

ORBIS LUMEN
TECHNICAL RIDER

v4

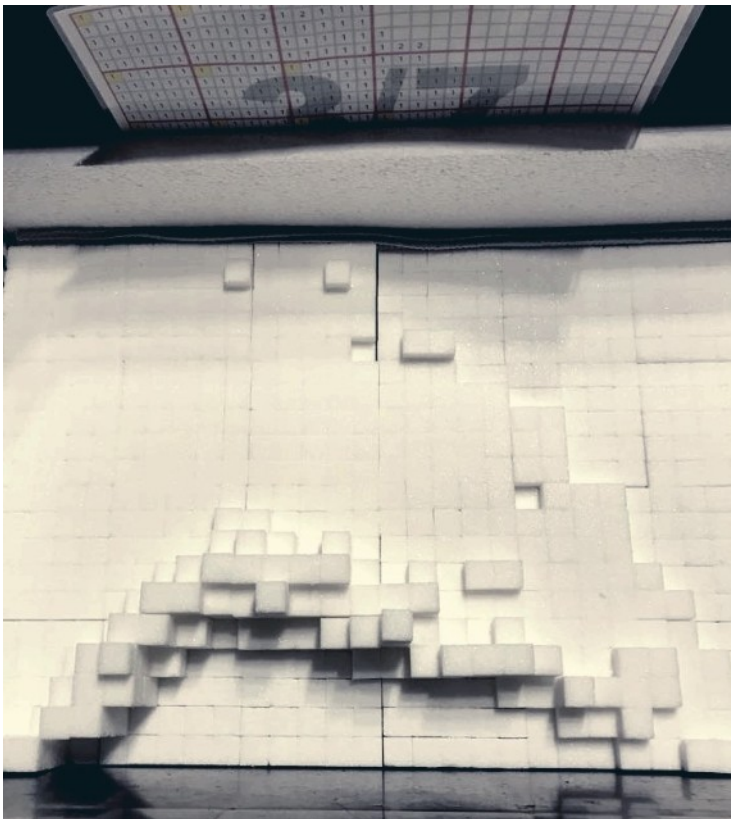


OVERVIEW

technical rider / version 10 May 2022 / contact: Michael Saup / michael@saup.de / +49.178.455 32 95

Orbis Lumen is showing a three-dimensional world map built from multiple layers of over 40000 white sugar cubes. Animated world models are projected onto the white sugar cubes from above.

The dimensions of the map are **4 m x 2.25 m (16 : 9)** . The sugar cubes are glued into units of 5x5 sugarcubes for ease of transport and setup. A total of 7 sugar layers are used for elevation (about 8 cm high).



1/1	1/2	1/3	1/4	1/5	1/6	1/7	1/8	1/9
2/1	2/2	2/3	2/4	2/5	2/6	2/7	2/8	2/9
3/1	3/2	3/3	3/4	3/5	3/6	3/7	3/8	3/9
4/1	4/2	4/3	4/4	4/5	4/6	4/7	4/8	4/9
5/1	5/2	5/3	5/4	5/5	5/6	5/7	5/8	5/9
6/1	6/2	6/3	6/4	6/5	6/6	6/7	6/8	6/9
7/1	7/2	7/3	7/4	7/5	7/6	7/7	7/8	7/9
8/1	8/2	8/3	8/4	8/5	8/6	8/7	8/8	8/9

