



# PUSH

Fall 2021  
Furniture I  
Professor Richard Prisco

# Design Brief

PUSH uses quality materials coupled with attention to detail and craftsmanship to broadly convey depictions of the design elements of point, line, and plane while also functioning as a lighting object. Point, line, and plane exemplified in others work led to many decisions on materials and compositions to be used in PUSH's display of these elements. Specifically, works by Dan Flavin and Larry Bell featured in "Minimalism" by James Meyer were heavily influential in this projects design direction. Clear planes, light diffusing rods, and poured bubbles were all observed and carried into the ideation for PUSH with the intent of these materials directly reflecting their visually similar elements.

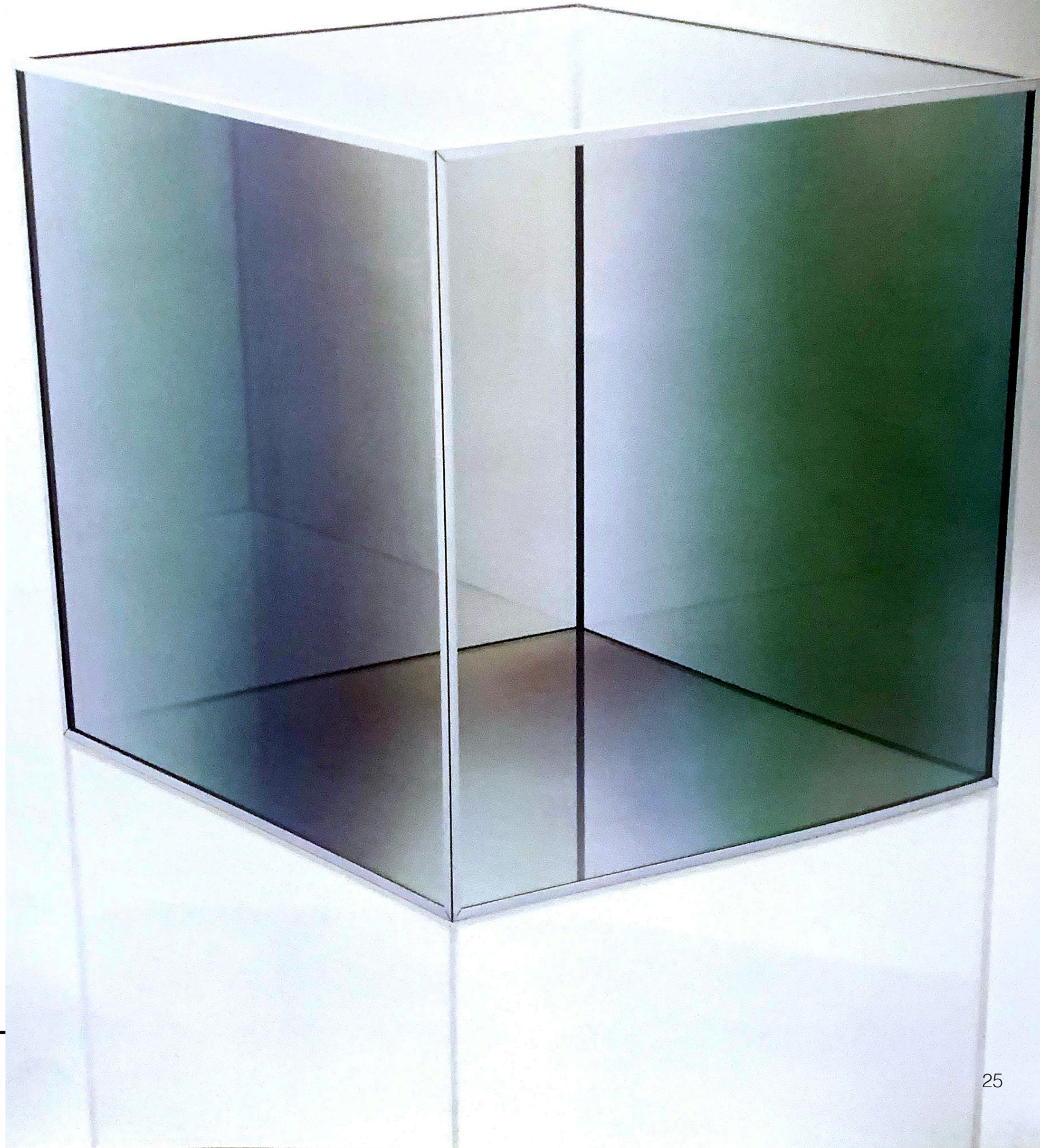
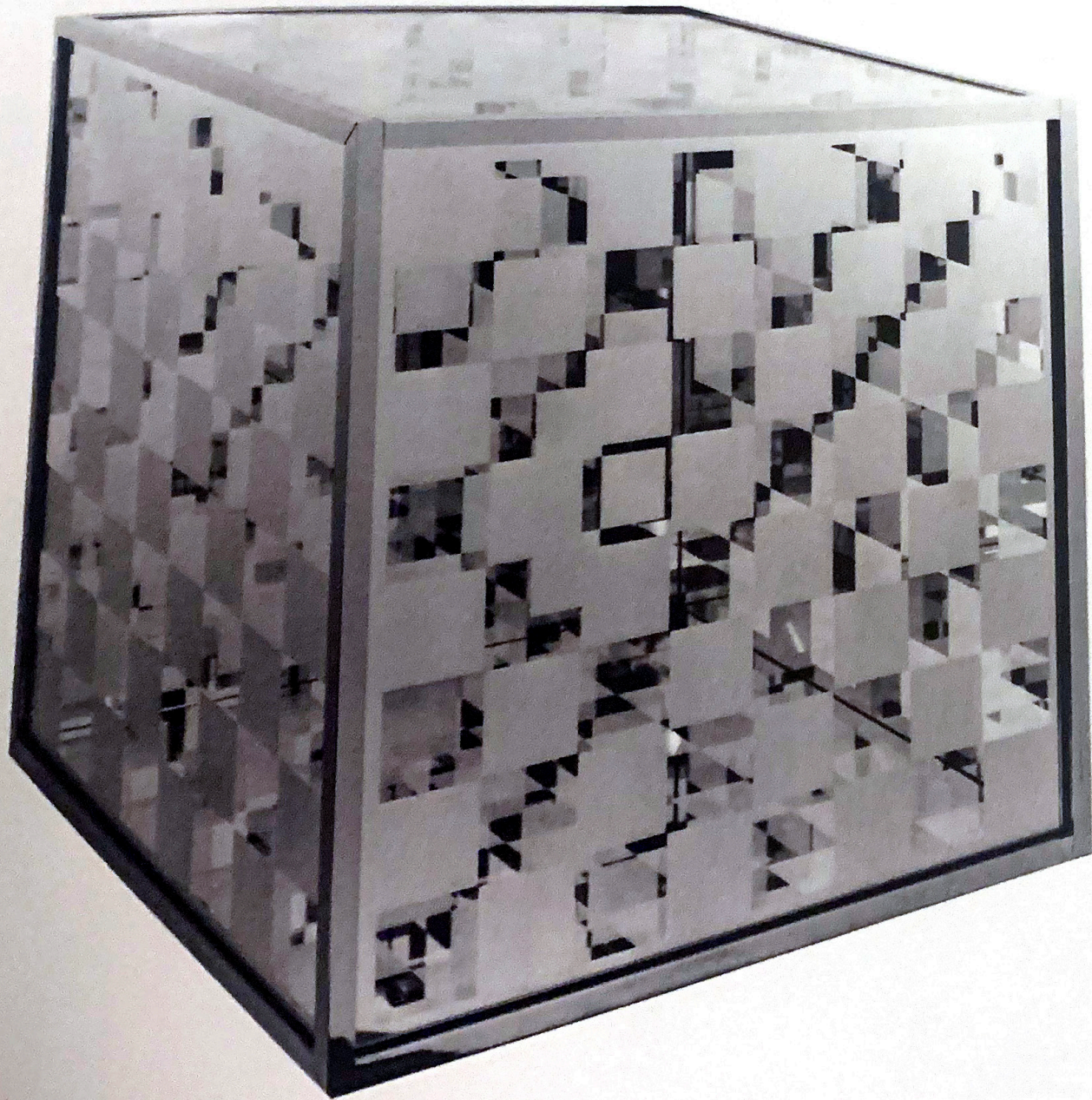
The production of this light began with ten initial concepts born of the research mentioned prior. The selected concept required a pushing motion to turn the lamp on and off leaving PUSH with it's name. The initial renders, in Rhino and KeyShot, coupled with insight and critique surrounding the volume and functional models, all helped to increase clarity about size and ratios between separate elements, placement of these elements, and material choices.

