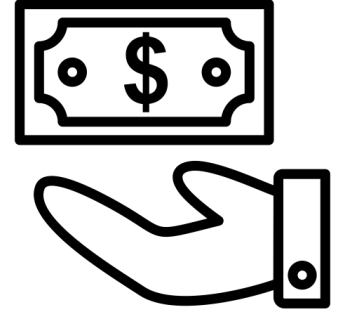
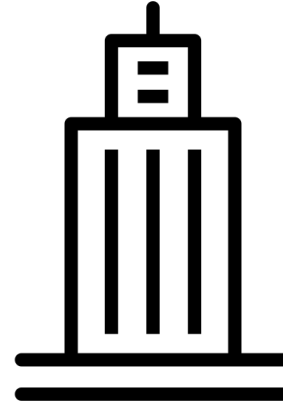
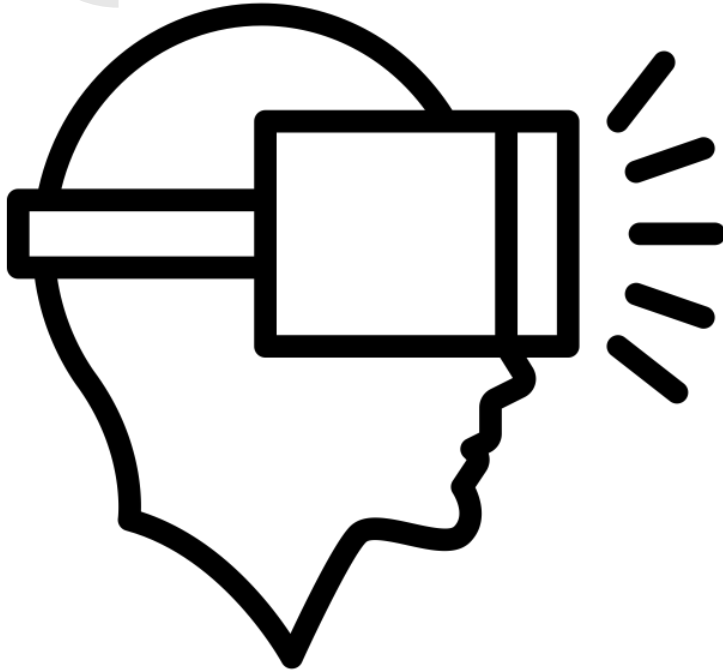


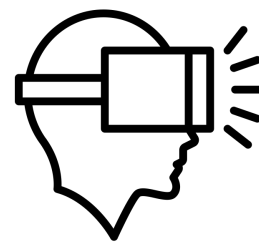
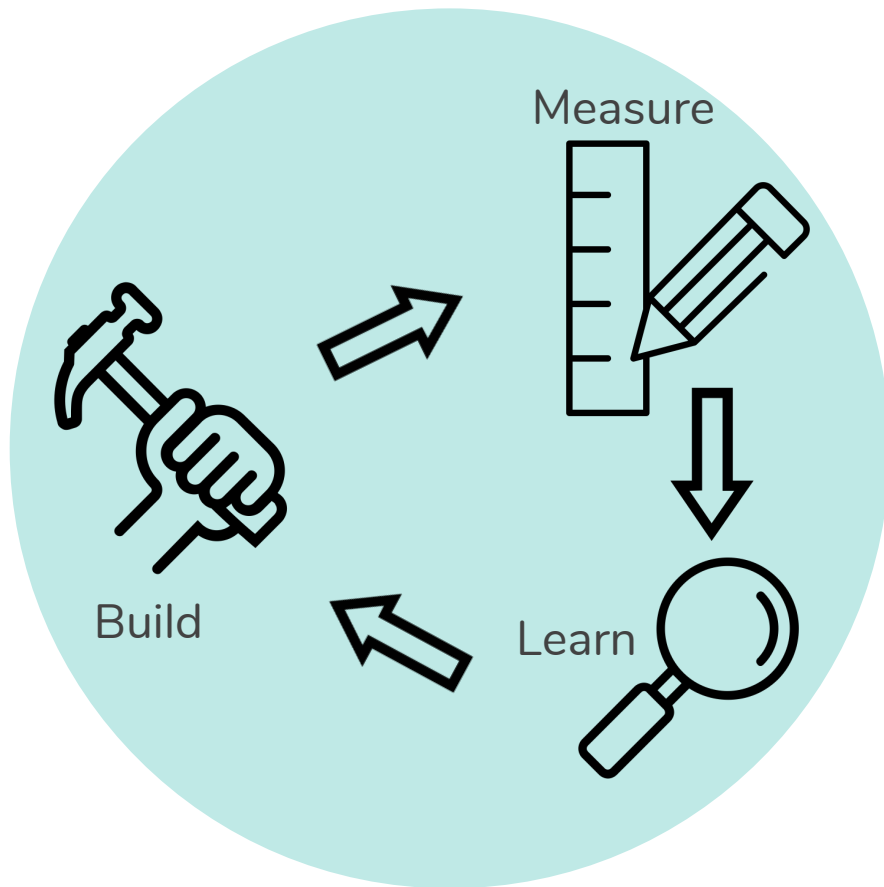
Project Ocelot