SPACE



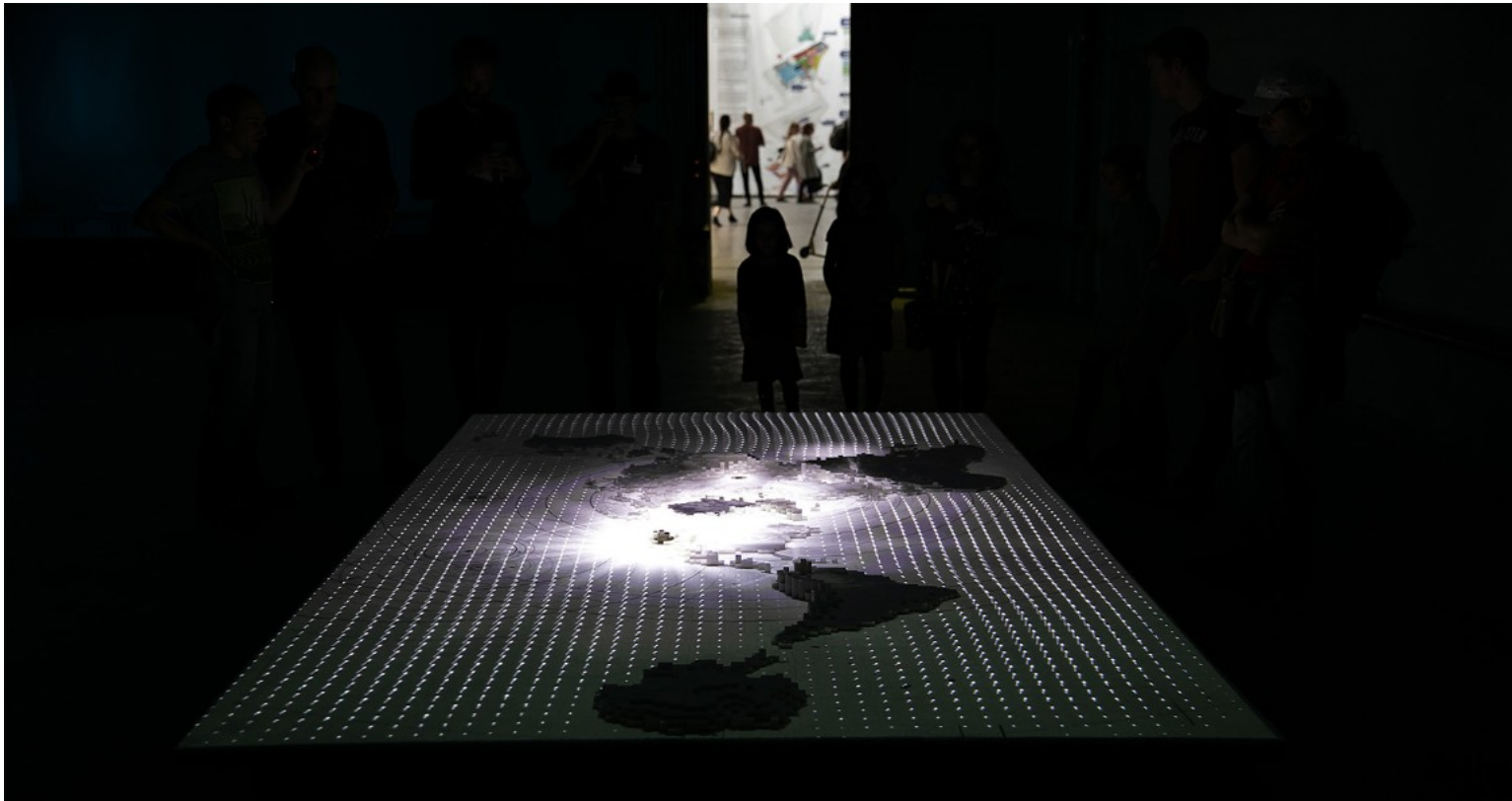
- The exhibition space shall be absolutely dark. No daylight through windows.
- The space should ideally be 8m wide and 12m long
- The space needs sufficient height for mounting the video projector (minimum ca 3.6 m with mirror, ideally 4.6 m or higher).
- The space ideally has white walls for ambient light reflections from the installation.
- We favor a black/dark floor.

SOUND

the installation outputs a low 50Hz/60Hz frequency for 1 minute after a sequence of 6 silent minutes. This pattern loops.

Therefore we need:

- 1 subwoofer (active or box with amp) with 300-500W output.