PUSH is constructed using acrylic rod, acrylic sheeting, poured resin, black walnut veneer, water based spray polyurethane, EVA foam, machinable felt, solvent bonding liquid, a toggle switch, wires, an E12 sized bulb socket, a 1600 lumen corncob LED bulb, and screws. Processes included cutting, solvent welding, tapping, and milling acrylic as well as pouring and machining resin, applying and treating veneer, and installing lighting components.



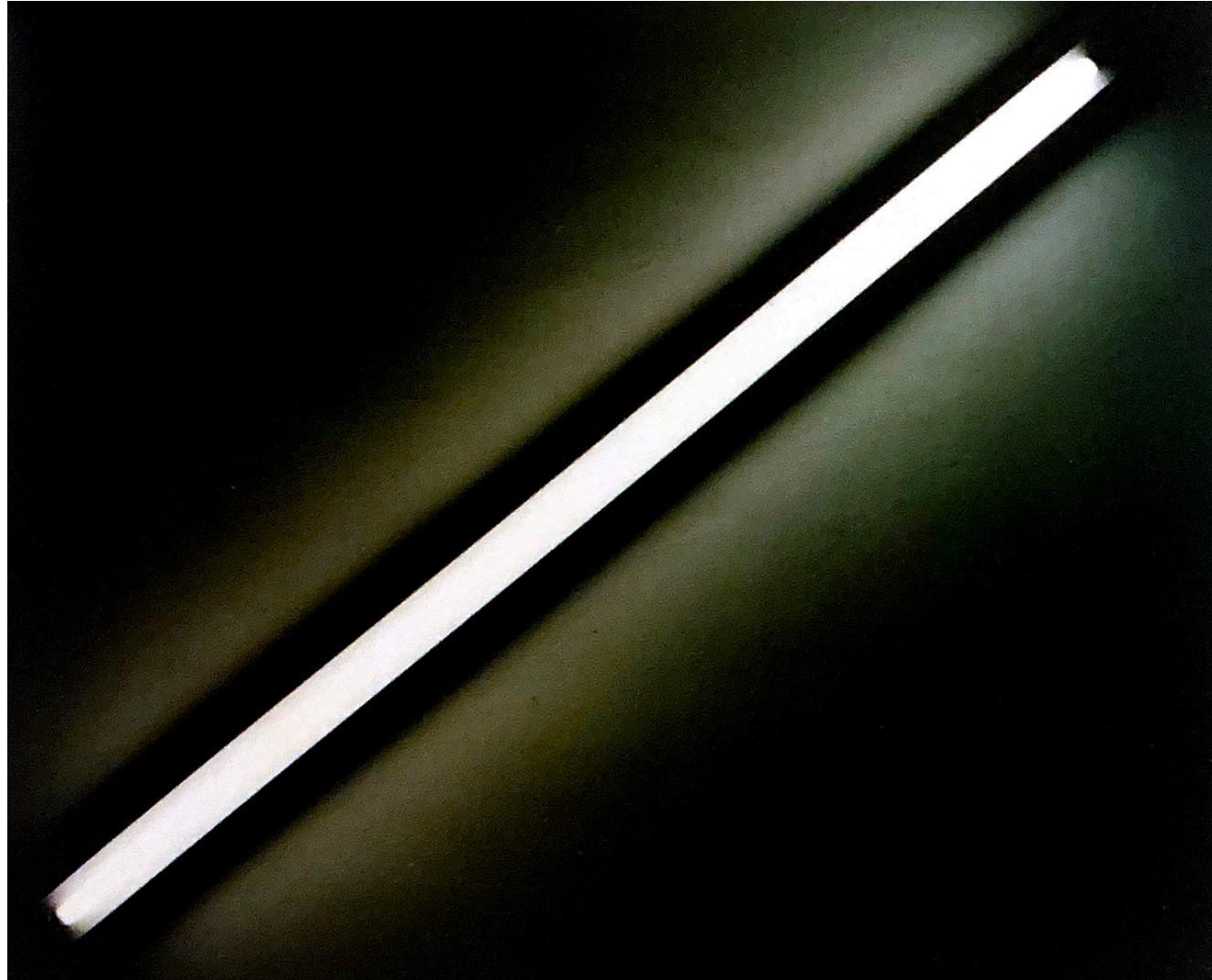
# Initial Research

Larry BELL





# Initial Research



Dan FLAVIN

the nominal three (to William of  
Ockham)

1964-69

Cool white fluorescent light

h. 244 cm [96 in]

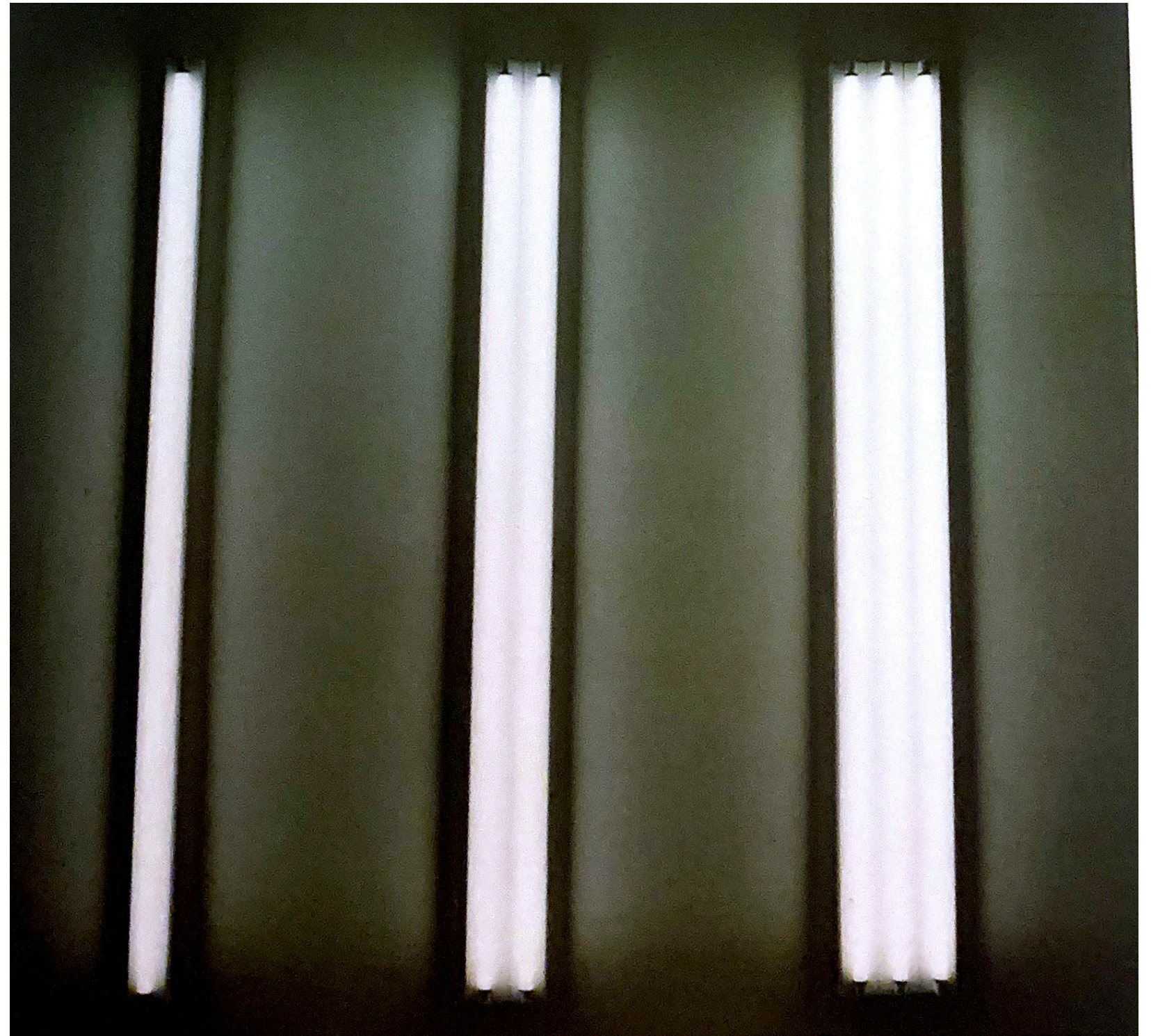
Dan FLAVIN

the diagonal of May 25, 1963 (to  
Robert Rosenblum)

