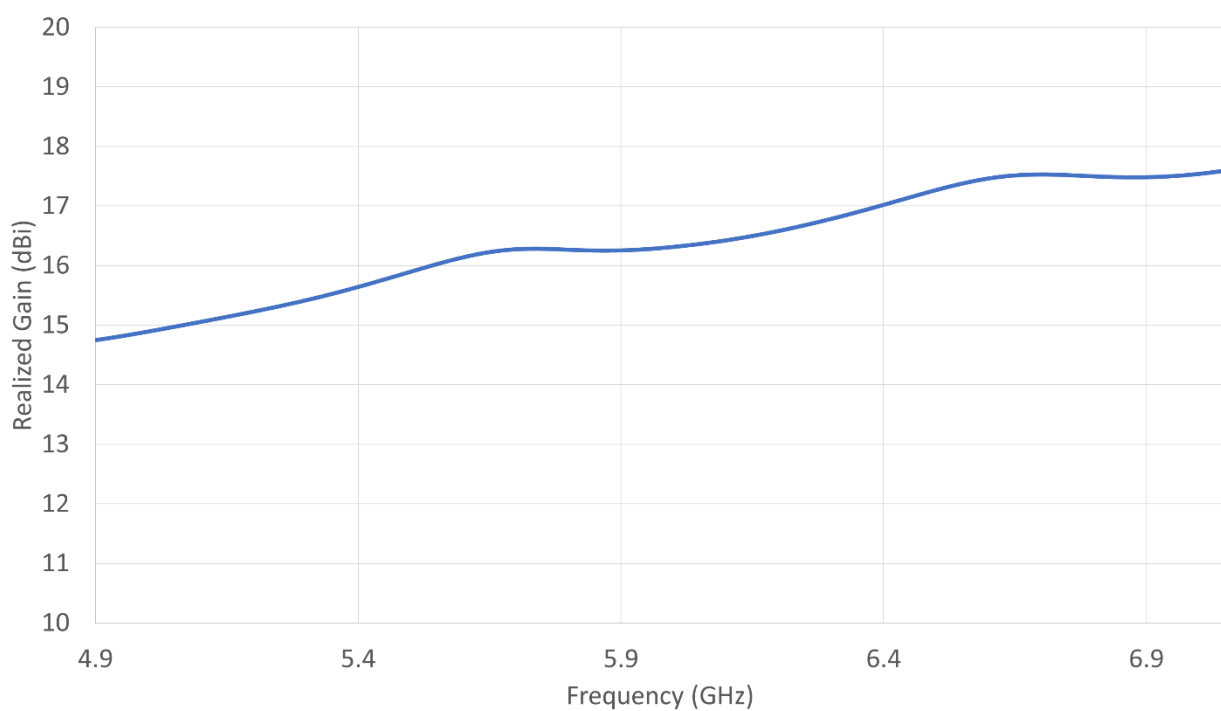
~236

~213

### Reflexion coefficient



### Gain

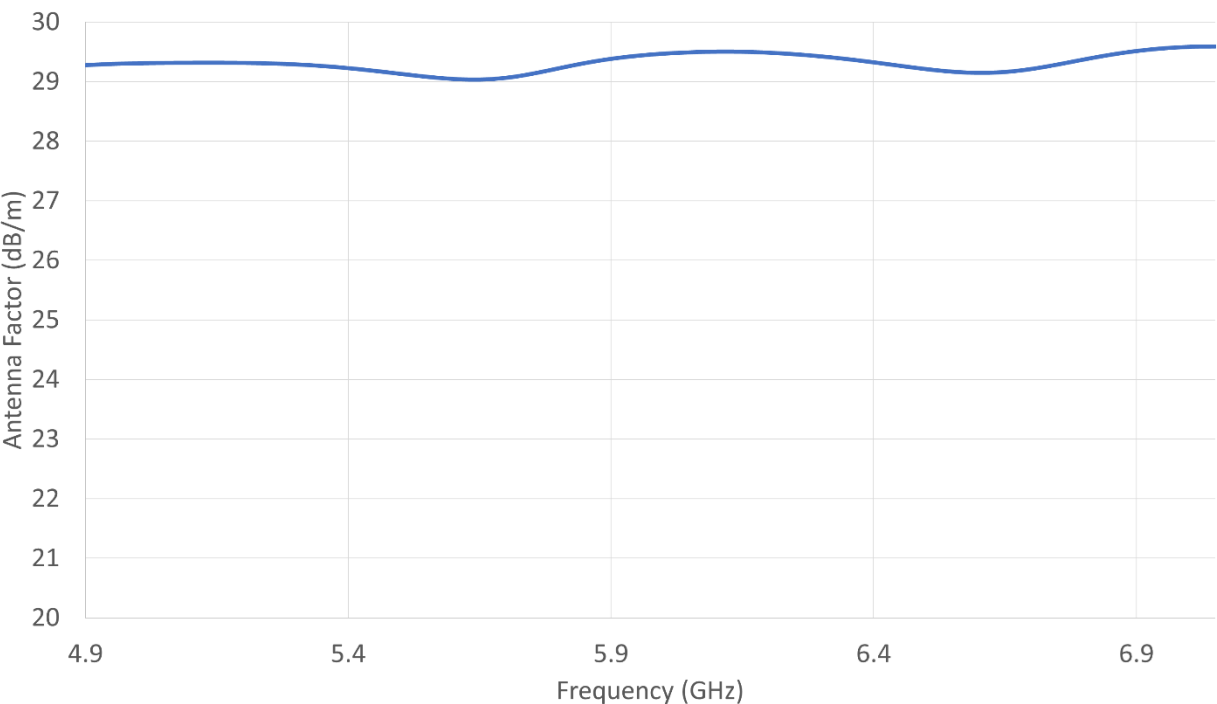




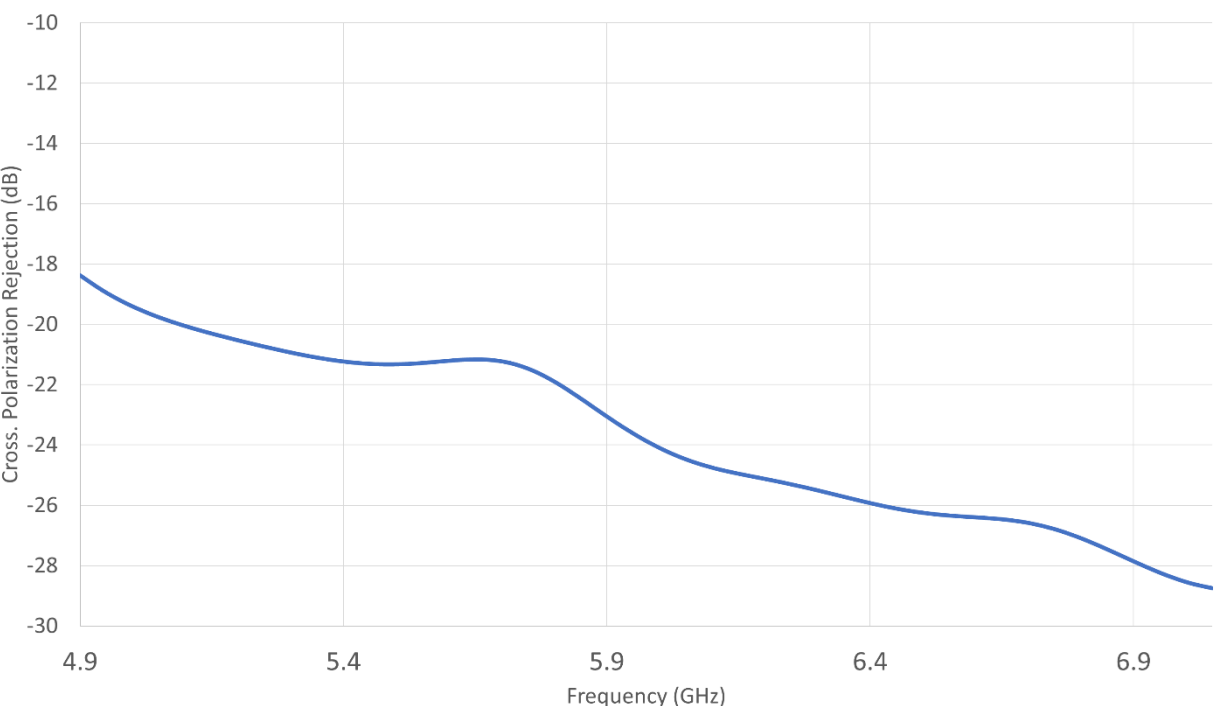
## Pyramidal Horn Antenna

4.9 – 7.05 GHz

