

Unit1-4

Methods of iterating

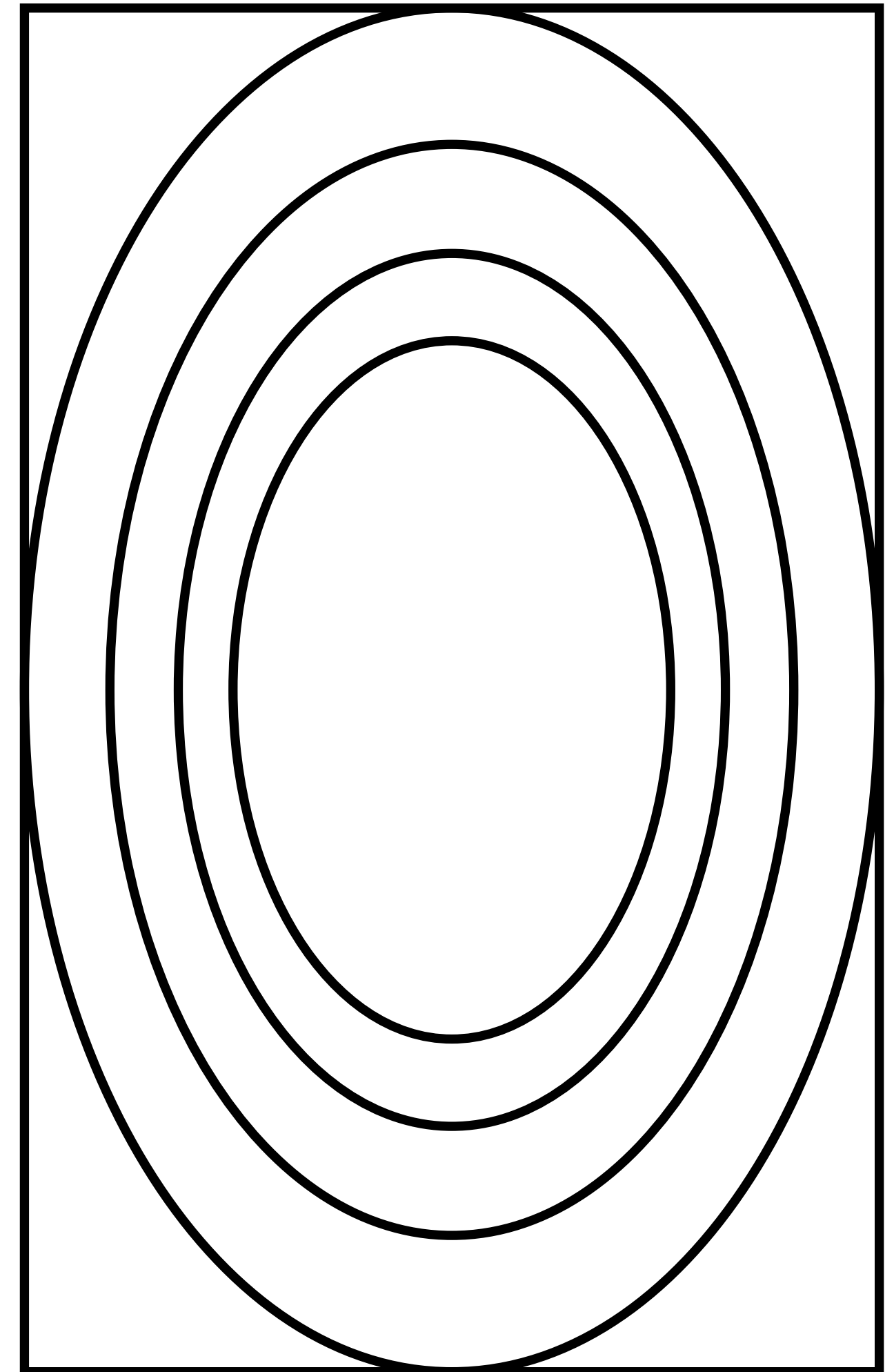
James Turrell
-Aten Regin

Recreate and explore
James Turrell's light
work with Blender.

Blender

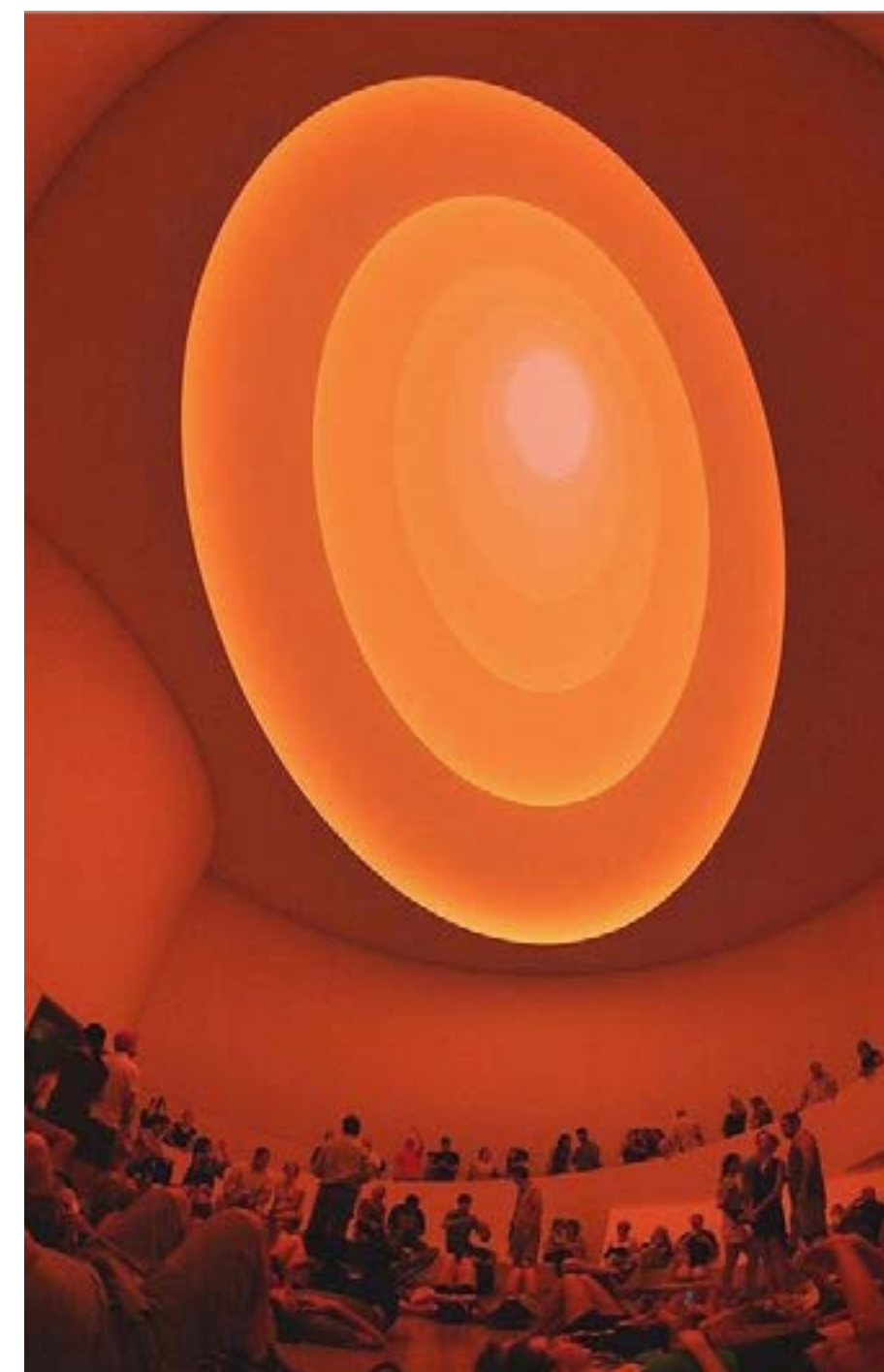
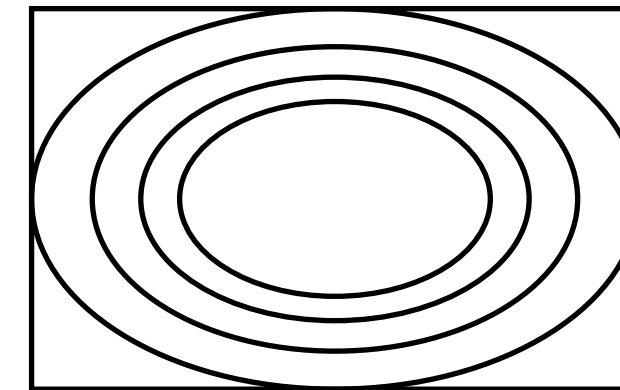
week-1

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About James Turrell

-Aten Regin



James Turrell is an American artist known for his 'light and space' art. His work focuses on the use of light, space and sensory experience to create immersive art environments through changes in light and shadow.