1963

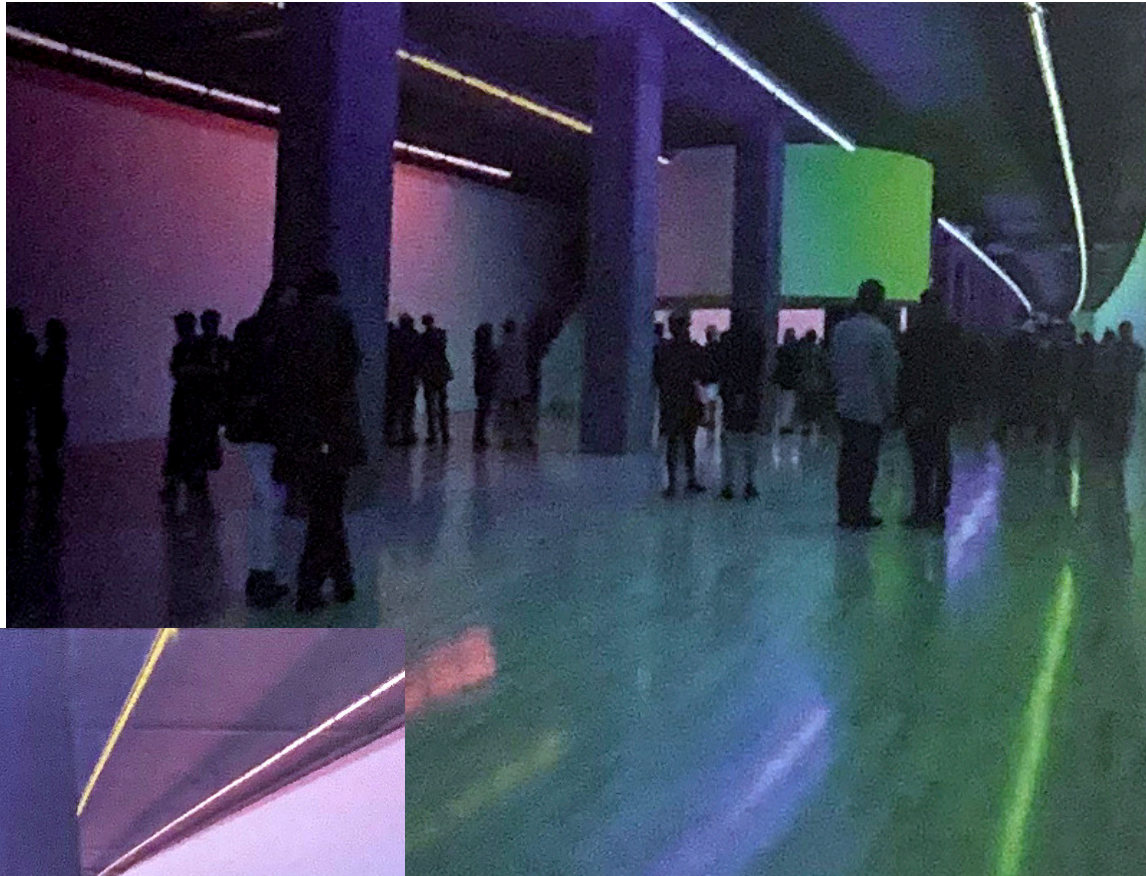
Cool white fluorescent light

l. 244 cm [8 ft]