### Antenna Factor

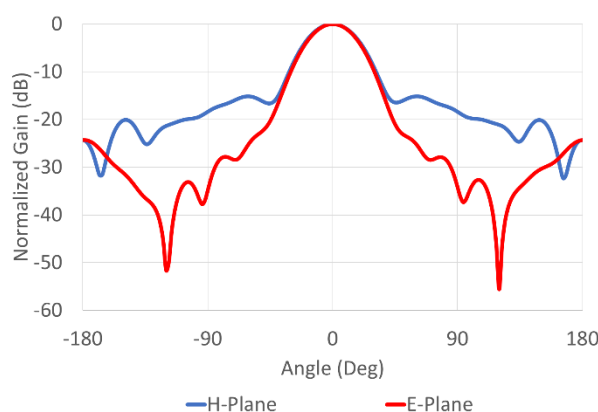


### Cross. Pol. Rejection

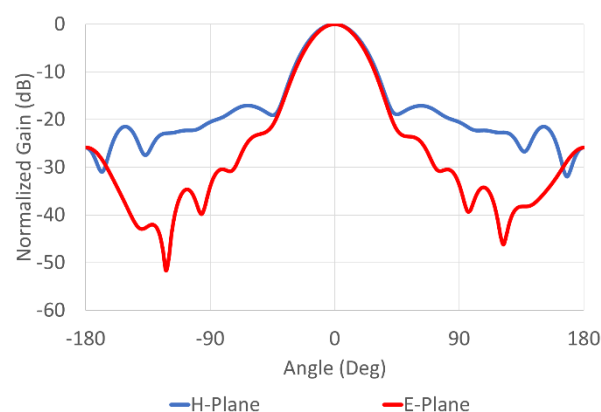


### Radiation patterns

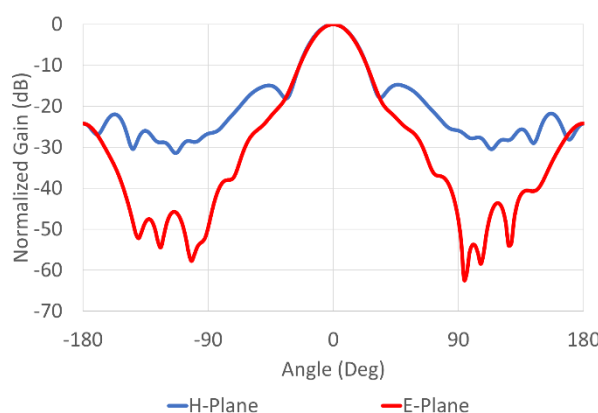
4.9 GHz



5.2 GHz



6.4 GHz



7.05 GHz