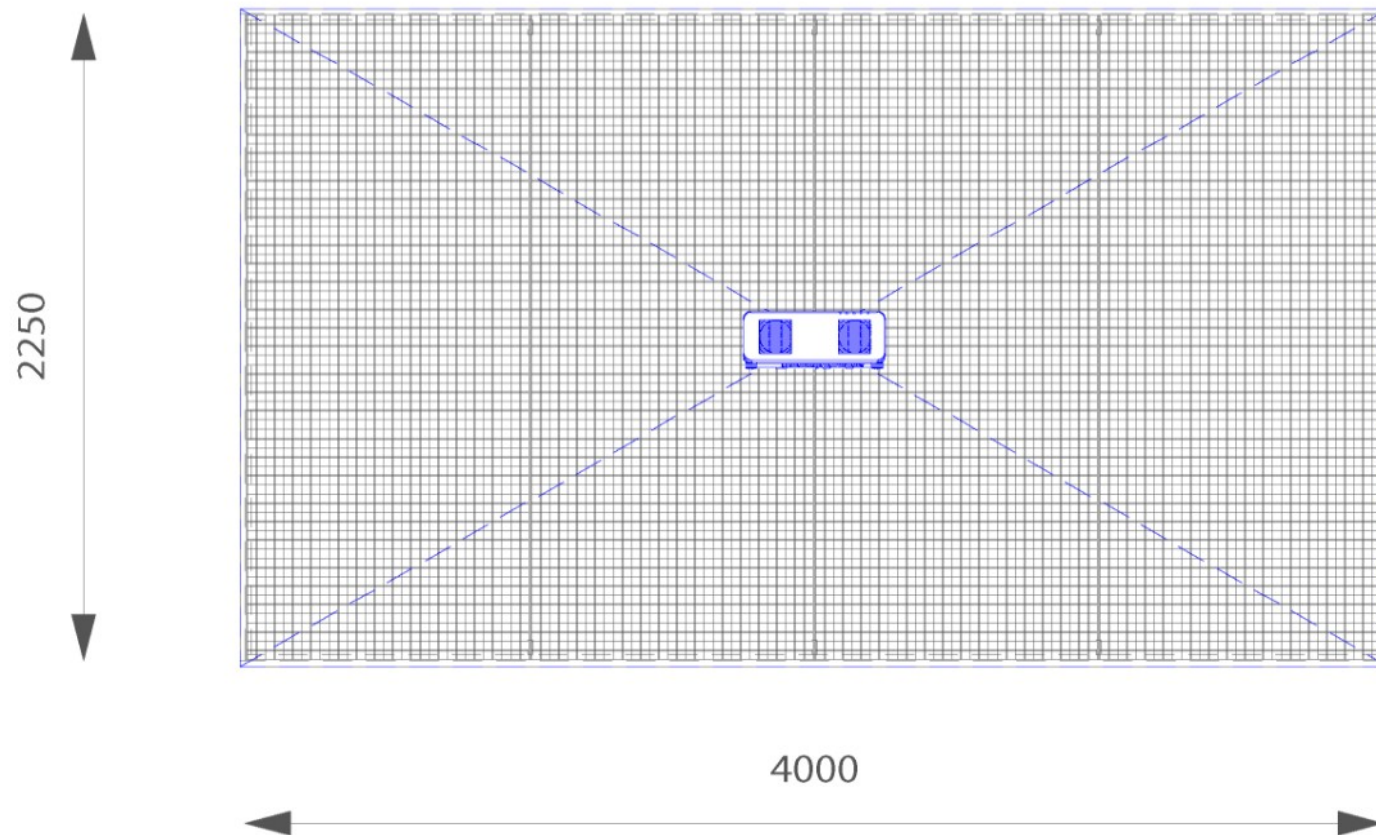


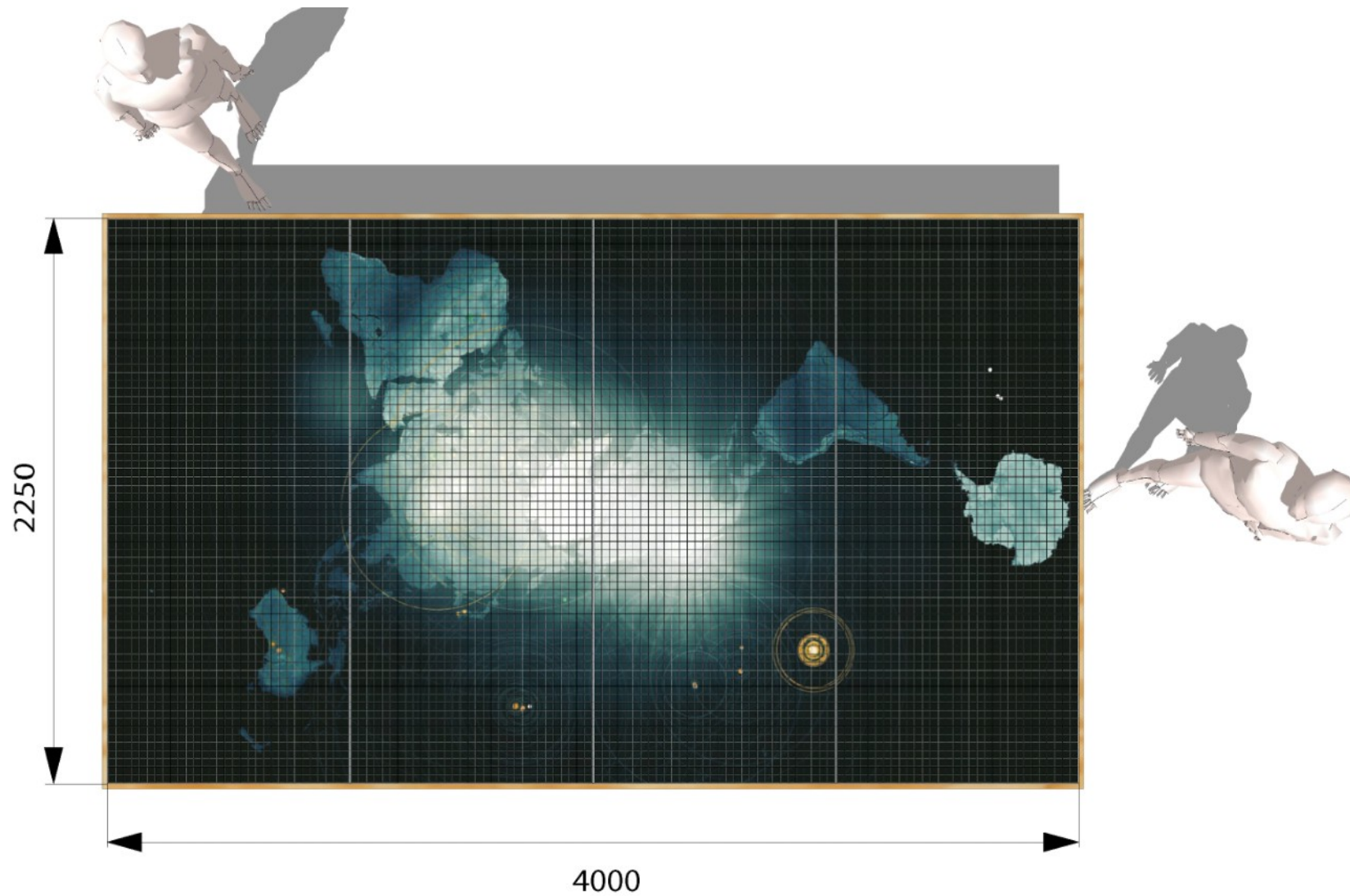
Ars Electronica 2018

Gratings / Gitterrost (30/30 30/2) (each 1000 mm x 2250 mm, total Dimensions 4000 mm x 2250 mm)

The sugar units are assembled on top of 4 gratings. These 4 gratings are elevated 20-30 cm above ground using either:

- stones (Ytong Porenbetonsteine etc) at 10 mounting points *or*
- 4x Nivtec platform 2x1m, 9x Nivtec leg 0,3m, 3x Nivtec leg adaptor plate *or*
- a dedicated construction on location





*Sugar cubes installed on 4 gratings. Total Dimensions 4000 mm x 2250 mm.
The gratings are mounted 20cm – 30 cm above ground depending on the room height.*

PROJECTION

A video projector is mounted above the installation. This shall be at 3500 mm, ideally 4500 mm or higher above the installation, depending on projector and *lens*. The higher the projector is mounted, the better for adjusting the projection mapping. The video projector shall have 6000 to 12000 ANSI Lumen.

