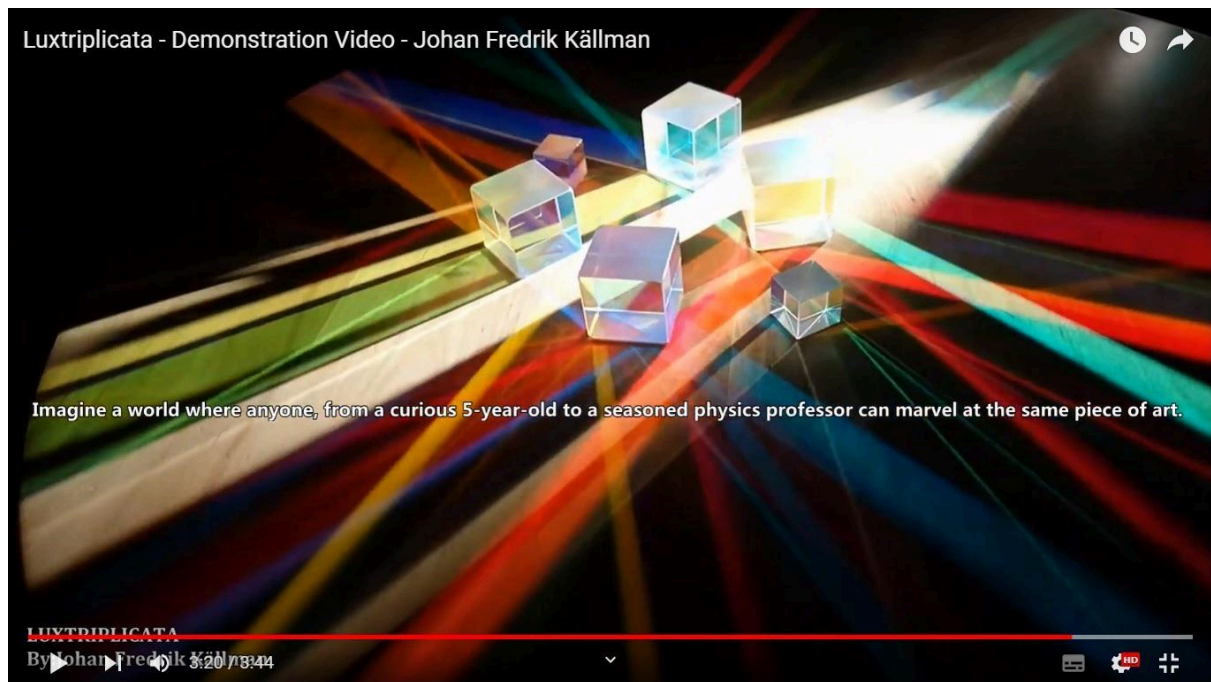
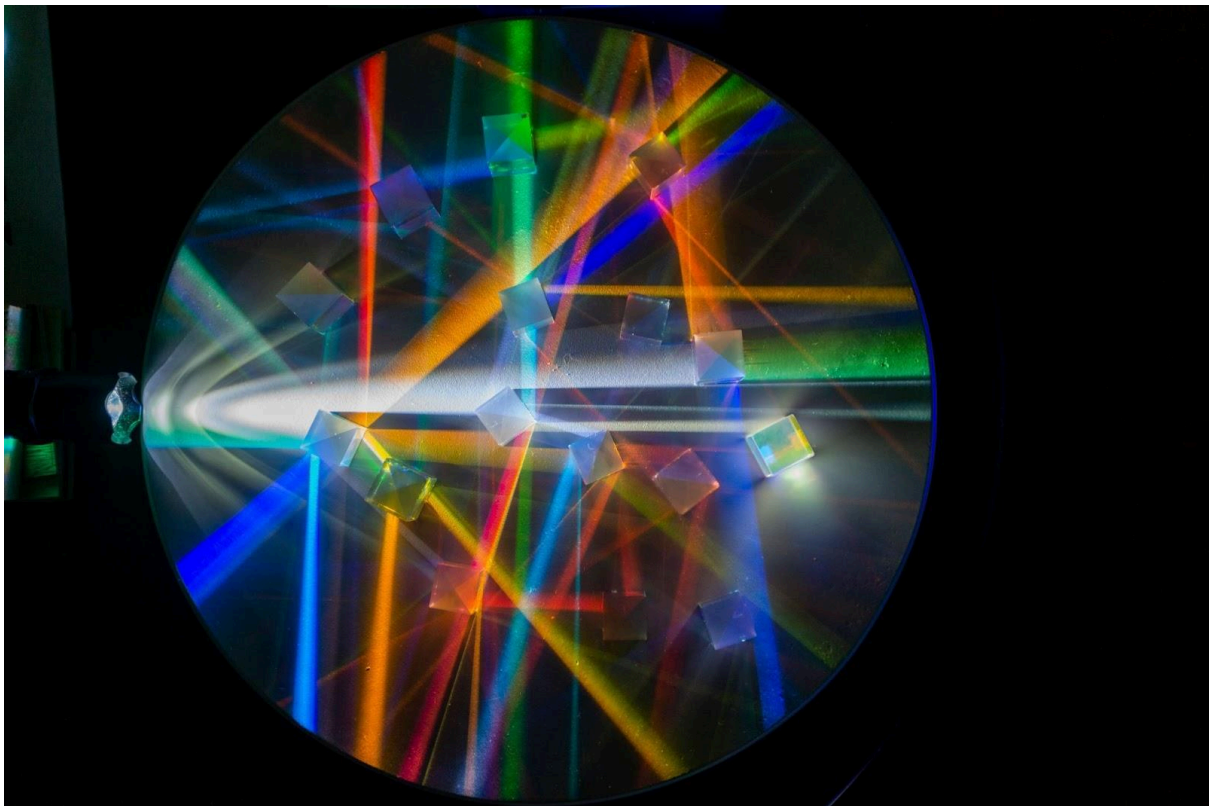