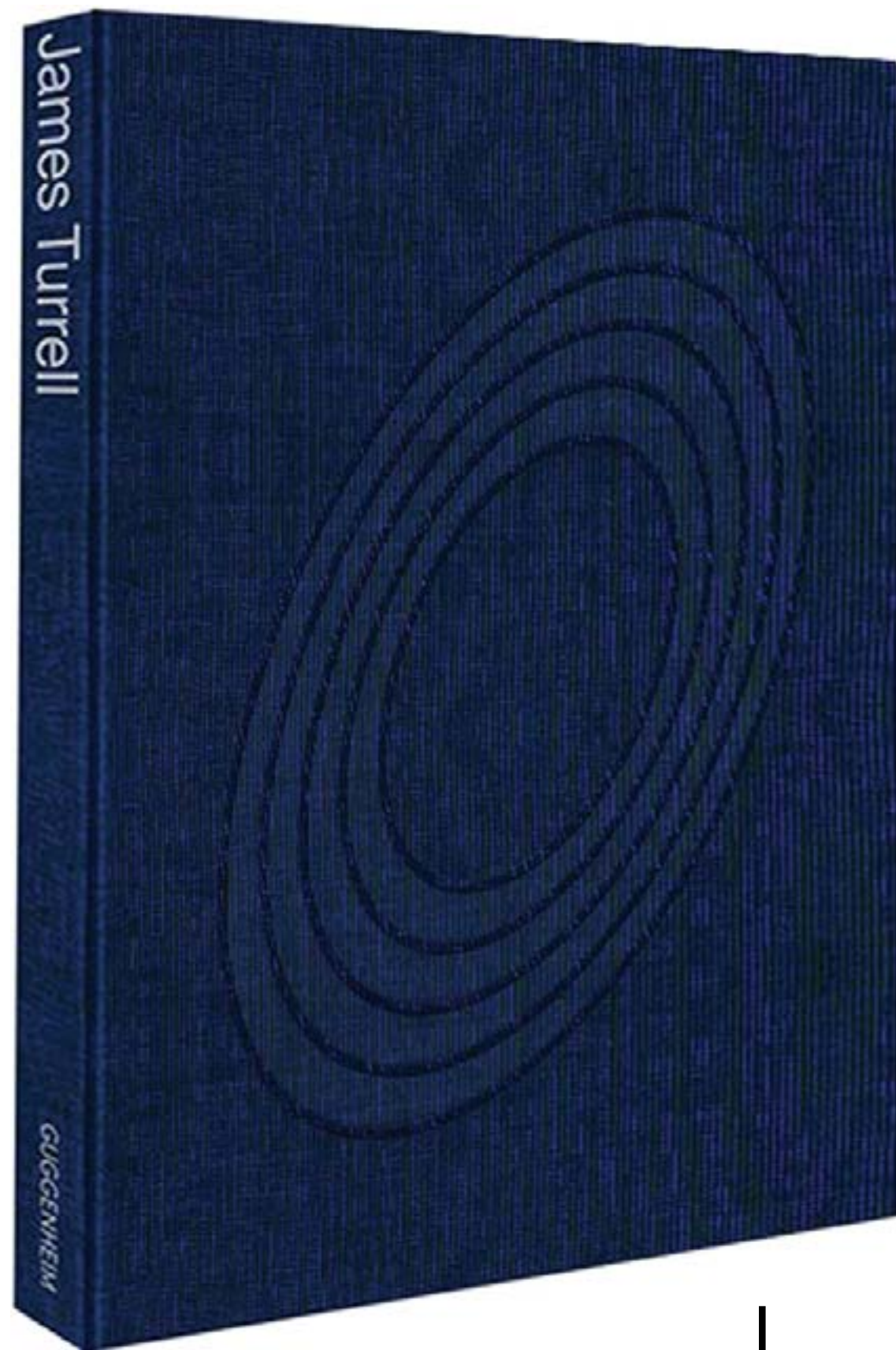
Aten Reign is a famous design by Turrell that was created in 2013 for the Guggenheim Museum in New York. The whole gallery has been changed to feel like a soft, glowing halo, with different colours of light that create a strange and exciting sensory experience.



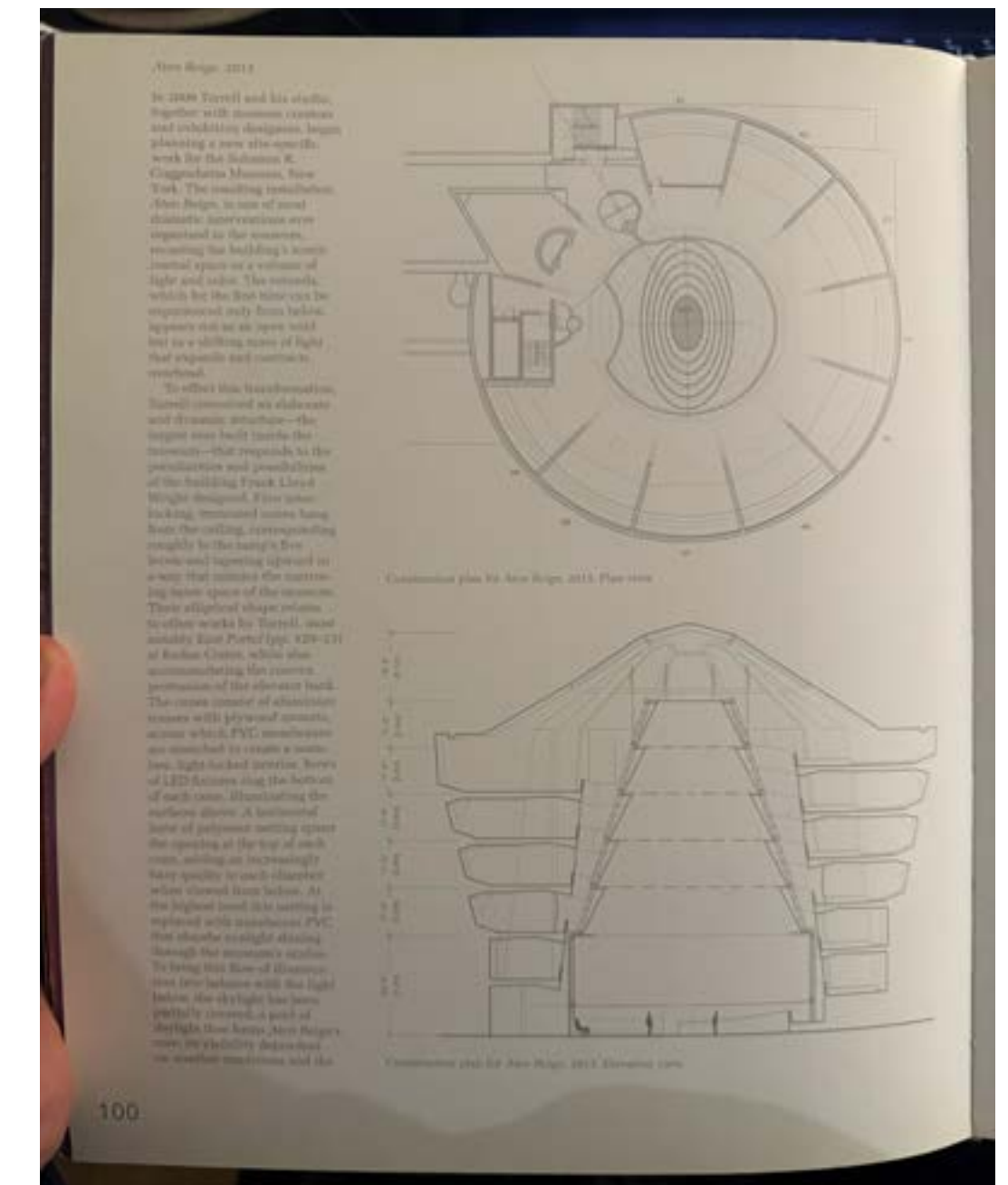
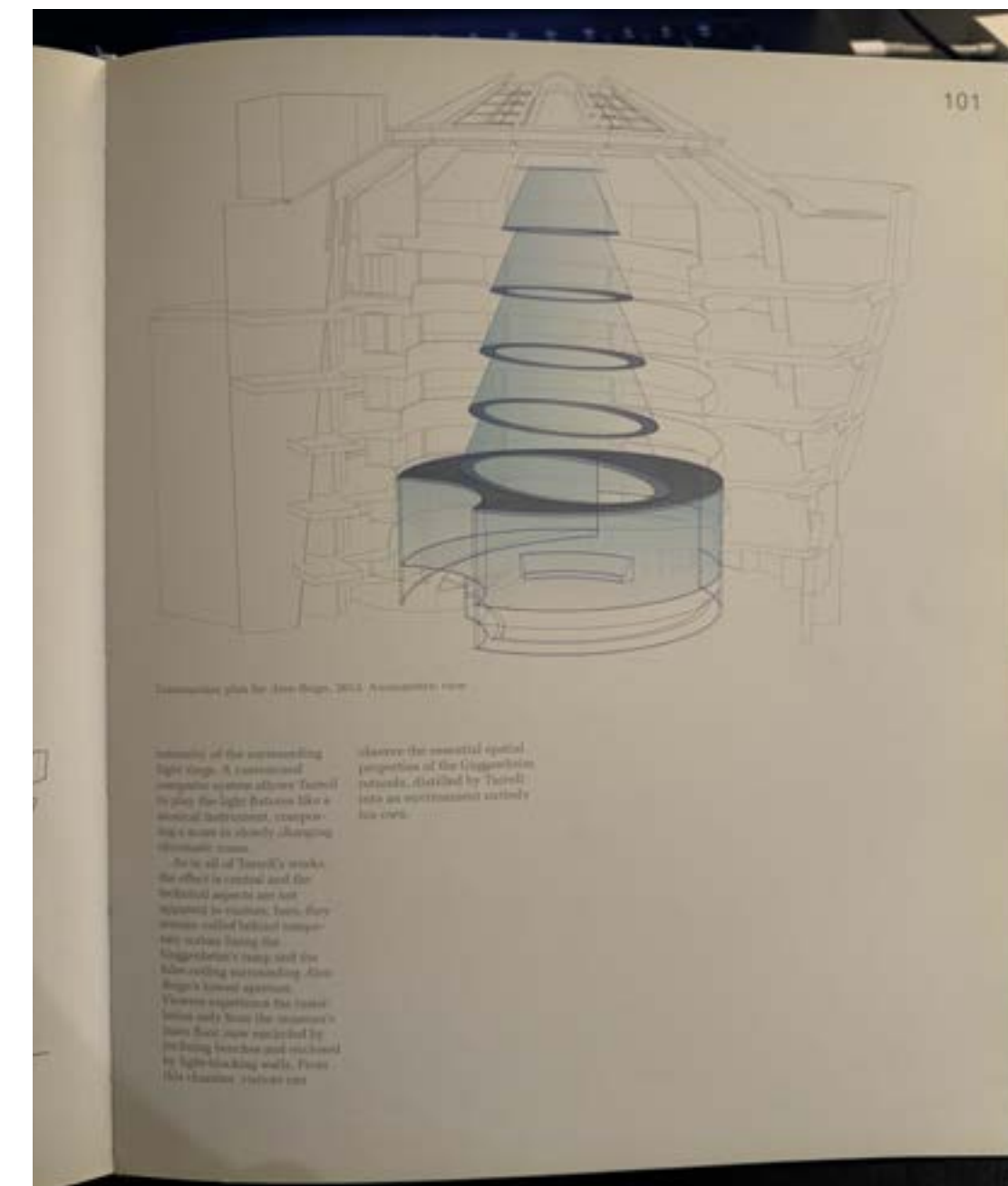
About James Turrell

