Semester One: Project 1A - Bespoke Survey

My Intimate Moment

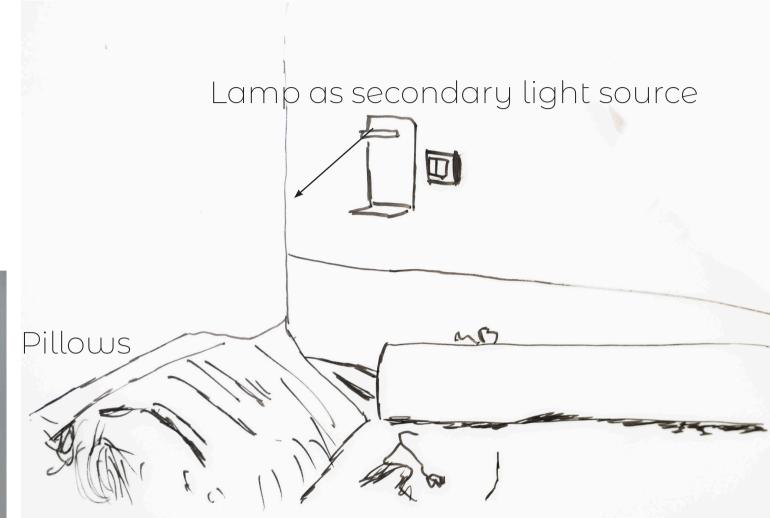
Description: My Bed.

"Imagine waking up to the blaring sound of your alarm, your mind immediately consumed by deadlines and the tasks that lie ahead, with no time to pause and appreciate the quiet beauty of the morning sun. Determined to change this, I adjusted my morning routine, and now, that brief moment of stillness has become the most cherished part of my day



Image of my area

Sketches of My Bed.



Window where light could come through

Side view

Front View



View from the window



View of the bed, exposing the mattress

Semester One: Project 1A - Bespoke Survey

My Intimate Moment

What creates this perfect moment

- Fabric and Materiality
- Main Elements
- Theme and Color
- Texture
- Light Conditions
- That moment from night to day

My Intimate Moment

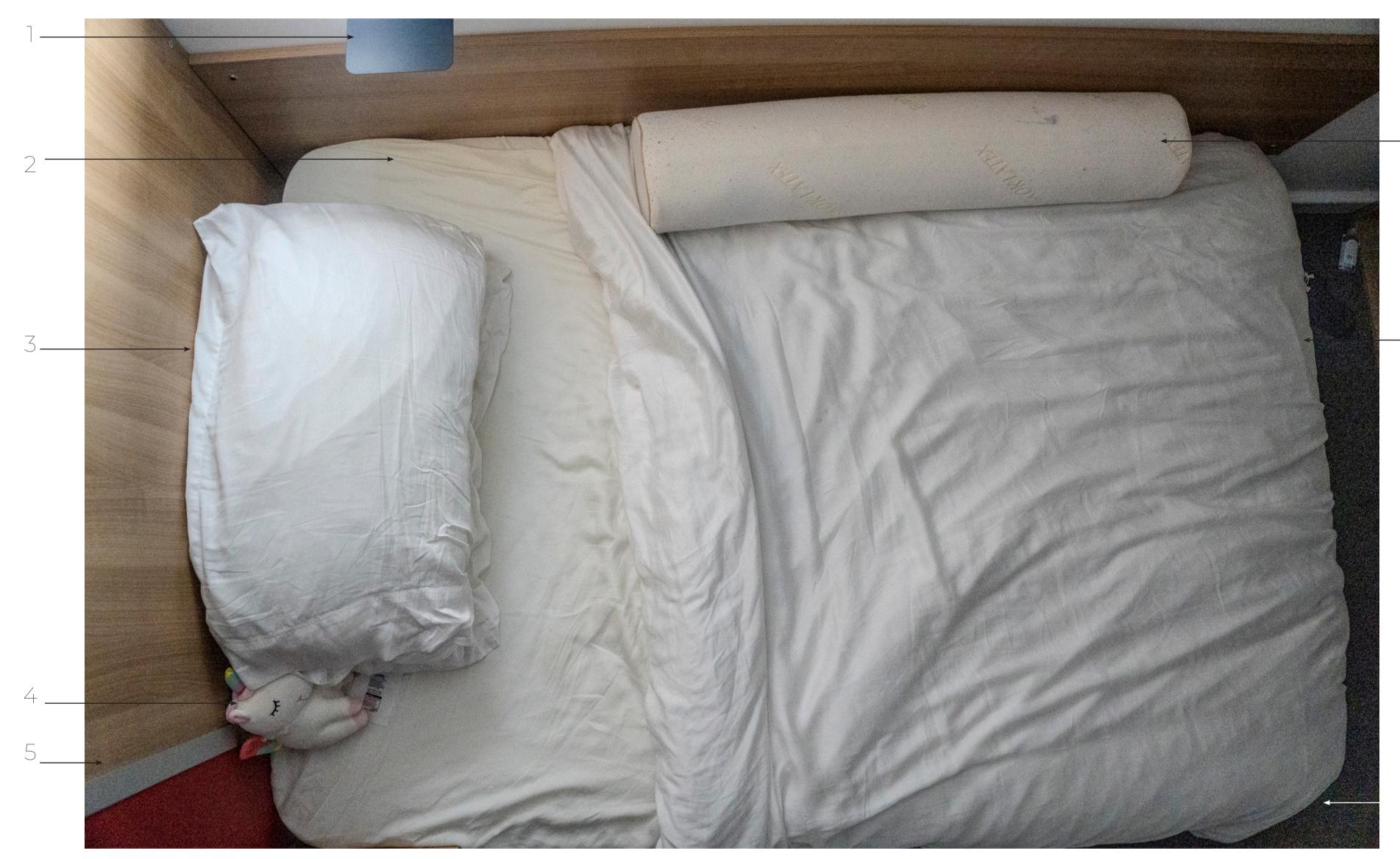


The Bed Walkway beside the bed.

Semester One: Project 1A - Bespoke Survey

Fabric and Materiality

"My personal space is shaped by several elements of perfectionism, with the bed being one of them. At first glance, the bed may seem ordinary, but upon closer inspection of the fabrics, it reveals a deeper attention to detail."



Top view of my space

Elements of the space

- 2. 3/4 Mattress with Bamboo Cover
- 3. Double Polyester Pillow with Bamboo Pillowcases
- 4. Unicorn Toy
- 5. Polished Wooden Headboard
- 6. Latex Bolester with Cotton Case.
- 7. 10.5 Tog King Size Duvet with Bamboo Cover
- 8. Rug

3

Semester One: Project 1A - Bespoke Survey

Theme/Color



Every element has one solid color except the wood so I would have to summarize it to a single Laurel-oak-winter-twig middle grey.

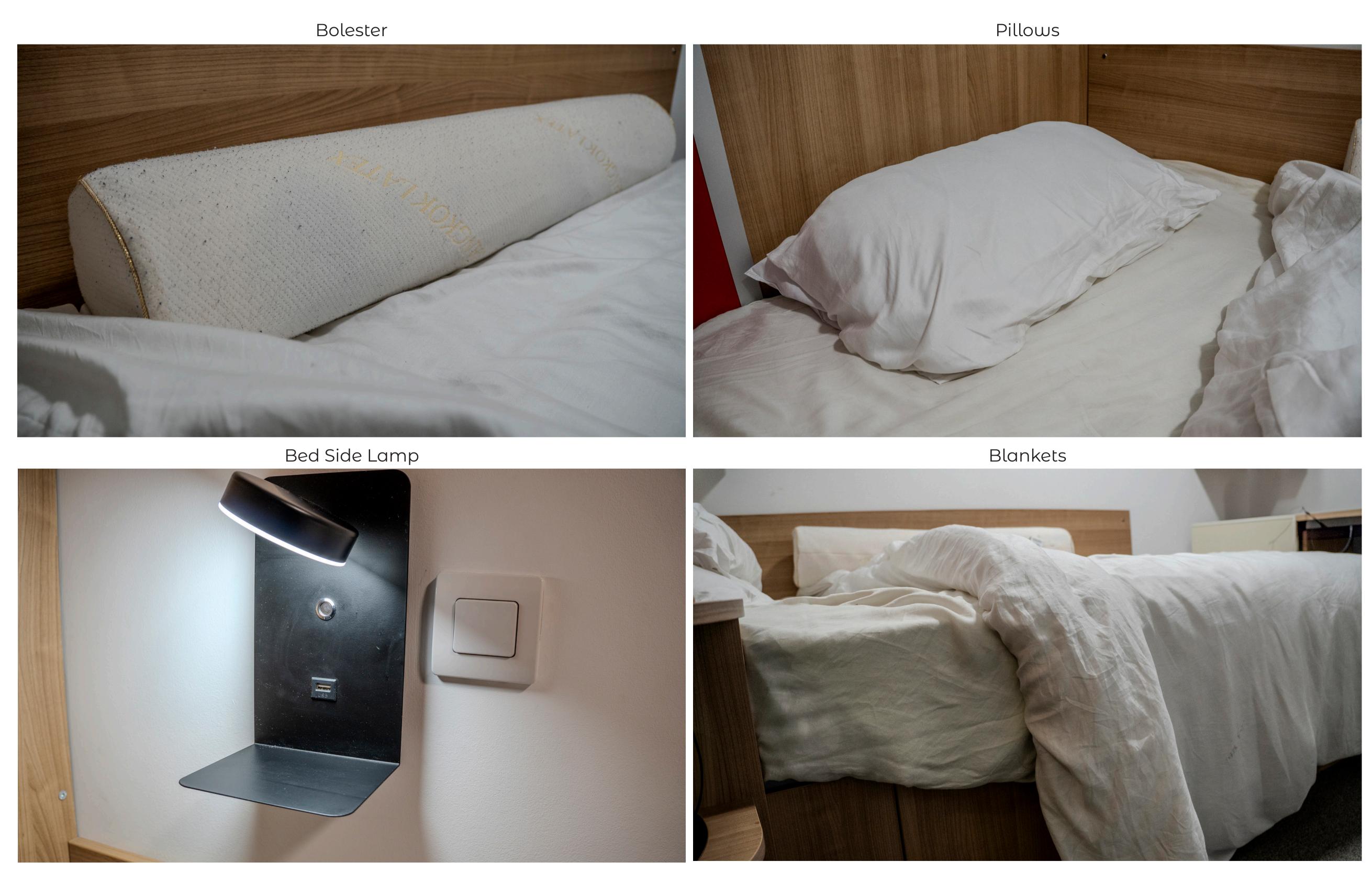
Texture.



Its hard to depict what each have so I have made a video.

HTTPS://WWW.YOUTUBE.COM/WATCH?V=AHAZNXD86VA

Main Elements



The soft, warm glow of the bedside lamp creates a comforting atmosphere either if you are winding down with a book or getting up really early.

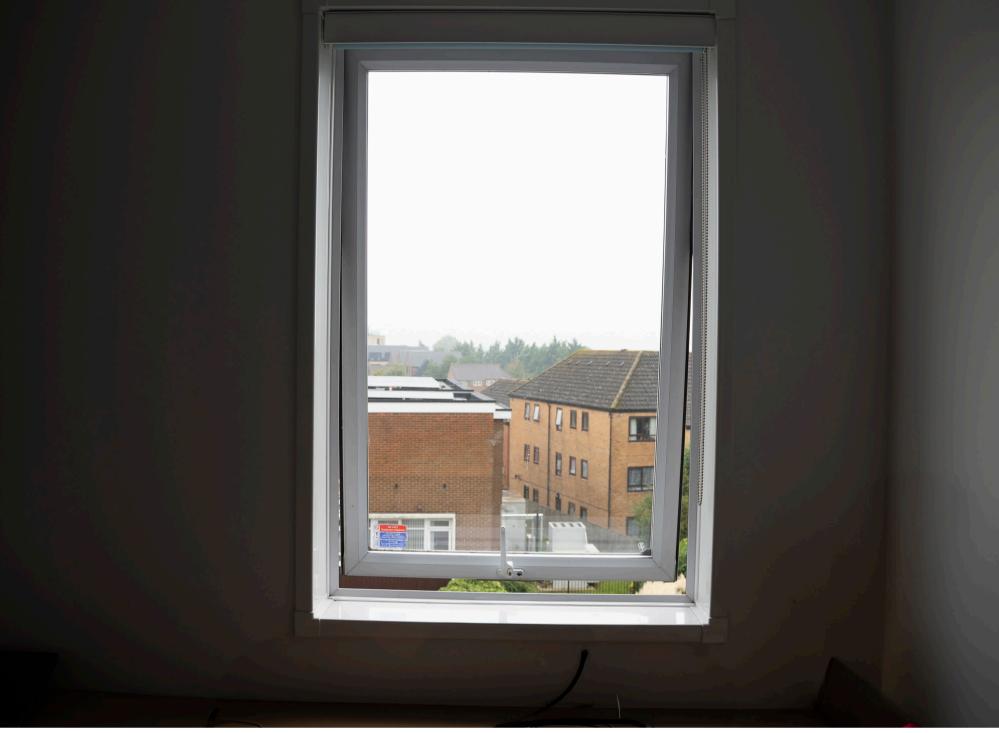
While the blankets weren't a tailored choice due to their price, having bamboo covers enhanced the sleeping experience, regulating the body temperature during extreme temperatures, particularly in the mornings.

Project 1a: Bespoke Surveying of an Intimate Space

Light Conditions

As someone who enjoys the touch of natural light, it is a necessity to have a room with the window connecting the environment and the room, letting sunlight throughout the day, directed towards the chosen space.







View of the space from behind.

View of the Window

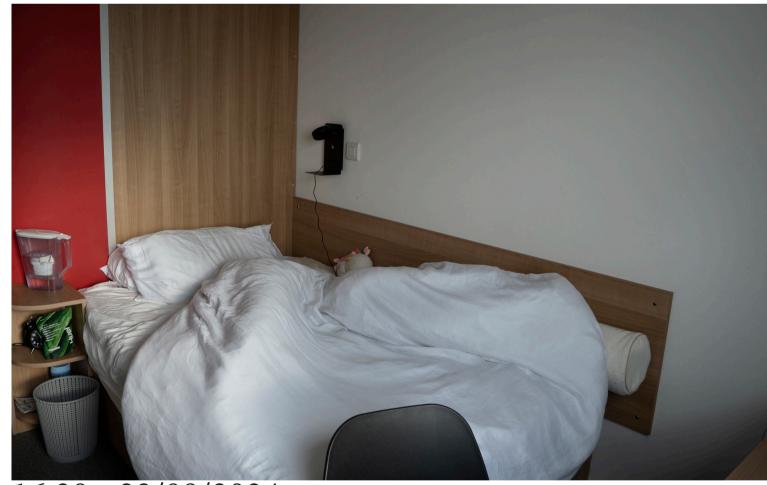
Artificial Light

How Light Changes During the Day

My question is how does the whole enclosed space receives the light?







