

# K-Wave Simulation

## Phantom:

- Air-Kapton-Water entrance window ✓
- Aluminium walls ✓

## Matrix Array:

- Center frequency: 3.5 MHz ✓
- Bandwidth: 60%: Gaussian filter ✓
- Distance from the entrance window: 54 mm ✗ 12 mm ✓

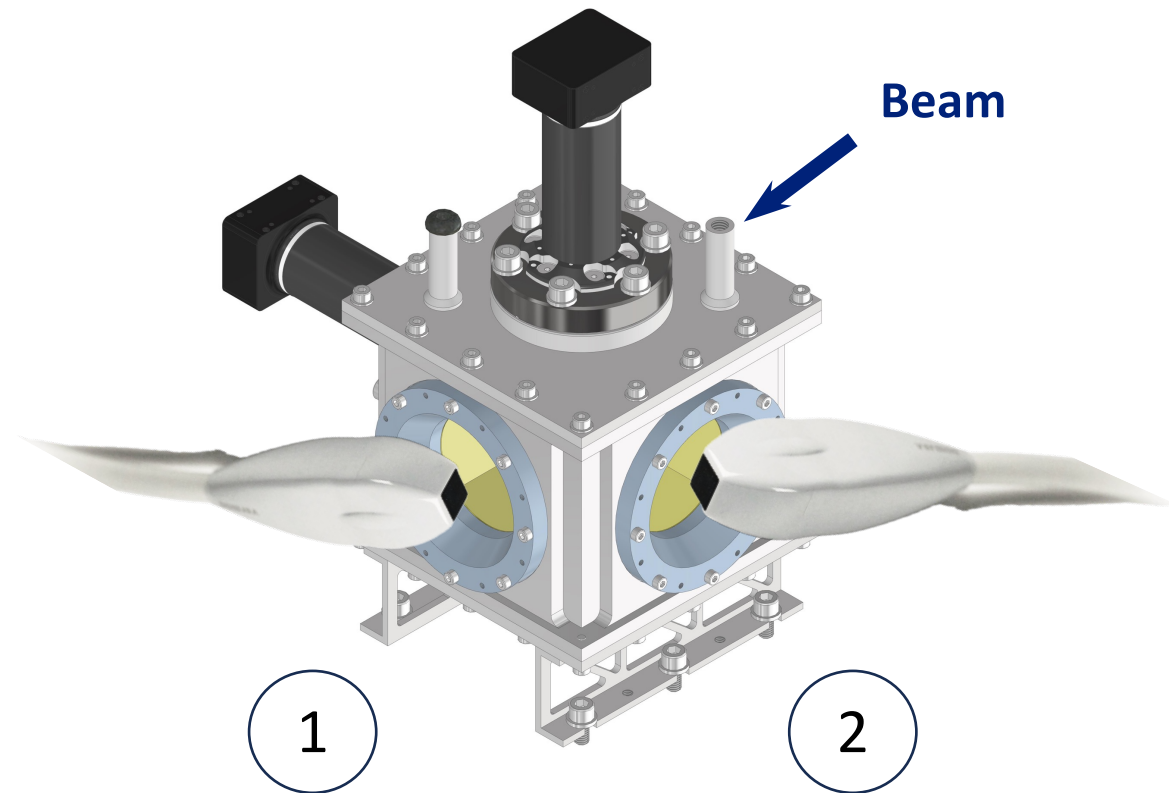
## Noise:

- Electrons ✓
- Electronic noise ✓

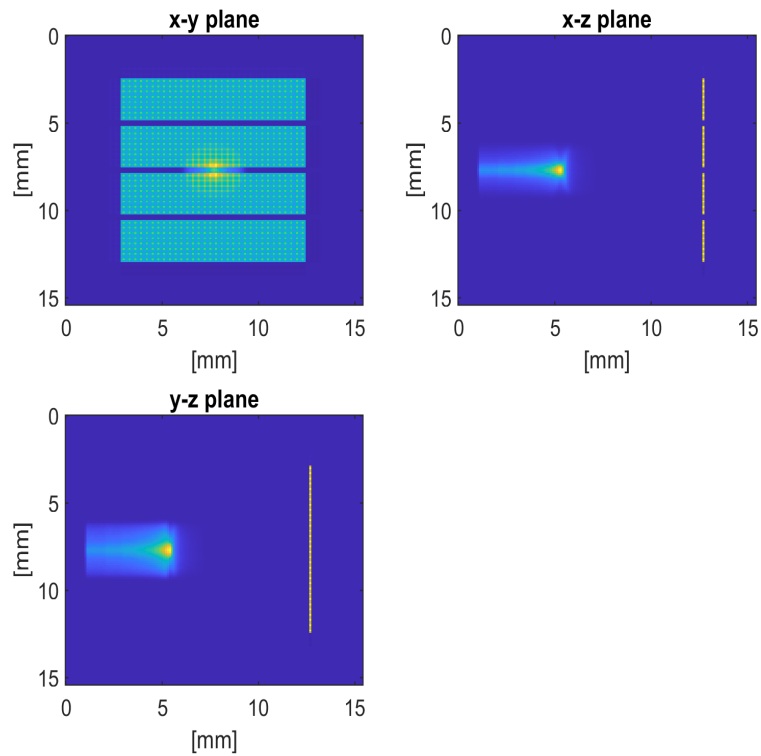
```
% Use 'shuffle' to set the seed based on the current time  
rng('shuffle');  
st_dev = 0.1;
```