We favor Panasonic projectors like

- Panasonic PT-RZ670BE 6500 ANSI-Lumen with lens ET-DLE080
- or
- PT-RZ970 9400 ANSI-Lumen with lens DLE085

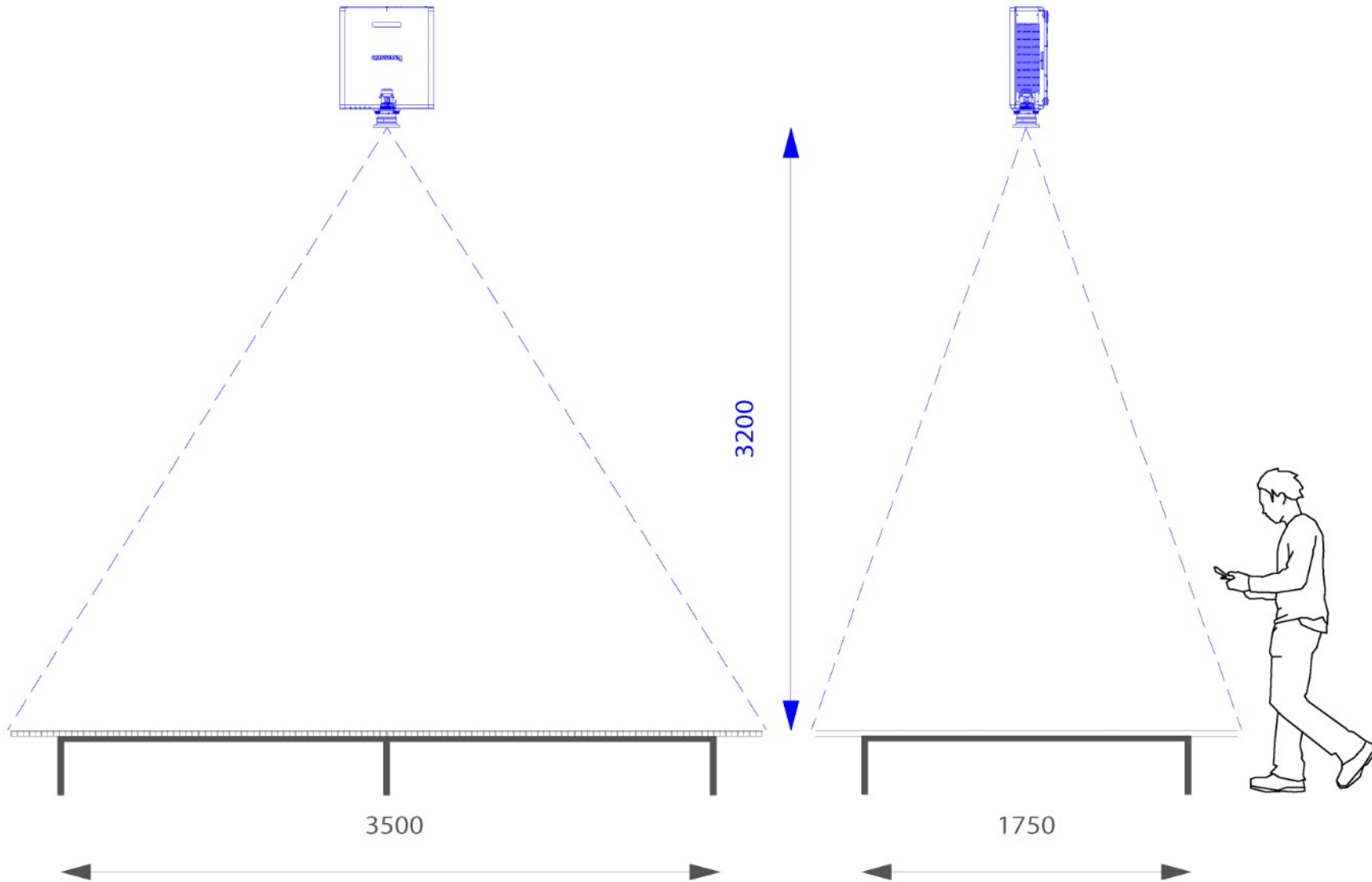
depending on the height of installation and ambient brightness in the exhibition space.