-Aten Regin 2

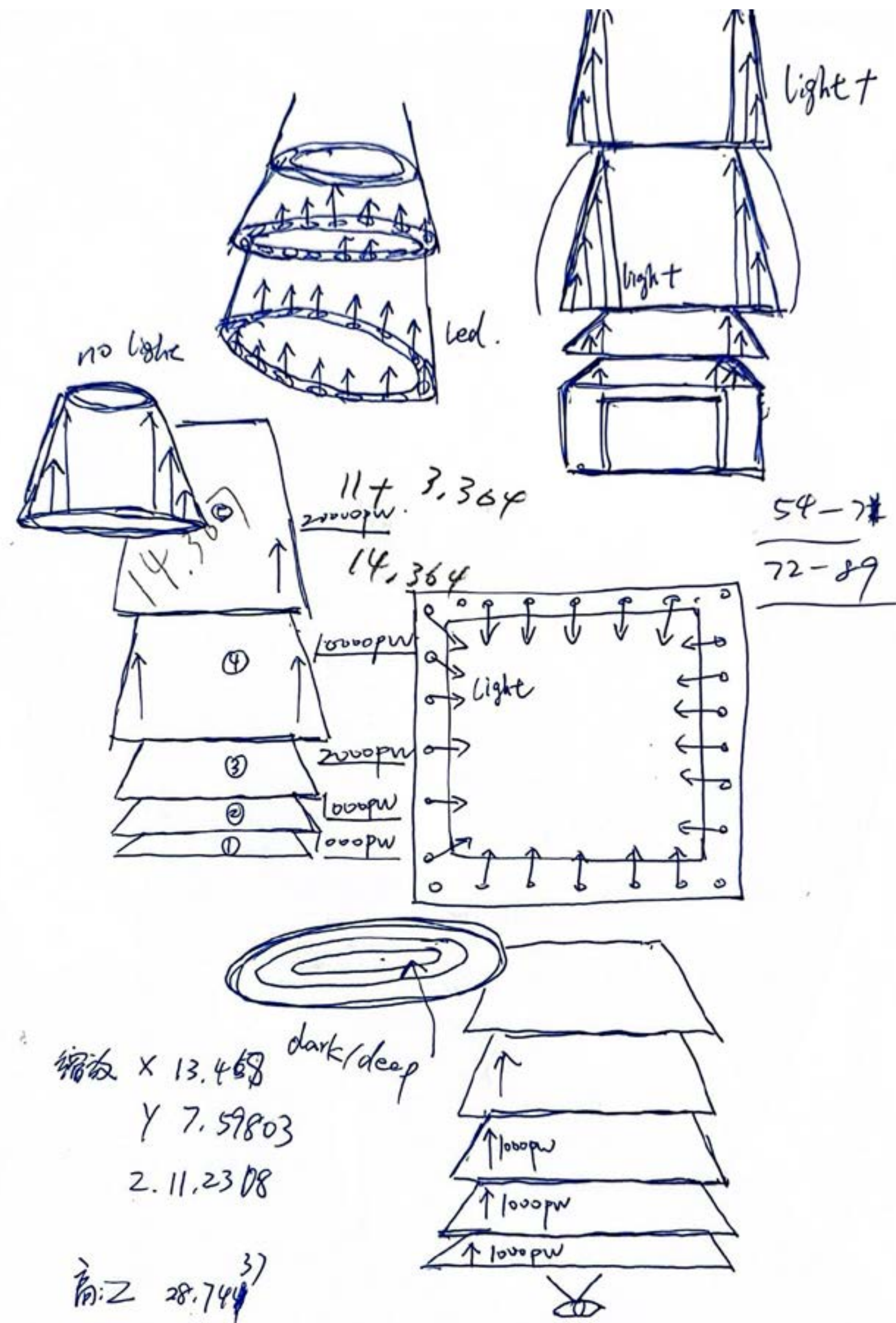
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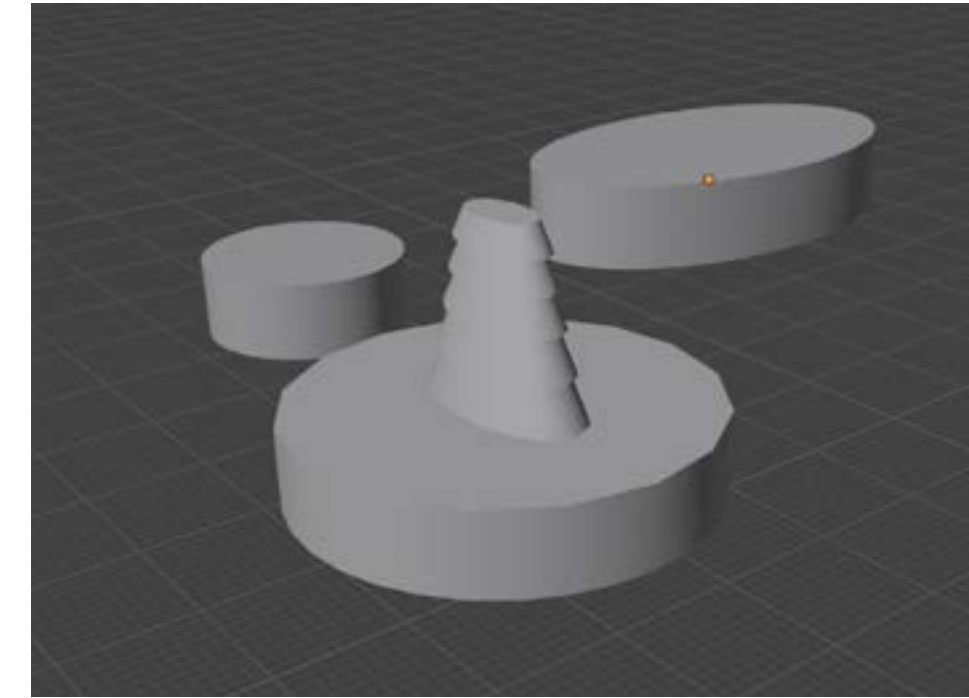
Aten Reign (2013), the installation by James Turrell that fills the Guggenheim in New York. Using this video on youtube as a reference, it shows the assembly process of Aten Regin's work, using many LED lights in its structure. Then borrow this book from the library which shows the structure of the piece in more detail.