# Initial Research



Dan FLAVIN

Städtische Galerie im Lenbachhaus, Kunstbau

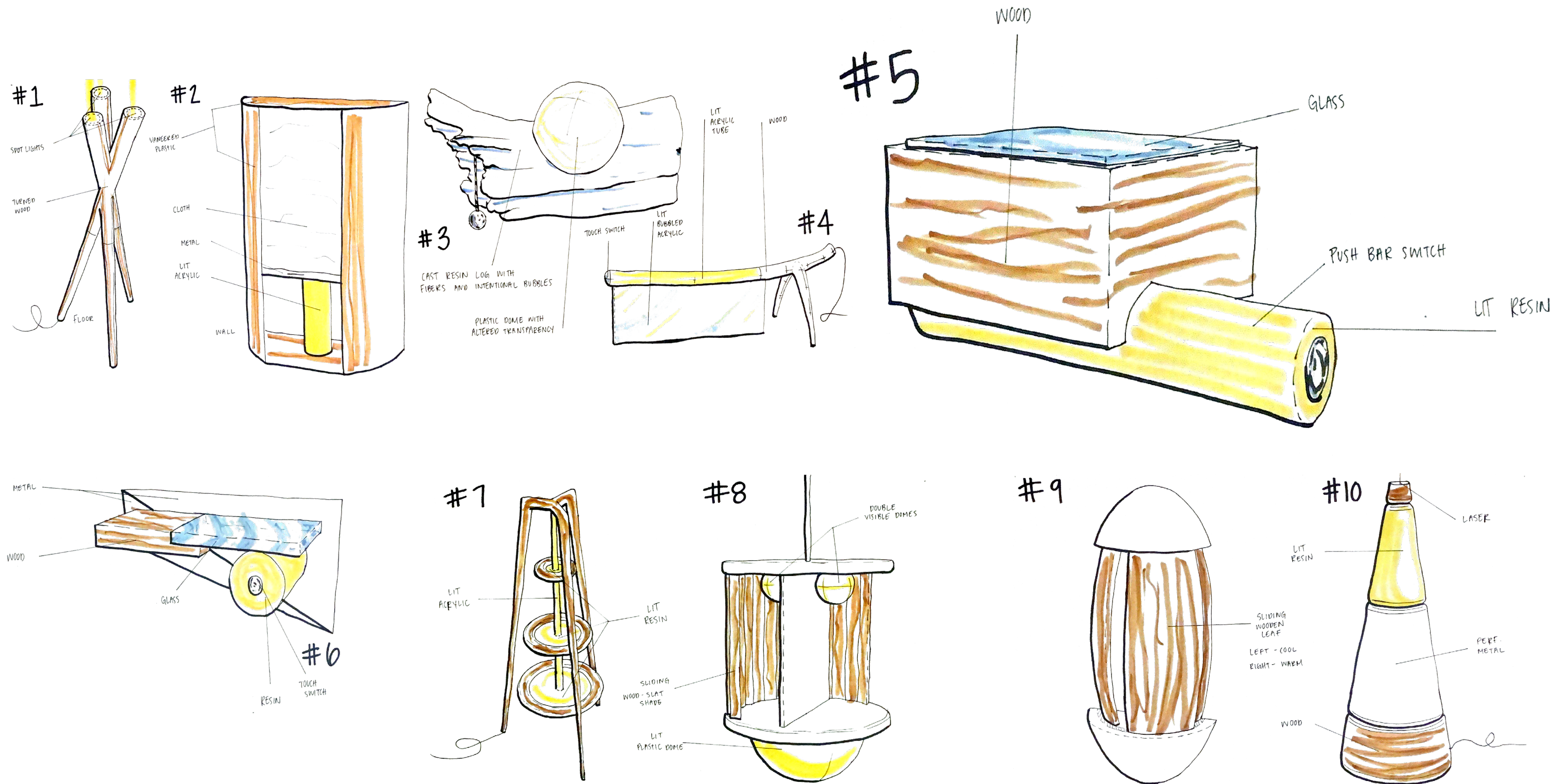
16 July-6 September 1998

Installation view



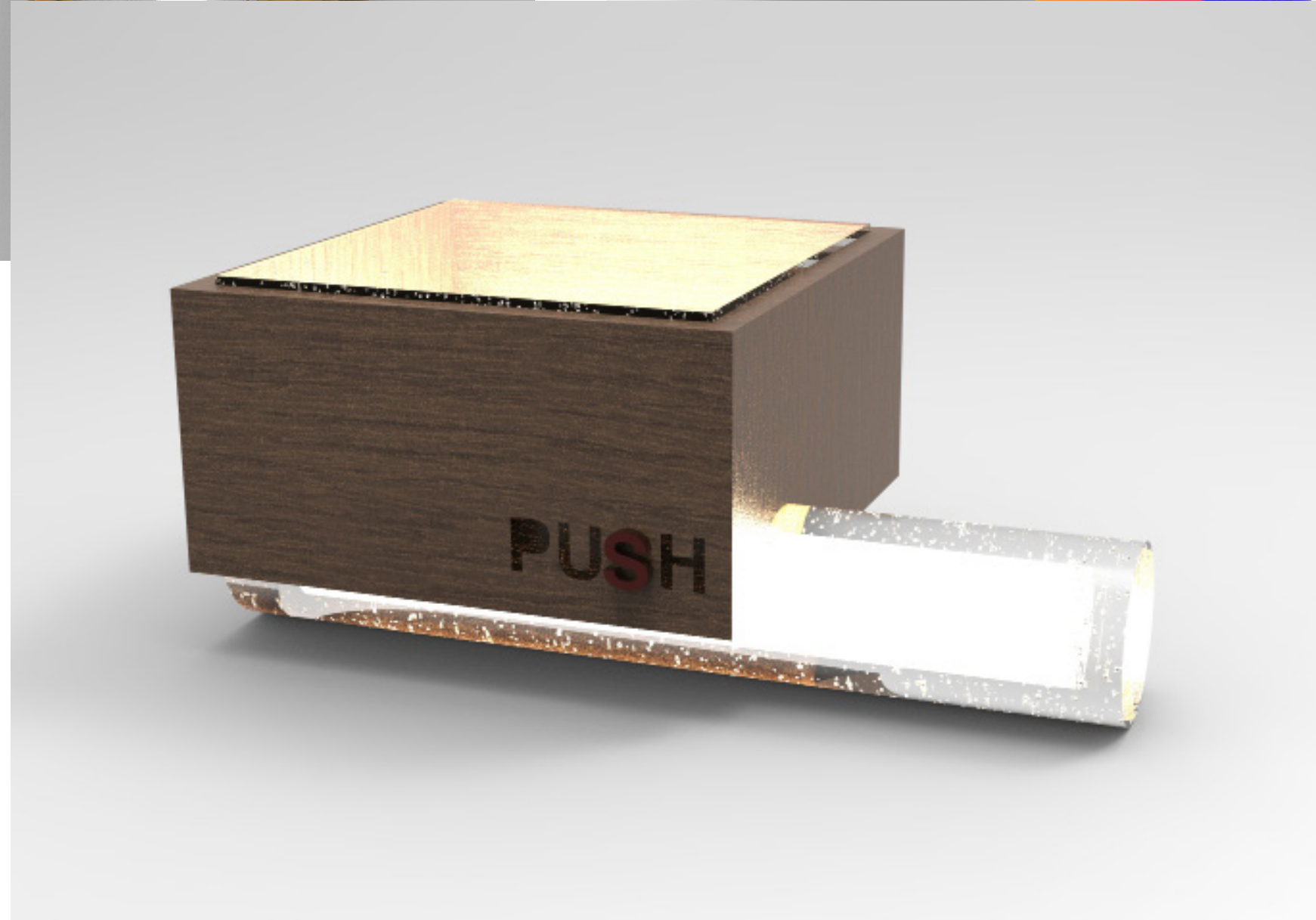
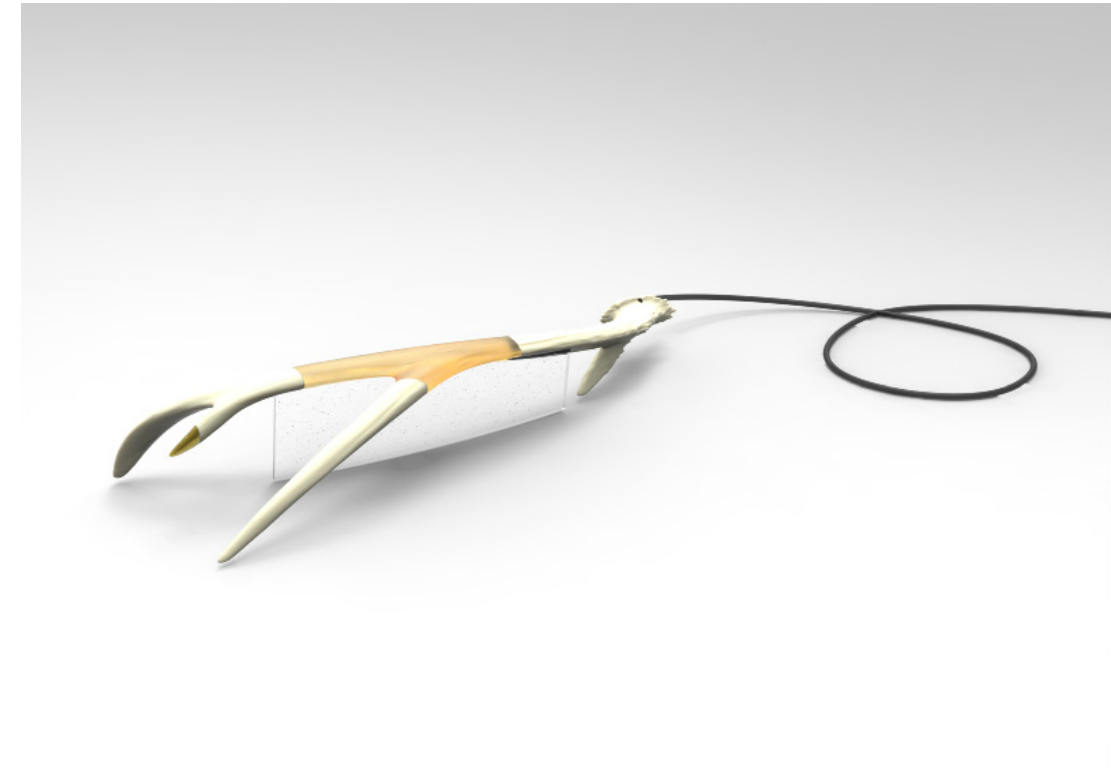
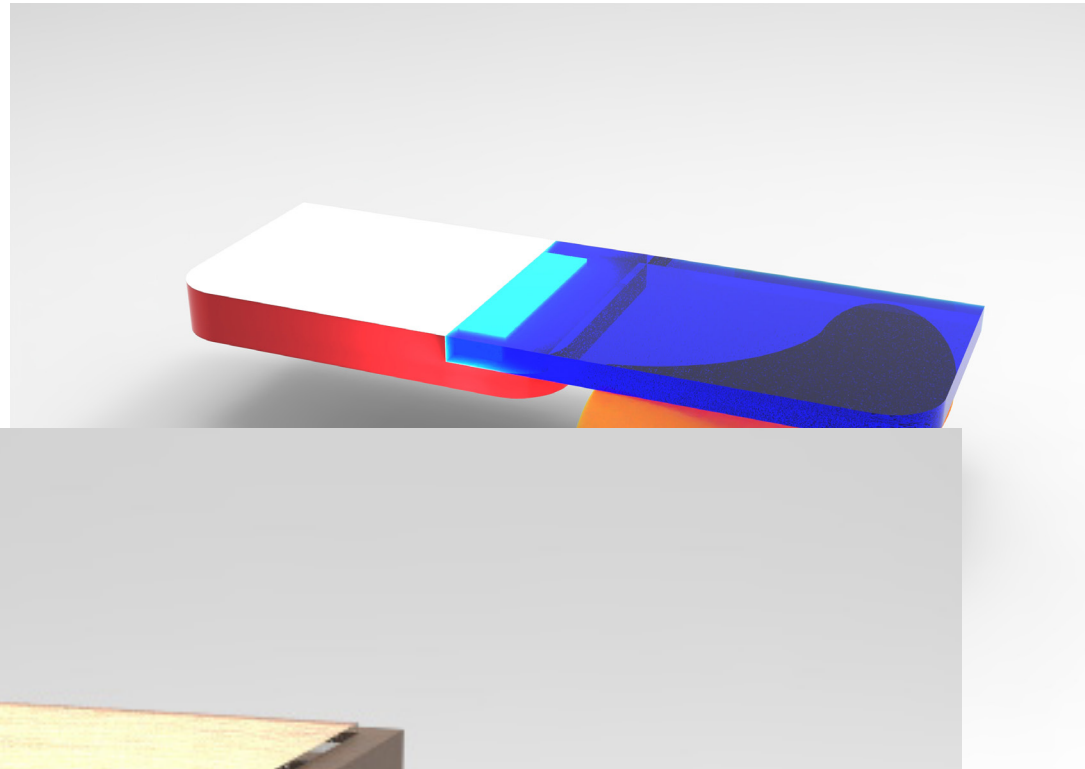