## Visualization - Luxtriplicata - Johan Fredrik Källman



<https://www.youtube.com/watch?v=vzUcLnfwrsr> This is a link to a demonstration video that showcases the appearance and functionality of Luxtriplicata.



The rotatable prism plate. As the light refracts through the prisms, it dances and twists, casting intricate rainbow colored patterns and hues across the surroundings in 360 degrees.

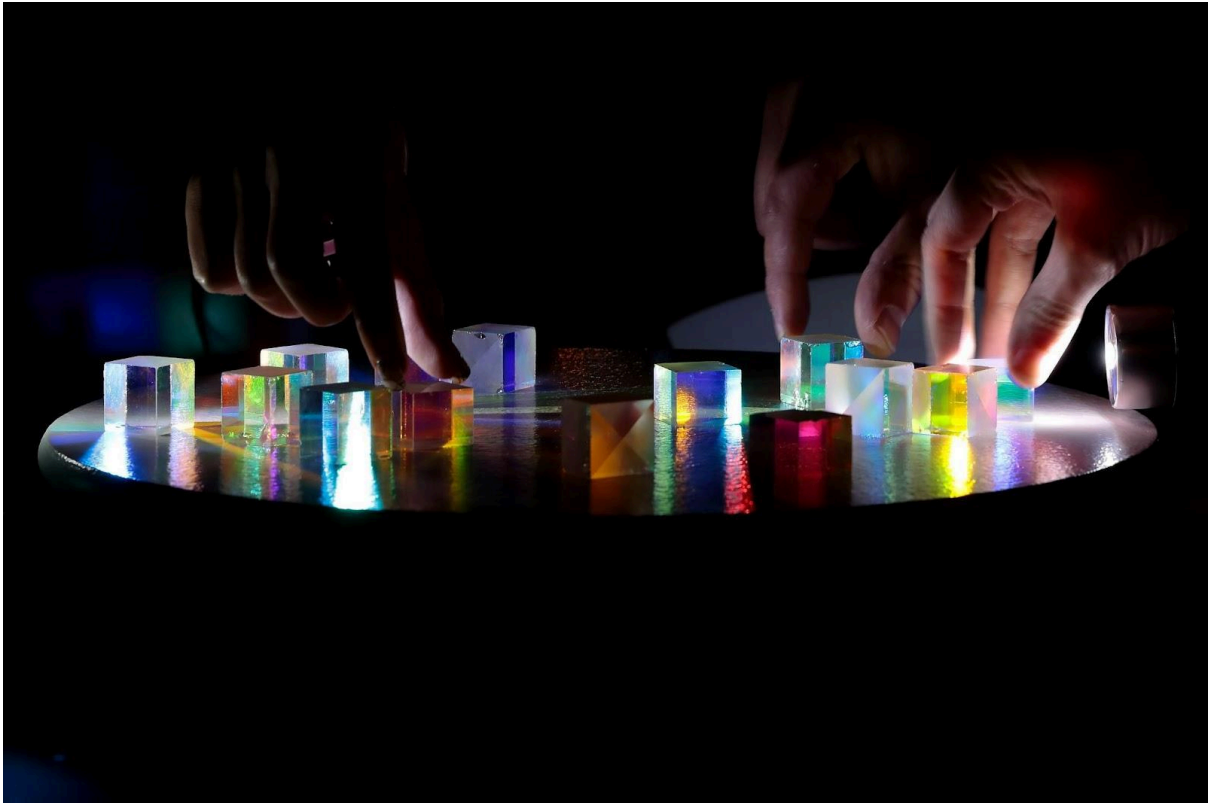


The perspective from which a child experiences the installation.