# Configurations

**Matrix Array**

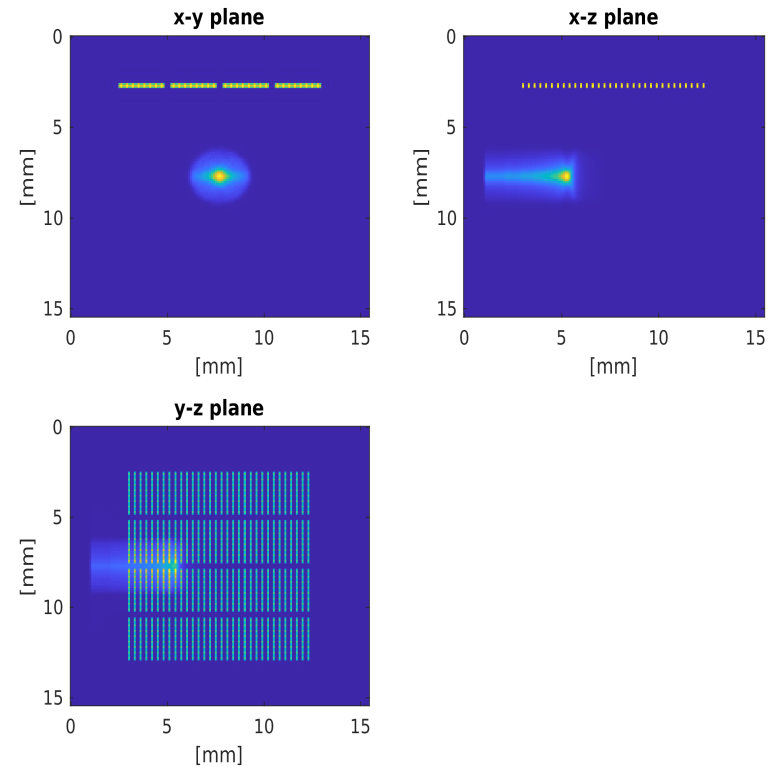


# Configurations

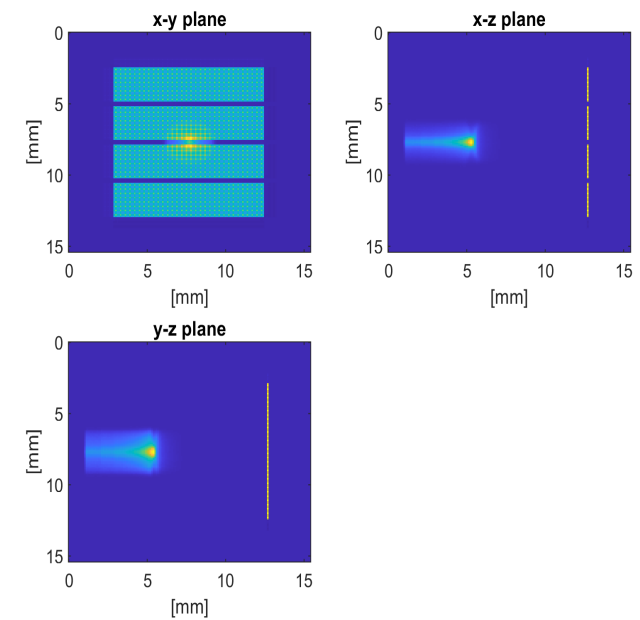