# Initial Sketches



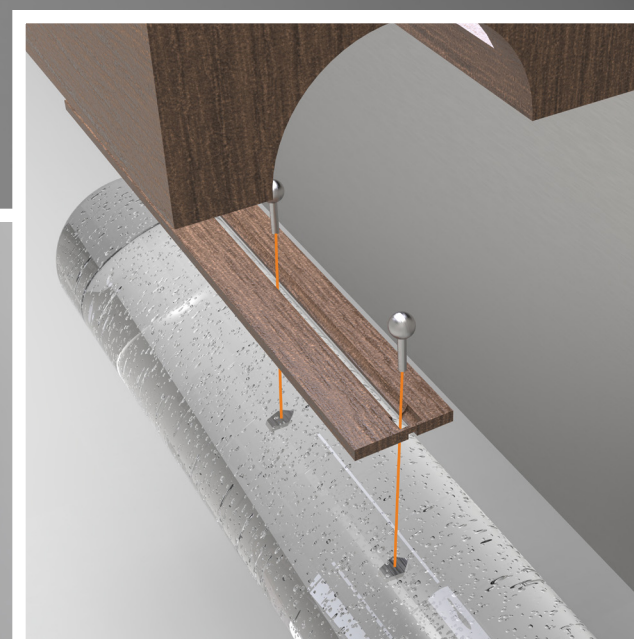
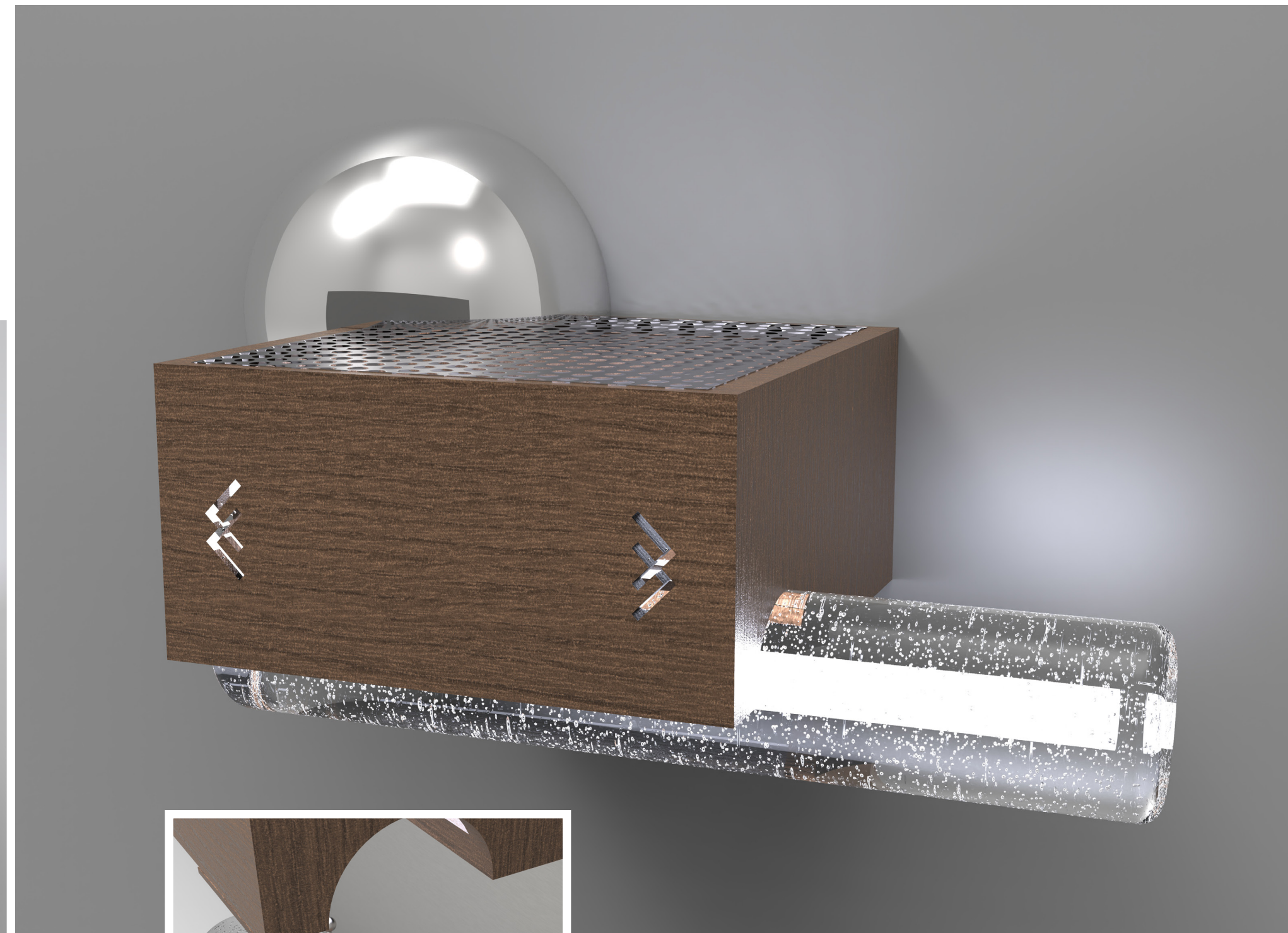