The video projector **must** match a

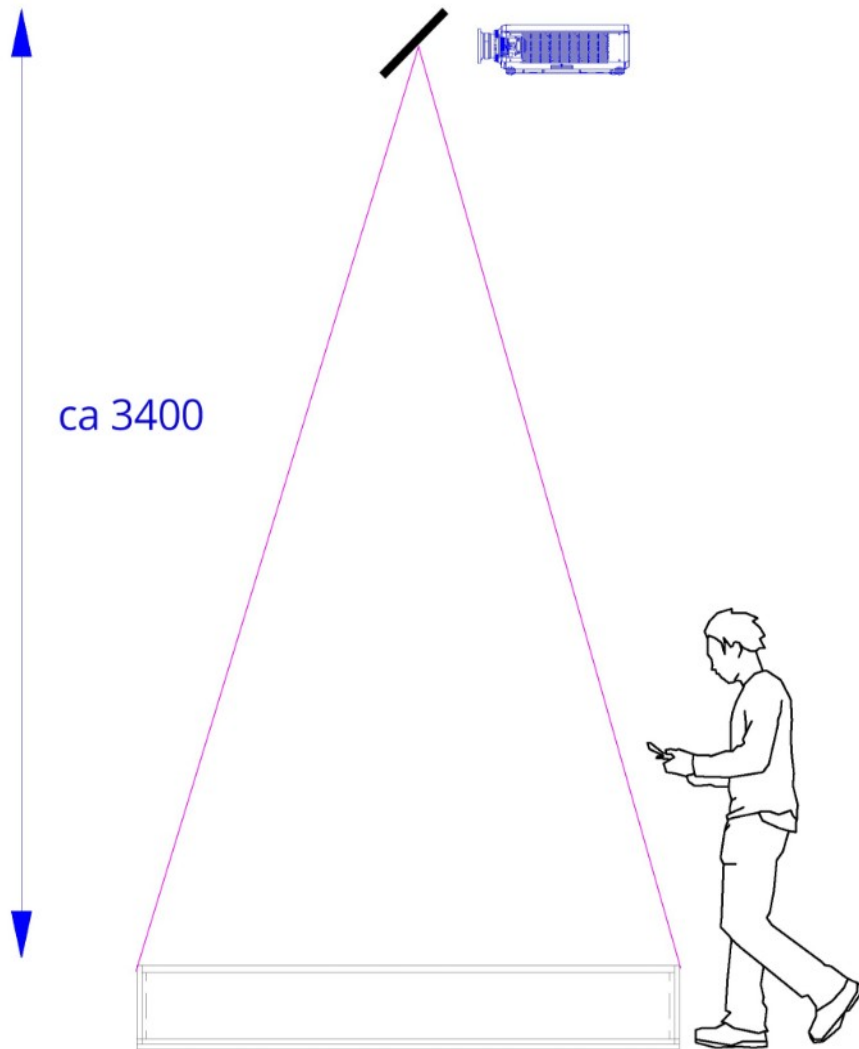
- minimum projection size of 4000 mm x 2250 mm (16:9) at the position of the gratings (30 cm above ground)
- at a resolution of 1920 x 1080 pixels (full HD)
- at 60Hz (Laptop output Frequency)