Measuring physiological responses to colour
through virtual reality environments

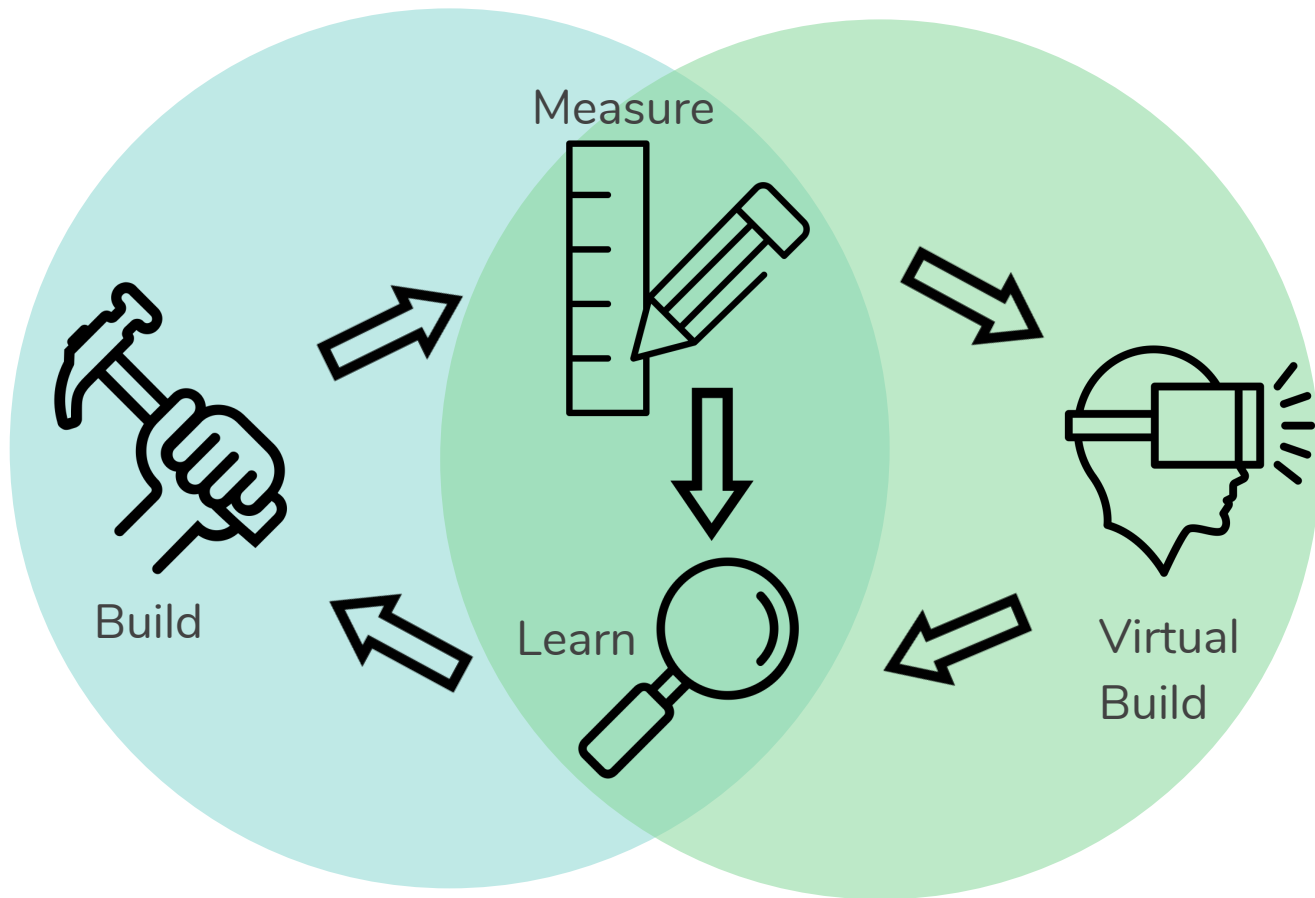
Sol Cutrera

Perception and space



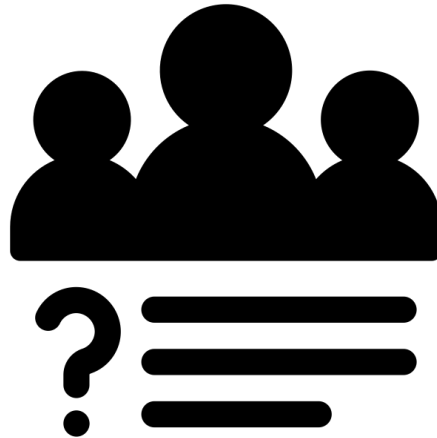


Virtual
Build

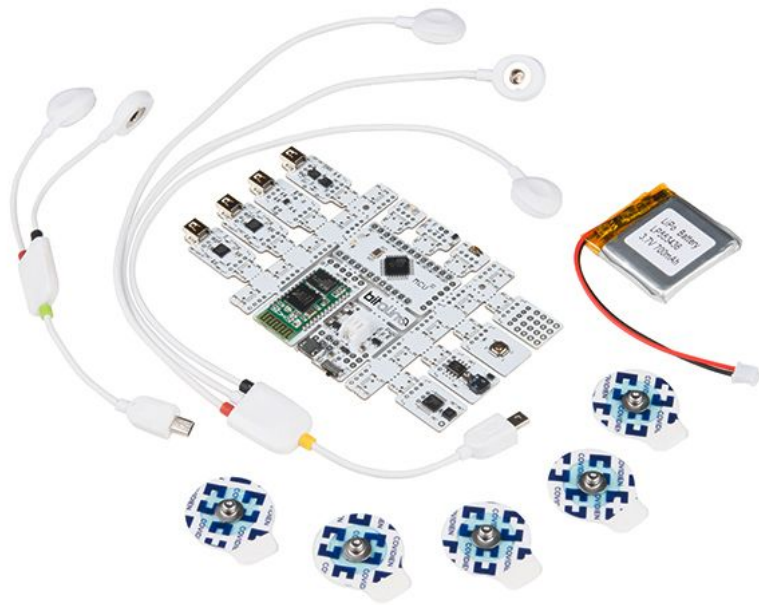




Post Occupation Surveys and Verbal Feedback

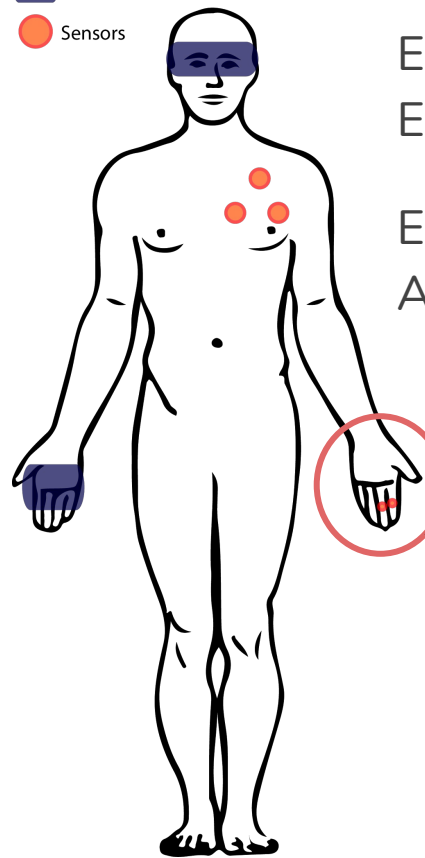


Biometric analysis



Virtual Reality Gear

Sensors

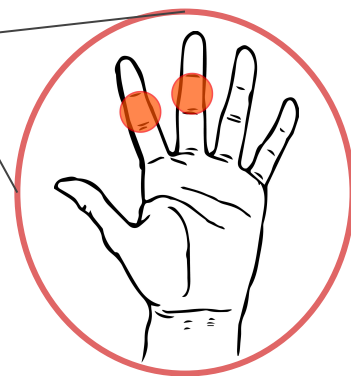


ECG

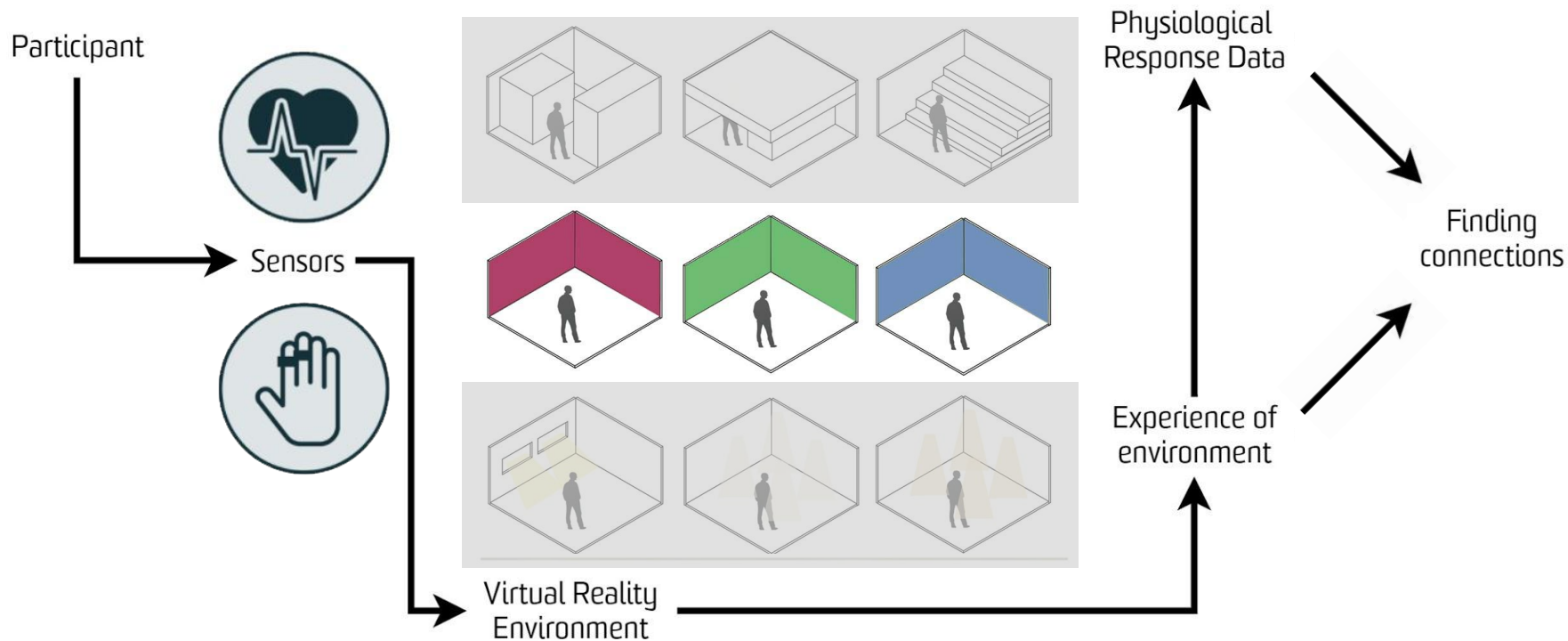