About Blender

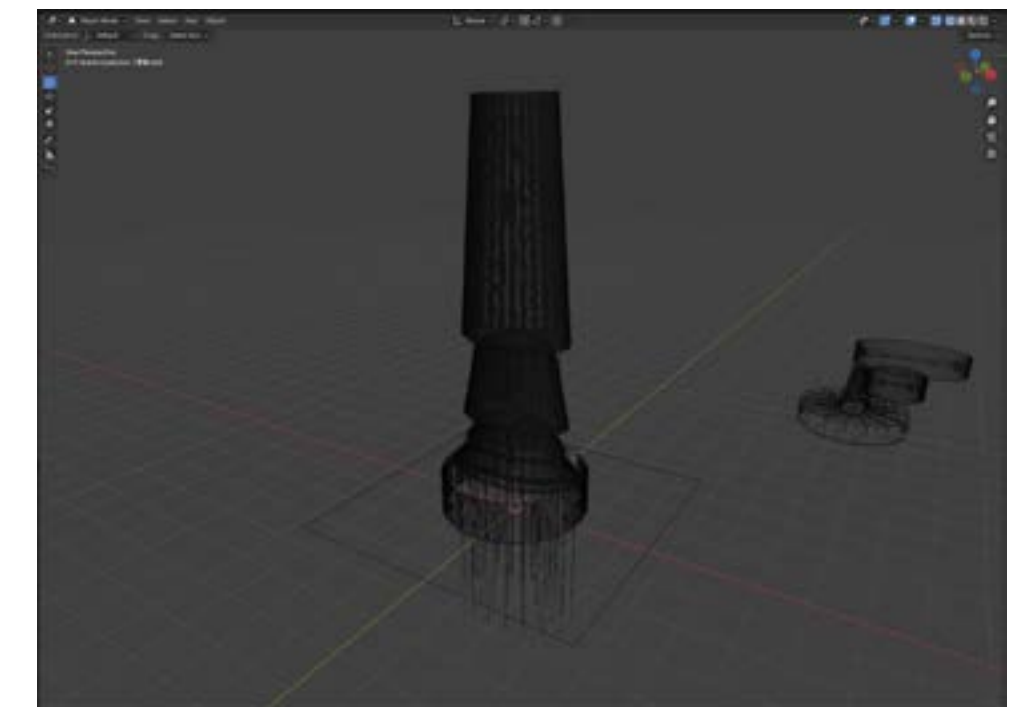
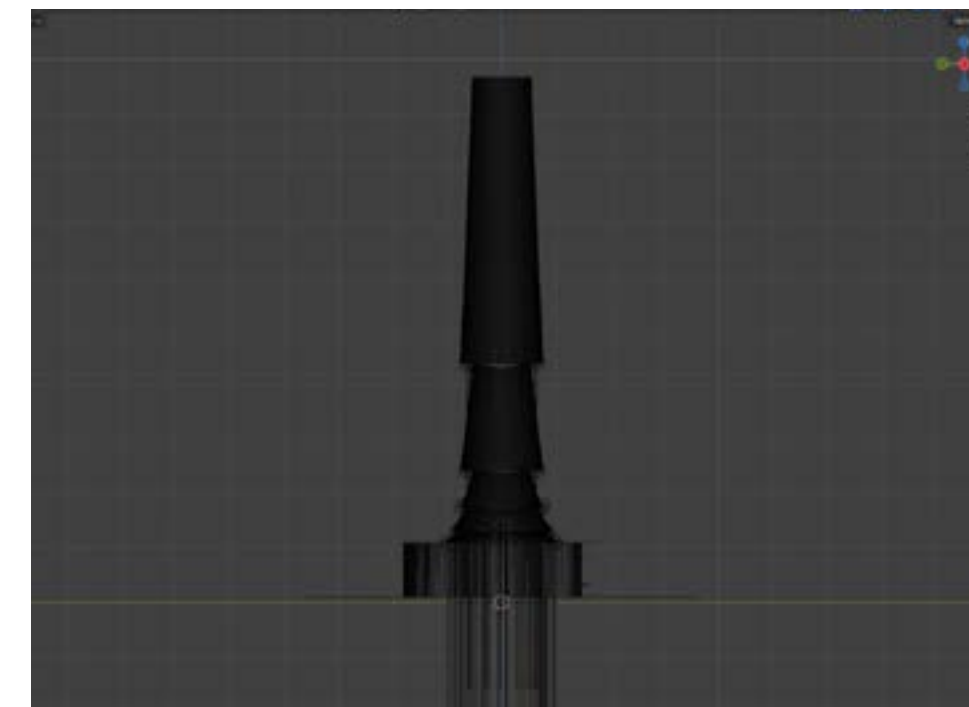
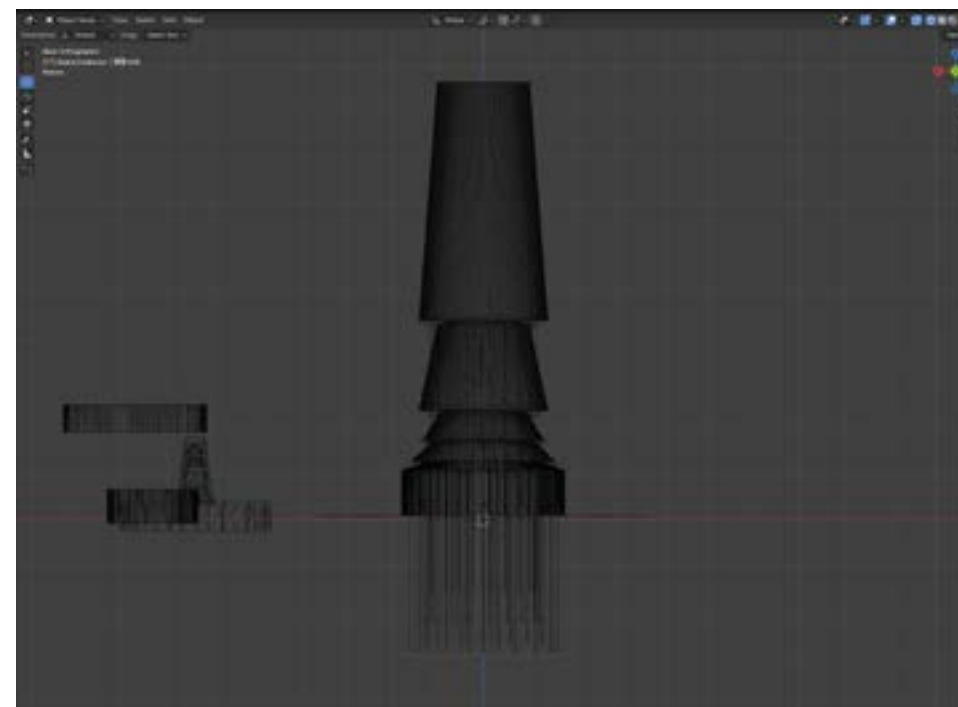
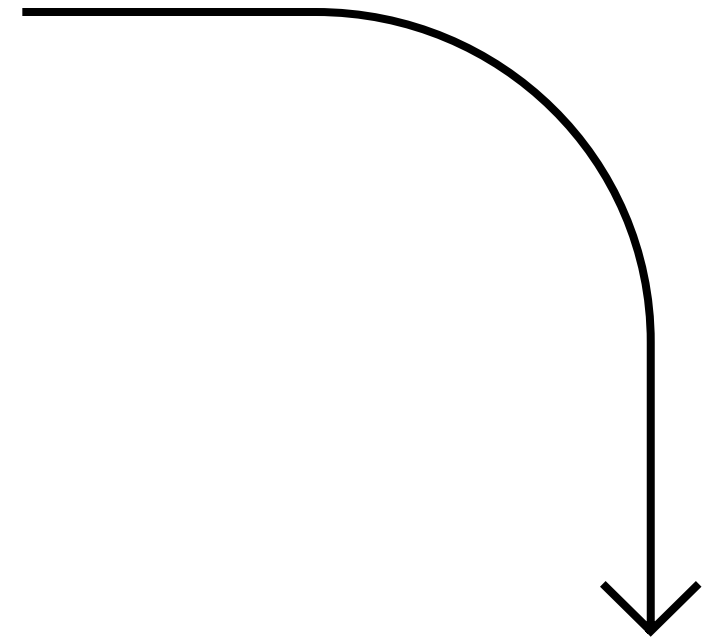