# Five Refined Concepts





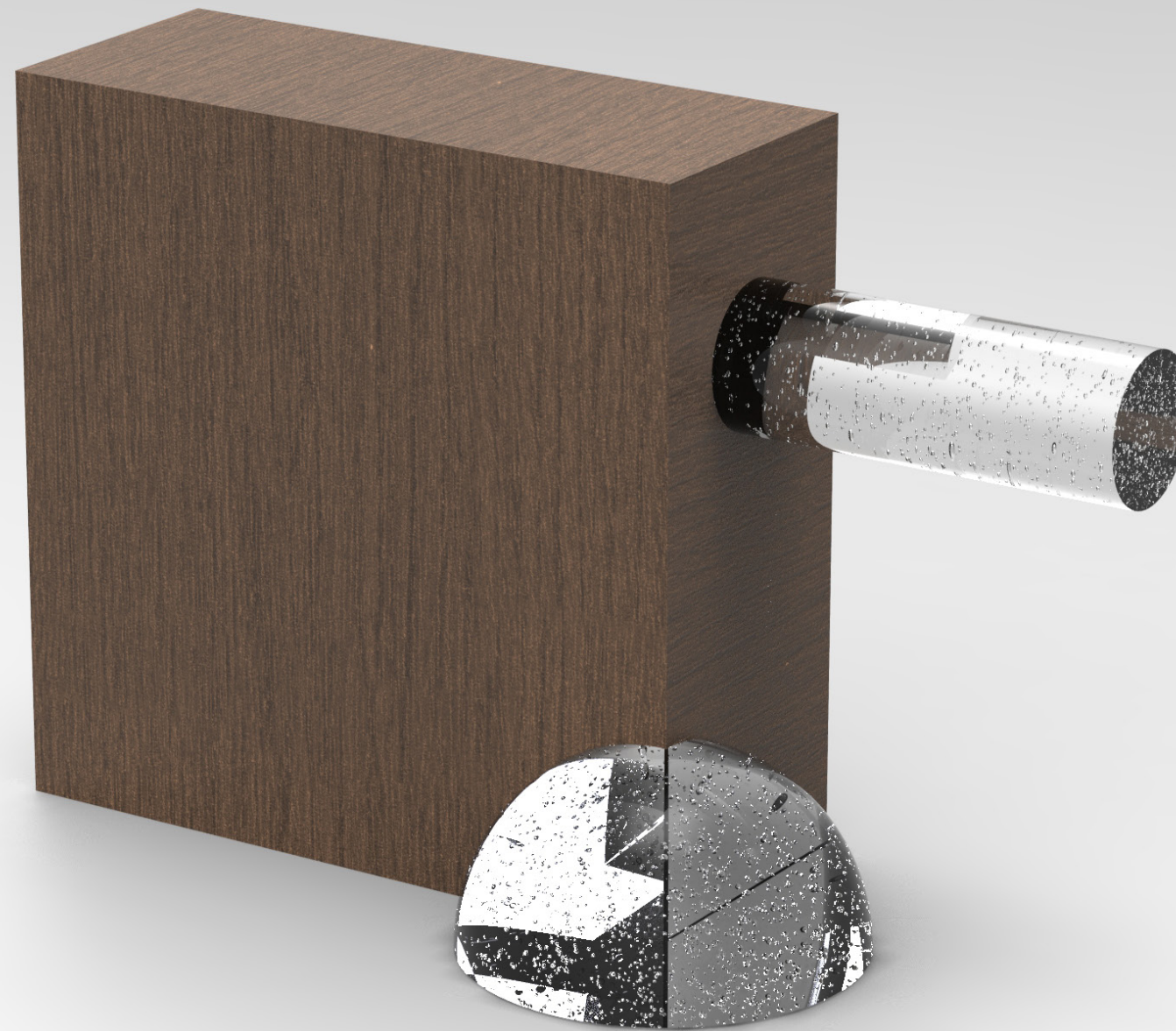
# First Refinement of selected concept



- 6" STAINLESS STEEL DOME • 7" SQUARE PERFORATED ALUMINUM SHEET • 7 1/2" X 7 1/2" X 4" WALNUT "BOX"
- 7" X 1" X 1/4" GROOVED WALNUT PLANK
- 2 1/4" BUBBLED ACRYLIC TUBE • TWO 15MM METAL BALL HEAD SCREWS WITH 6MM DIAMETER HEADS
- TWO NUTS • EPOXY RESIN • WOOD GLUE
- 4 BRACKETS AND SCREWS • TOGGLE OR PRESSURE SWITCH • LIGHT MOUNT • BULB • WALL BOX