Electrocardiography

EDA
Activity

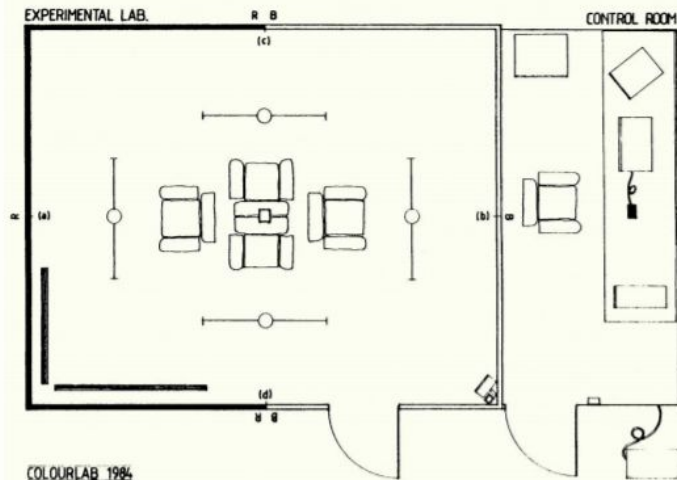
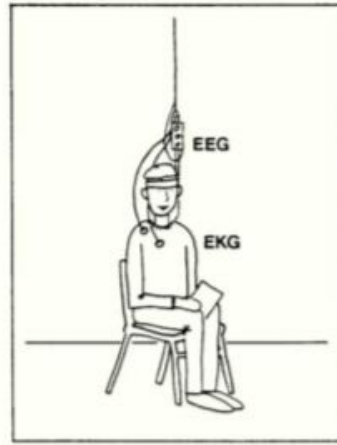
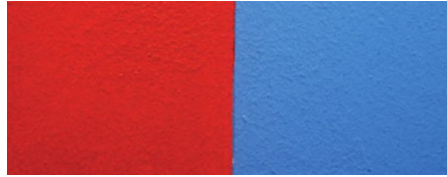
Electrodermal



Particular point of view



Phase 1: Replicate



Mikellides, 1990

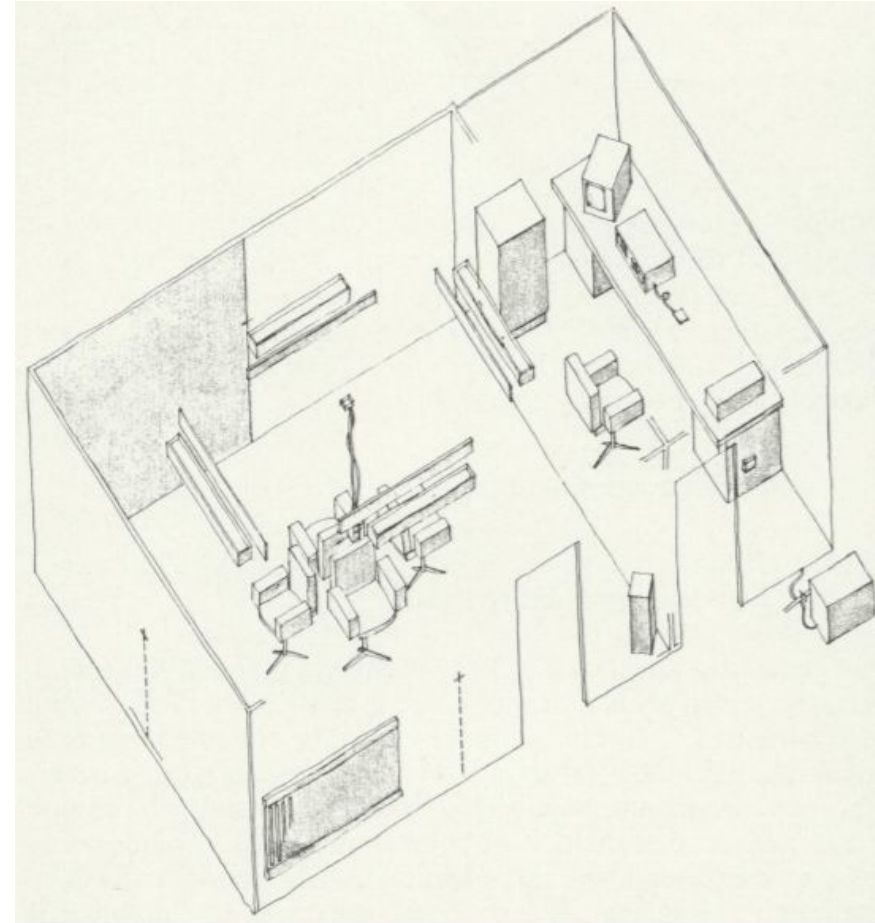
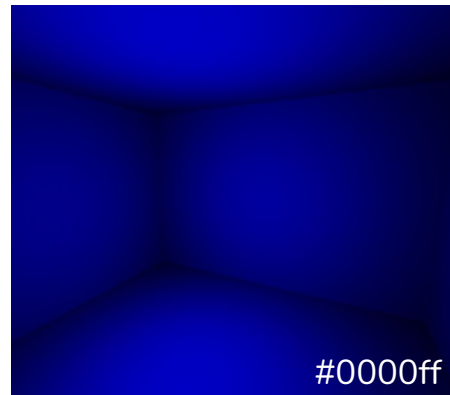
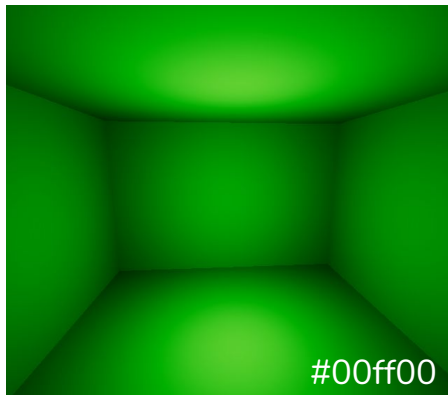
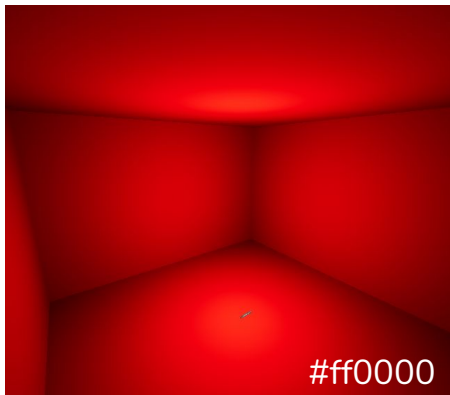


FIGURE 5. Axonometric drawing of the experimental and control rooms.