This photo shows what the 360 degree projections look like when Luxtriplicata is placed indoors. A similar effect occurs if the installation is placed outside in a courtyard or a botanical setting.

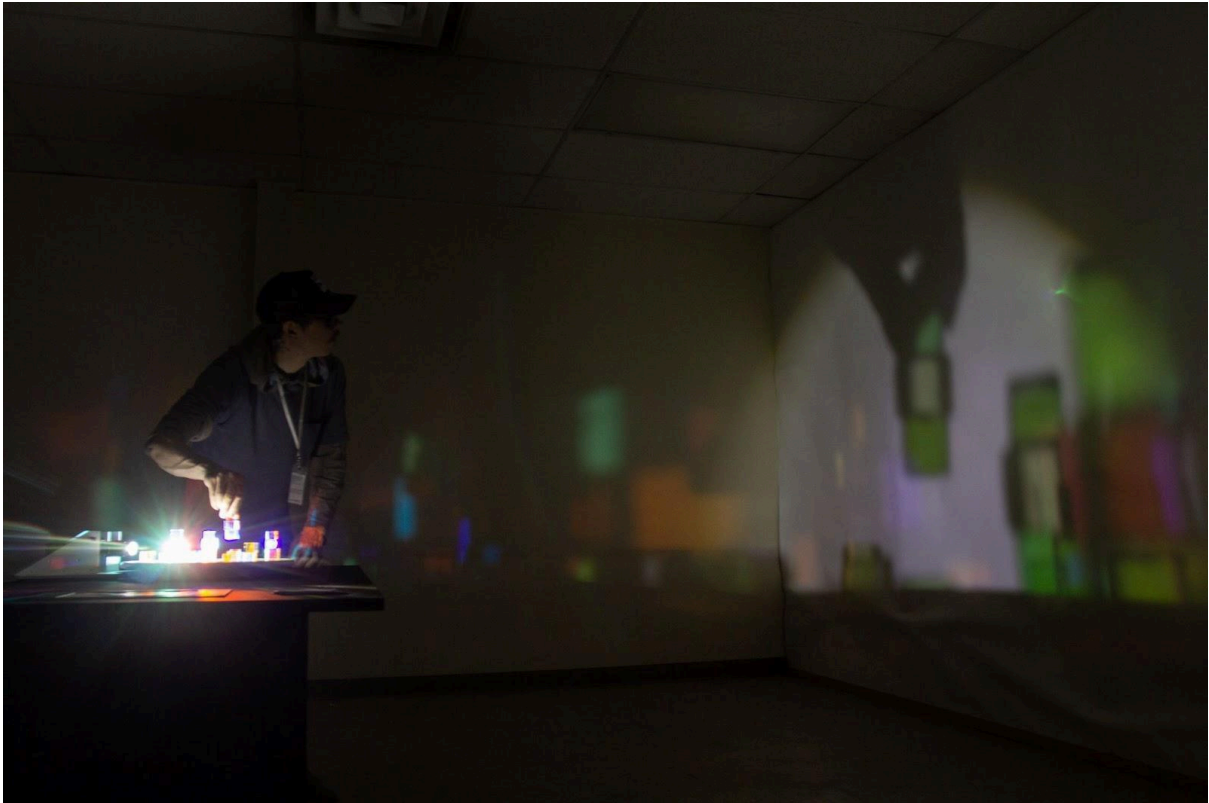




The defining feature of this installation lies in granting people the freedom to interact and play with it. A positive aspect is that multiple people can engage with the work simultaneously.



Luxtriplicata stands out for its pure physical part, it's not just something beautiful to look at but actually something you really can feel and see with your own hands and eyes.



In this shadow theater of prisms and hands, spectators become immersed in a mesmerizing display.



The shadows cast by hands interacting with the prisms create a theatrical experience.





The projections grow larger as the distance between the light source and the surface increases.



The projections become very clear even if the surroundings outdoors are illuminated.





*Island of Light 2023, Smögen, Sweden. Based on past events, I find that three tables effectively handle large crowds.*



*Night Light 2024, Calgary, Canada. Two table setup with two prism plates on each table.*



*LUMEN 2023, Waterloo, Ontario, Canada.* In this set-up of Luxtriplicata, I placed two rotatable plates on the same table with the flashlights pointing in different directions.