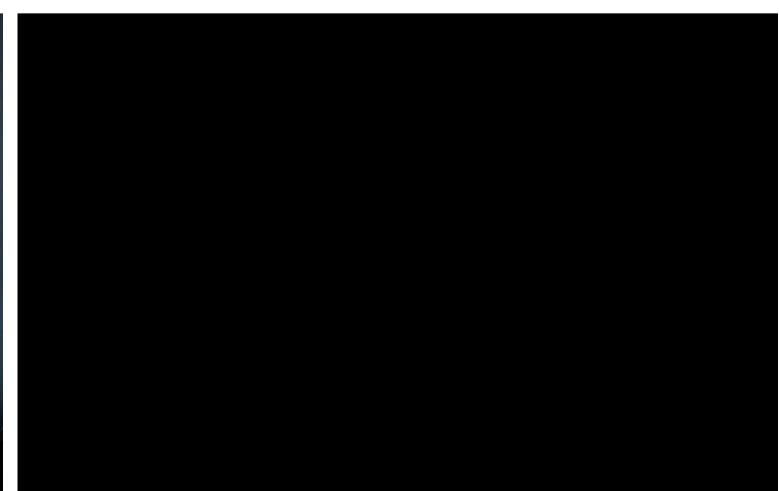
13:30 - 22/09/2024

15:00 - 22/09/2024

16:30 - 22/09/2024







18:10 - 22/09/2024

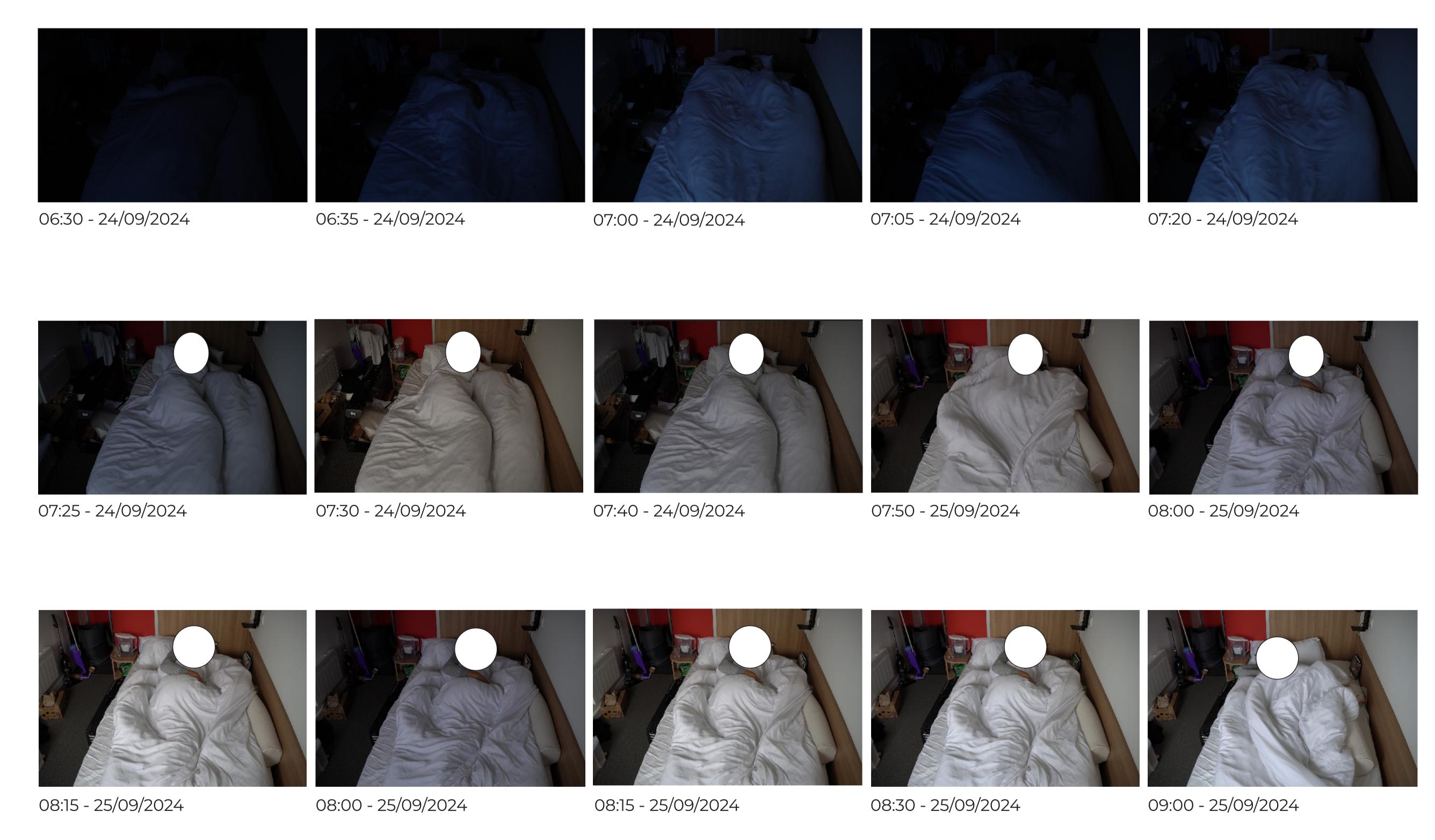
18:54 - 22/09/2024

19:22 - 22/09/2024 (Sunset time 19:03)

Project 1a: Bespoke Surveying of an Intimate Space

How My Bed receives Sunlight

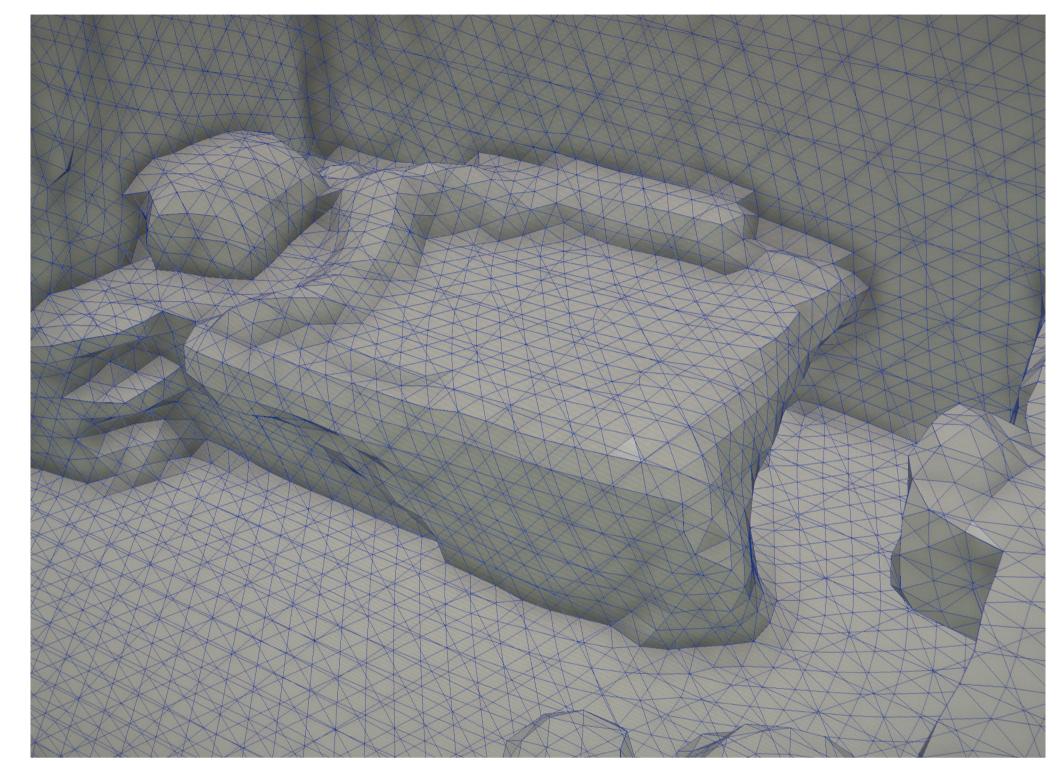
I took a video of me sleeping in my own bed from 6:30 AM to 8:00 AM