Try modelling in some shapes



Learning to cut, dividing three-dimensional shapes

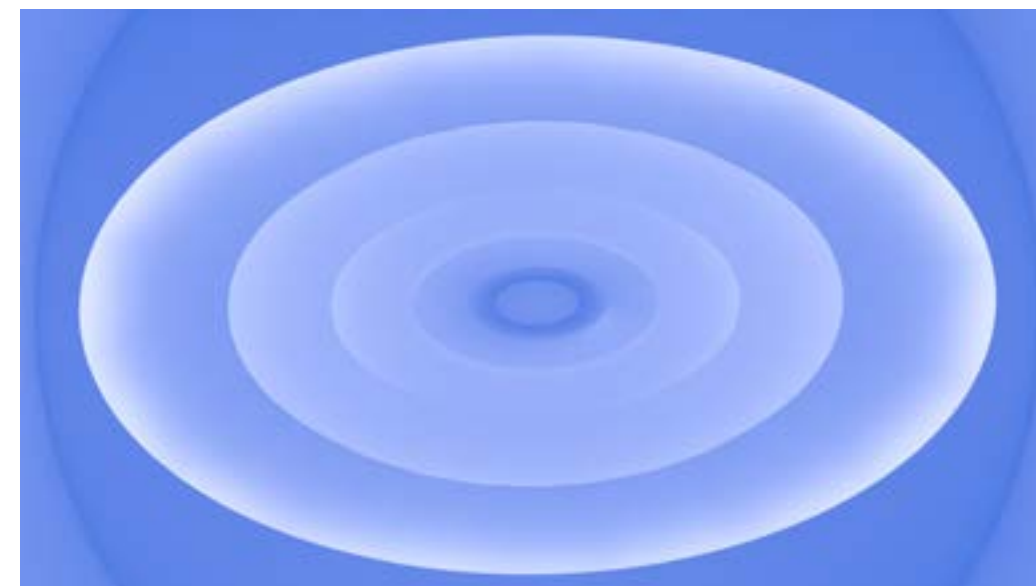
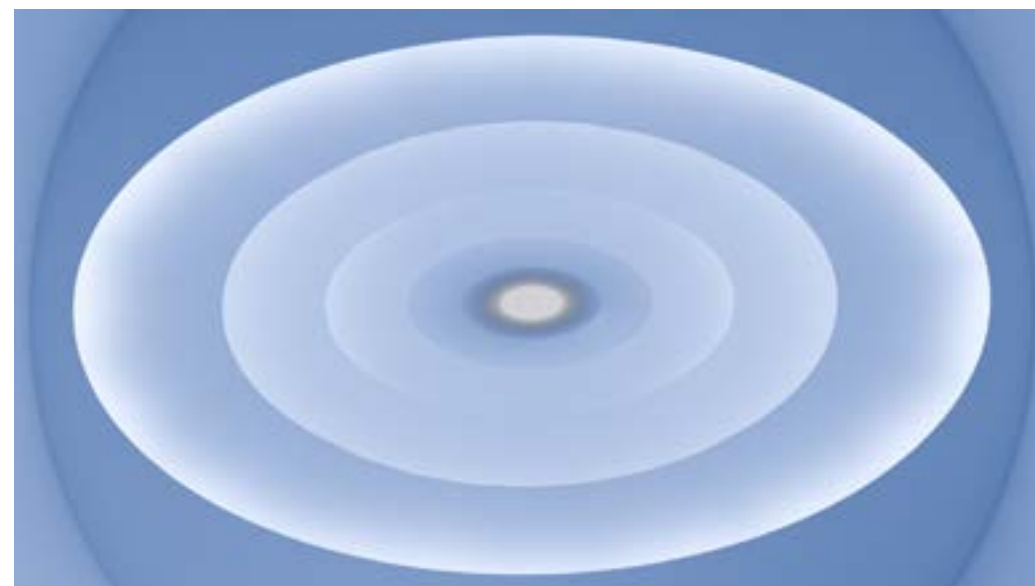
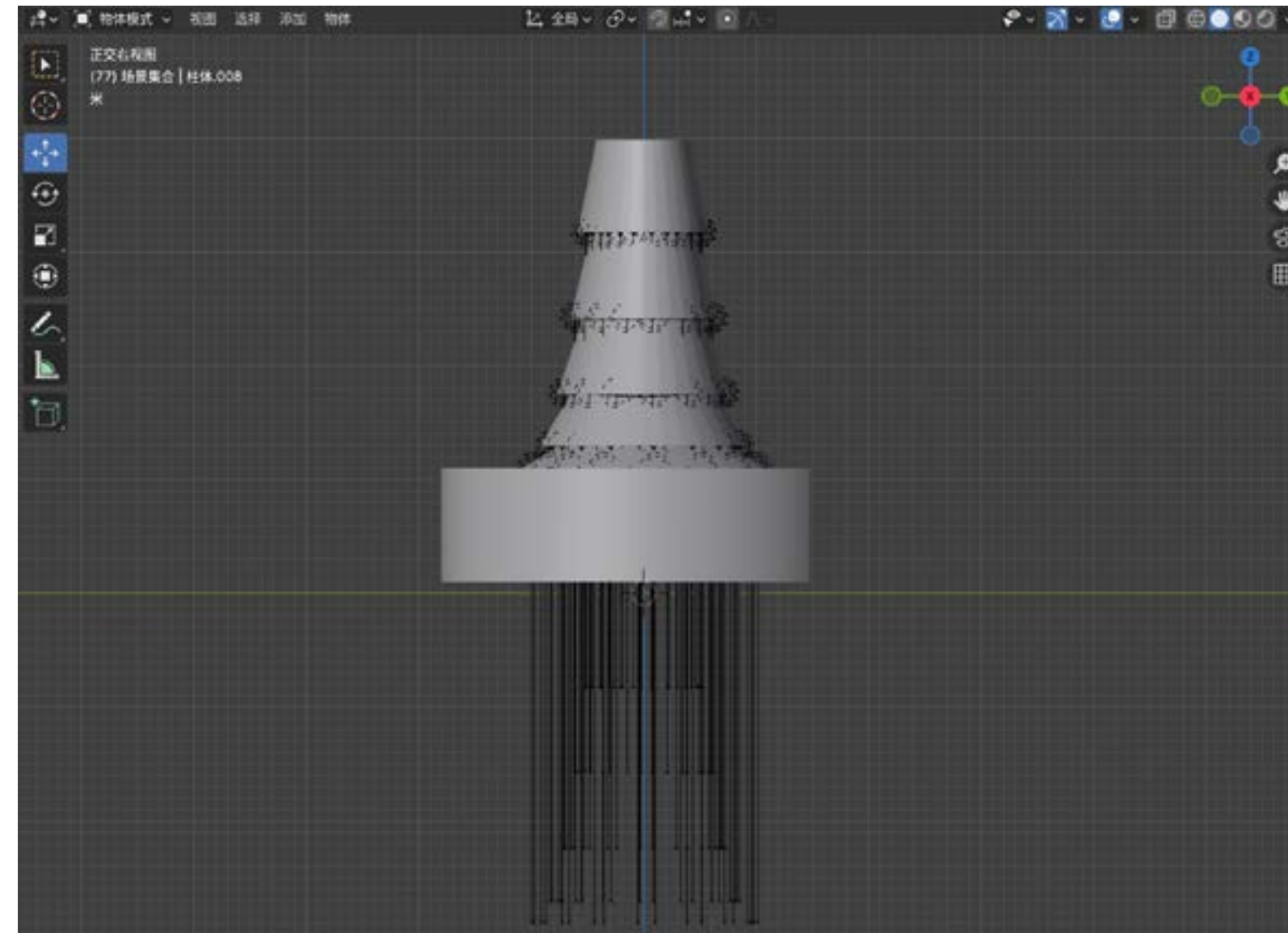
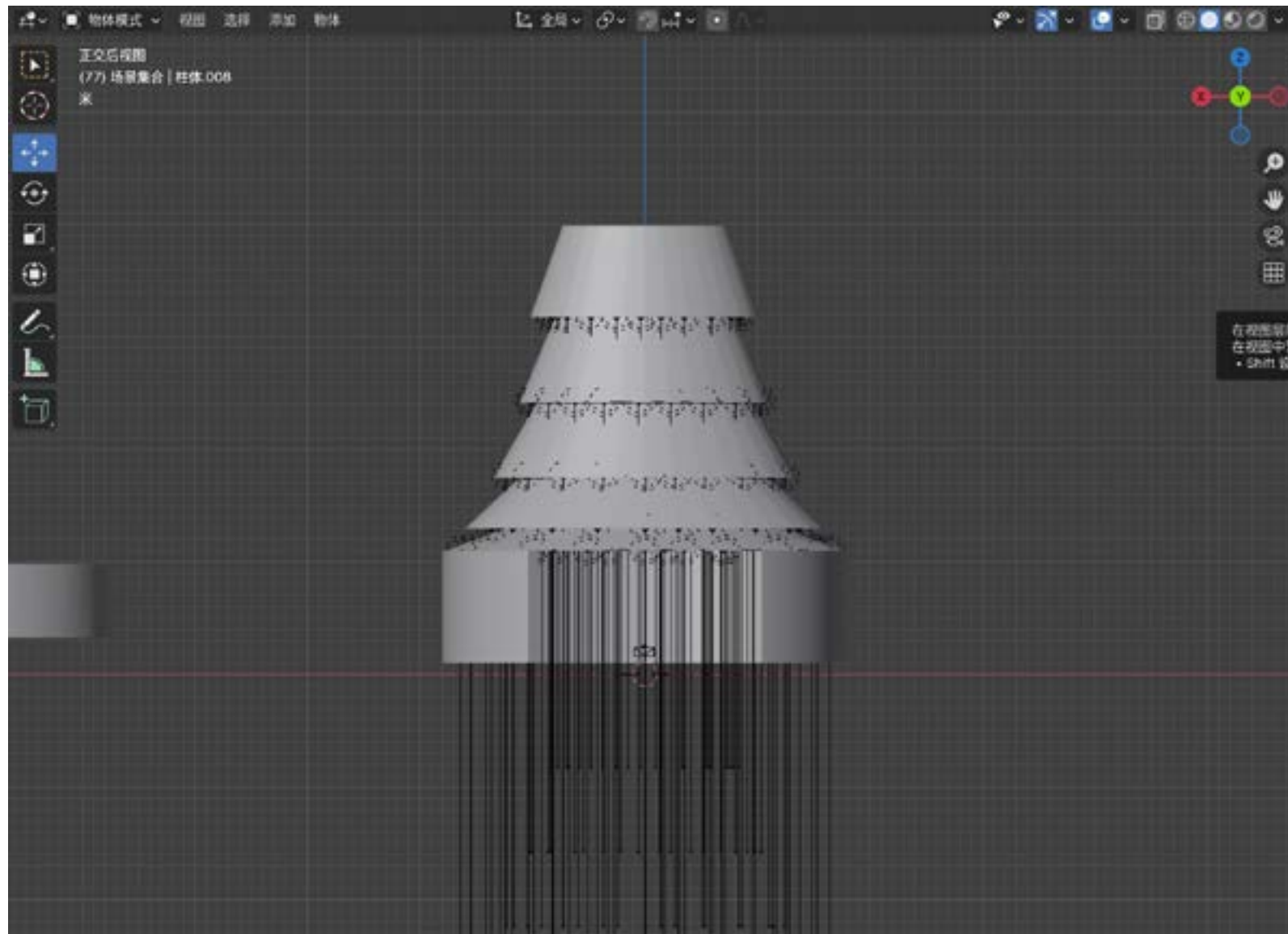
Try modelling to the design drawings



I started to try to follow the design drawings, to build the space, to think about how best to present the feeling of light, and in order to meet the final visual effect, I started to build the model a little bit more complex and think about where to put the lights.

I kept trying to work out the height of each layer, how to make it look right, and kept improving the model. I made sure it was airtight, that light could be bent inside and that it wouldn't leak.