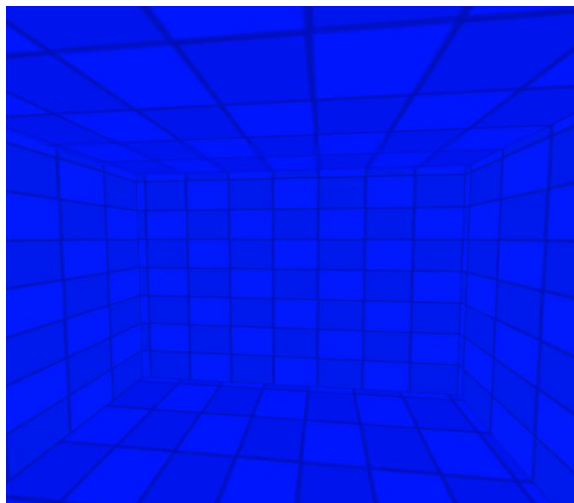
Phase 2: Expand

Hue vs Saturation





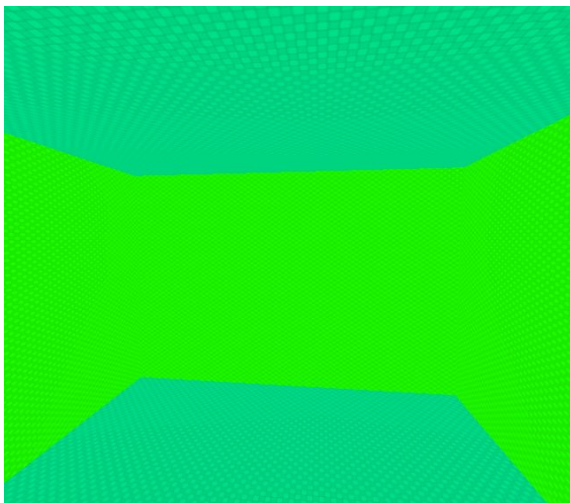
Light Map Resolution



4



Less than ideal texel density



52



Ideal texel density



250

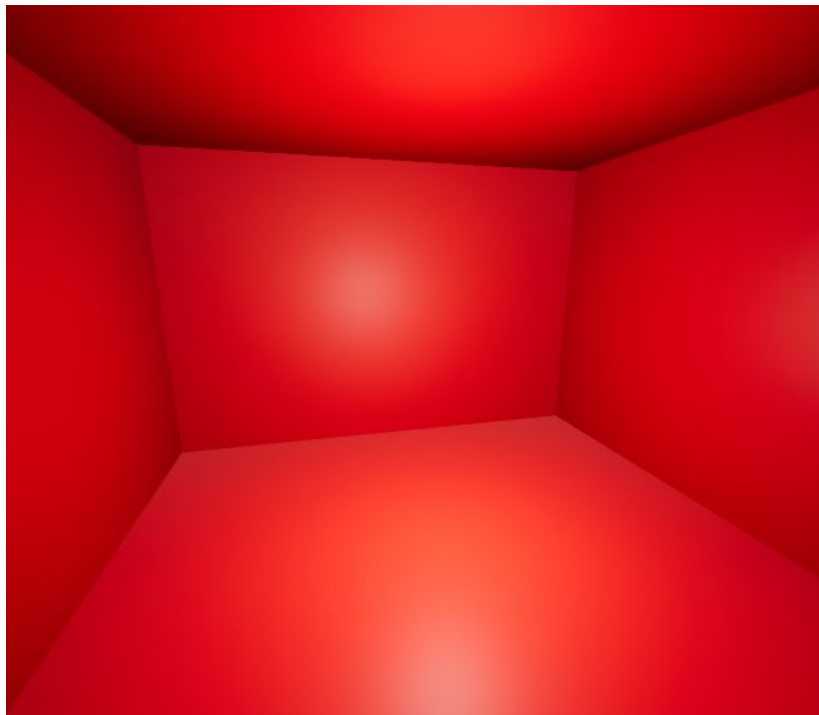


Max or greater than ideal texel density

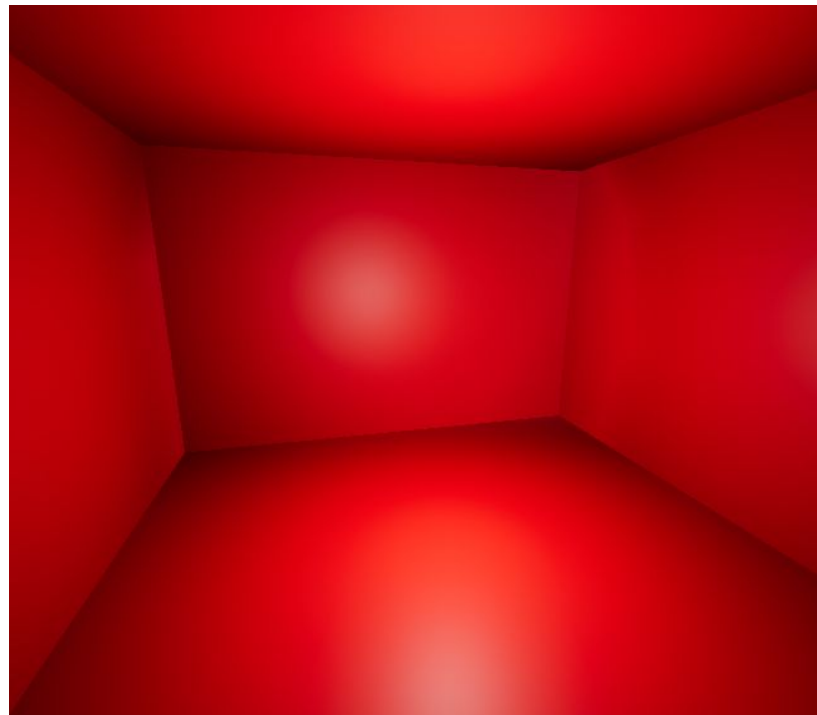


Light Map Resolution

Insufficient texel density

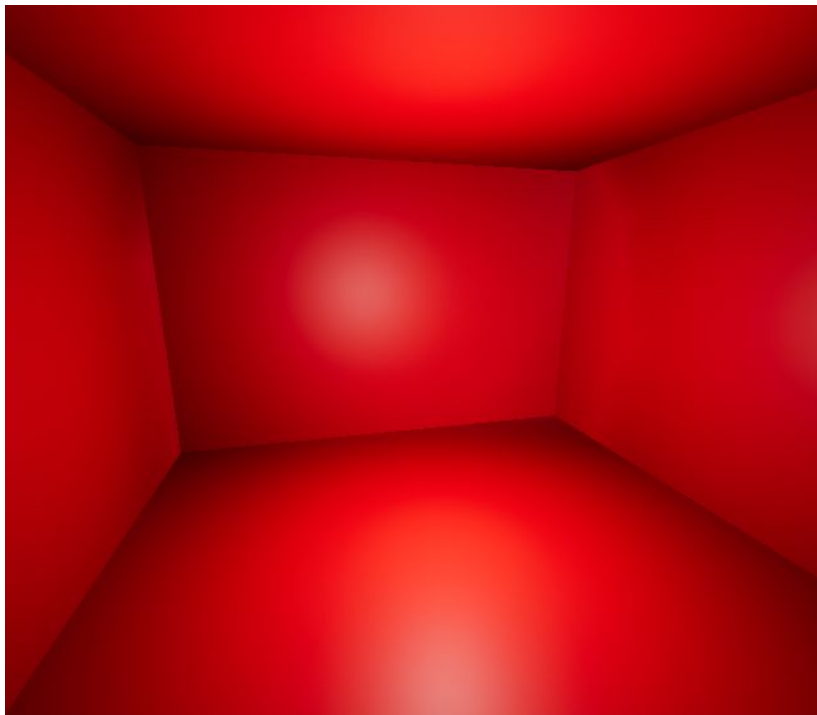


Ideal texel density