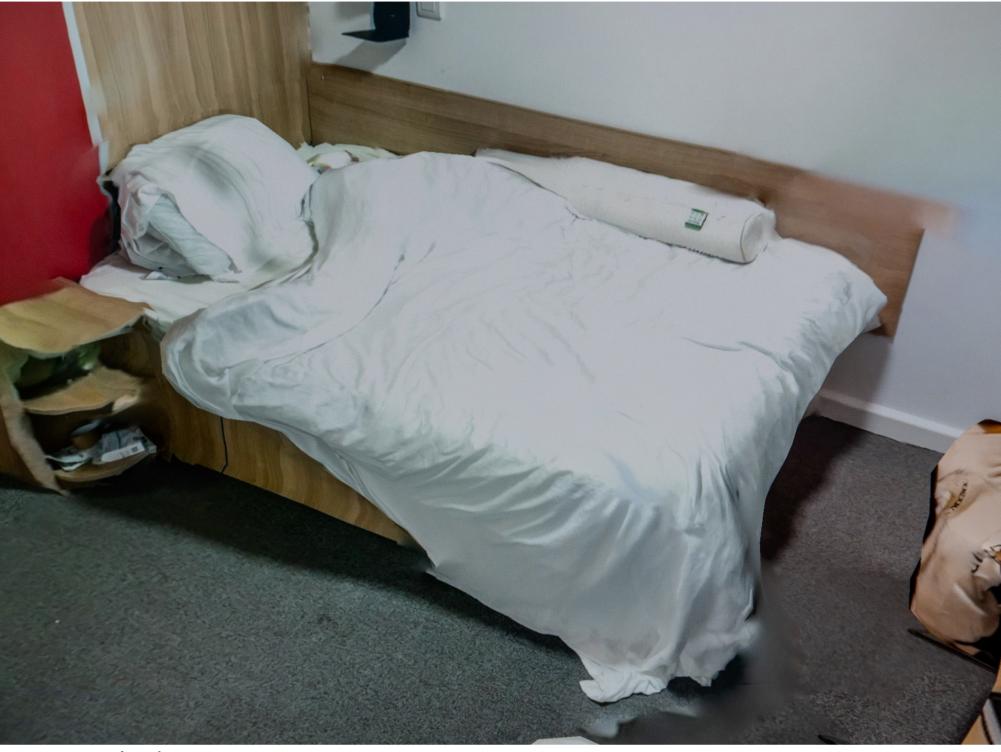


Here is the test video>> https://www.youtube.com/watch?v=3VtUQk-8ba6g

How to Measure the Space

Method one: LiDAR Scanning using Polycam



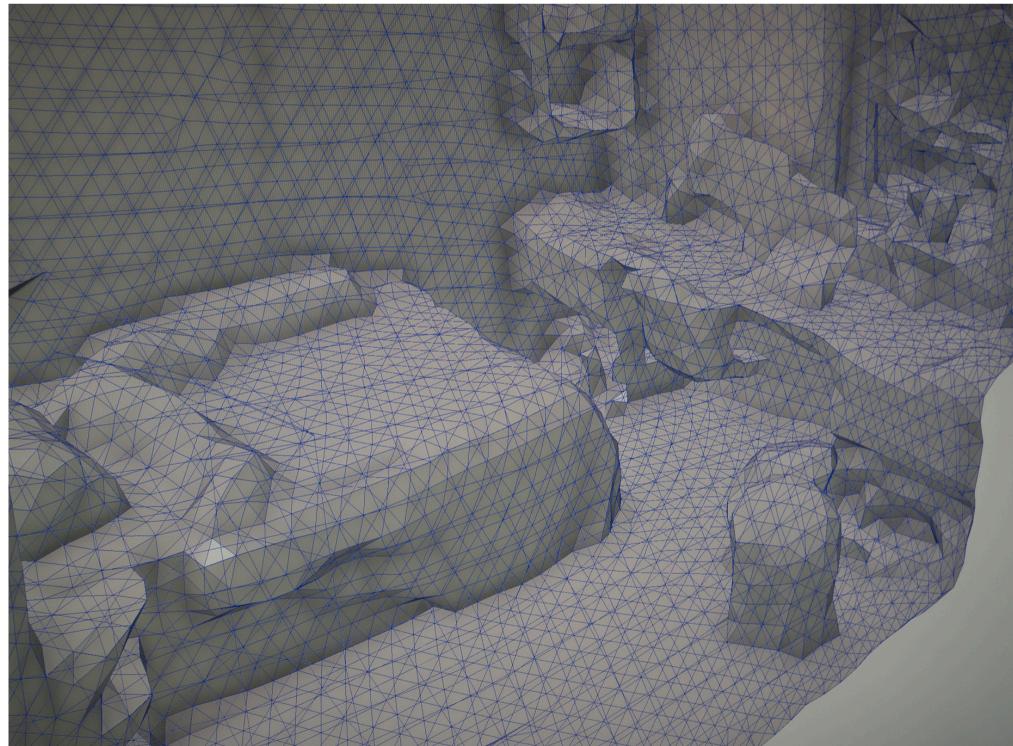


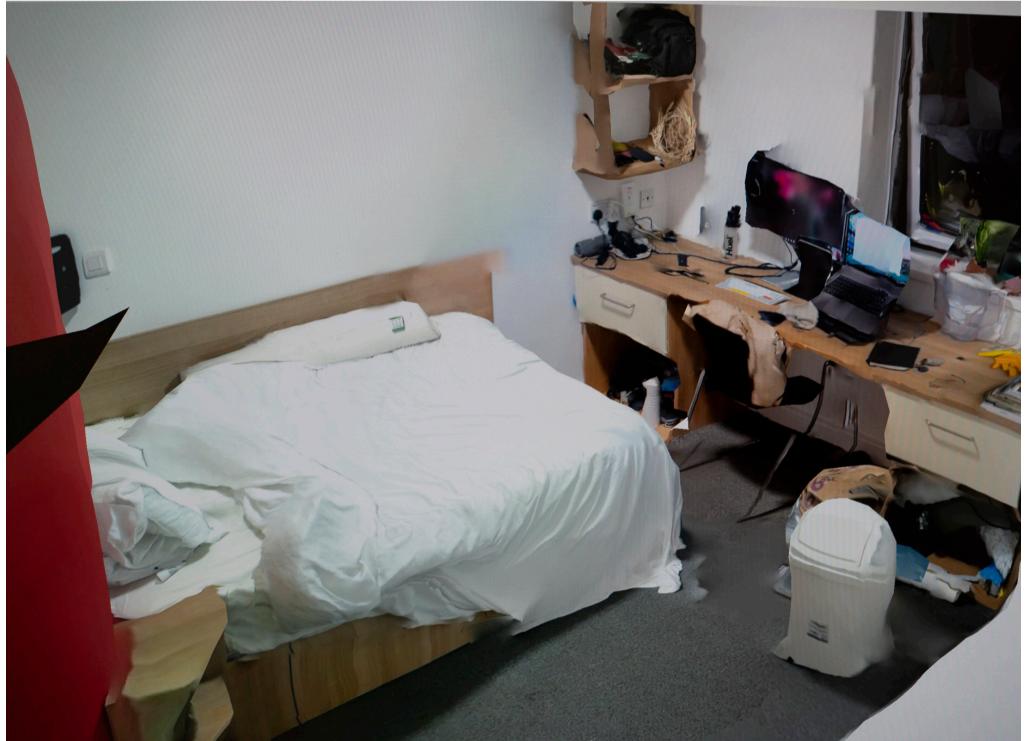


Wireframe Mesh View

Textured View

Real Life Image







Wireframe Mesh View

Textured View

Real Life Image

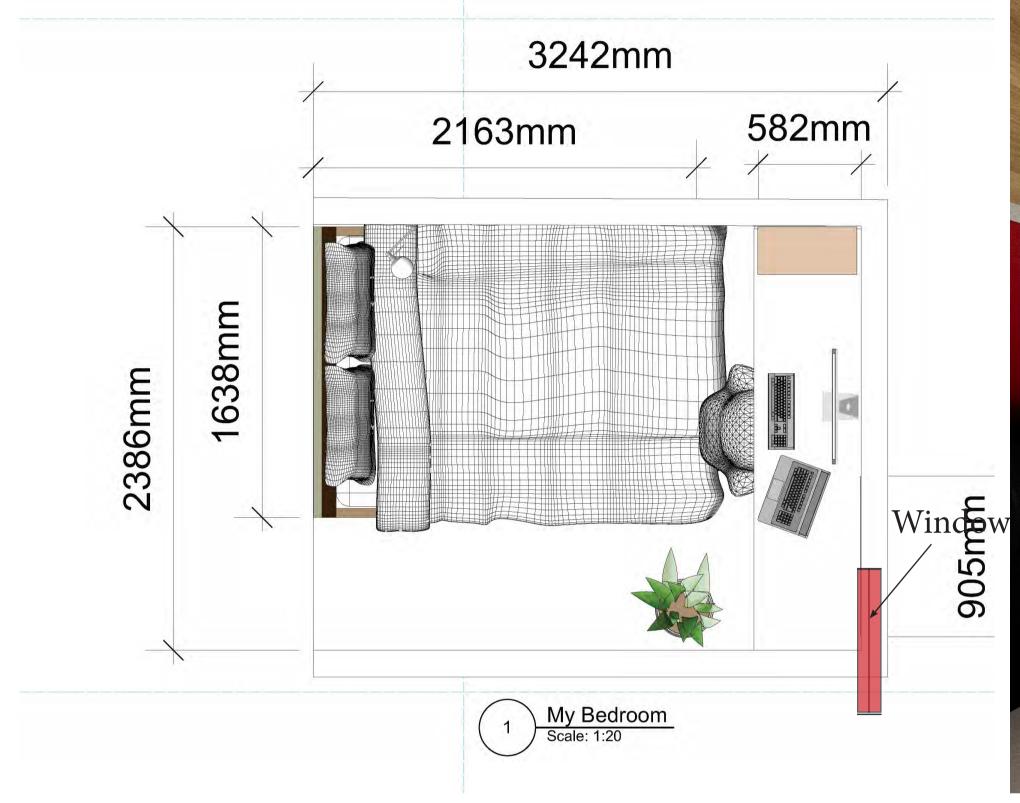
If equipments with better accuracy could be utilized instead of iPhones, it would have been of much use. Nevertheless, the scans could provide a general representation in a few moments.

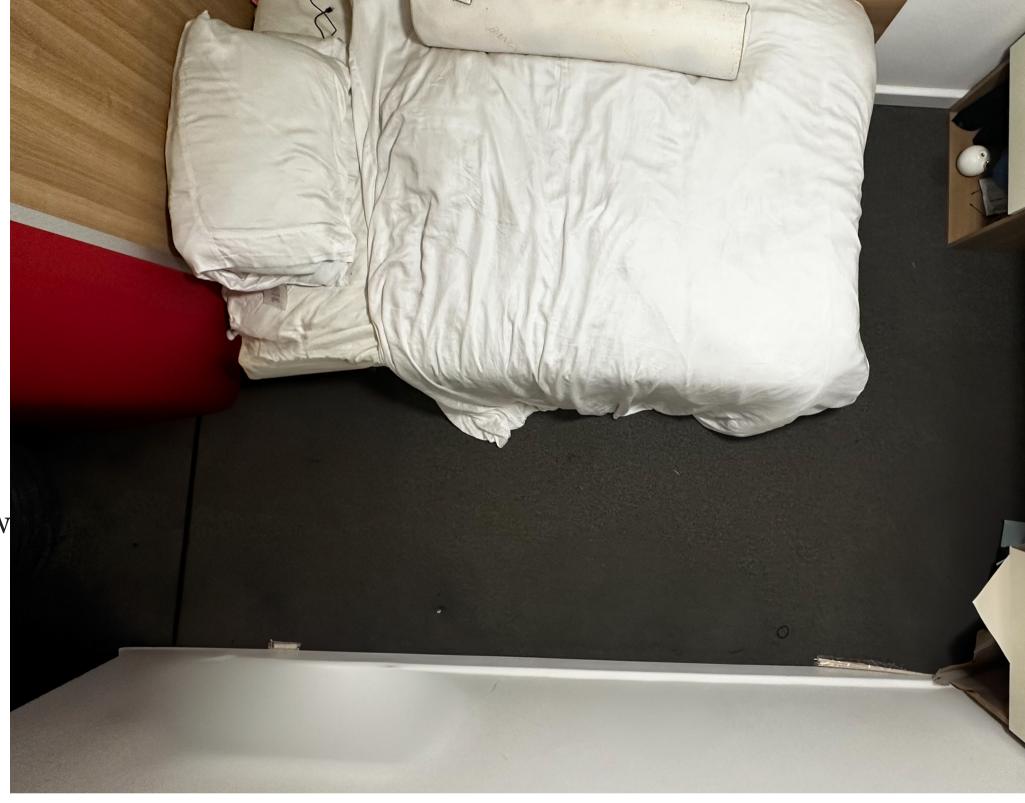
Reference

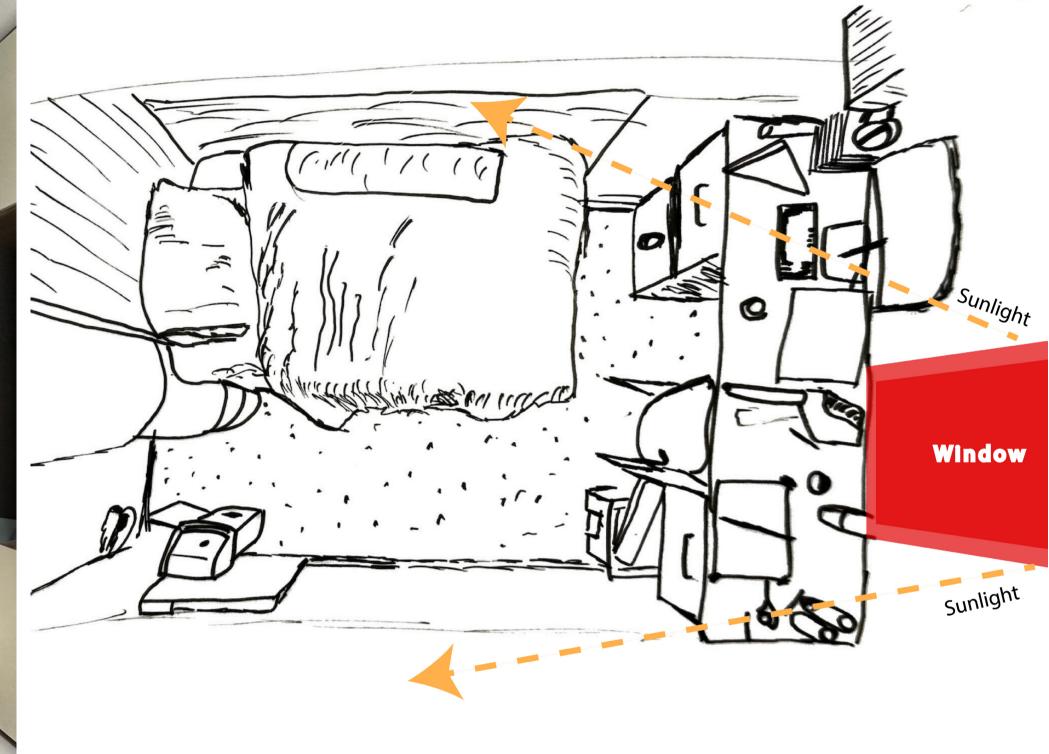
Poly.cam. (2024). My Library | Polycam. [online] Available at: https://poly.cam/library [Accessed 2 Oct. 2024].