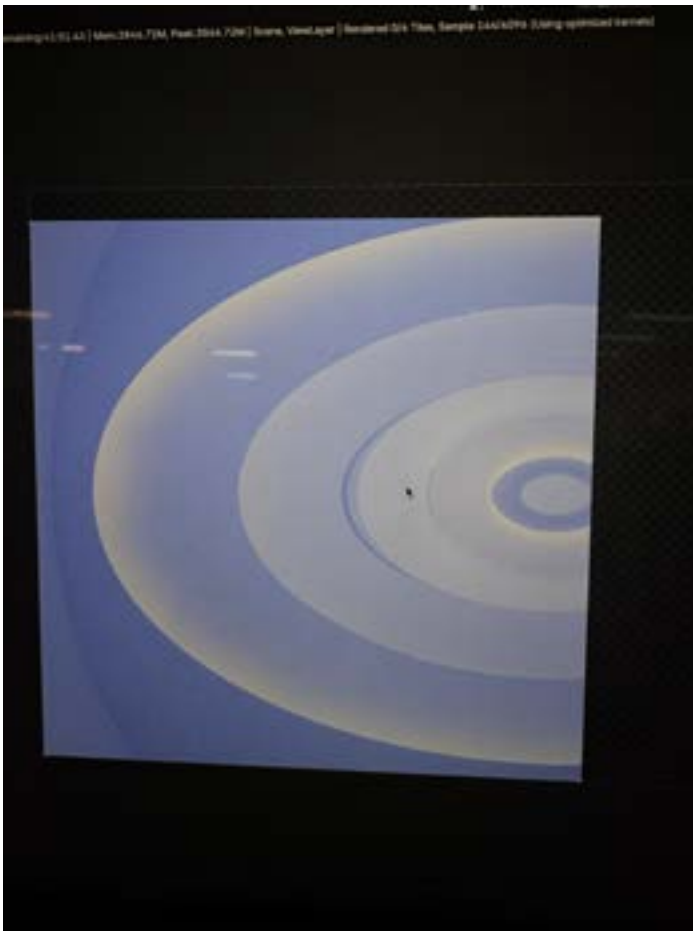
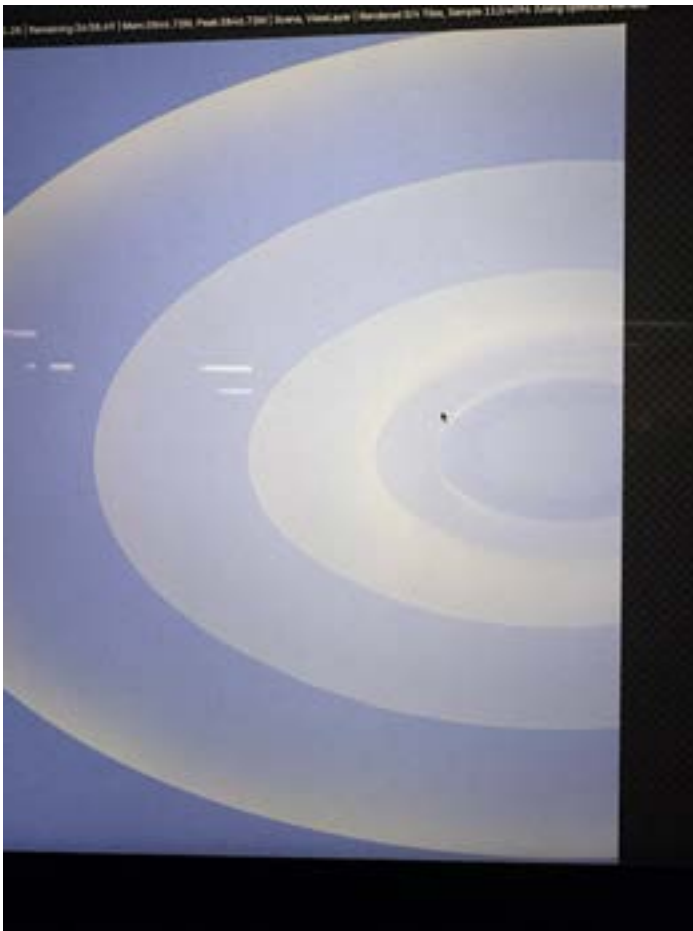
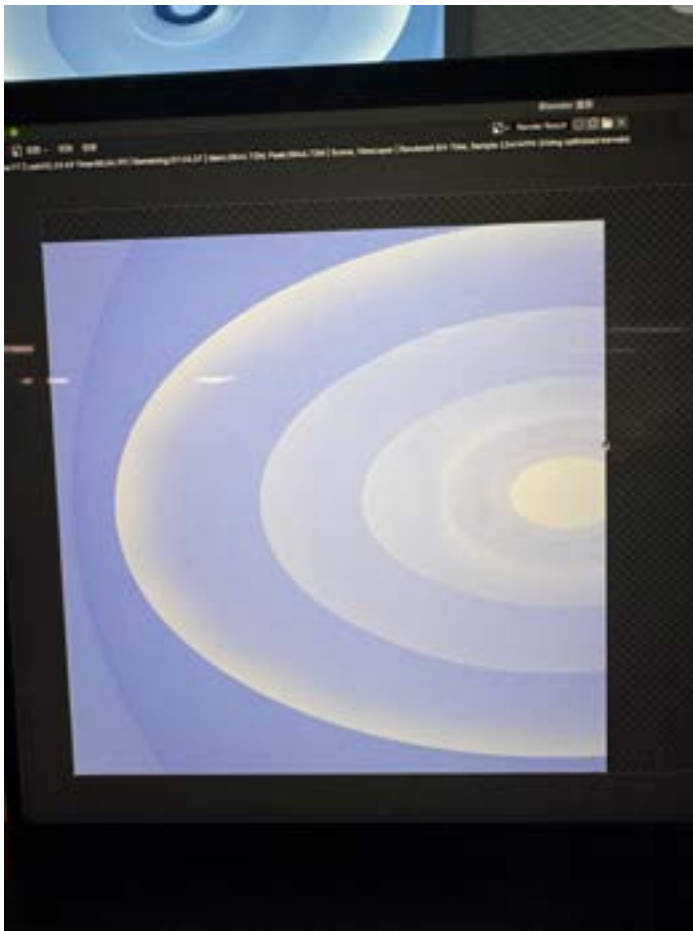
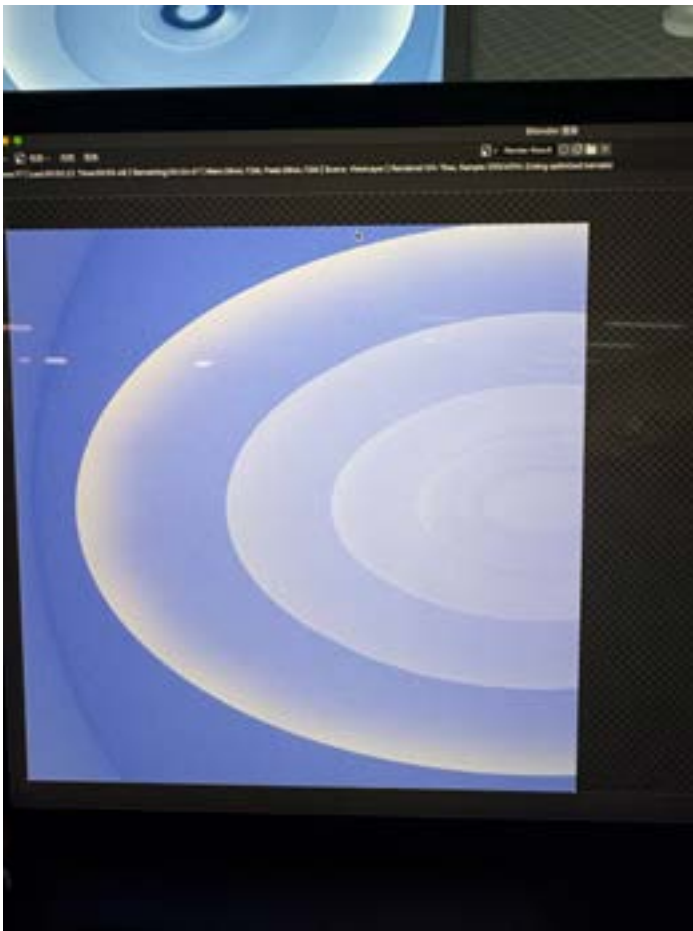
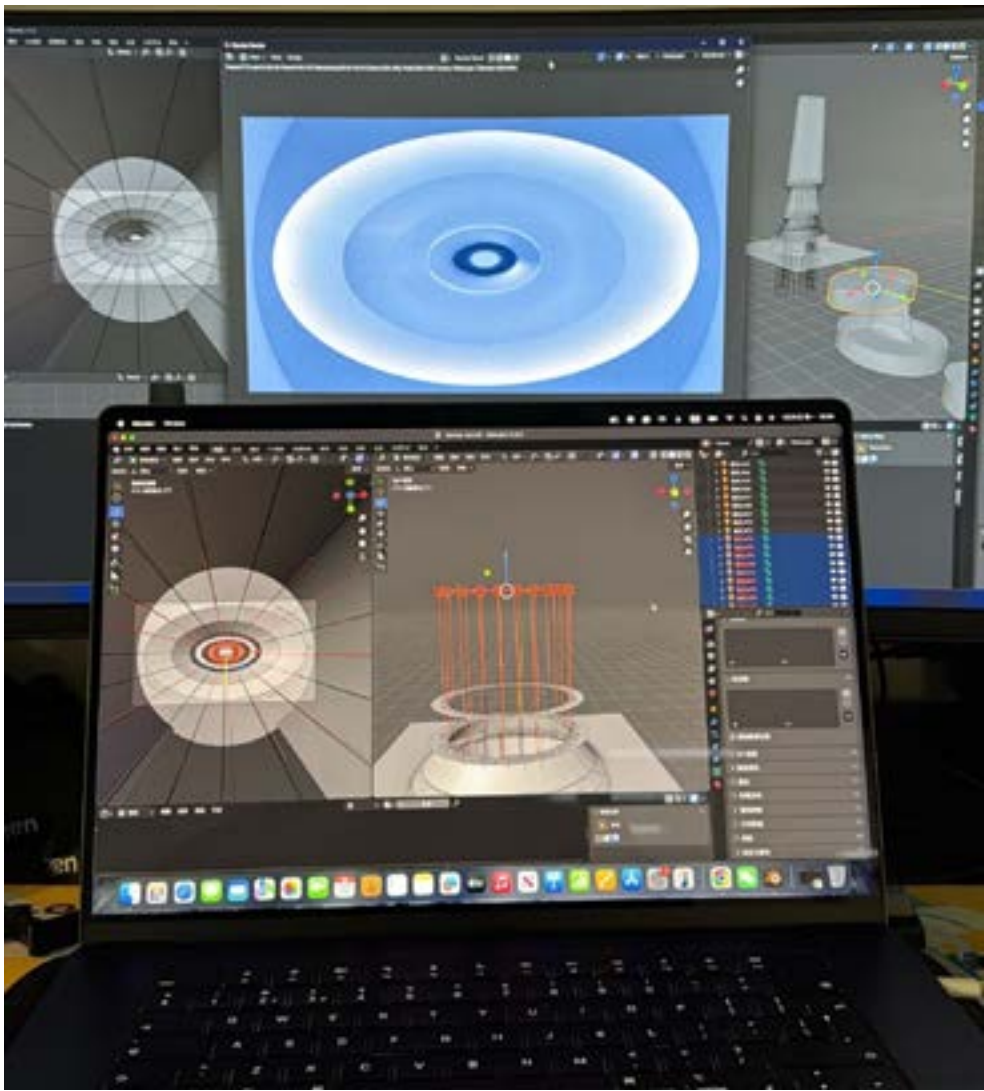
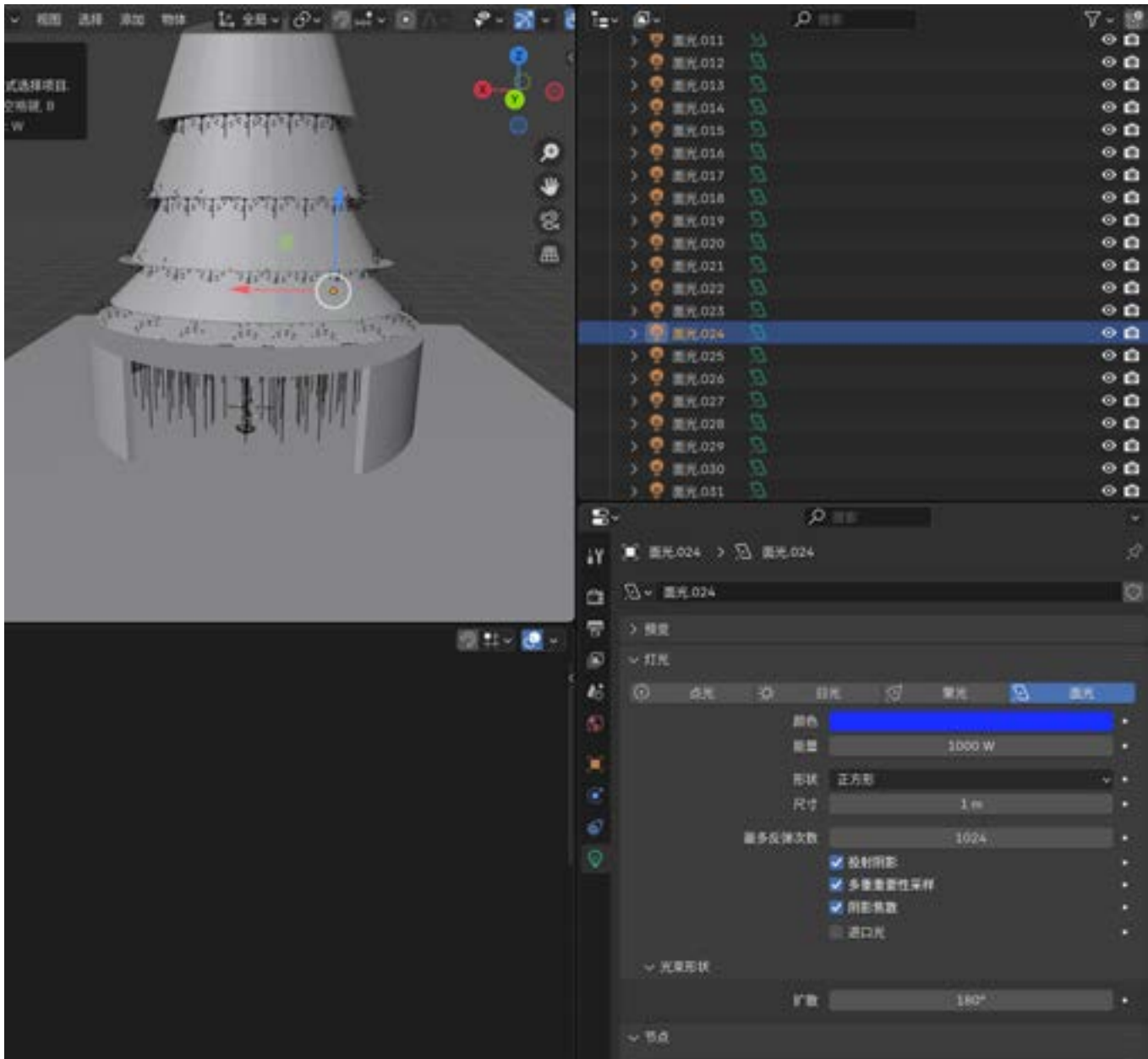
Modelling