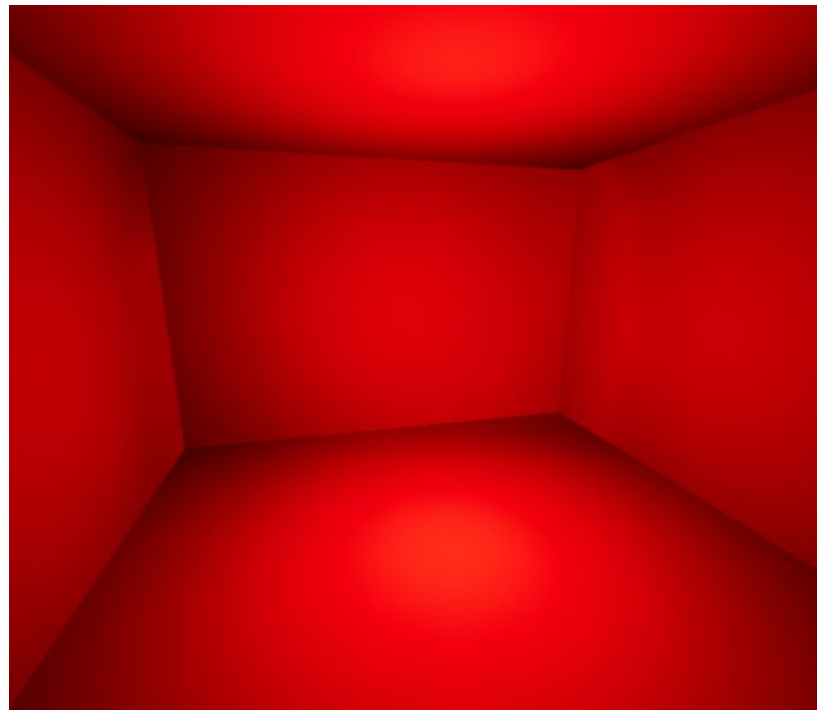




Material Properties

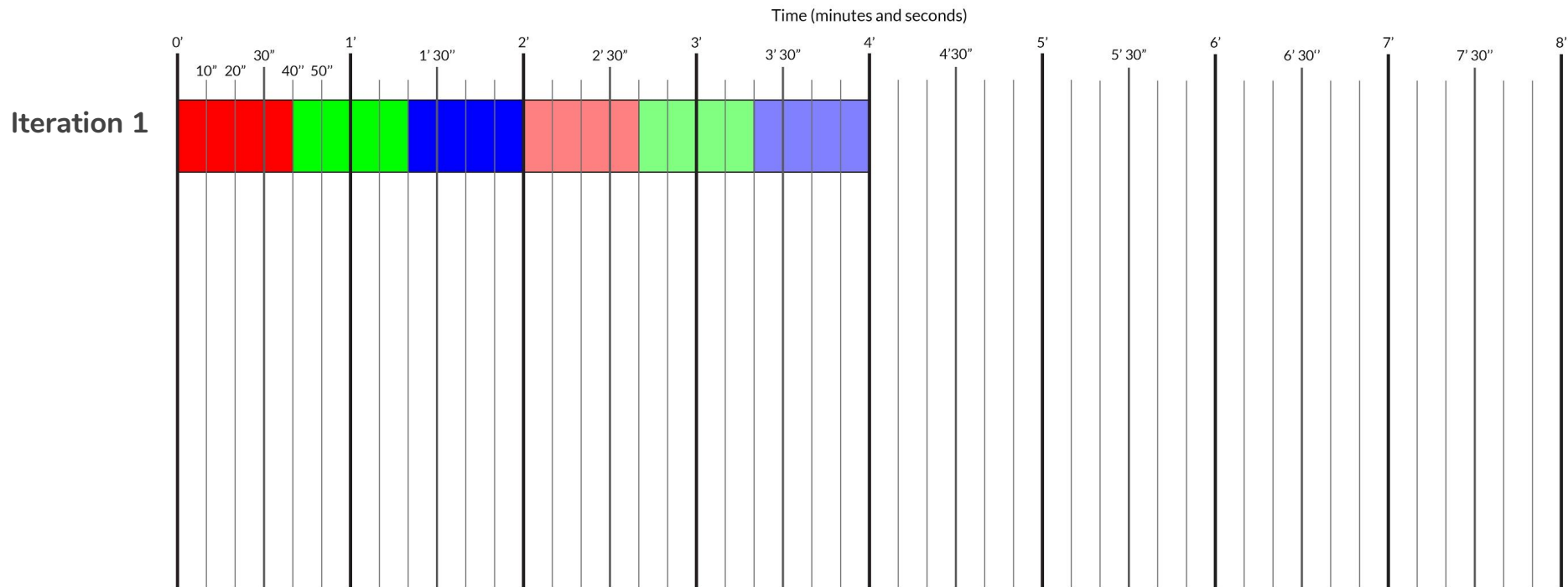


Specular set to 0 to reduce light hotspot





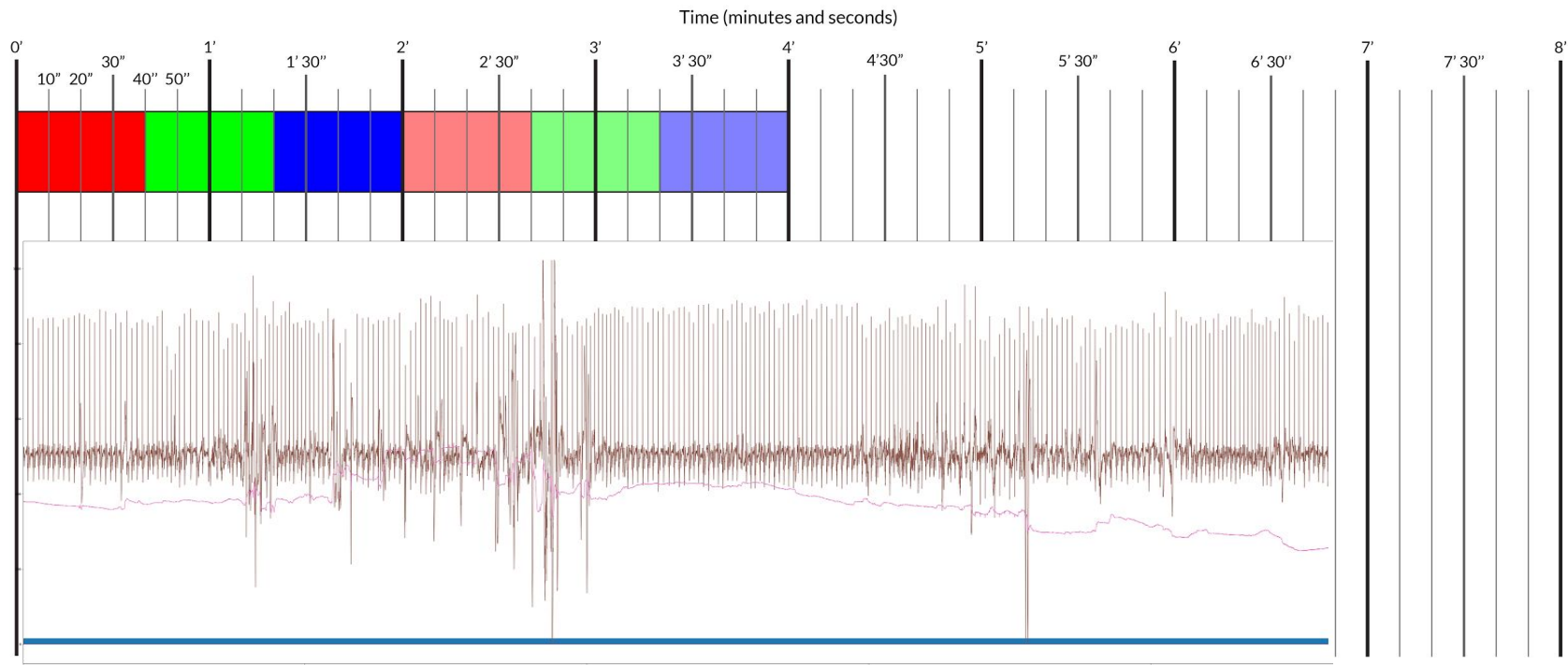
Sequence of Events





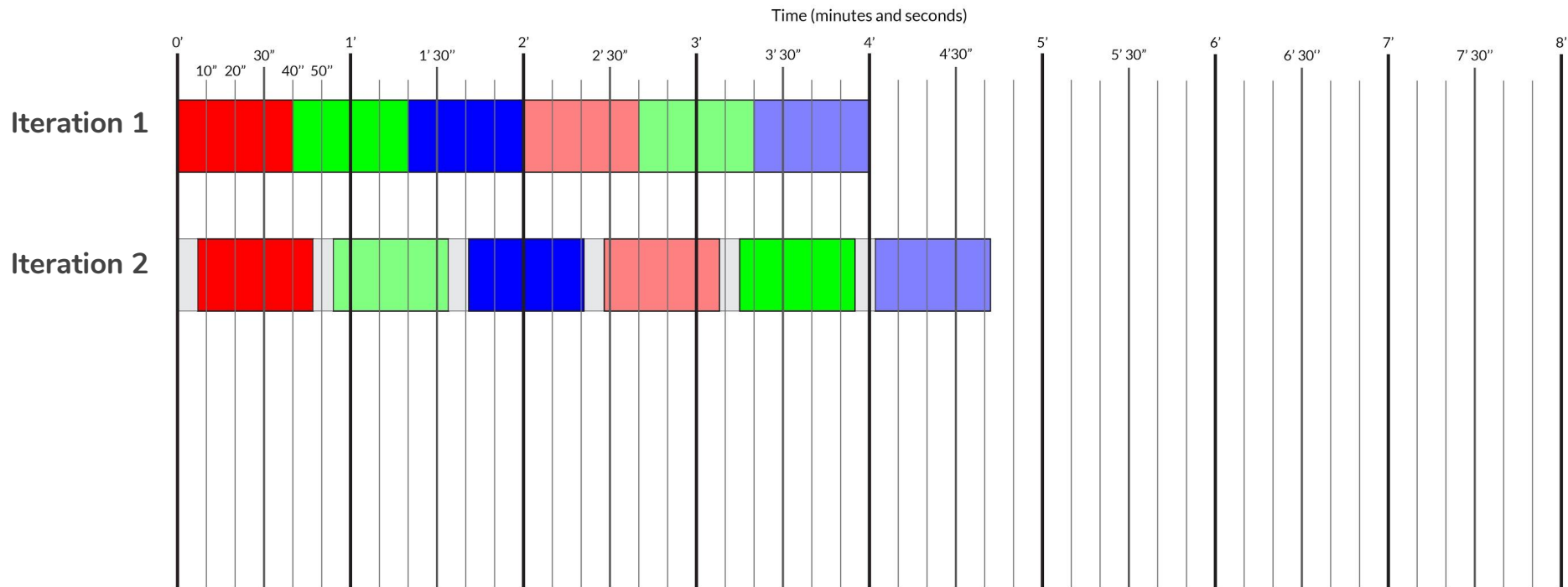
Sequence of Events

Iteration 1



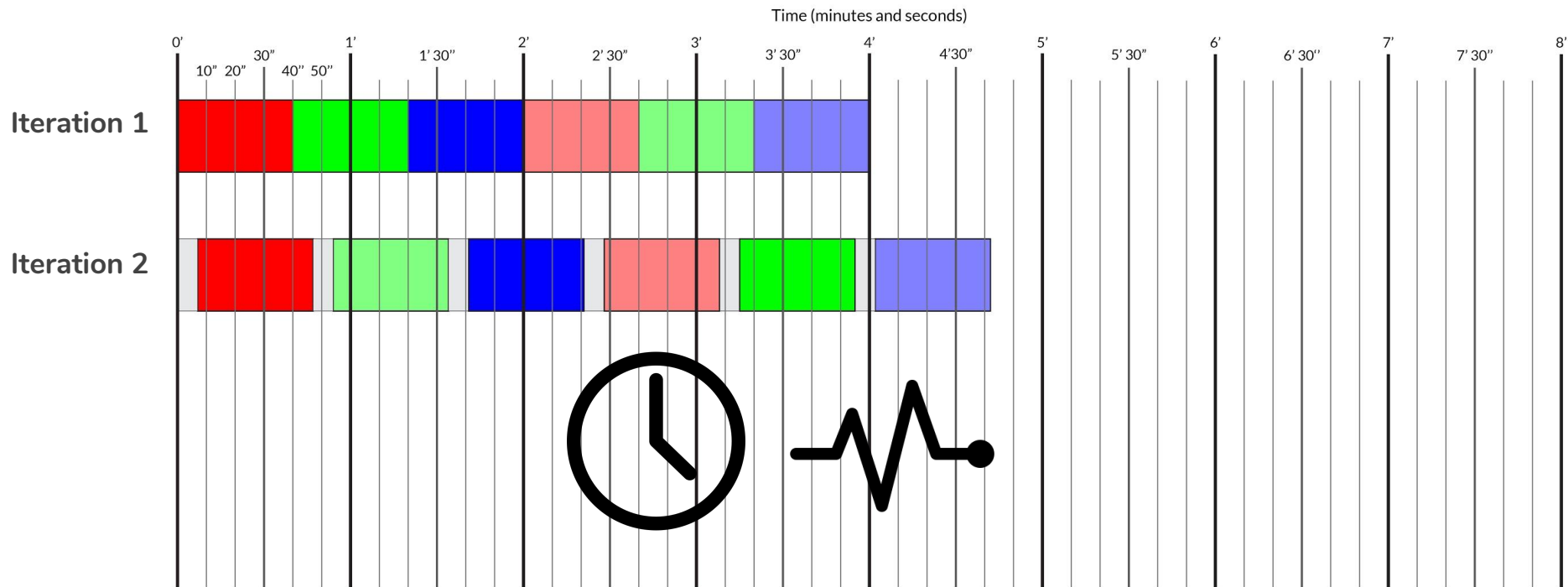


Sequence of Events



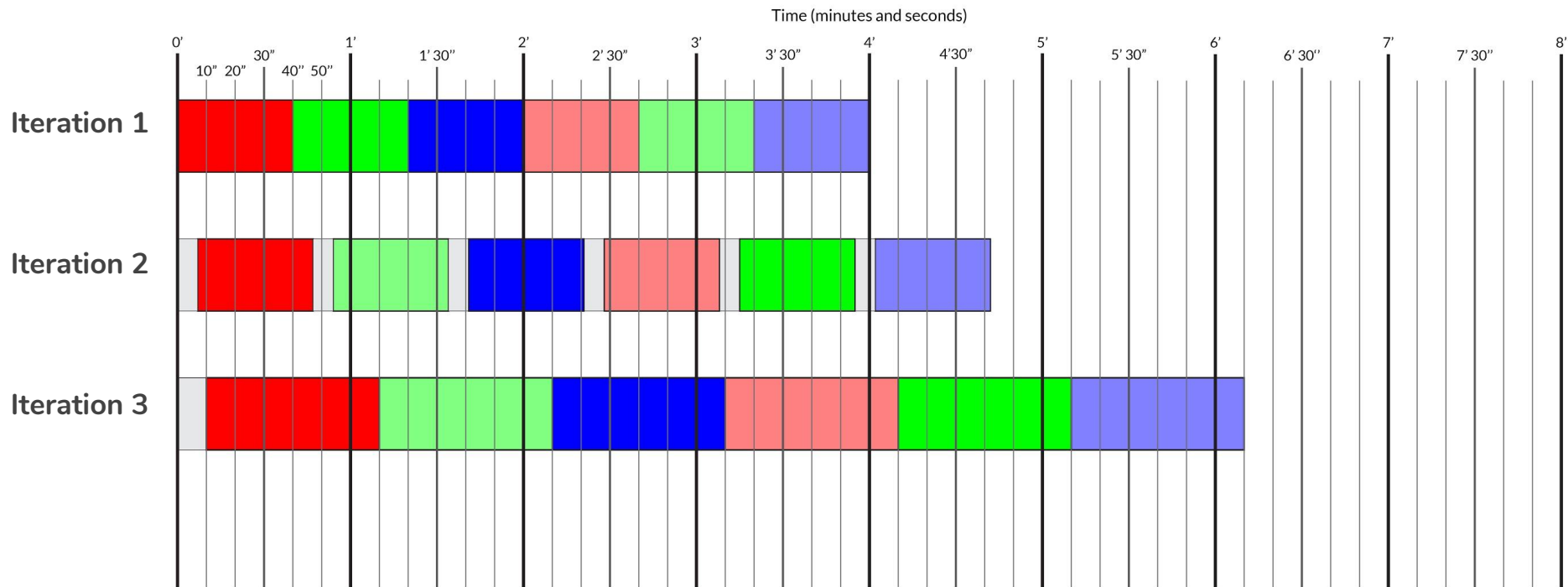


Sequence of Events



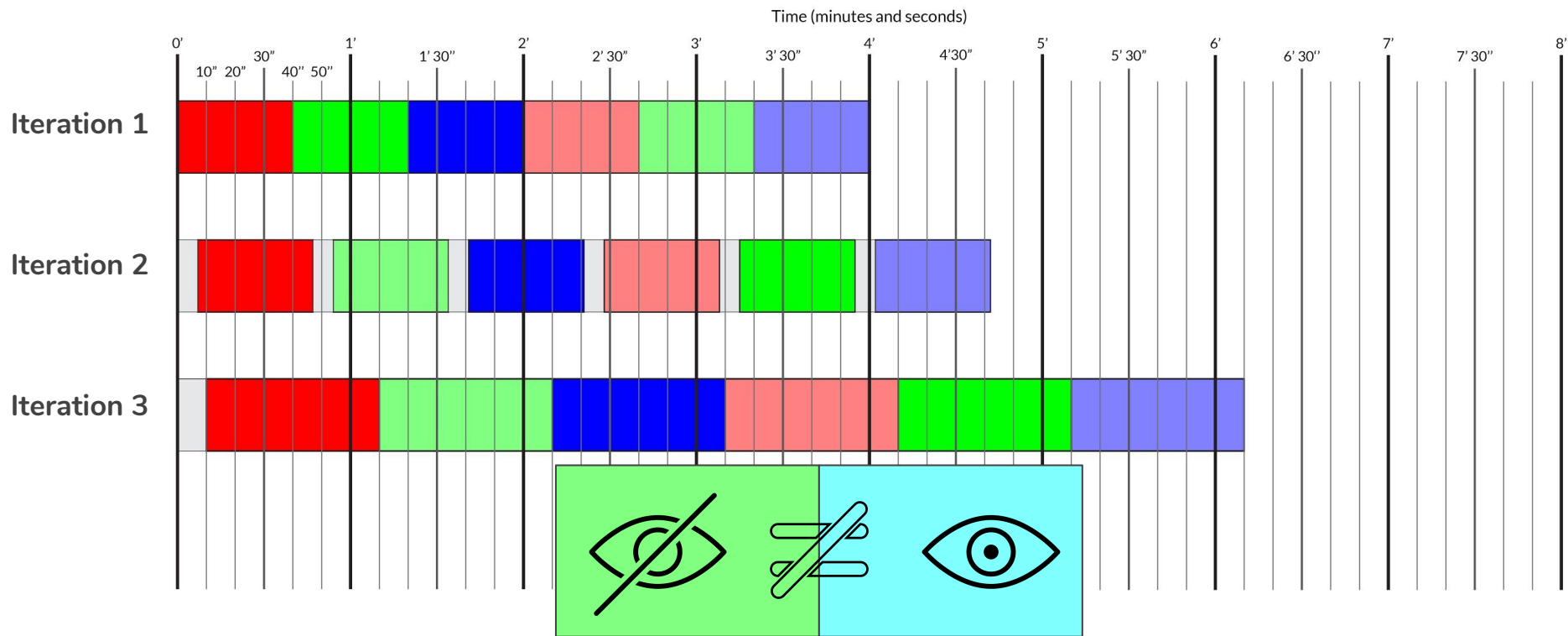


Sequence of Events