Method Two: Basic Measuring

Overhead View







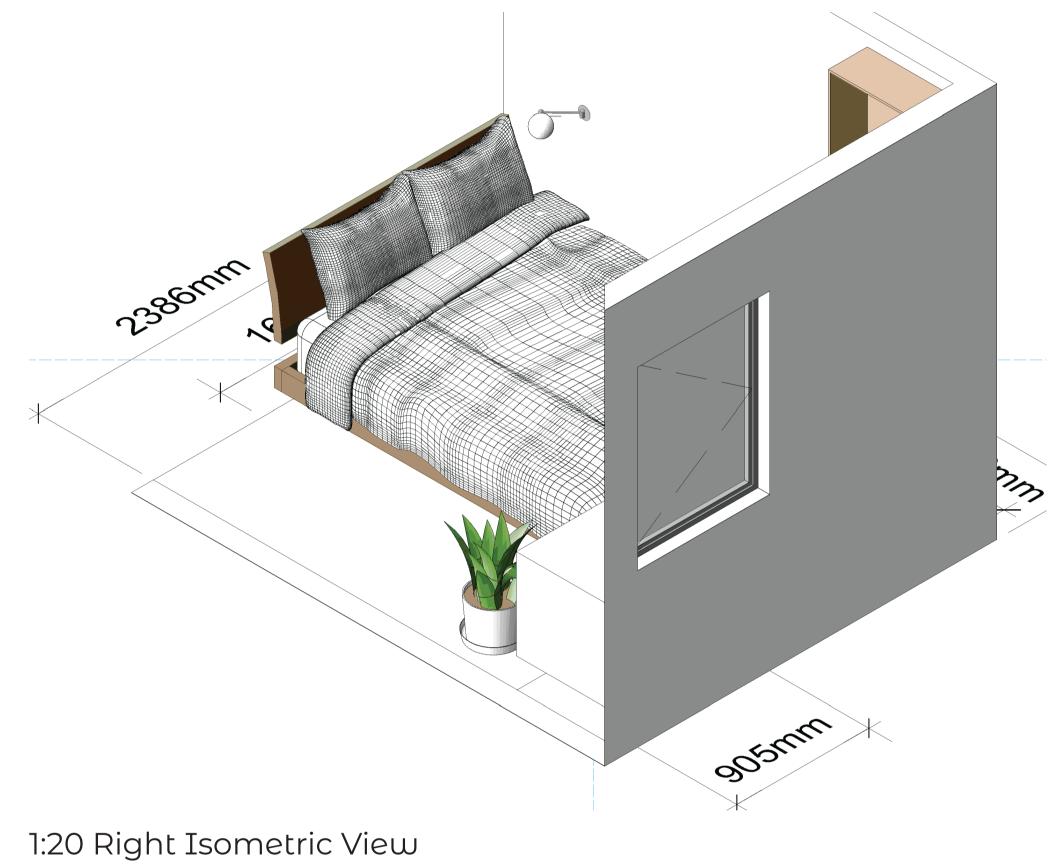
1:20 Hand Drawn Floor Plan

Real Image

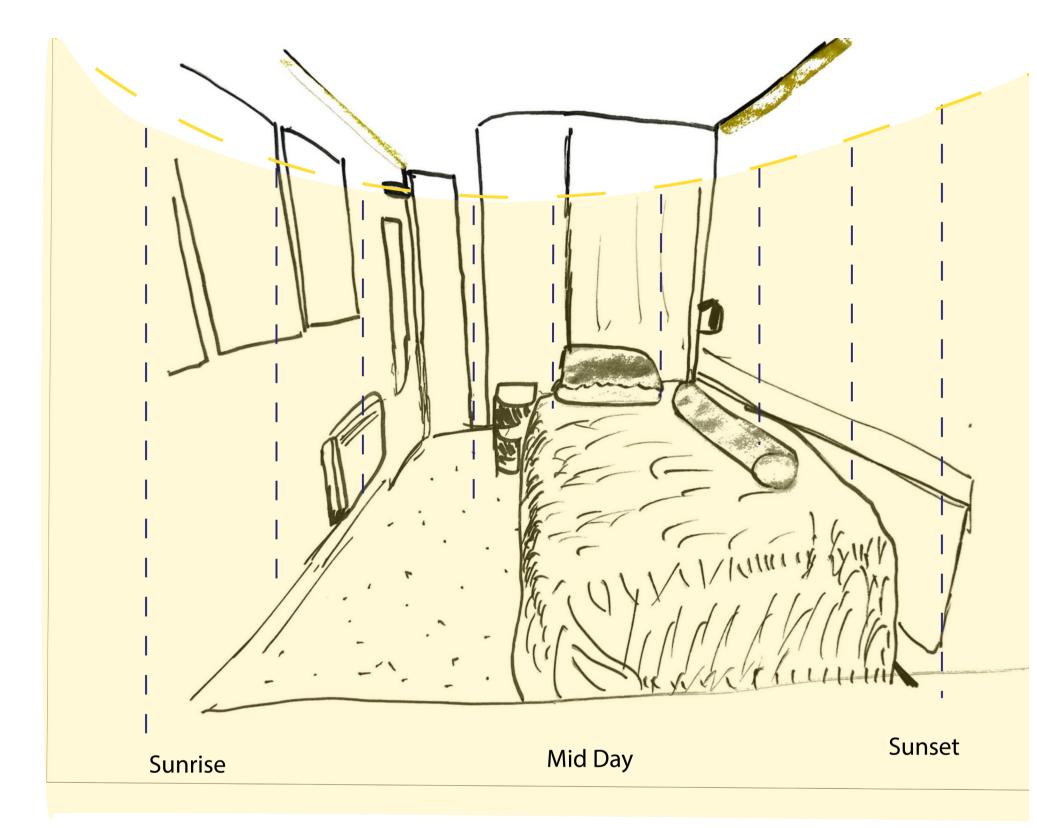
A busy Day

Method Two: Basic Measuring

View from Window







Real image

Real image

Why did this happen? The Height







The Room

The only interference of the sun path







View to the east

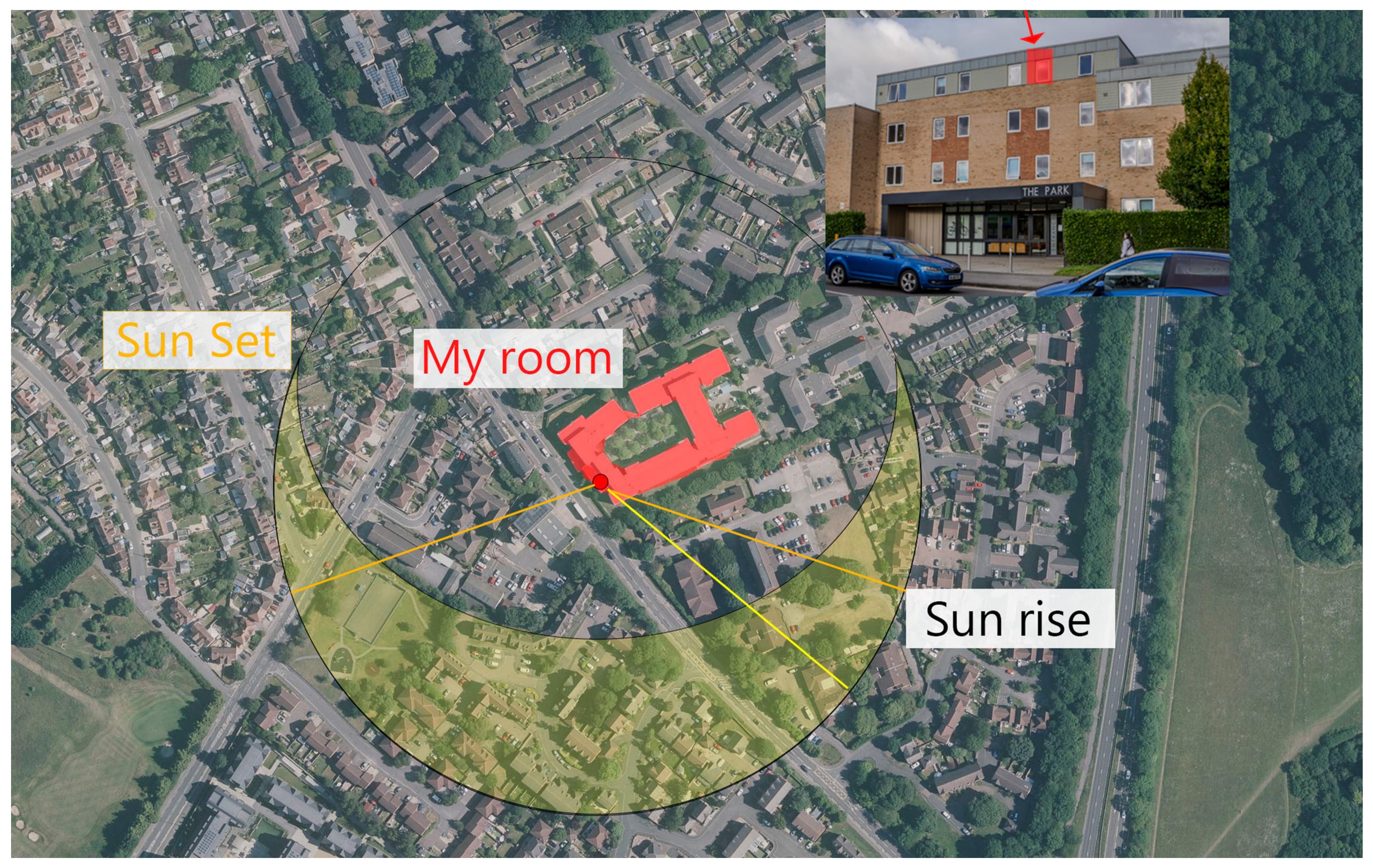
The window

The accomodation and the road.

Being one of the highest place around on the 3rd floor, the space is well lit. But can the input be the same on different orientations?

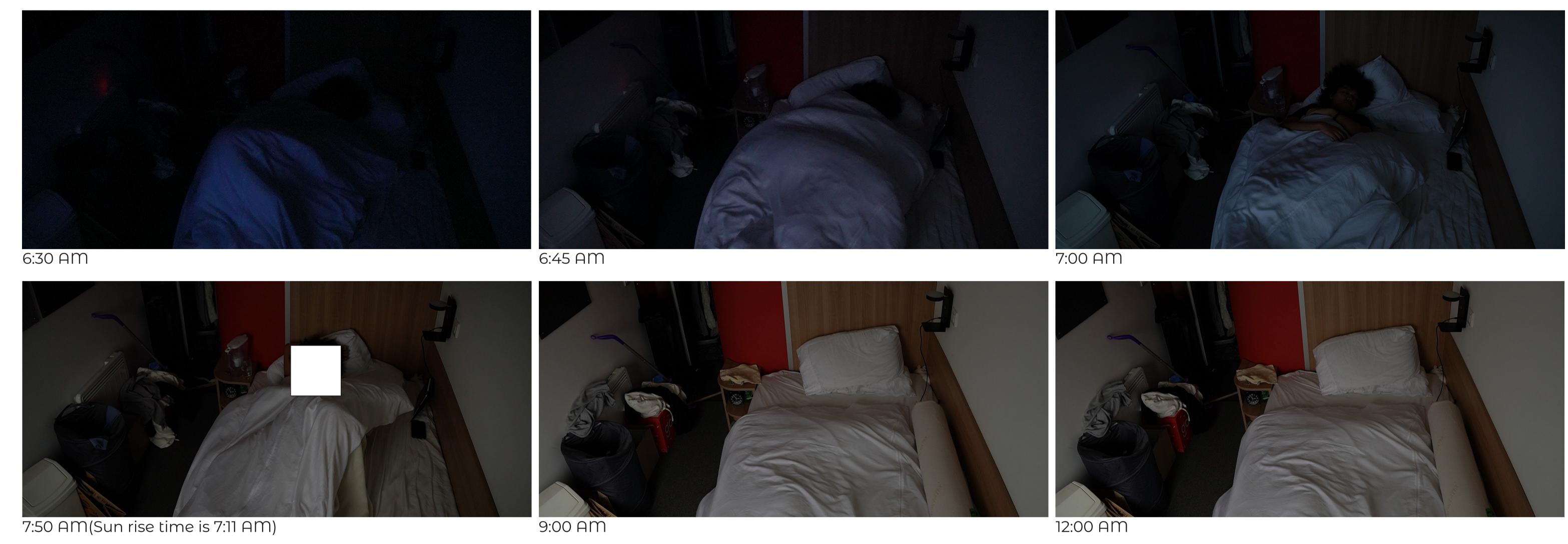
Why did this happen? The Orientation

Why did this happen?



My building in Oxford

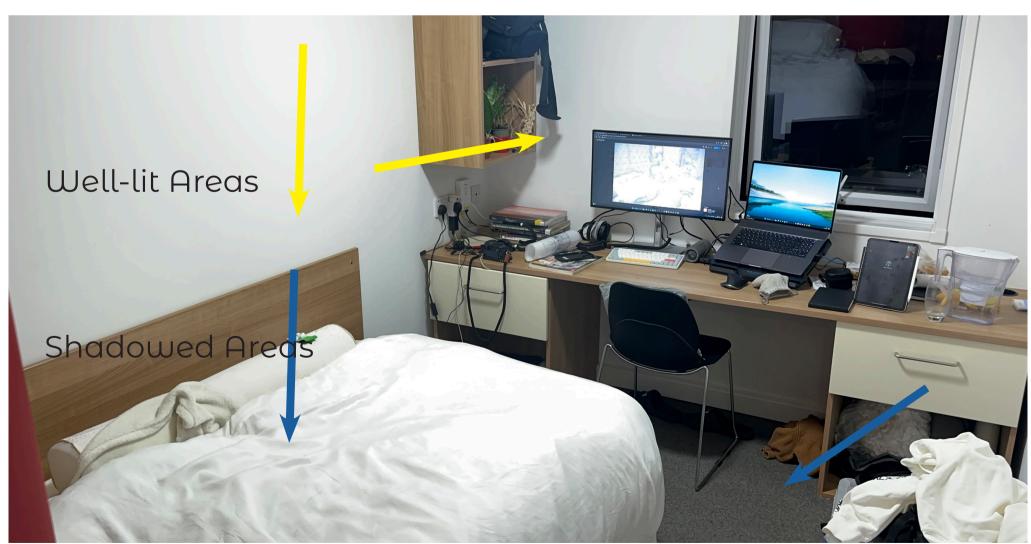
How does Light Enter? The Light Analysis in the AM



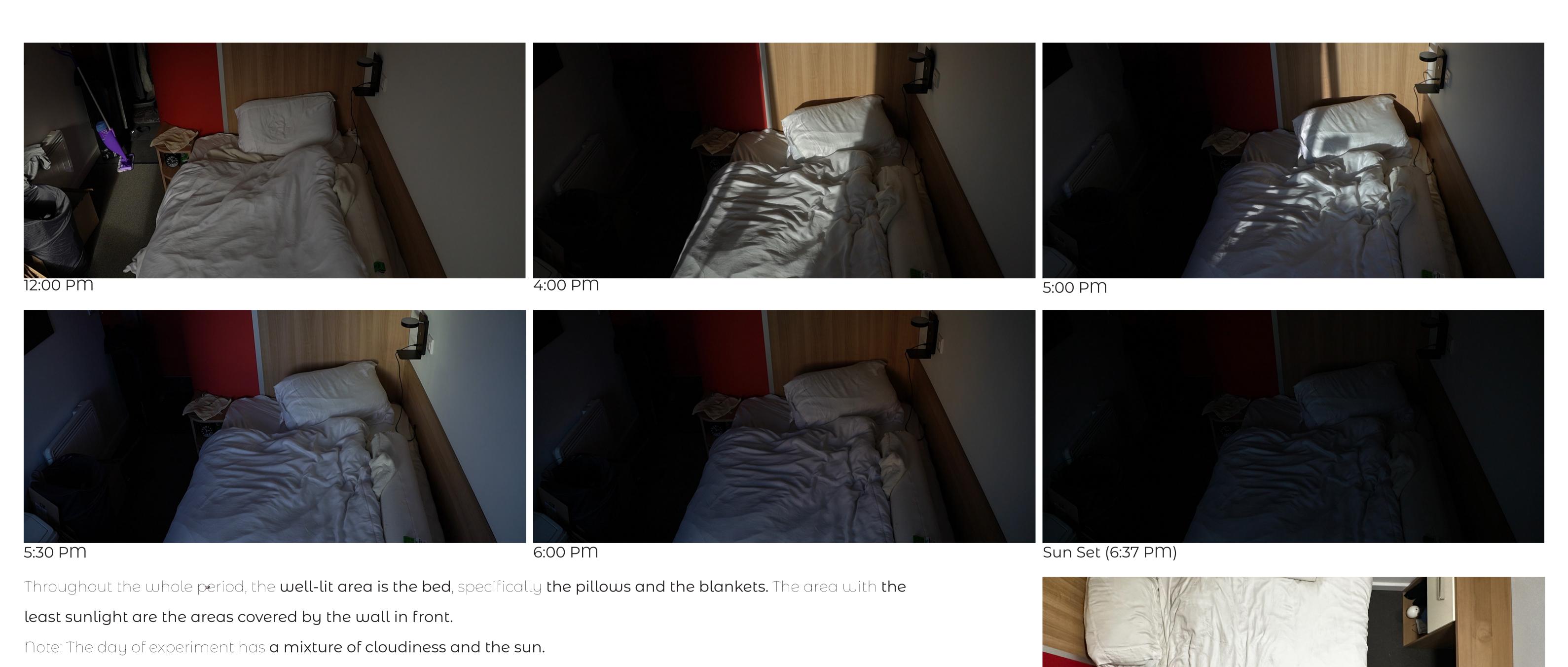
Why isn't there a proper direction of light in the room?

Beause of the sun path, normally the sun isn't directly shining to the room during the day time until 12 PM.

- The areas which reflected the most lights are the bedsheets, the walls, the wooden headboard
- The dead spots are the floor mat and the area shadowed by the desk infront and the wall



How does Light Enter? The Light Analysis in the PM



The bed is specifically placed in the area where the sun was lit the most.

The Light Analysis



The following depicts the individual materials, the most yellow is the most reflective part, whereas the least is the least reflective.

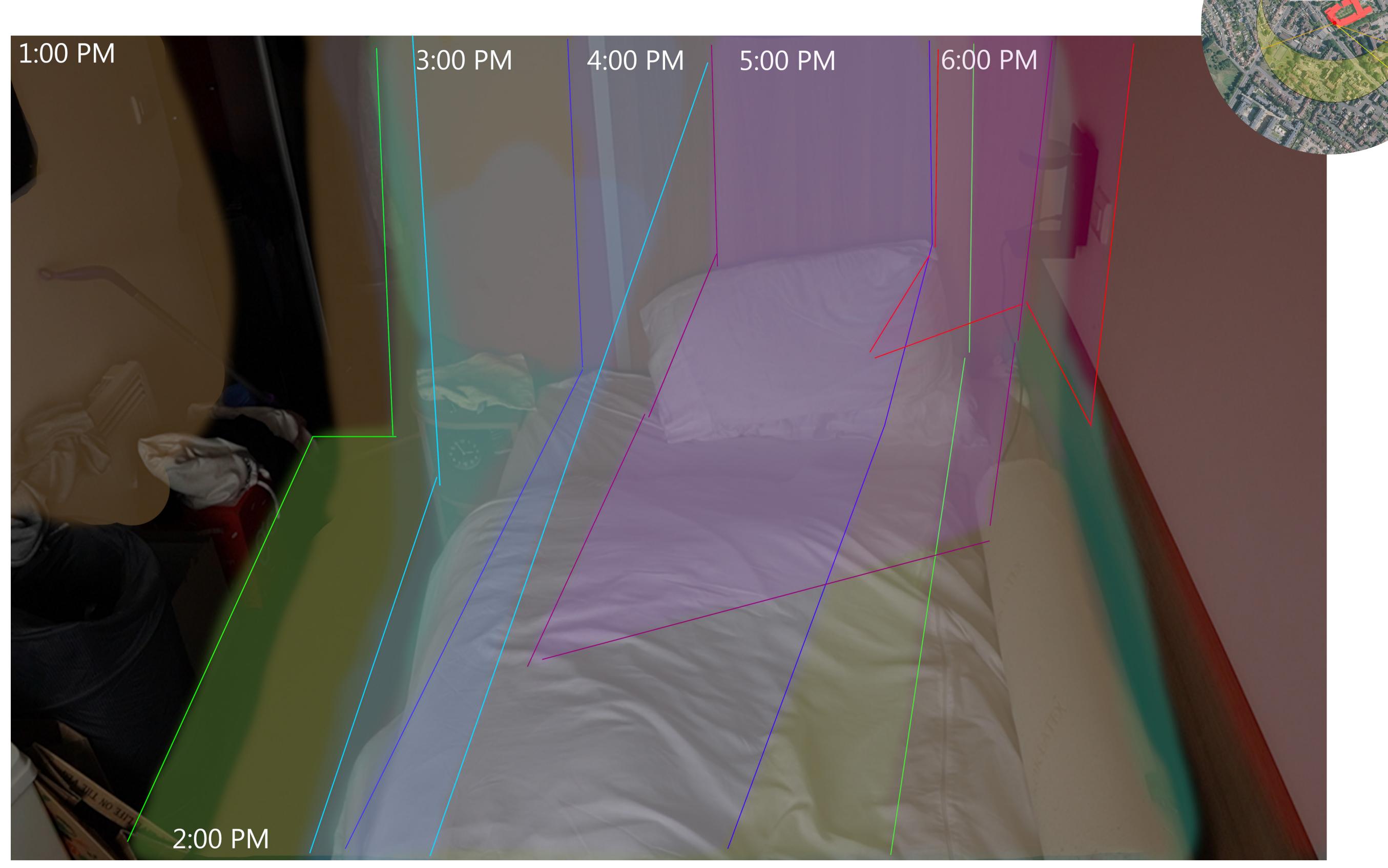
Sun Path in the Room



Duration: From 6:30 AM to 12:00 PM

During the morning hours, the sun was never directly shining due to the direction of the aperture, although the indirect sunlight was enough to light the room. The higher the opacity of the yellow, the more the morning sunlight hit.