1

Matrix Array

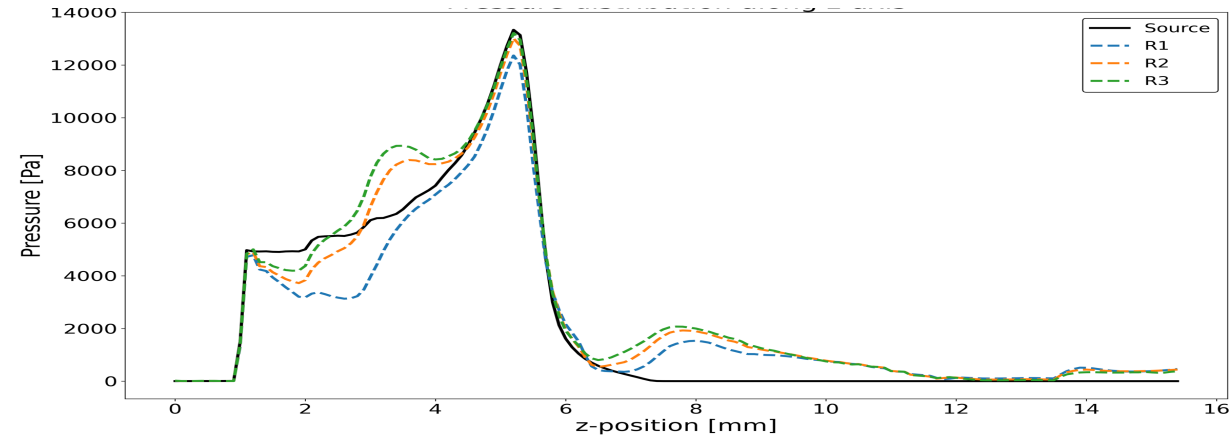
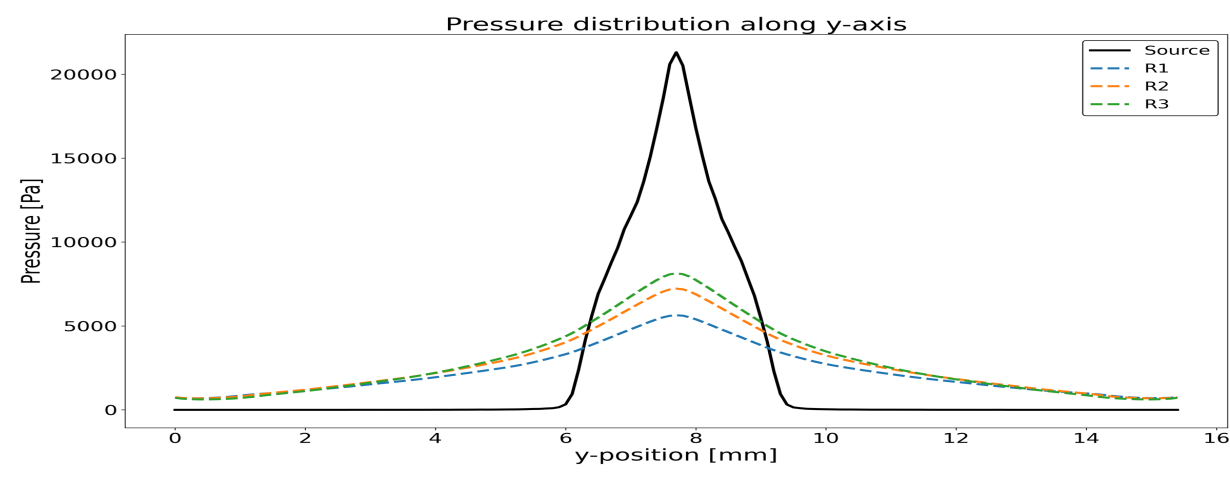
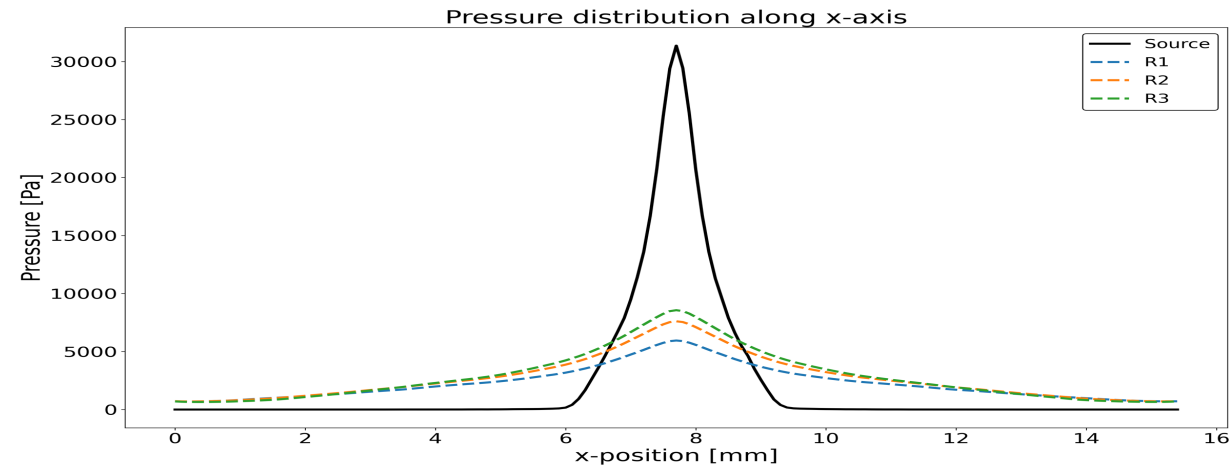