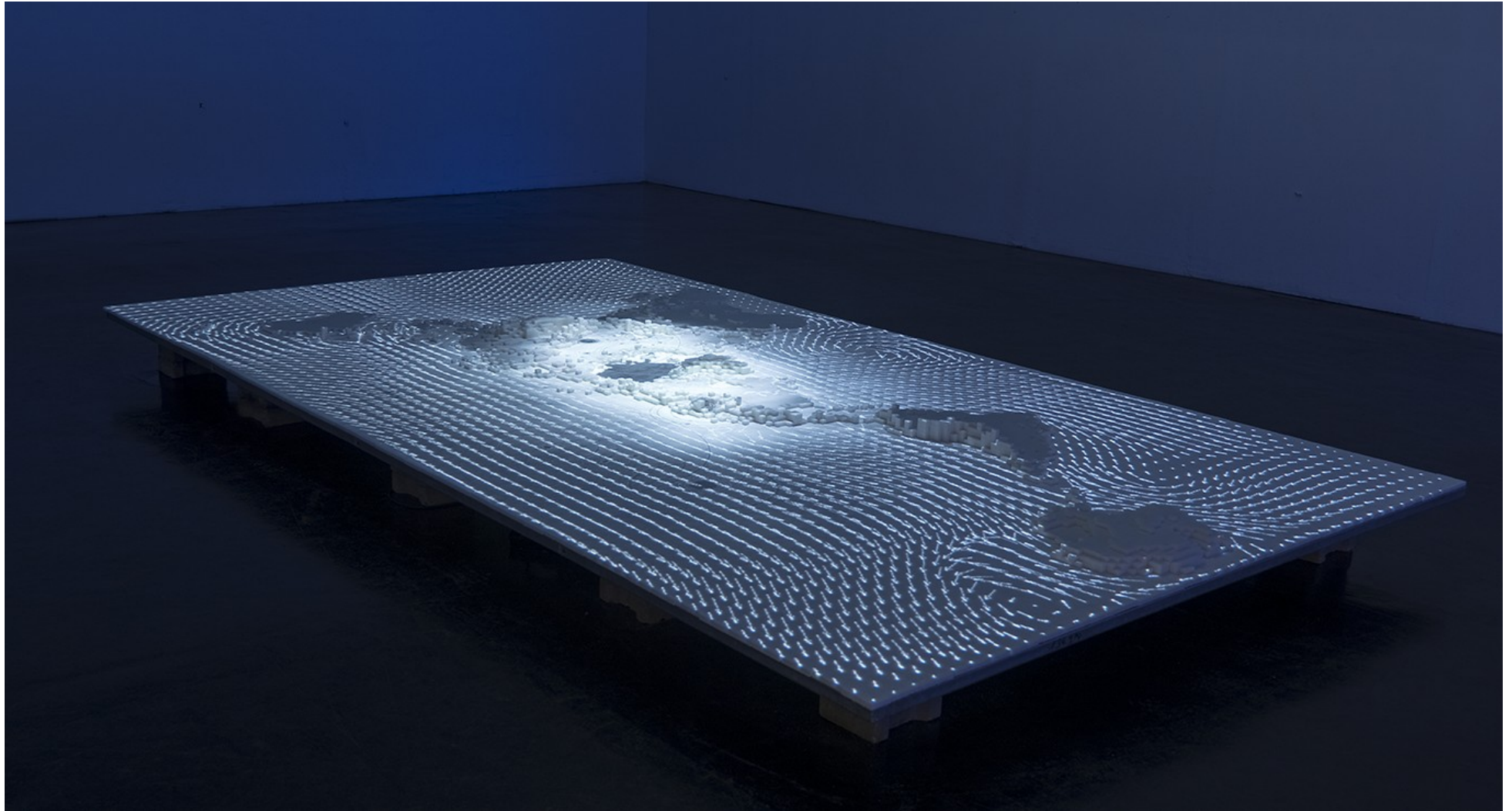
We can correct a distorted non-rectangular projection via our playback software. This is important for perfect alignment of the projection mapping with the shape of the sugar world map.

PROJECTION PLAN



In case of insufficient height of the room, it may be possible to use a mirror to match the projection:





Luminale Frankfurt am Main 2018



Setting up - Ars Electronica 2018

TRANSPORT



The whole installation fits in our transport vehicle

DURATION OF SETUP

The video projector and all technical connections **must** have been mounted **before** we can start setting up.

- Mounting the sugar units takes **1 full day** including calibration.
- Dismantling the work takes **1 day**.

Tech list & Insurance

see extra spreadsheet.