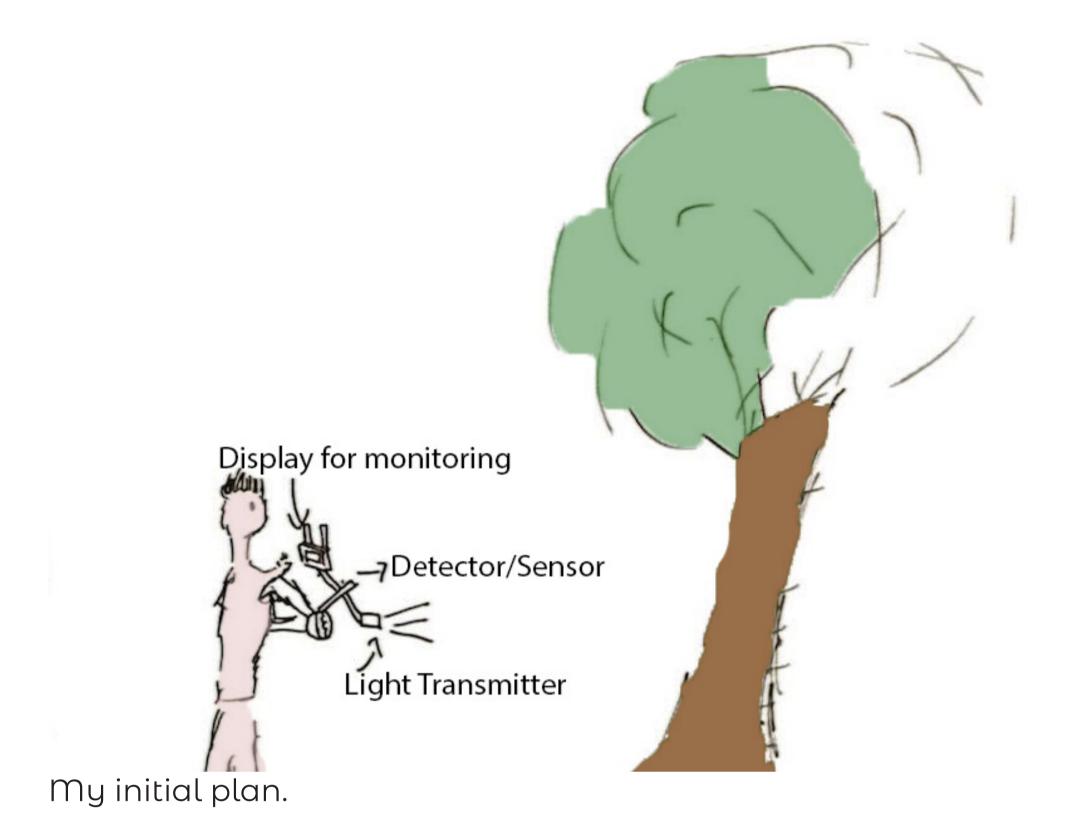
Sun Path in the Room

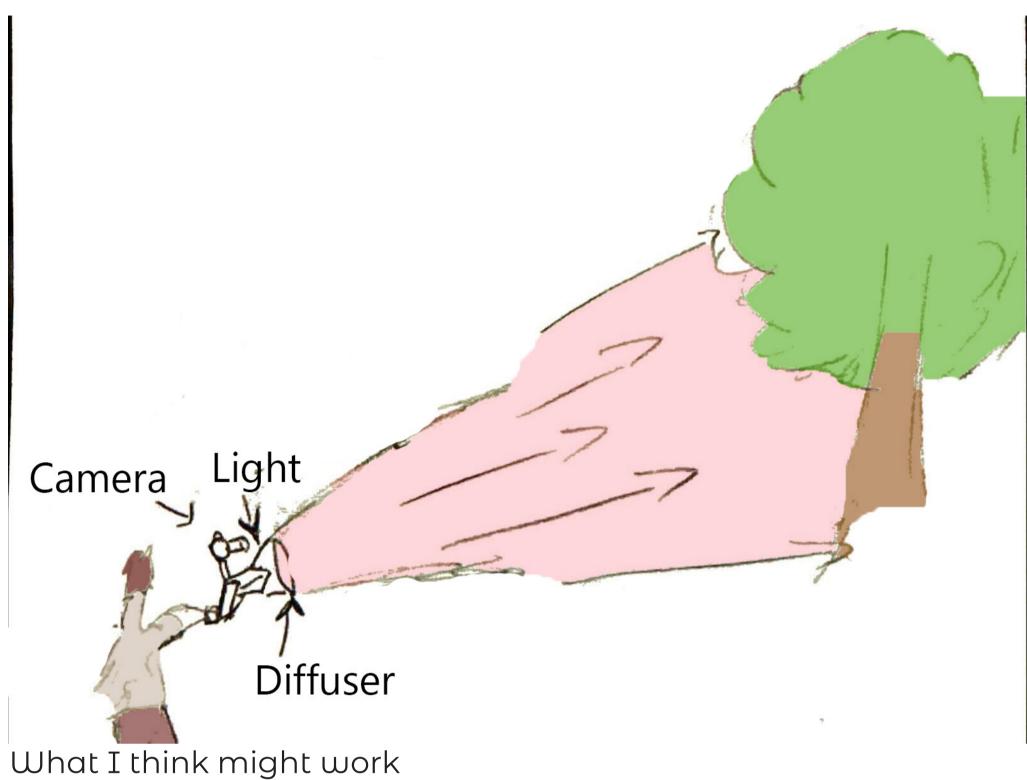


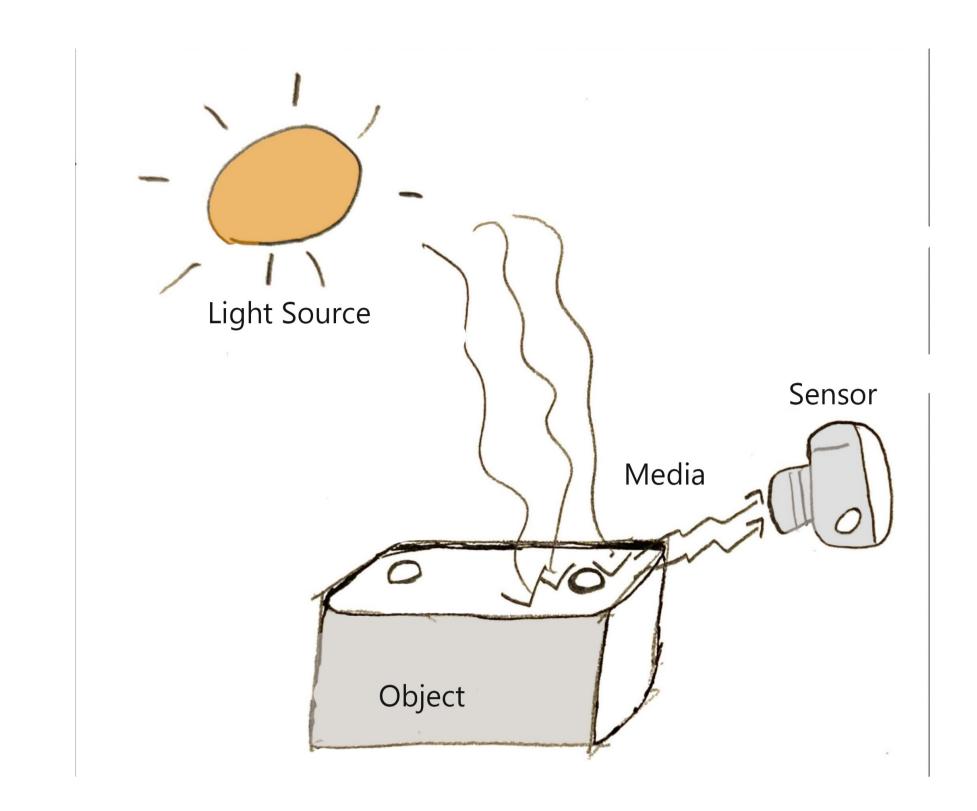
Duration: From 1:00 PM to 7:00 PM

During the afternoon, the sun was clearer, and the aperture of the window directly affects how the sunlight was received.

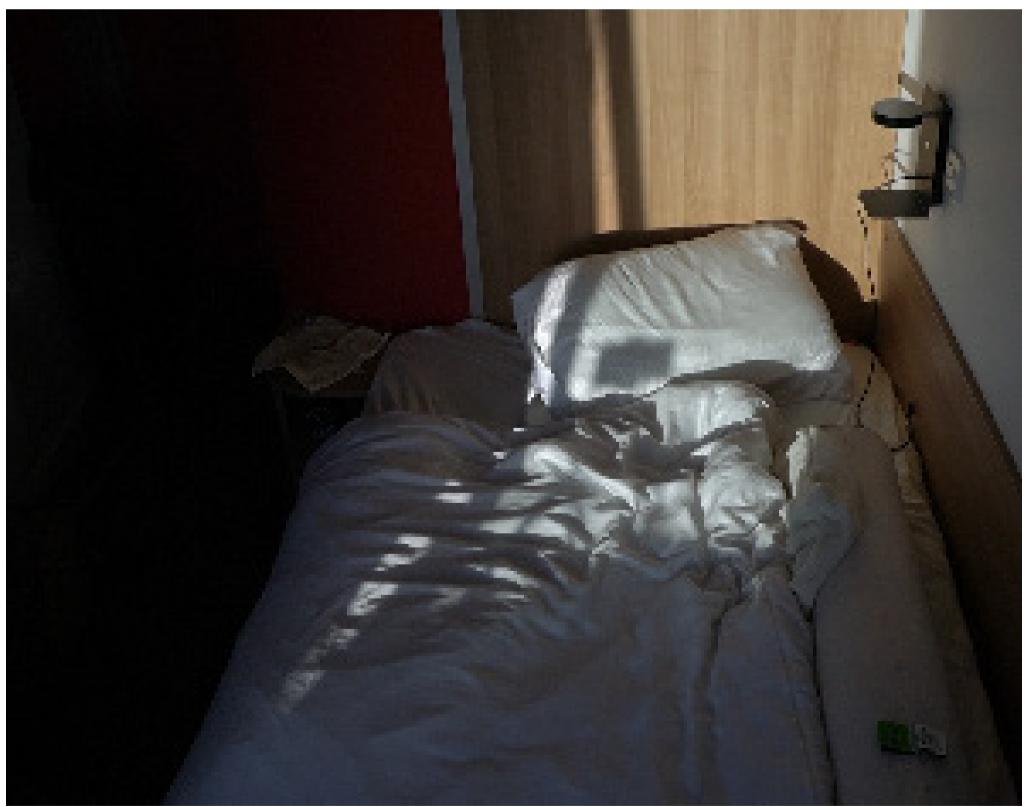
What are the inaccuracies and interferences within the previous surveys?











Main Question: How do objects respond to light precisely?

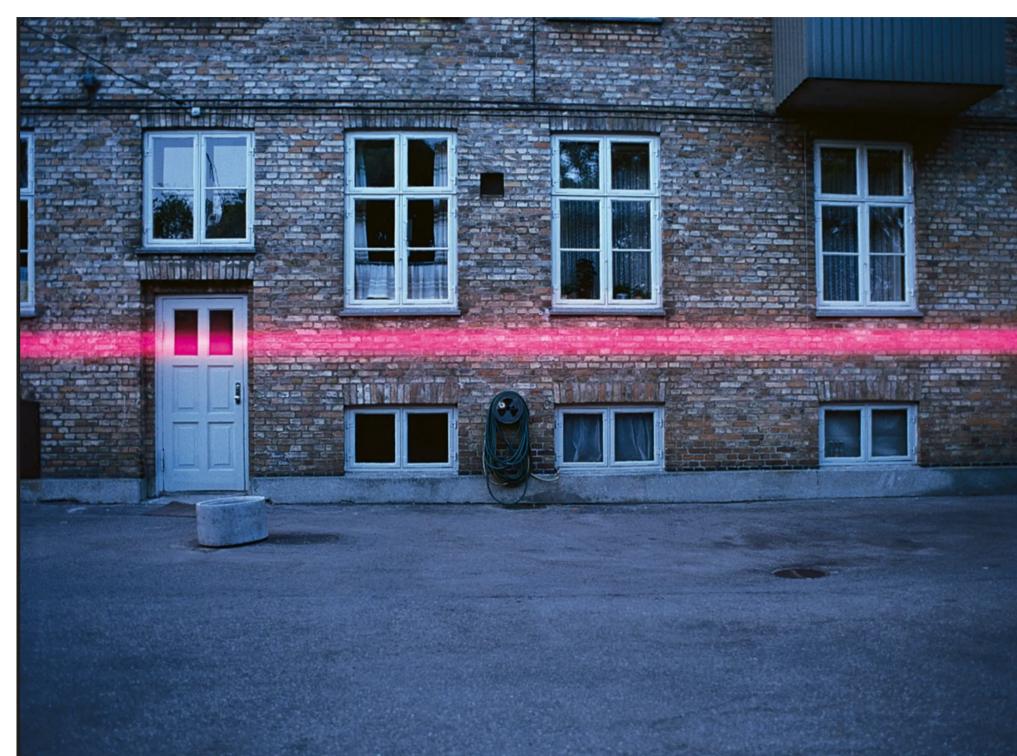
- Light Sources
- The medium which the light travels
- The properties of the surface of the objects
- The data measuring/collecting instrument

Errors

- Task One couldn't provide details of the surfaces without prior knowledge,
- Task Two had influences such as the climate, the weather and the season.

Precedent - Olafur Eliasson's Light Phenomena.