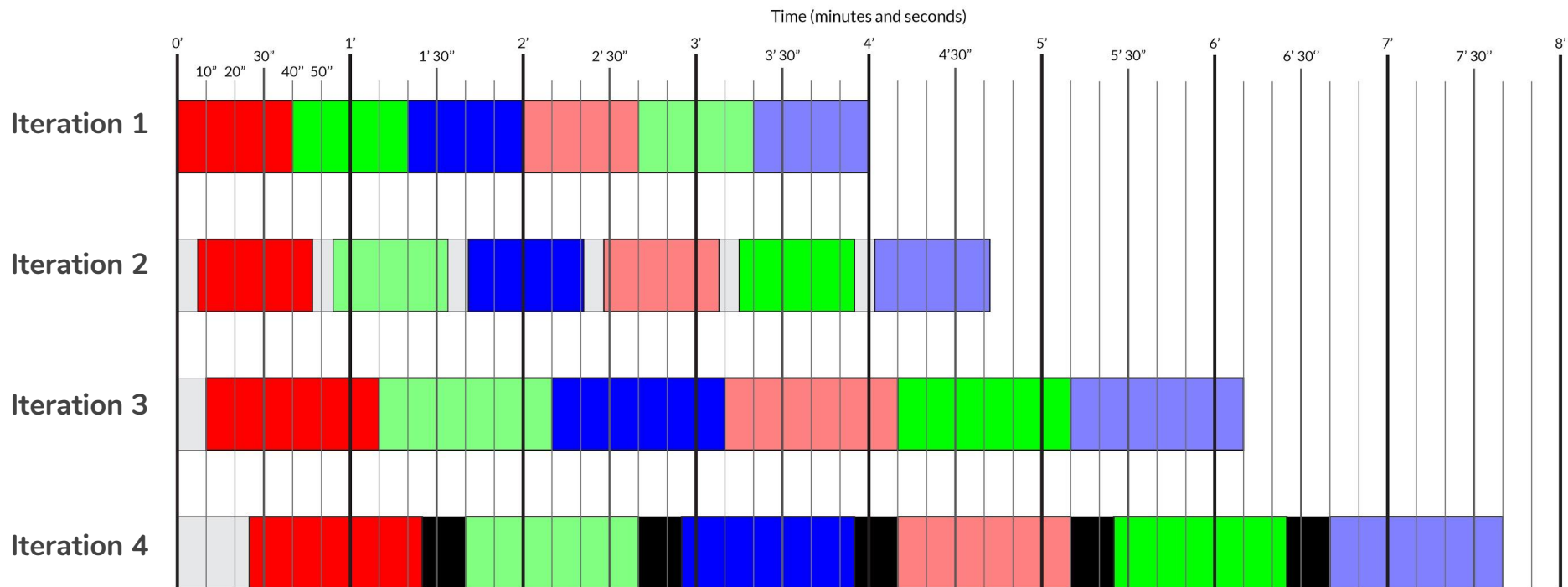


Sequence of Events





Sequence of Events





Intermission Time Testing

5 seconds

Colours in order	Actual Room Colour	Colours perceived
R100		Normal
G50		Bright aqua colour, towards the end it starts to fade slightly into the required colour
B100		Normal
R50		Normal but slightly brighter
G100		Normal but there are circles where you look as if by a spot light
B50		Normal slightly stronger

10 seconds