# Final Rendered Iteration



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Transition to upright piece  
Acrylic bar pushes left and right triggering internal switch

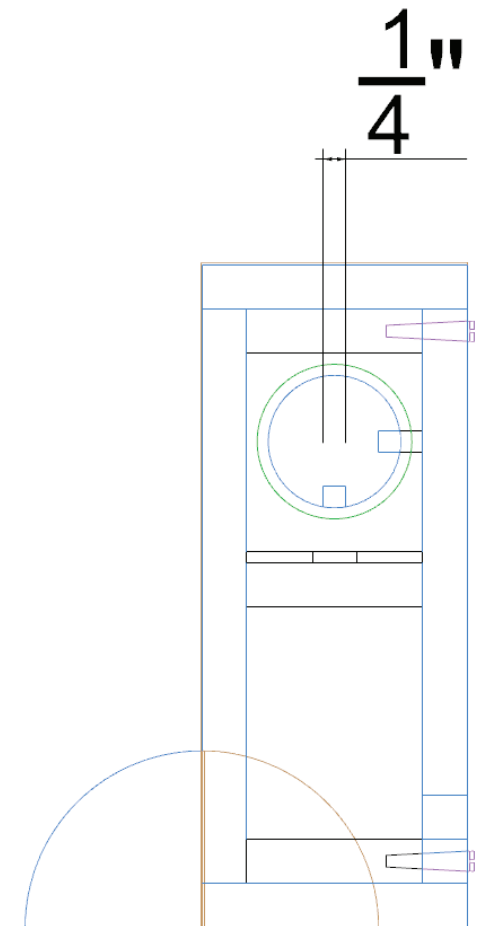
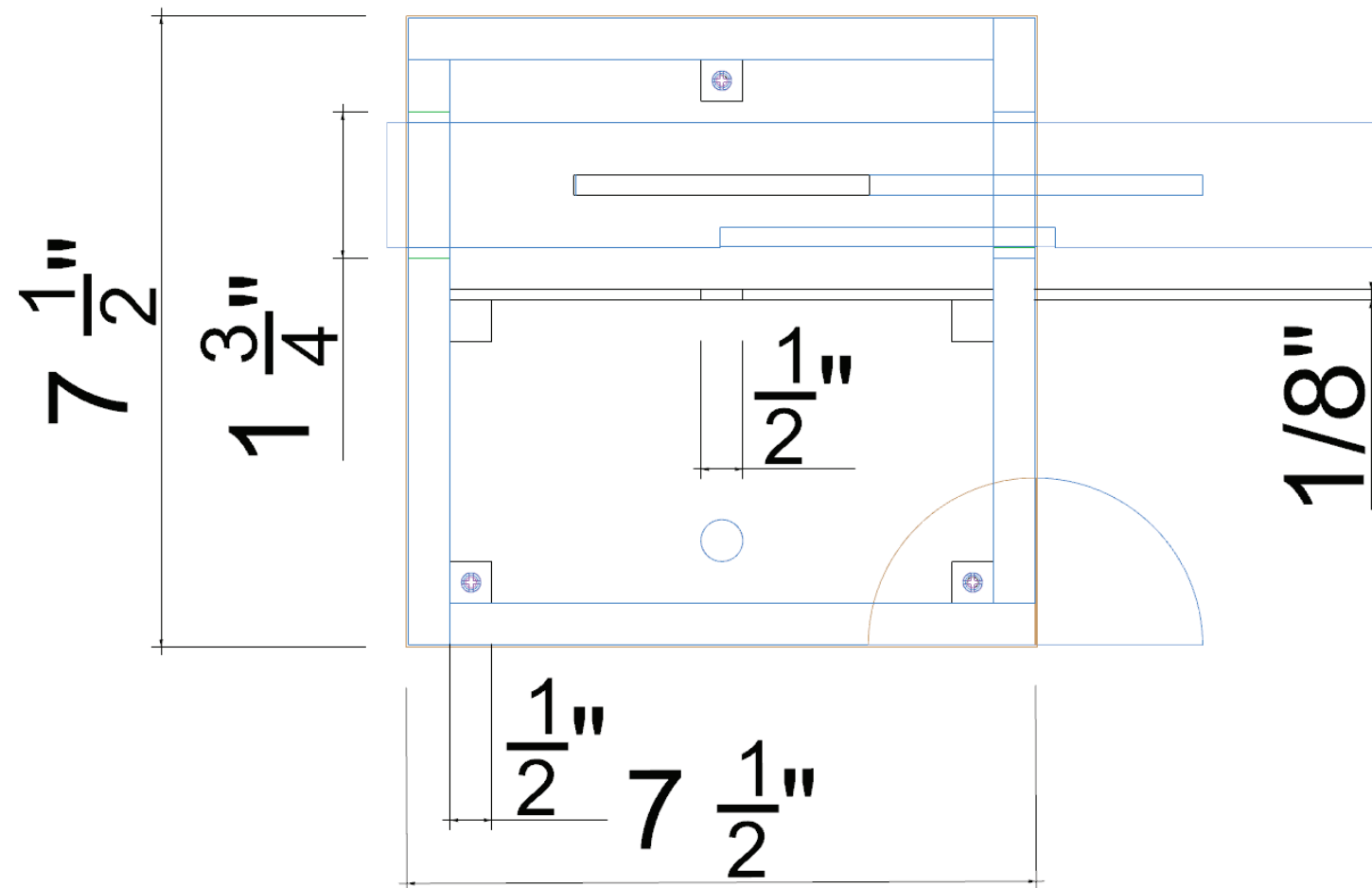
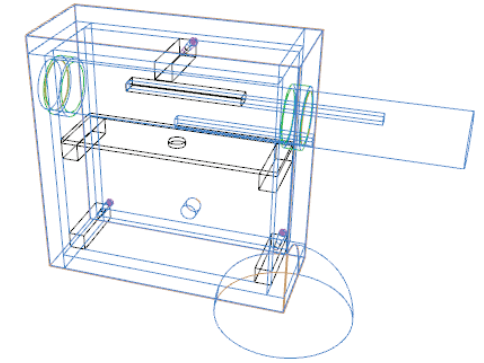
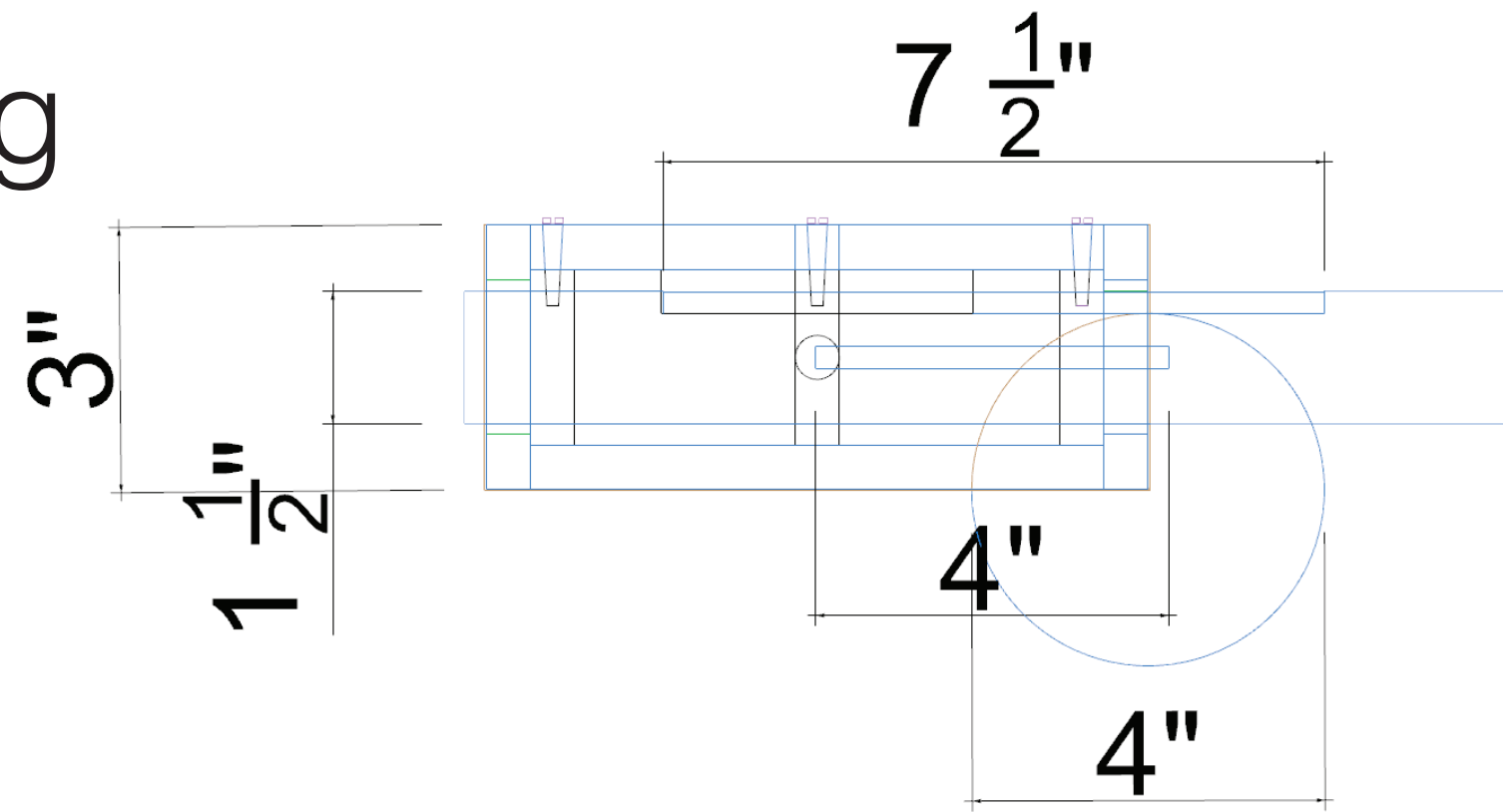
Simplification of attachment, form, and material use  
One single light inside box