Expectations, Copenhagen, 1992



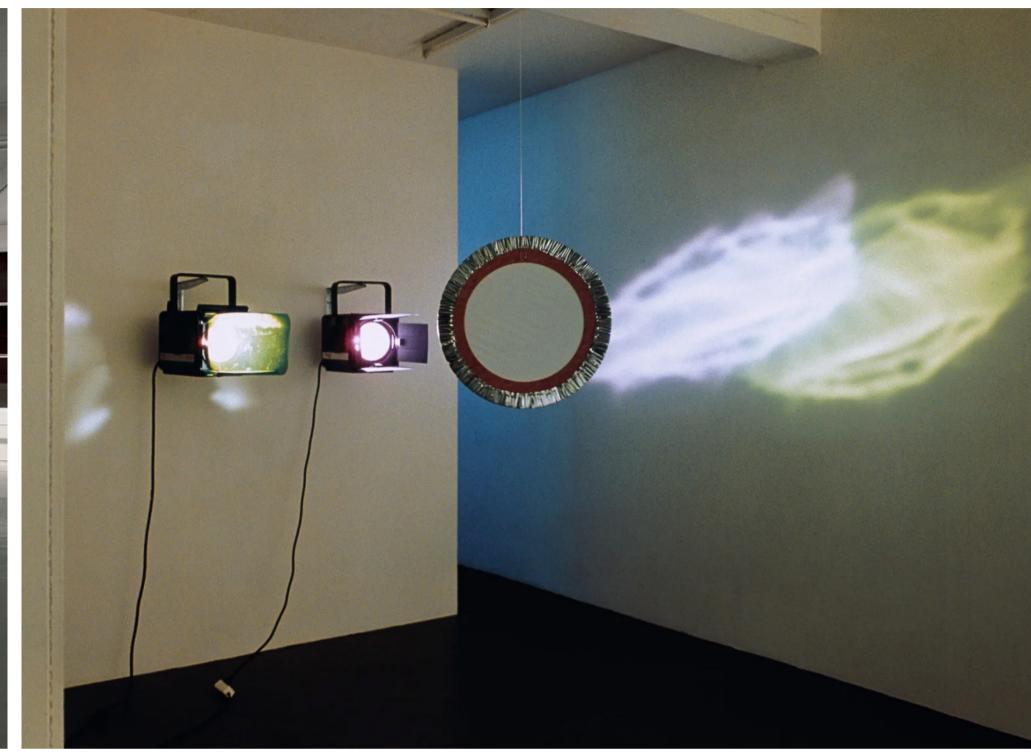
Expectations (Mads Gamdrup and Pia Agge, 1992)

Infinity, Copenhagen, 1991



Overgaden, Institute of Contemporary Art, 1992-1991

Tell Me About A Miraculous Inventon, 1996



Galleri Andreas Brändström, Stockholm (Lars Gustavsson,1996)

Thick horizontal red line projecting towards a wall of a courtyard, corresponding to the horizon made using

- HMI Lamp (A bright light source)
- Color Filter Foil
- Tripod
- Lens dimensions variable installation view.

Artificial horizon made with a straight blue line projecting towards a bare wall made using

- Projector,
- Color Filter (Blue)

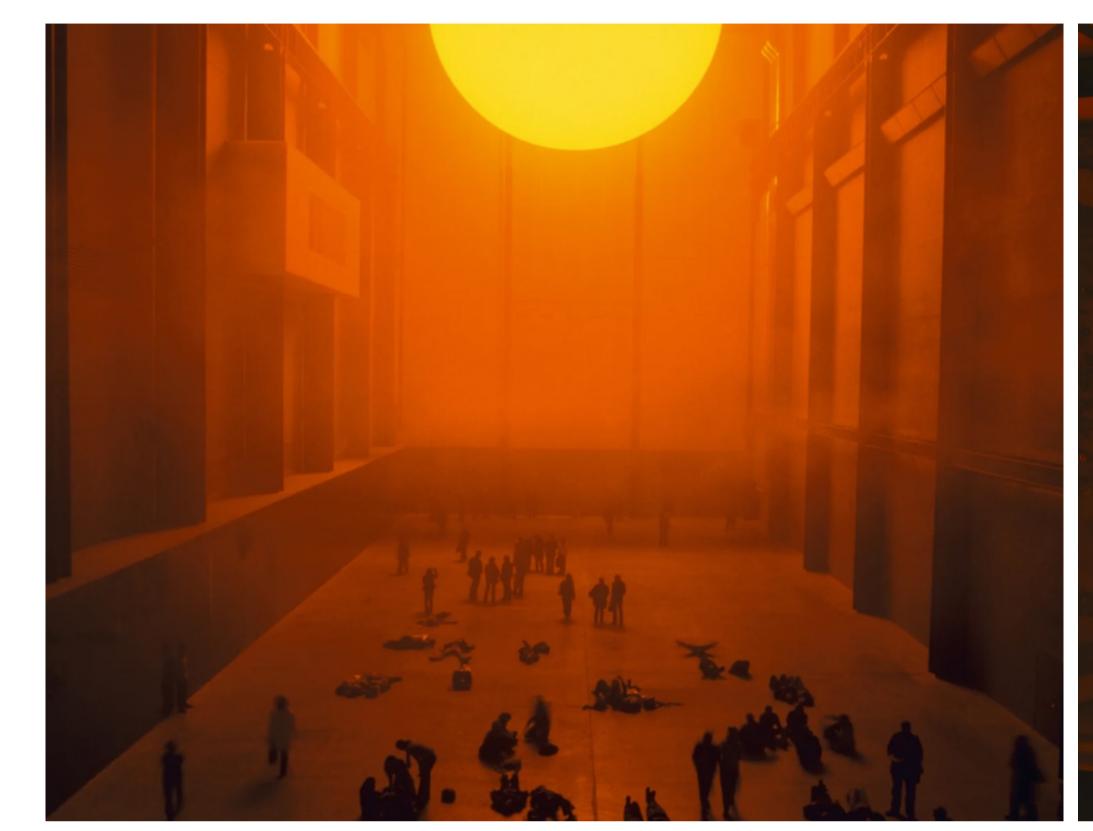
Composed of two spotlights and a wooden frame wrapped in tin foil made using

- Spotlights
- Color Filter
- Tin Foil

The way the Icelandic-Danish artist utilized light, color and space to create the possibilities produced by the reaction of human eye encouraged my interest in light and the way I design my device.

Reference

Precedent - The Weather Project



7.7m Mist



Location: Turbine Hall, Tate Modern (The Unilever Series), London.

Artist: Olafur Eliasson, Susan May.

Year: 2003

Wide semicircular screen back lit by a battery of 200 yellow mono-frequency lamps.

Aluminum Frame

Key Notes

How can we manipulate and understand the way weather has an impact to humans, and how it continues to impact those around? Visitors from the harsh London winter entered a 150-metre long Turbine Hall filled with the bright colors of the sun, and the blurring mist.

Questions Raised

- How does light relates to humans and the space around them? How can we understand the relationship between the user and any architectural detail, ideological strategy, and the project?
- How do i create the device serving the same function, but in a smaller scale and be operated by one in a ?

Reference

Eliasson, O. (2003). The weather project · Artwork · Studio Olafur Eliasson. [online] olafureliasson.net. Available at: https://olafureliasson.net/artwork/the-weather-project-2003/ [Accessed 27 Oct. 2024].

Required Materials

To recreate everything, materials for the light source, the measuring device, and the processing device are needed.

Requirements for the device Portable, can be carried by a coach Battery Powered, that could last possibly hours of use without recharging. Scanning Area - Outdoors, both during the day or during the night. Cost and the Material - Easy to duplicate, and not that much.

Easily Processed Data

Light Transmitter

- Powerful enough to light the area on a sunny day.
- Have a proper cooling system to stop overheating.
- Works with color filter properly without burning it.





Camping lights

Flashlight

Road Light

The Sensor + Monitor + The data processor

- Be able to capture data in a second.
- Able to monitor without using complicated computing softwares
- Be able to record and understand in the moment, with minimal post-measuring edits.
- Record at different angles



The Device I am Making - How much Lumen is needed?