After spending some time figuring out what the model should look like, I made sure that it was well designed.

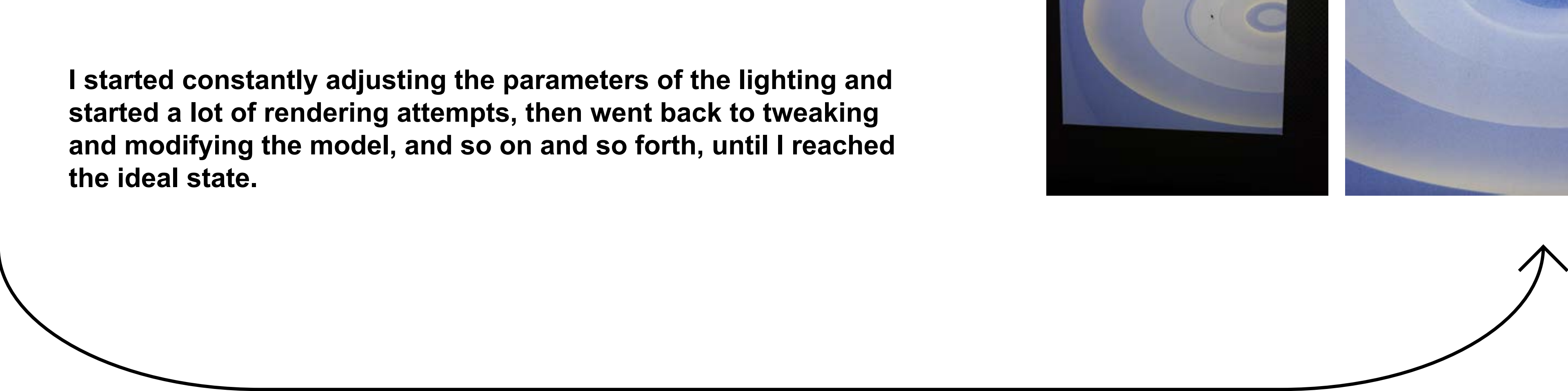
I then tried adding lighting effects and rendering it a couple of times, but I found that there were still some issues. The light wasn't refracted well, and the intensity of the light wasn't even, which didn't give the feeling of a good transition. This meant that I needed to adjust more of the parameters.