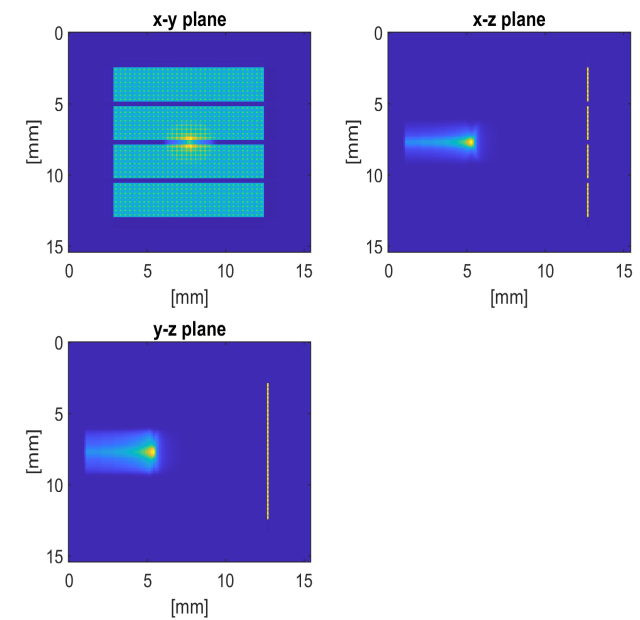
2





1

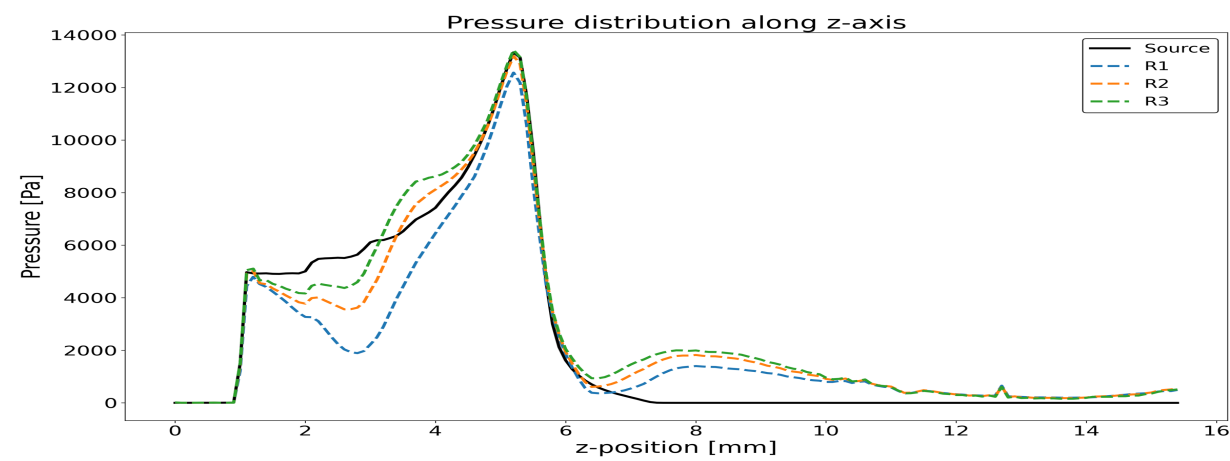
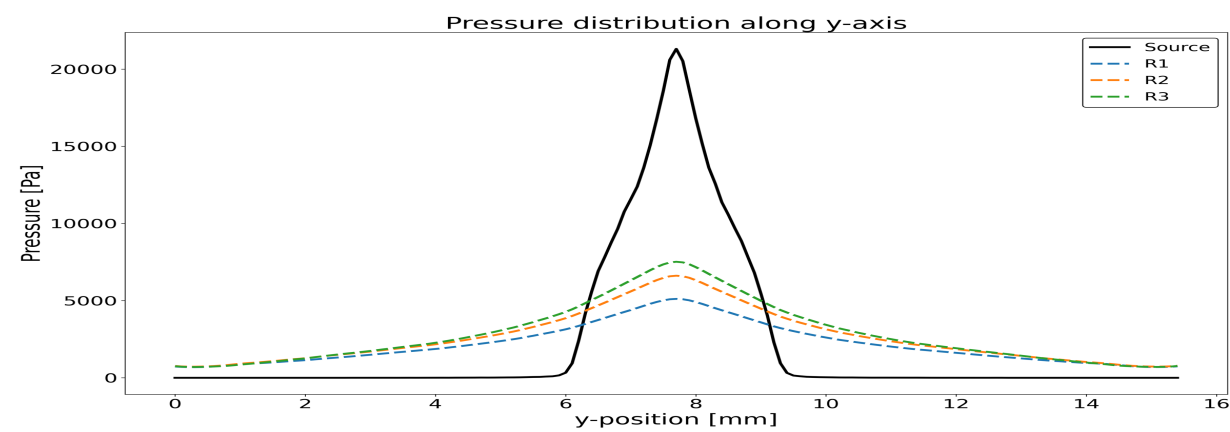
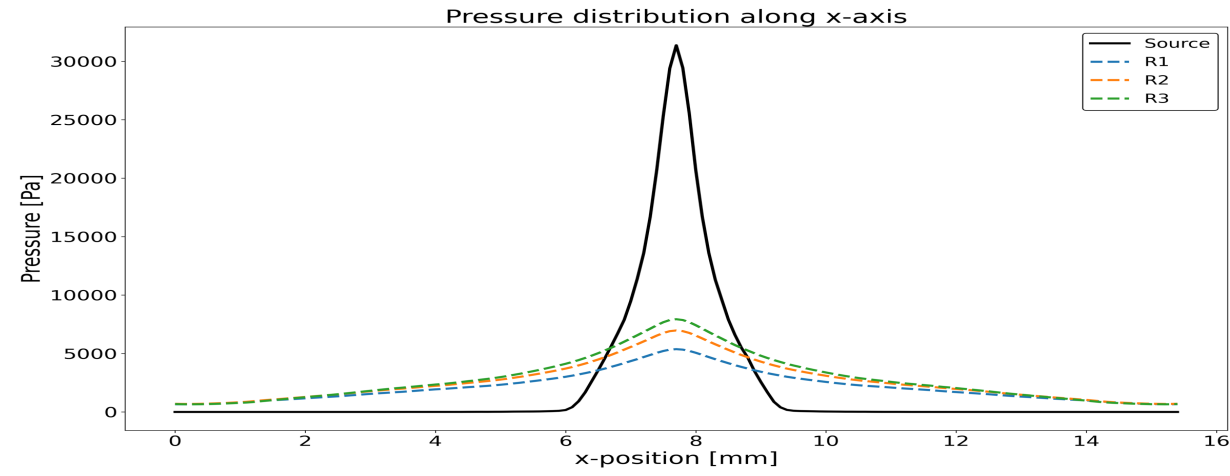
Electronic noise ❌  
 Frequency response ❌