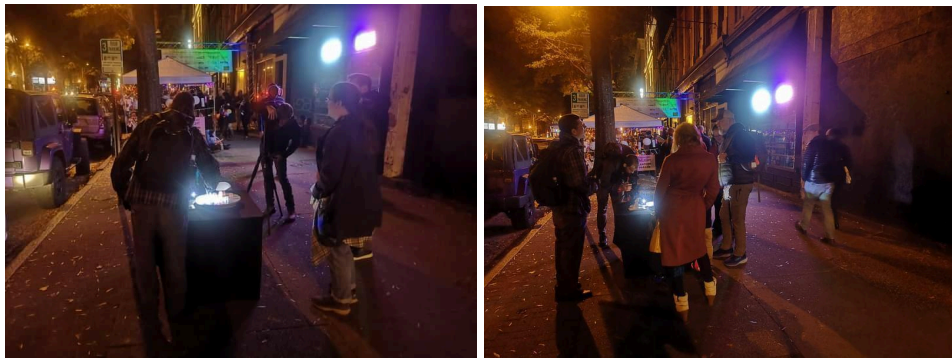


This setup could also be an alternative for presentation.

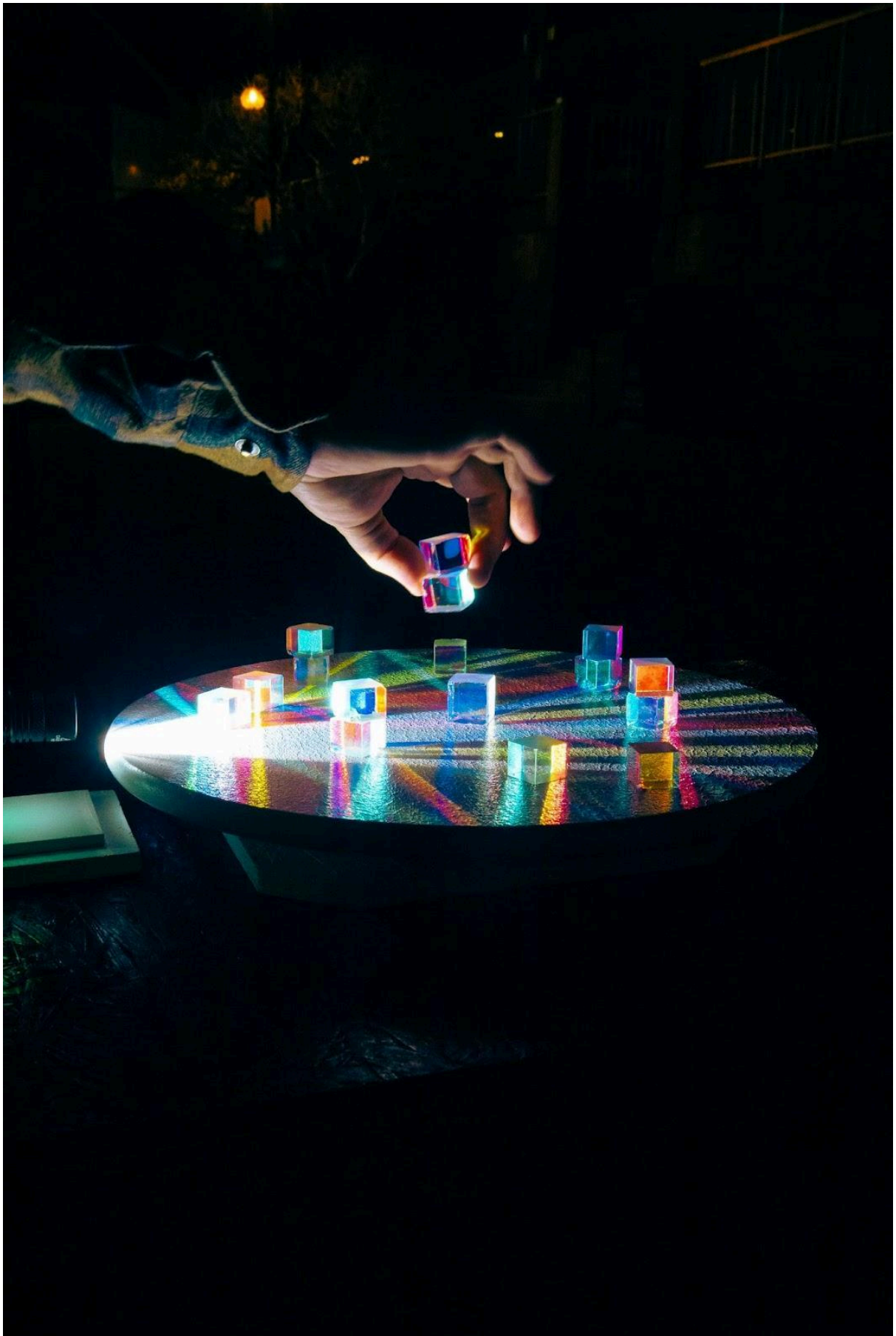




*INLIGHT 2023, Richmond, Virginia, U.S.A.* This installation is a hybrid of art and science, offering a comprehensive and immersive experience that captivates both the senses and intellect.