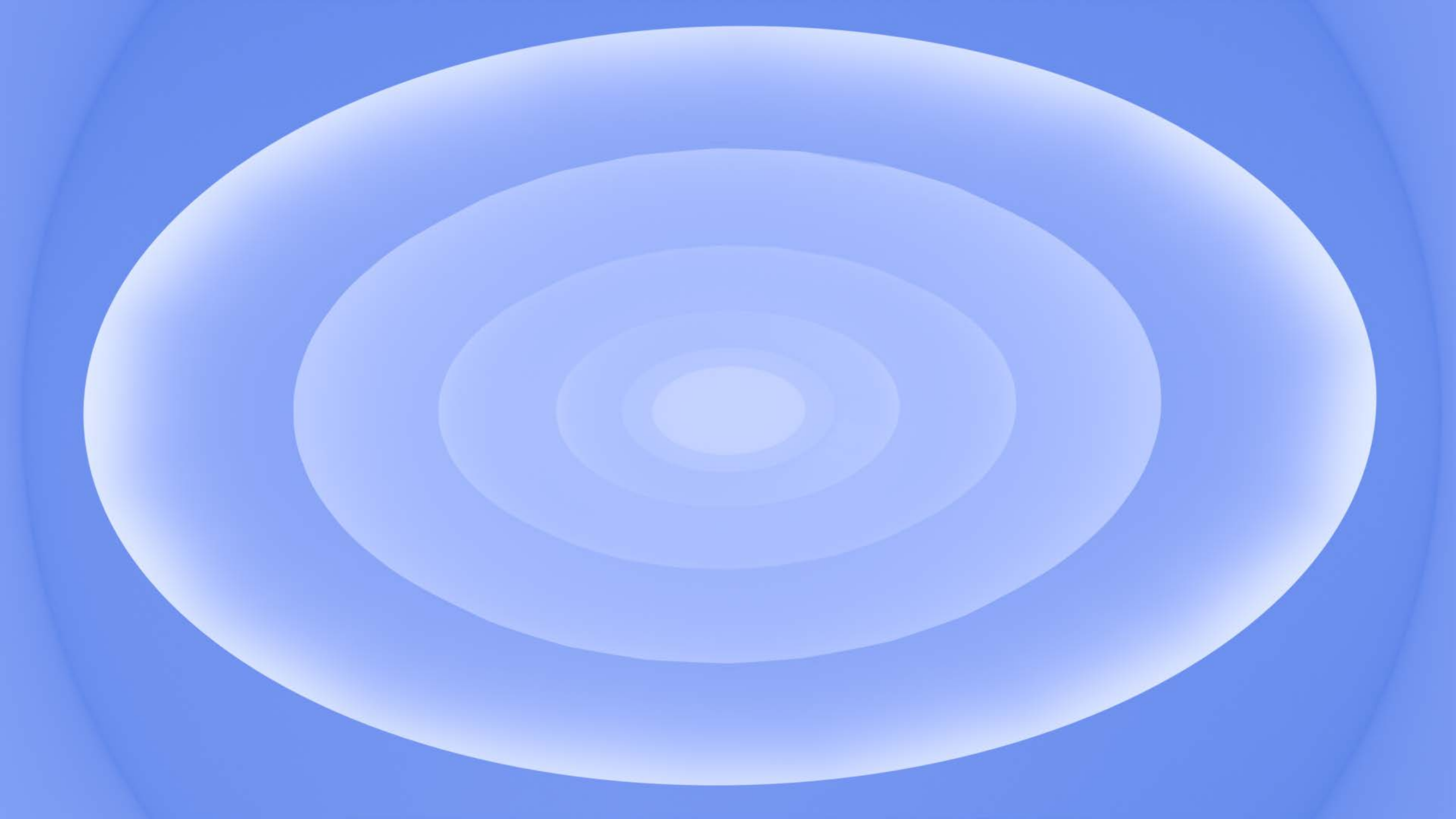
Lighting Effects Iteration

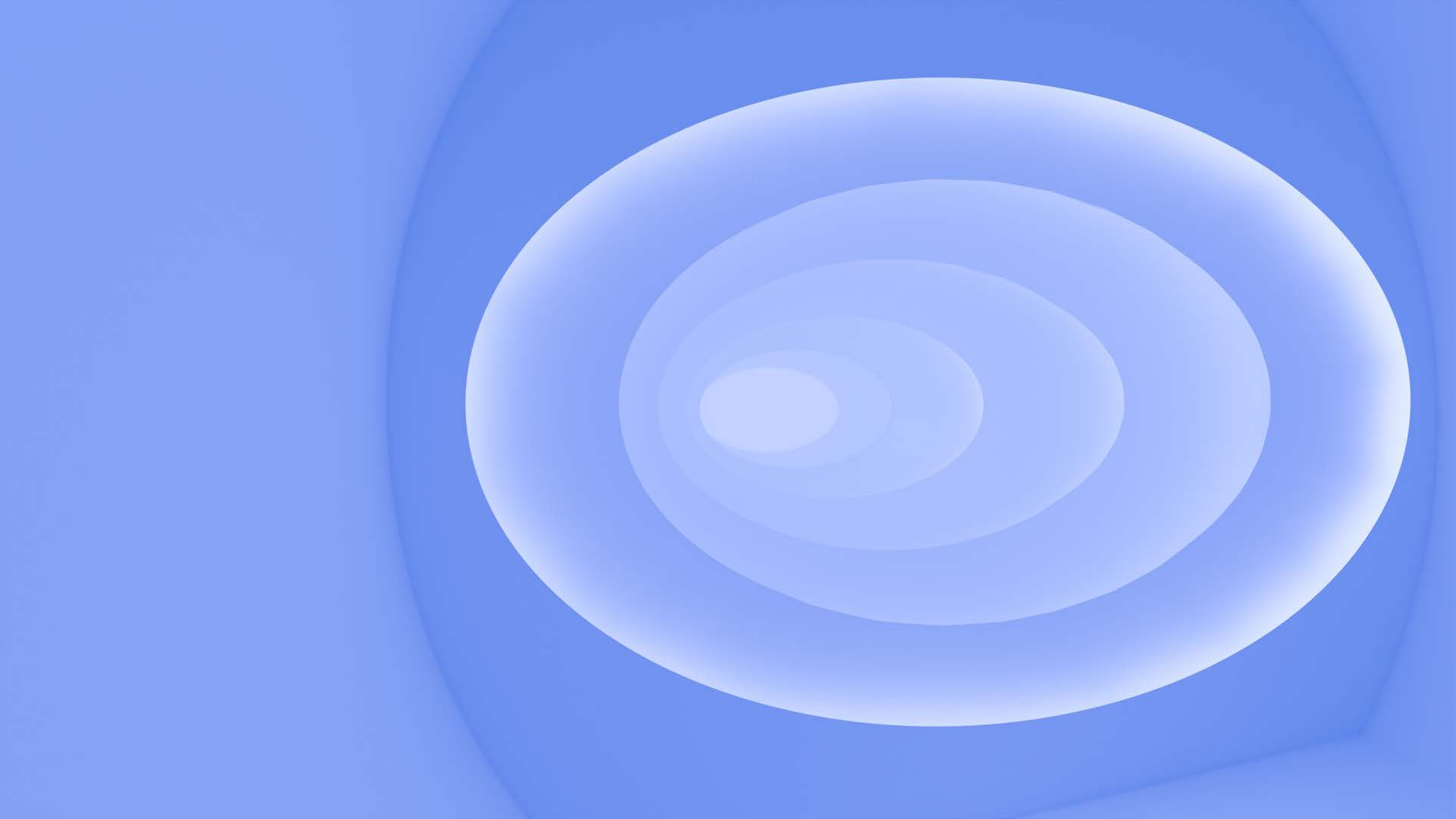


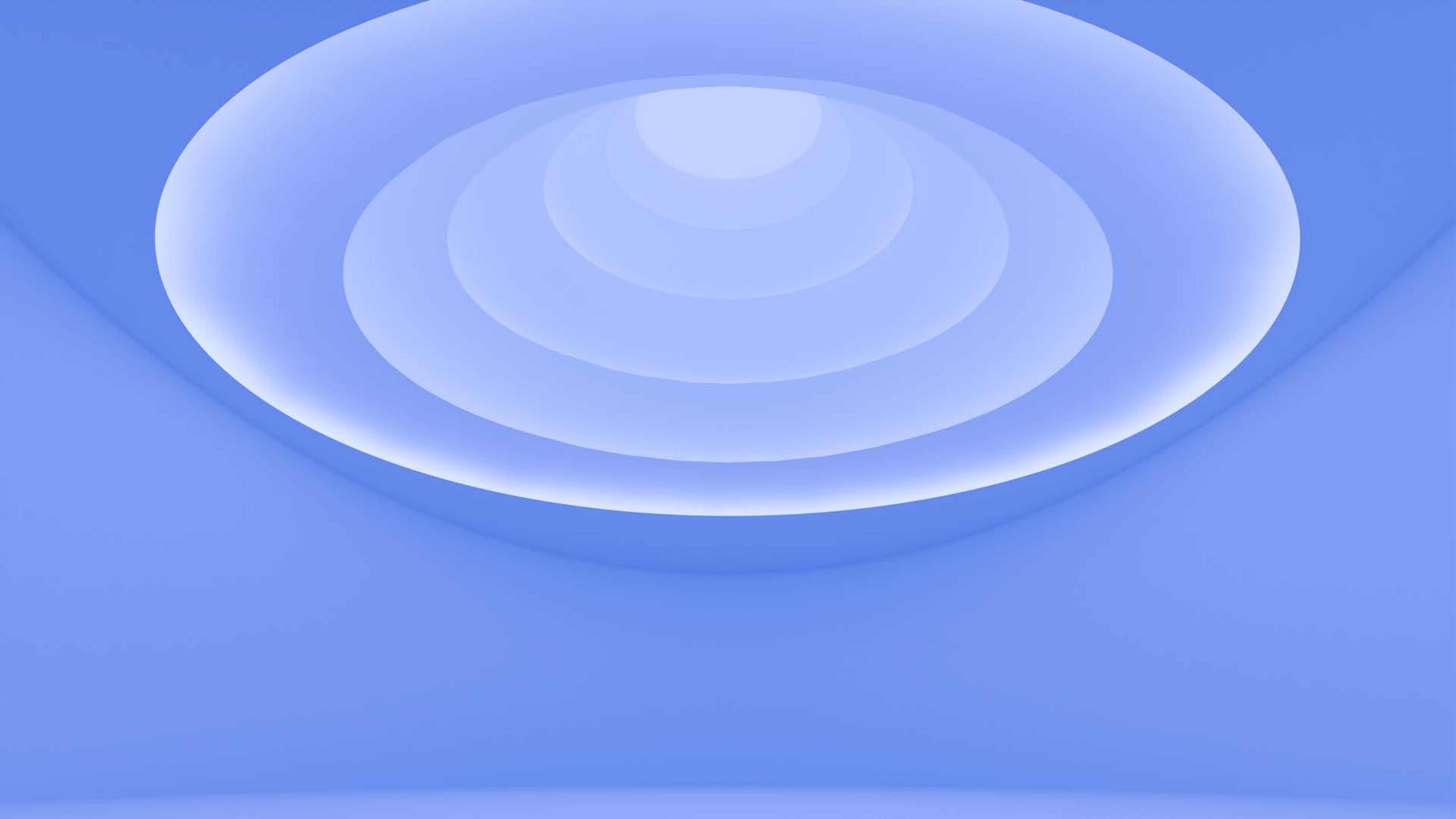
I started constantly adjusting the parameters of the lighting and started a lot of rendering attempts, then went back to tweaking and modifying the model, and so on and so forth, until I reached the ideal state.

Adjustment parameters









Color Iteration

I tried changing the color of the lighting on it and then did some different color renders to make iterative attempts at color.

The interesting point is that when you look at the environment from a certain angle, it doesn't look like a three-dimensional model, but has some flat visual effects.

This is one of the characteristics of James Turrell's work, but it also inspires me, do you have to use PS, AI, and other flat software to make flat visual works? Maybe can try to start from the direction of 3D software, 3D to 2D, maybe there will be a different new things.



Firstly to answer the question.

When I finished the reproduction of this work, what surprised me was that I didn't expect Blender to reproduce the scene analog. Light-related works have to be structurally rigorous, light is a very soft and easily changeable medium and usually requires a clear framework to show the effects of light.

In the case of not having enough venues, I think Blender is the best choice to restore James Turrell's work, it provides a large number of parameters to assist the effect of light, I think if there is a chance to show the conceptual design drawings in a blender, it is a good choice.

The technical challenges that come with it are almost all, I started to learn from cutting the model to adding light effects, and finally modifying the model and parameters, it's a lot of work but a lot of rewarding.

I think a blender is more suited for working with 3D models, but after this experiment, it can also come in handy to aid conceptual design.

Its relation to graphic design is my biggest takeaway this time, this Aten Regin by James Turrell, can be completely restored in AI or PS, and it is the fastest. But it would have lacked a sense of immersion, a spatial narrative effect, and would have thinned the piece out. The final visual presentation looks like a flat work, which inspired me about the possibility of using 3D software to try to make flat works, as well as to broaden the connection between the two and enrich the boundaries of graphic design.