Lasers



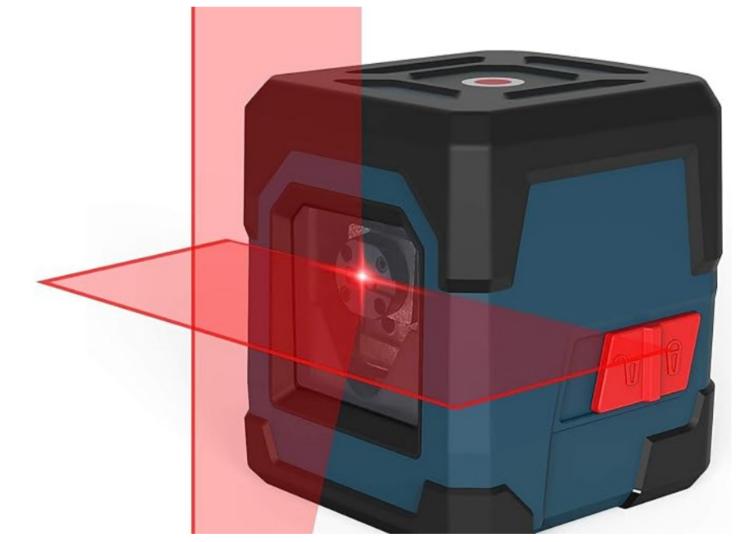








Bike Lights



Theatre Spot Light

LED Video Light



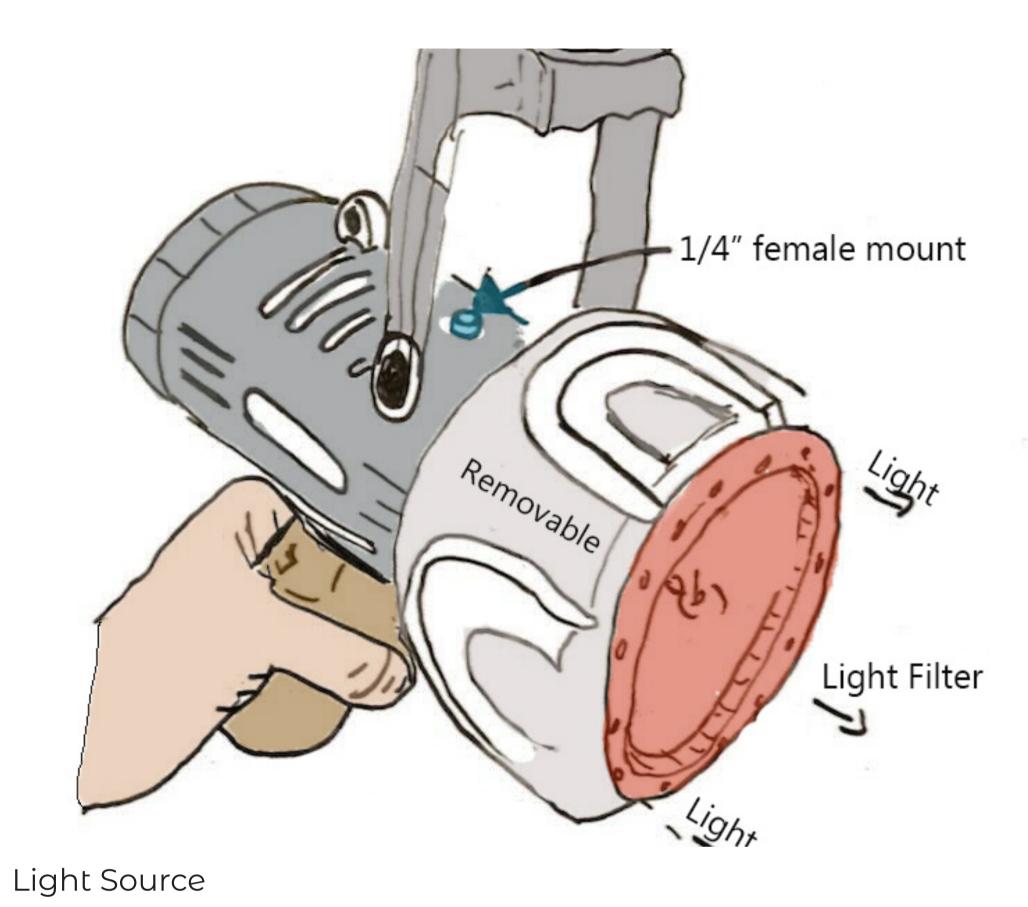
Studio Lights



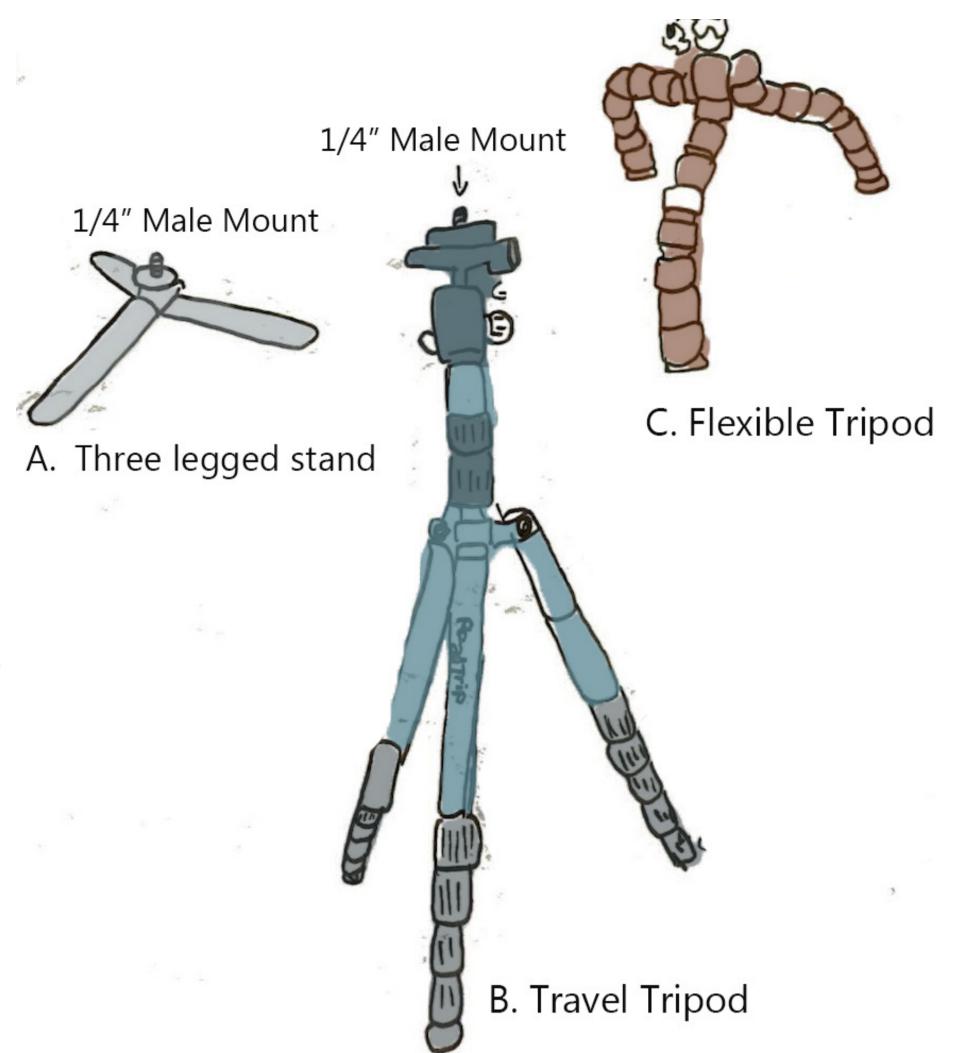


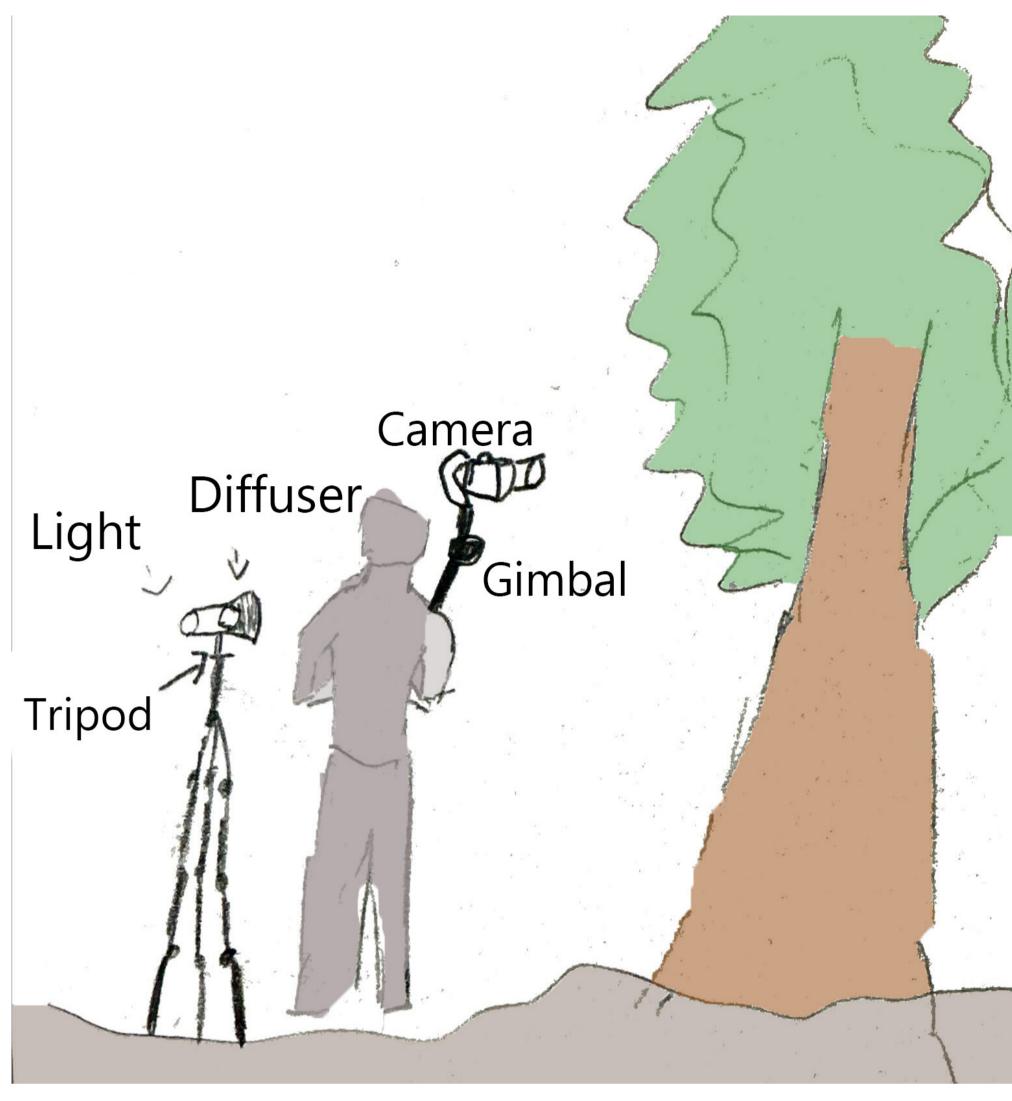
Each light has their own specific uses, and their intended users, and in our case, the survival lights and the high lumen flash would have the qualities (Portability, Battery, Heat, ...) that we need at a low cost. Of course, light sources with really high lumens like studio lights are the best choices, but the price and other issues placed them in the second best.

The Design

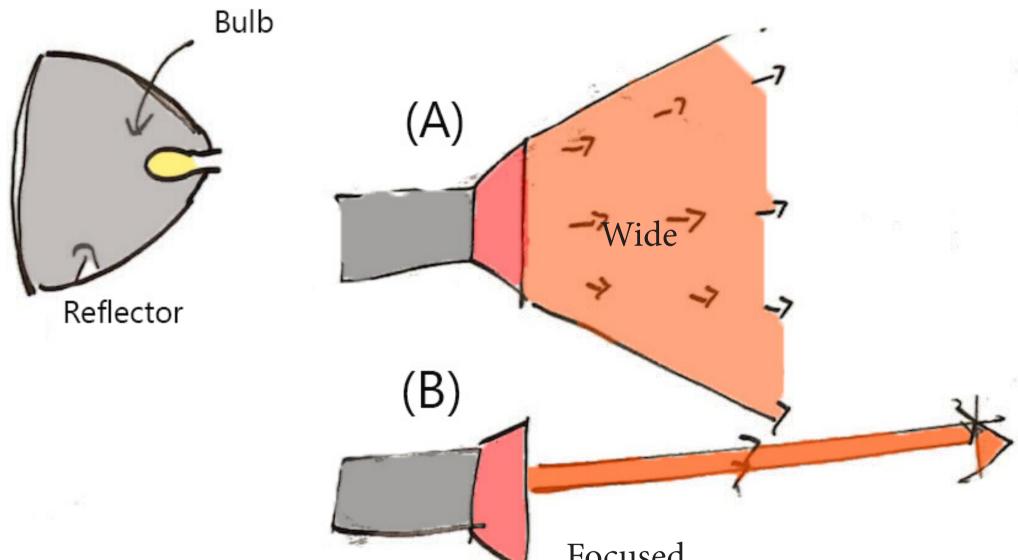


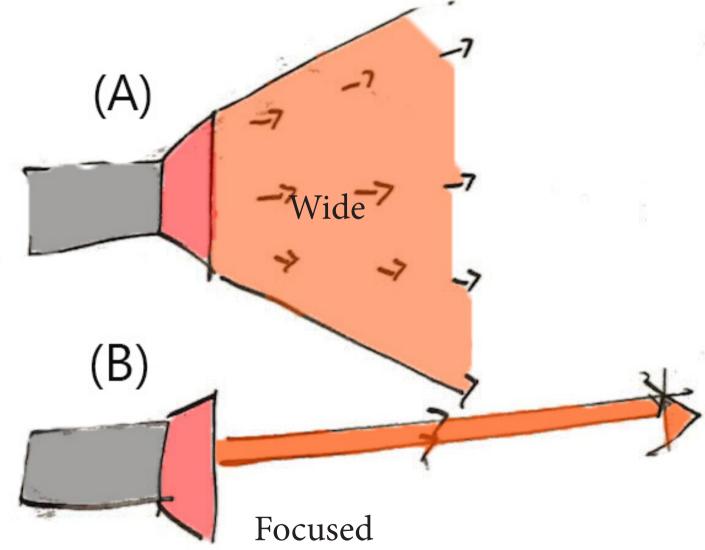
Light Reflector



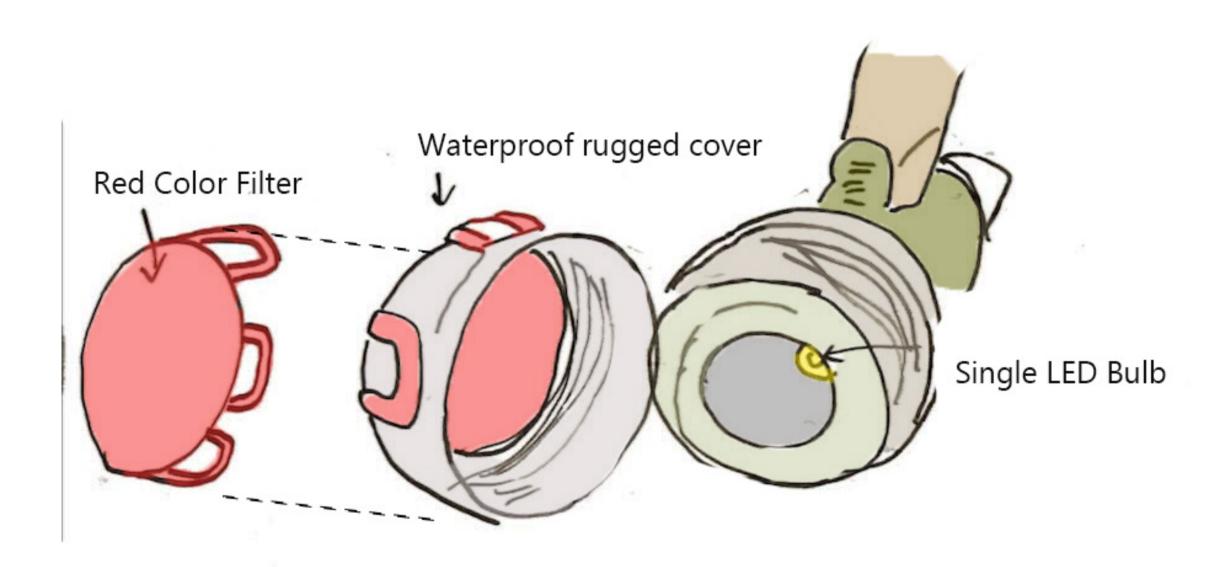


Light Filter





Tripod



Light Reflector

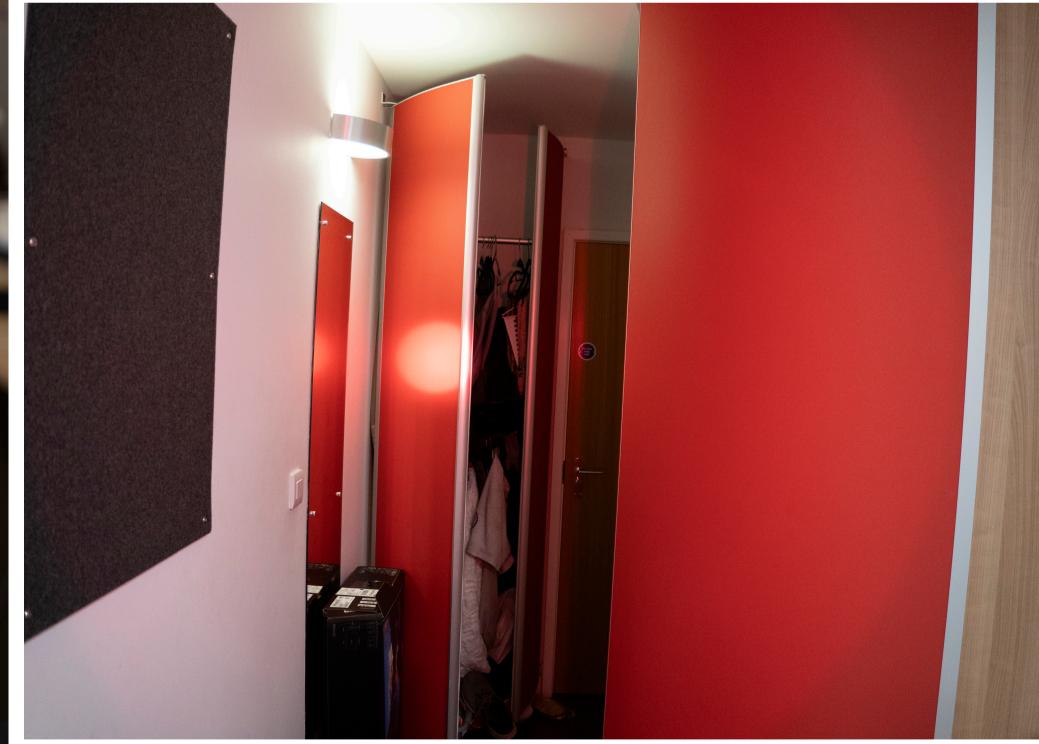
Real World Test



Brightest Mode

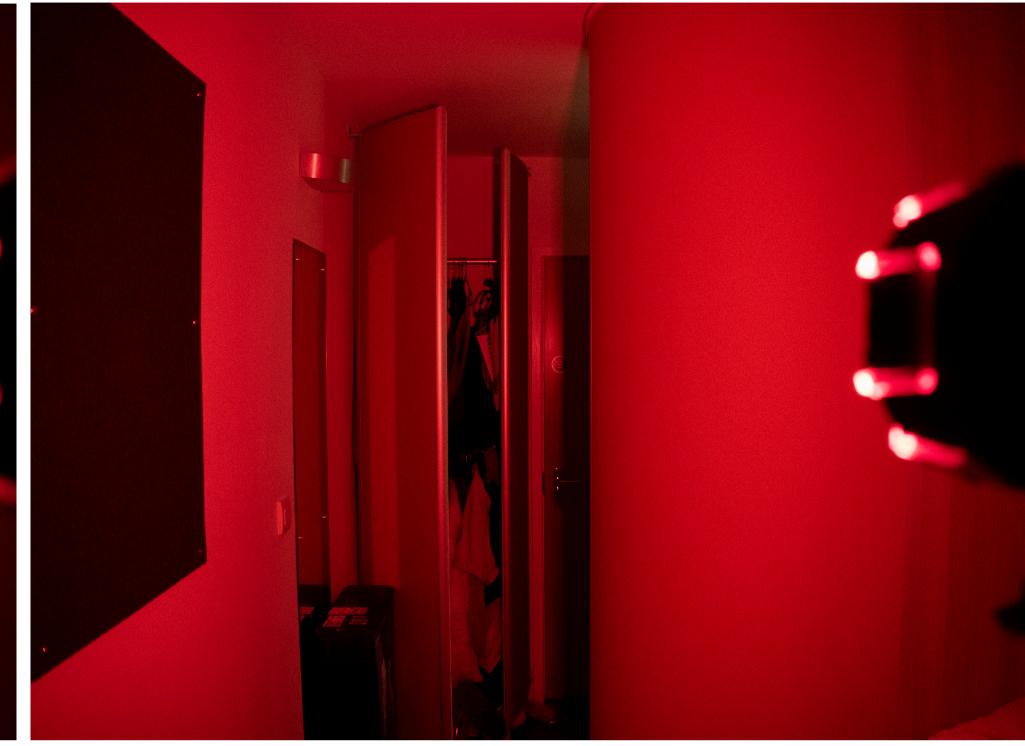


Without any light



With Room Light (800-1000 lumen)

Wide Light Mode



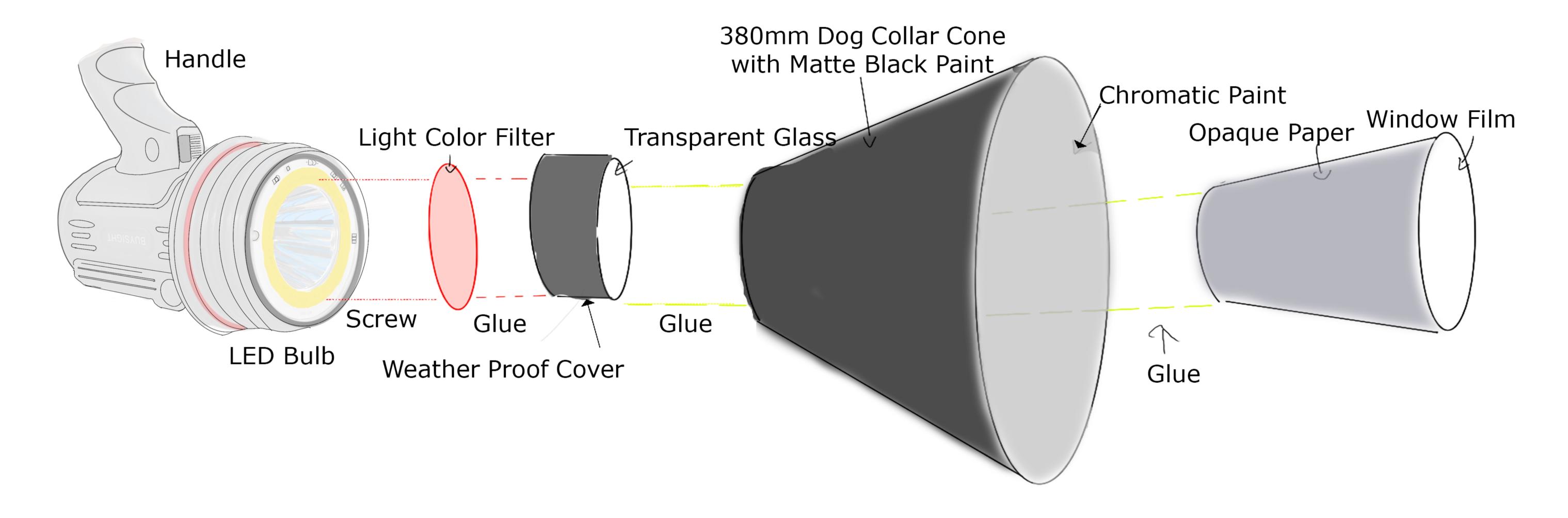
Without any light



With Room Light (800-1000 lumen)

Flaws of this set up

- The aperture isn't wide enough
- The reflective cone isn't big enough
- The color filter is too thick.