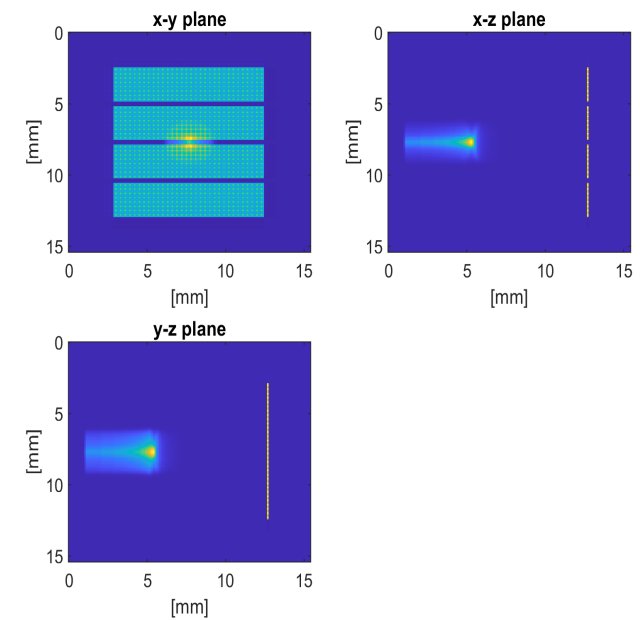




1

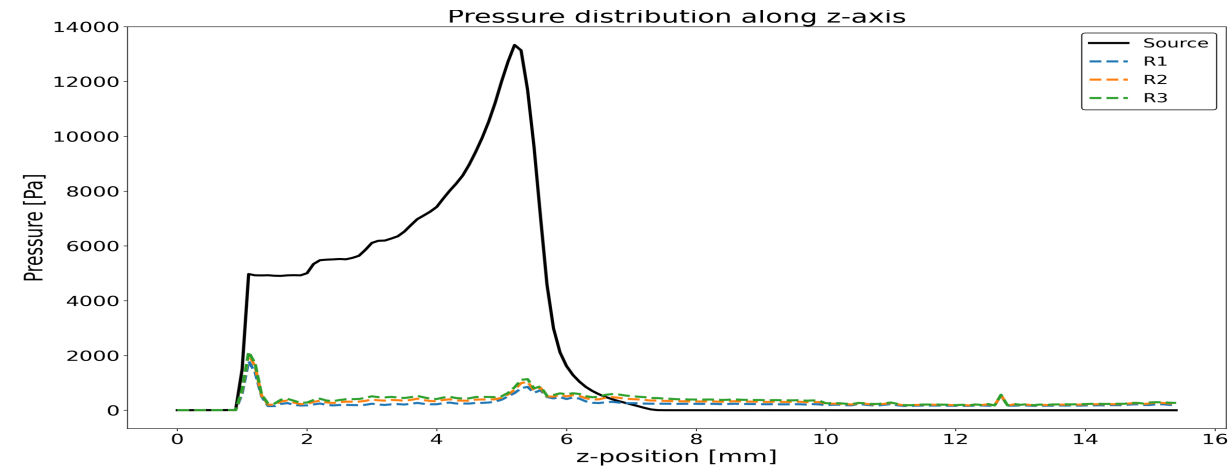
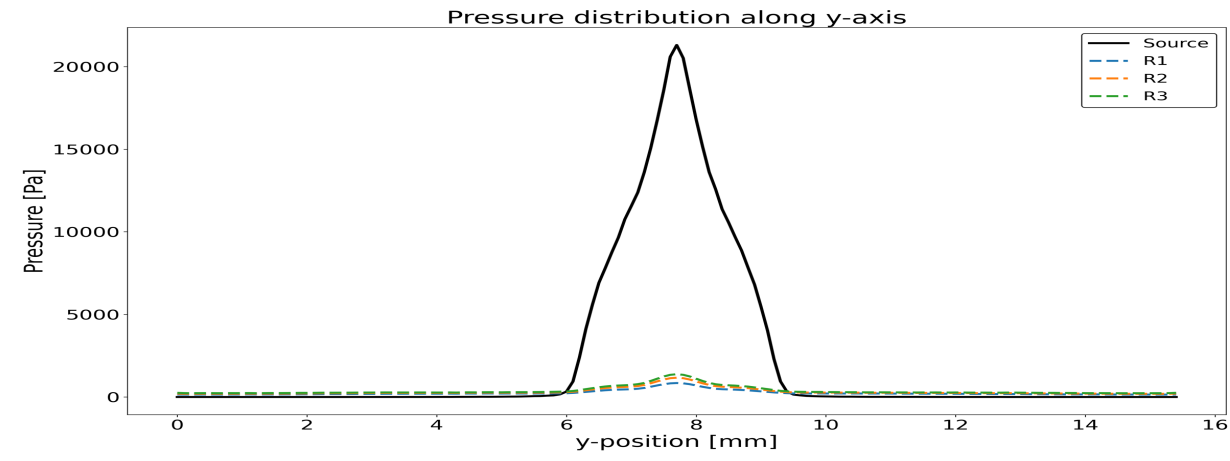
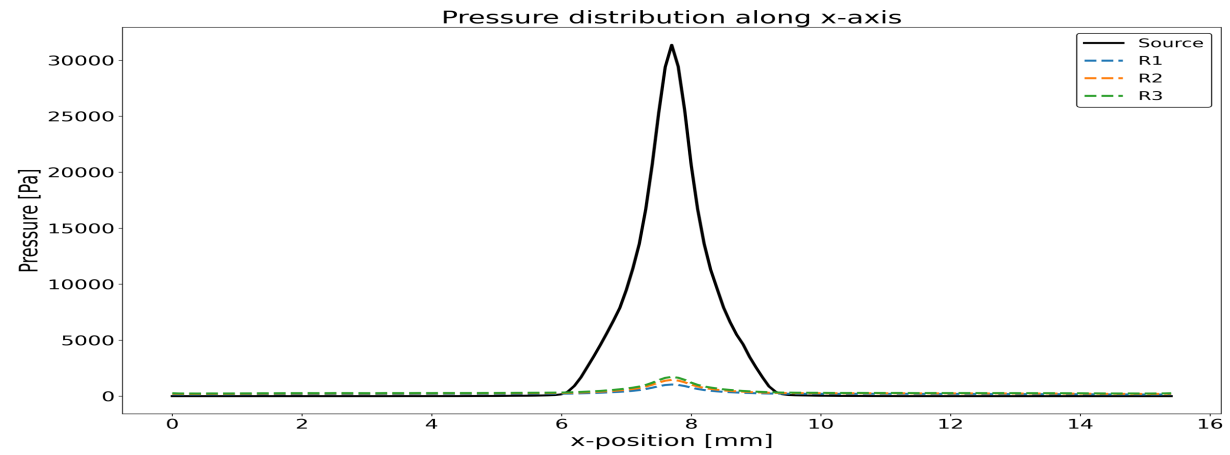