Colours in order	Actual Room Colour	Colours perceived
R100		Normal
G50		No aqua but lighter than before
B100		Normal
R50		Normal
G100		Normal
B50		Normal

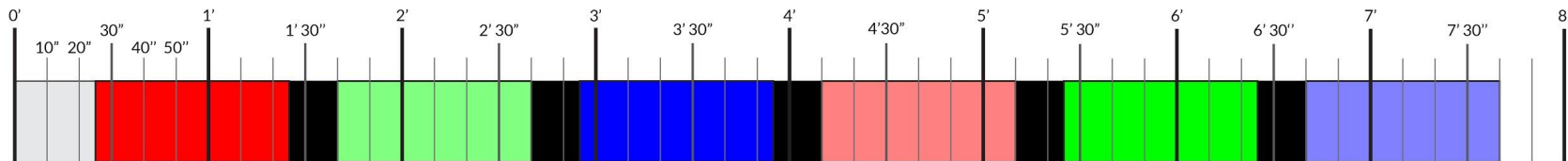
15 seconds

Colours in order	Actual Room Colour	Colours perceived
R100		Normal
G50		Normal
B100		Normal
R50		Normal
G100		Normal
B50		Normal

30 seconds

Colours in order	Actual Room Colour	Colours perceived
R100		Normal
G50		Normal
B100		Normal
R50		Normal
G100		Normal
B50		Normal