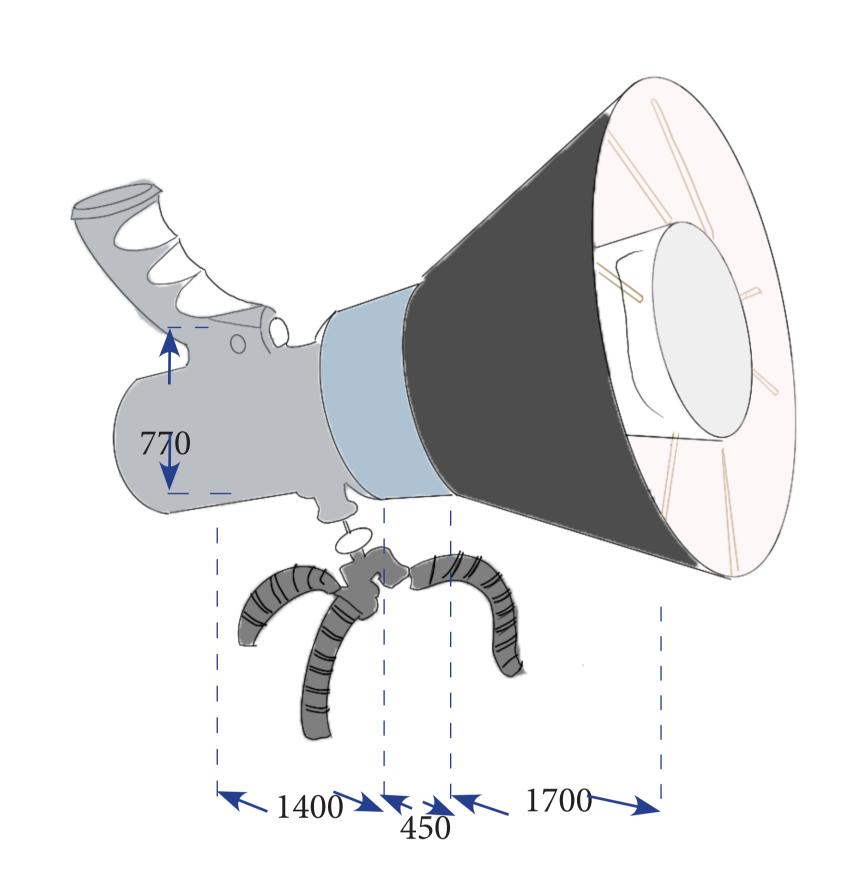


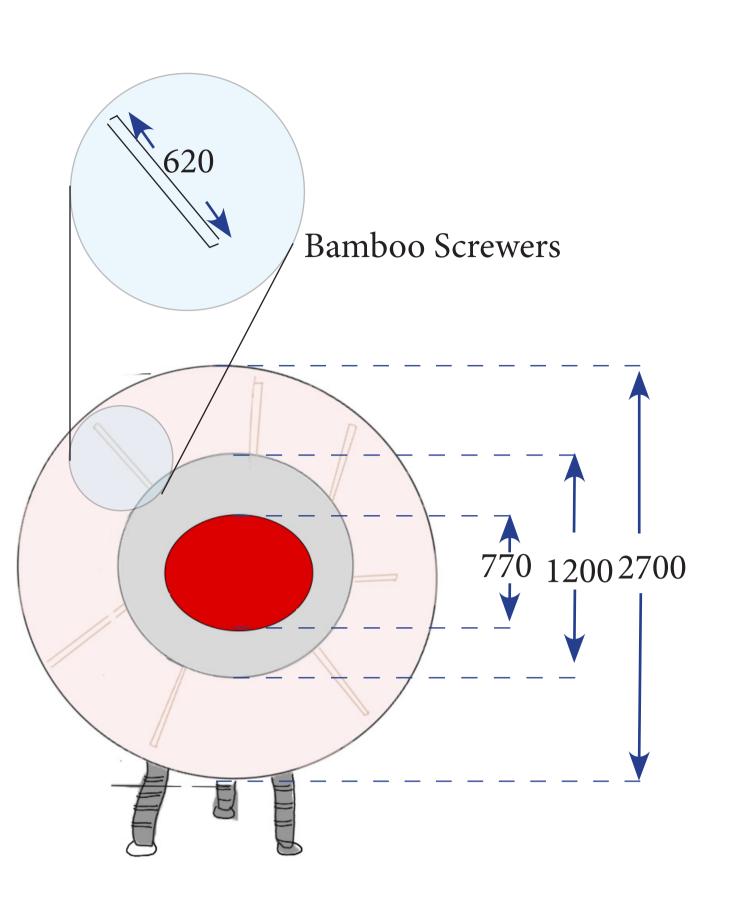


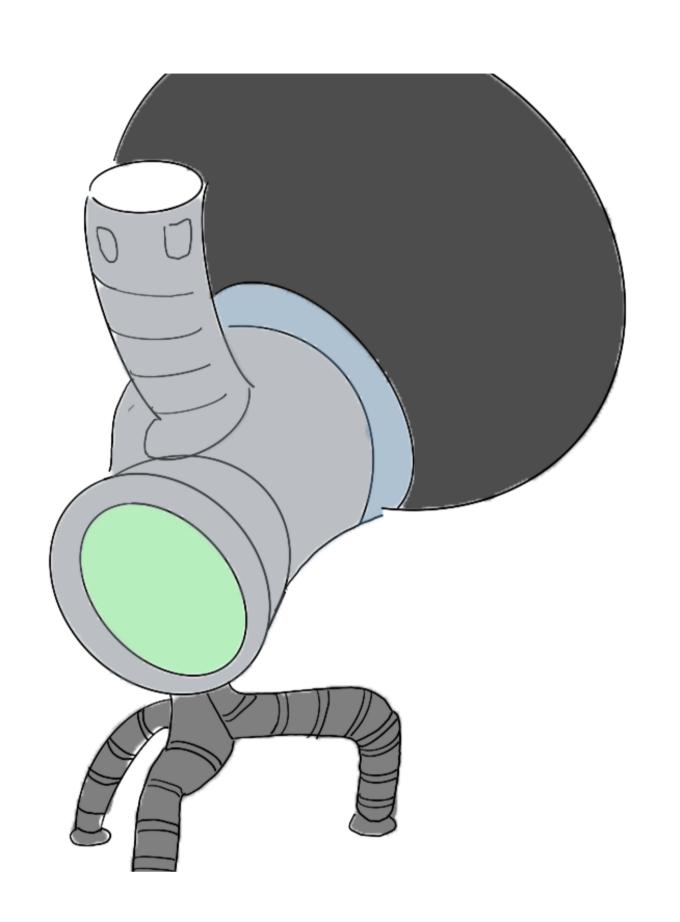
The aim of the cone was simple; to make the beam wider, without dimming. The device itself was attached to a reflective cone to produce a wider aperture to help shine brighter.

Specification

Simplified Measurements





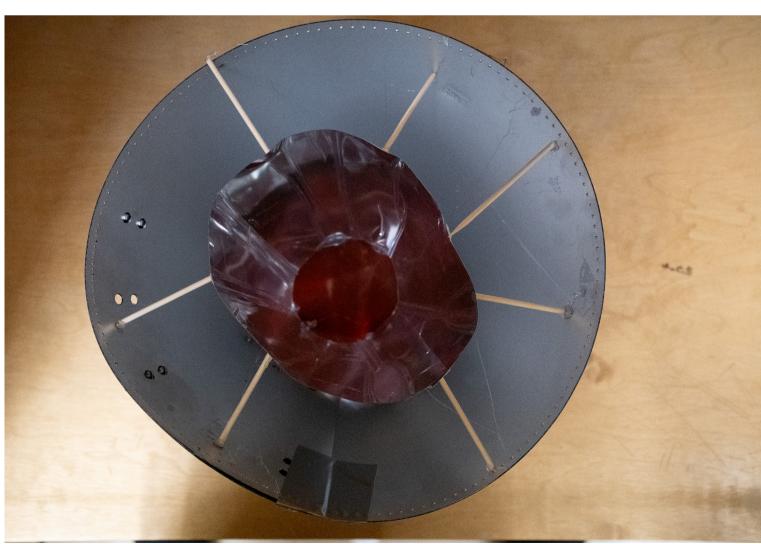




Unscrewed Cone Bottom View



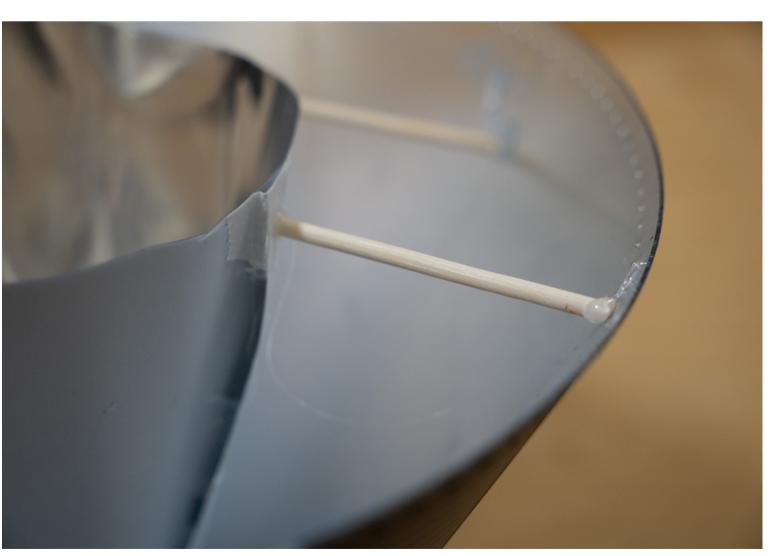
Top View



Side View

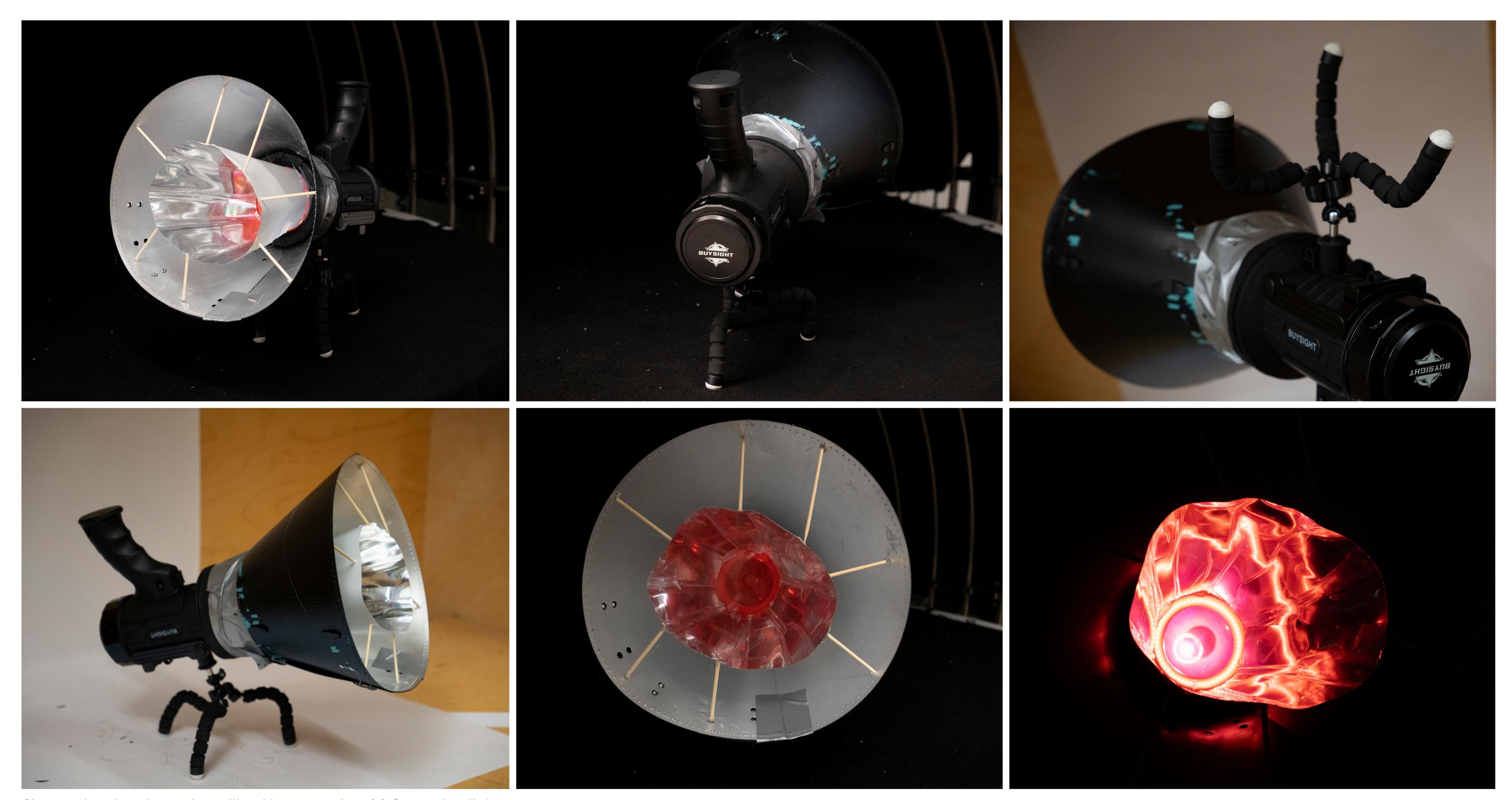


Bamboo Screwers Reinforcements



The device could be held by a person, weighs less than a 1 litre water bottle, and sealed to be able to withstand weather conditions.

The Final Device



The product is going to be utilized in my project 2A for testing light.