Electronic noise   
 Frequency response 

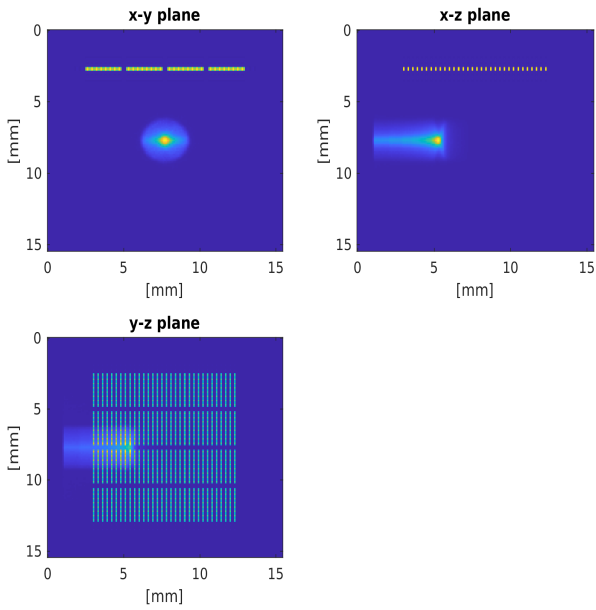




1

Electronic noise ✓  
 Frequency response ✓





2

Electronic noise ✓

Frequency response ✓