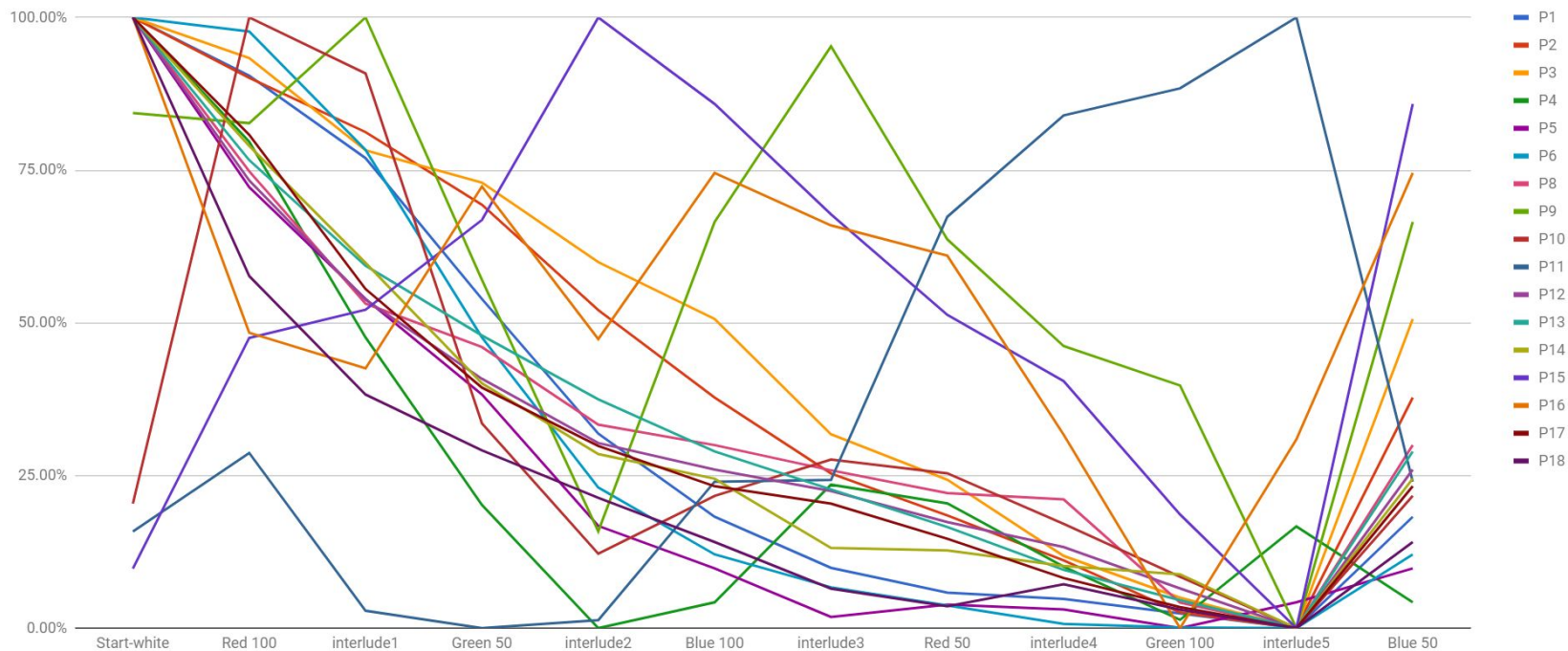
Iteration 4





Output: EDA

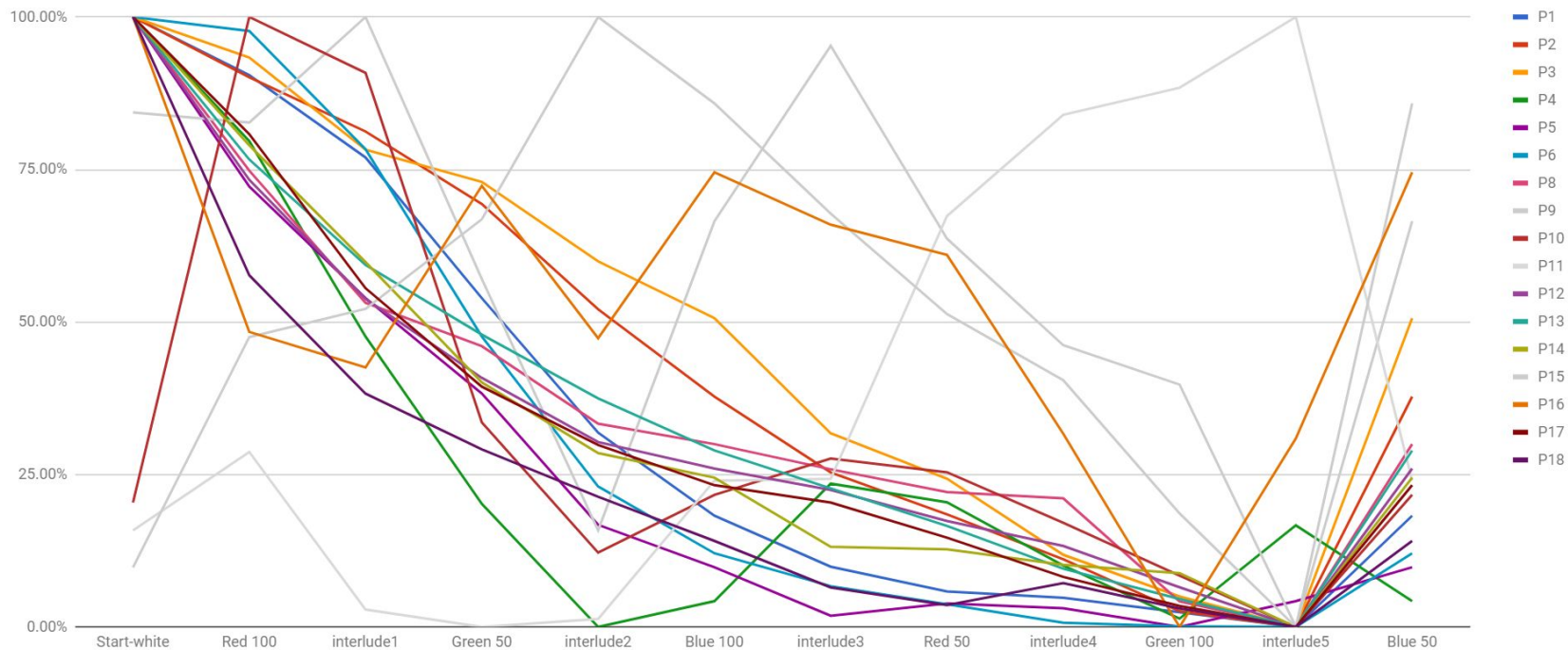
EDA results Phase 2



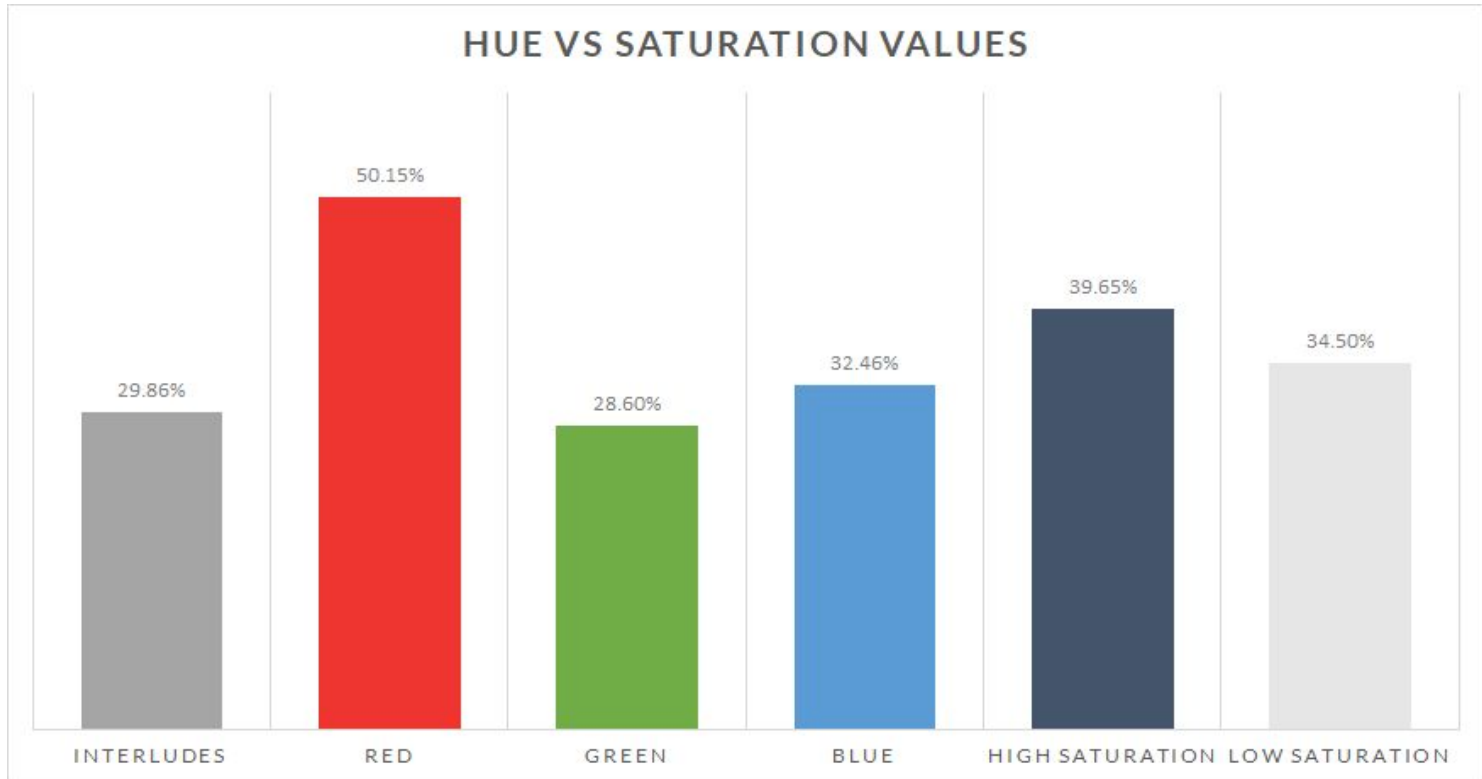


Output: EDA

EDA results Phase 2

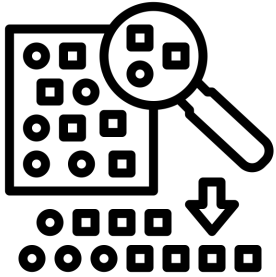


Comparing Averages

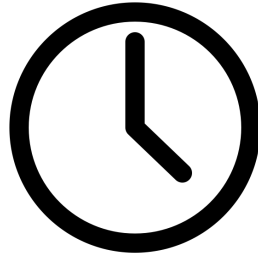




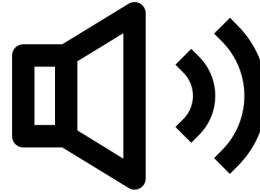
Limitations & Future Adjustments



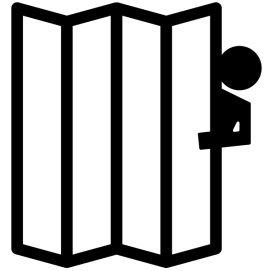
Increase sample size



Time Exposed



External Audio



Participant Privacy

Project Ocelot

Measuring physiological responses to colour
through virtual reality environments

Sol Cutrera

Email: sol_cutrera@hotmail.com

LinkedIn: <https://www.linkedin.com/in/maria-sol-cutrera-3740b113b/>