## Technical Documentation - Luxtriplicata - Johan Fredrik Källman



### 1 Set-up:

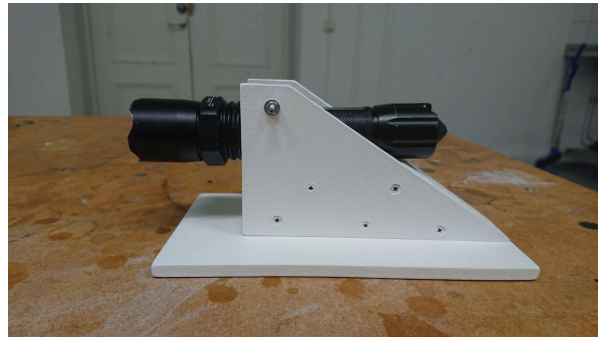
Flashlights x 2 - Powered by 3 AAA rechargeable batteries

Flashlight stands x 2

Rotatable plate x 1 (12 inch Ø)

Glass prisms x 21 (Varying sizes)

Table x 1 - Dimensions: Approx. Height: 35 inch  
Width: 30 inch Length: 50 inch



\* No ground support, rigging or weighting is required for this installation. The work is simple and quick to install. Once the prisms are placed on the rotatable plate and the flashlights are in place on the table it's just to turn them on and the installation is ready to shine.

\* The technology used in the installation undergoes rigorous testing and is certified to withstand extreme weather conditions, including heavy winds, rain, and snowfall. Luxtriplicata performs well in cold environments, enduring temperatures as low as -25°C and significant snow accumulation. Additionally, the flashlights are NEC- marked, water-resistant, and have the highest waterproof rating of IPX8/IP 65.

\* The flashlights operate on rechargeable batteries, eliminating the need for a power cord. This feature not only reduces the installation's energy consumption but also aligns with environmental consciousness and sustainability.

\* The rotatable plate, coated with water-resistant paint, is crafted from sturdy oak wood. The prisms, solid glass, are durable, minimizing breakage risks.



## **Space Requirement - Placement Proposal:**

### **Outdoors:**

\* I entrust you with the placement of Luxtriplicata. However, I would like to place the installation where a lot of people are in circulation as it's intended to interact with. Options could include a town square, courtyard, alley, sidewalk, tunnel or under a bridge.

\* For optimal performance, the installation is ideally situated where there are existing projection surfaces in the surroundings onto which the 360-degree projections of the prisms can be displayed. This includes locations such as building facades, bridges, walls, trees, hedges, and even statues or fountains.

### **Indoors:**

\* Works well in spaces of approx. 40m<sup>2</sup> - 90 m<sup>2</sup> (e.g., industrial facilities, galleries or tents). Darkened areas are recommended to enhance the experience.

\*The benefit of housing the installation indoors is the capability to darken the area, enabling visitors to also experience the installation during day time.

### **Additional Information:**

\* I can adjust the scale of the installation to accommodate varying placements and locations, ranging from 1 to 5 tables. Each table would feature a rotatable plate with prisms and a flashlight. Based on past experiences, I find that two or three tables effectively handle large crowds effectively and without any issues.

\* The projections increase in size as the distance between the light source and the projection surface expands. The flashlights' focus function allows for easy adjustment of their sharpness.

\* The entire setup, including placing prisms on the rotating plate and positioning flashlights on the table, takes approximately 40 minutes. My assistant and I handle the setup and dismantling efficiently.

\* Luxtriplicata has been successfully showcased in various settings worldwide, demonstrating its execution both materially and conceptually.

### **Eco-Friendly Technology:**

Inspired by environmental responsibility, Luxtriplicata advocates for eco-friendliness. Powered by only 3 rechargeable AAA batteries, its LED flashlights reduce energy consumption, minimizing the installation's environmental footprint. With just 1 kWh, the flashlights can be charged approximately 50 times, demonstrating minimal energy consumption. Luxtriplicata demonstrates how significant visual impact can be achieved with minimal energy consumption and aligns with sustainability values.