

# Volumes

## Reference

### Panel:

Properties ▸ Render ▸ Volumes

EEVEE simulates volumetric scattering by evaluating all volume objects inside the view frustum.

To achieve this, EEVEE uses several 3D textures which have a high video memory usage. The texture dimensions can be tweaked using the *Resolution* and *Steps* parameters.

### Resolution

Controls the quality of the volumetric effects. Lower resolution increases video memory usage and quality.

### Steps

Number of steps to compute volumetric effects. Higher count increases video memory usage and quality. These samples are distributed along the view depth (view Z axis).

### Distribution

Blend between linear and exponential sample distribution. Higher values put more samples near the camera.

### Max Depth

Maximum surface intersection count used by accurate volume intersection method. Will create artifacts if it is exceeded.

## Custom Range

When working with volume objects, EEVEE automatically computes the best depth range where to compute the volume sampling and lighting. In certain situations, this isn't enough and produces sub-optimal sampling which increases noise. This is particularly the case when using a volume shader inside the *World* or when working with large number of volume objects. The custom depth range can be enabled to restrict the computation of volumes to a certain range along the camera depth and thus increase precision.

### Start

Start distance of the volumetric effect.

### End

End distance of the volumetric effect.

See also

[Limitations.](#)

[Previous](#)  
[Raytracing](#)

Copyright © : This page is licensed under a CC-BY-SA 4.0 Int. License

Made with [Furo](#)

Last updated on 2025-05-10

[View Source](#)  
[View Translation](#)  
[Report issue on this page](#)

[No](#)  
[Cur](#)