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LightProbeVolume(LightProbe)

base classes — [bpy_struct](#), [ID](#), [LightProbe](#)

class bpy.types.**LightProbeVolume(LightProbe)**

Light probe that captures low frequency lighting inside a volume

bake_samples

Number of ray directions to evaluate when baking

TYPE:

int in [1, inf], default 2048

capture_distance

Distance around the probe volume that will be considered during the bake

TYPE:

float in [1e-06, inf], default 20.0

capture_emission

Bake emissive surfaces for more accurate lighting

TYPE:

boolean, default True

capture_indirect

Bake light bounces from light sources for more accurate lighting

TYPE:

boolean, default True

capture_world

Bake incoming light from the world instead of just the visibility for more accurate lighting, but lose correct blending to surrounding irradiance volumes

TYPE:

boolean, default False

clamp_direct

Clamp the direct lighting intensity to reduce noise (0 to disable)

TYPE:

float in [0, inf], default 0.0

clamp_indirect

Clamp the indirect lighting intensity to reduce noise (0 to disable)

TYPE:

float in [0, inf], default 10.0

dilation_radius

Radius in grid sample to search valid grid samples to copy into invalid grid samples

TYPE:

float in [1, 5], default 1.0

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dilation_threshold

Ratio of front-facing surface hits under which a grid sample will reuse neighbors grid sample lighting

TYPE:

float in [0, 1], default 0.5

escape_bias

Distance to search for valid capture positions to prevent lighting artifacts

TYPE:

float in [0, 1], default 0.1

facing_bias

Smoother irradiance interpolation but introduce light bleeding

TYPE:

float in [0, inf], default 0.5

intensity

Modify the intensity of the lighting captured by this probe

TYPE:

float in [0, inf], default 1.0

normal_bias

Offset sampling of the irradiance grid in the surface normal direction to reduce light bleeding

TYPE:

float in [0, inf], default 0.3

resolution_x

Number of samples along the x axis of the volume

TYPE:

int in [1, 256], default 4

resolution_y

Number of samples along the y axis of the volume

TYPE:

int in [1, 256], default 4

resolution_z

Number of samples along the z axis of the volume

TYPE:

int in [1, 256], default 4

surface_bias

Moves capture points away from surfaces to prevent artifacts

TYPE:

float in [0, 1], default 0.05

surfel_density

Number of surfels to spawn in one local unit distance (higher values improve quality)

TYPE:

int in [1, 1000000], default 10000

int in [1, int], default 20

validity_threshold

Ratio of front-facing surface hits under which a grid sample will not be considered for lighting

TYPE:

float in [0, 1], default 0.4

view_bias

Offset sampling of the irradiance grid in the viewing direction to reduce light bleeding

TYPE:

float in [0, inf], default 0.0

classmethod bl_ma_get_subclass(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The RNA type or default when not found.

RETURN TYPE:

`bpy.types.Struct` subclass

classmethod bl_ma_get_subclass_py(id, default=None)

PARAMETERS:

id (*str*) – The RNA type identifier.

RETURNS:

The class or default when not found.

RETURN TYPE:

type

Inherited Properties

- `bpy_struct.id_data`
- `ID.name`
- `ID.name_full`
- `ID.id_type`
- `ID.session_uid`
- `ID.is_evaluated`
- `ID.original`
- `ID.users`
- `ID.use_fake_user`
- `ID.use_extra_user`
- `ID.is_embedded_data`
- `ID.is_missing`
- `ID.is_runtime_data`
- `ID.is_editable`
- `ID.tag`
- `ID.is_library_indirect`
- `ID.library`
- `ID.library_weak_reference`
- `ID.asset_data`
- `ID.override_library`
- `ID.preview`
- `LightProbe.type`
- `LightProbe.clip_start`
- `LightProbe.show_clip`
- `LightProbe.show_influence`
- `LightProbe.influence_distance`
- `LightProbe.visibility_buffer_bias`
- `LightProbe.visibility_bleed_bias`
- `LightProbe.visibility_blur`
- `LightProbe.visibility_collection`
- `LightProbe.invert_visibility_collection`
- `LightProbe.show_data`
- `LightProbe.use_data_display`
- `LightProbe.data_display_size`
- `LightProbe.animation_data`

Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `ID.rename`
- `ID.evaluated_get`
- `ID.copy`
- `ID.asset_mark`
- `ID.asset_clear`
- `ID.asset_generate_preview`
- `ID.override_create`
- `ID.override_hierarchy_create`
- `ID.user_clear`
- `ID.user_remap`
- `ID.make_local`
- `ID.user_of_id`
- `ID.animation_data_create`
- `ID.animation_data_clear`
- `ID.update_tag`
- `ID.preview_ensure`
- `ID.bl_rna_get_subclass`
- `ID.bl_rna_get_subclass_py`
- `LightProbe.bl_rna_get_subclass`
- `LightProbe.bl_rna_get_subclass_py`