Resin hemisphere and acrylic rod act as only points of light escape



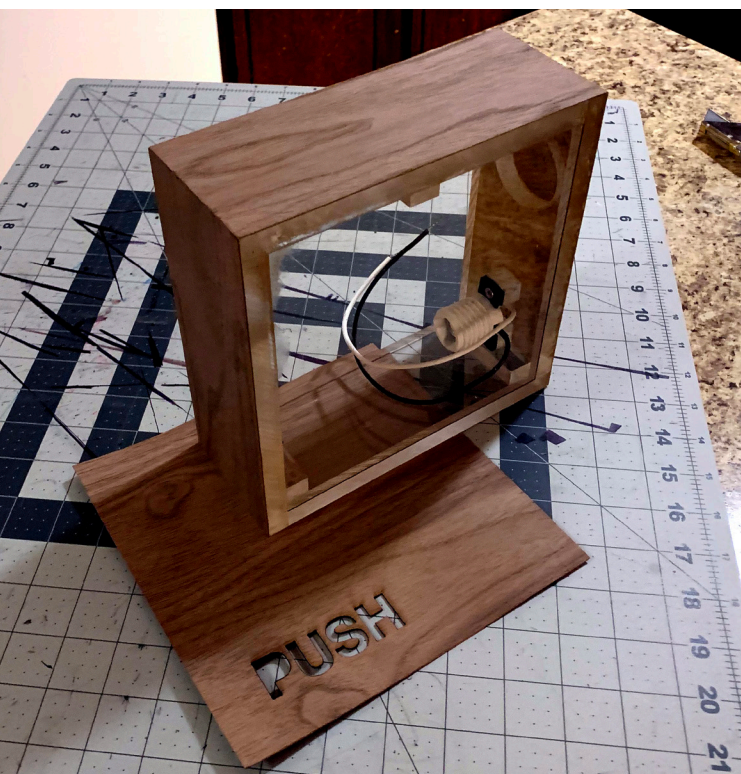
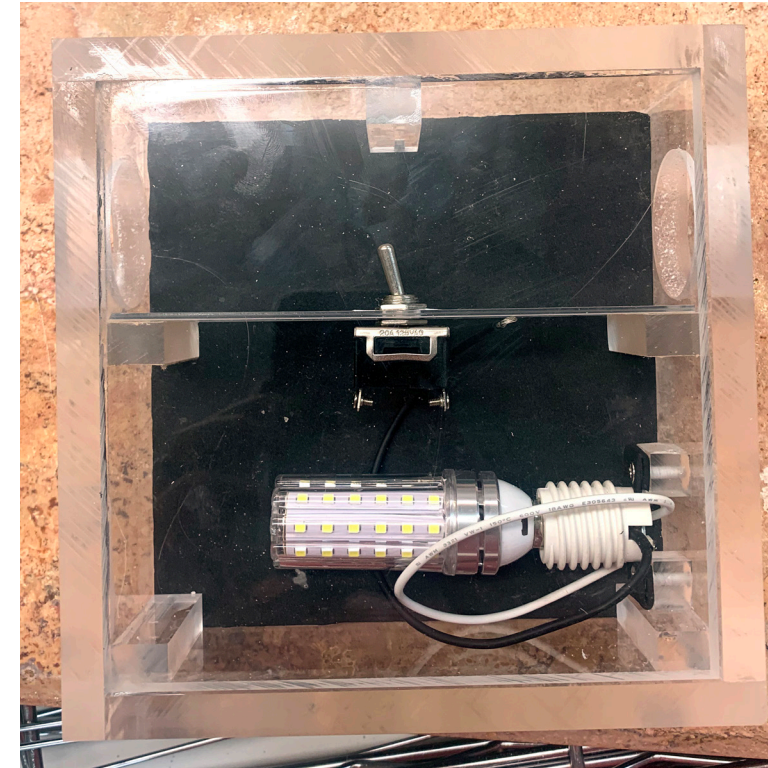
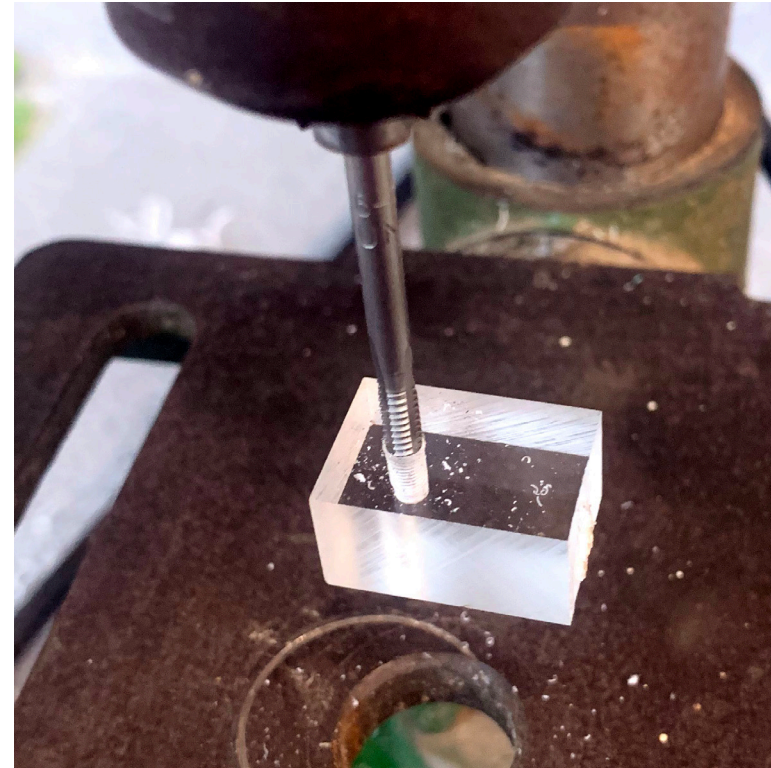
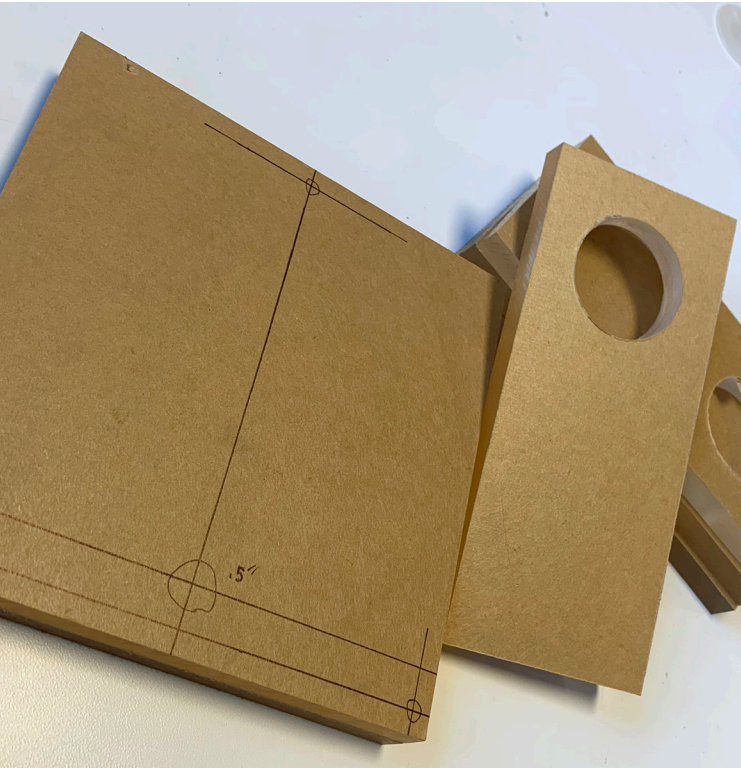
# Engineering

Critical and general dimensions using standard drafting conventions.





# Building Processes



Pictures of the steps and procedures leading to PUSH being a finished prototype.



# PUSH

Final Prototype

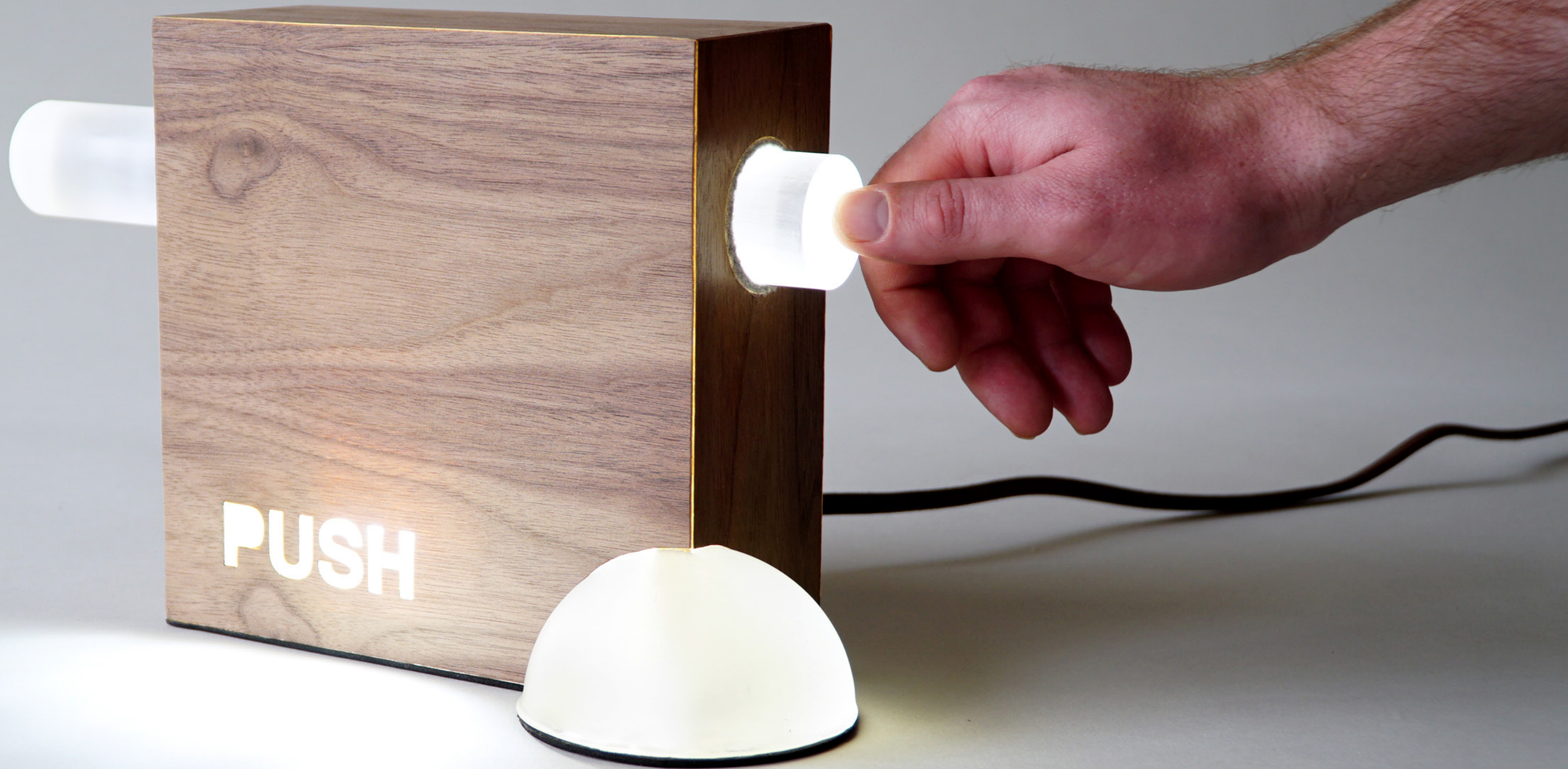
















PUSH



# Acknowledgment

PUSH was recognized as a student lighting entry **finalist in the Fall 2022 ISFD Innovation+Design Competition.**

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