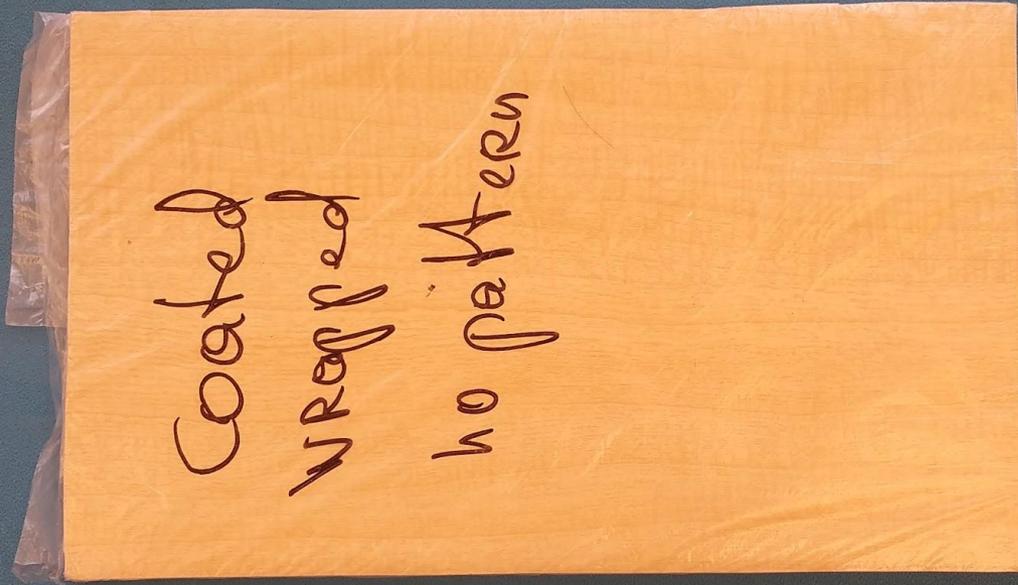


# **Scintillator Panel Catalog**

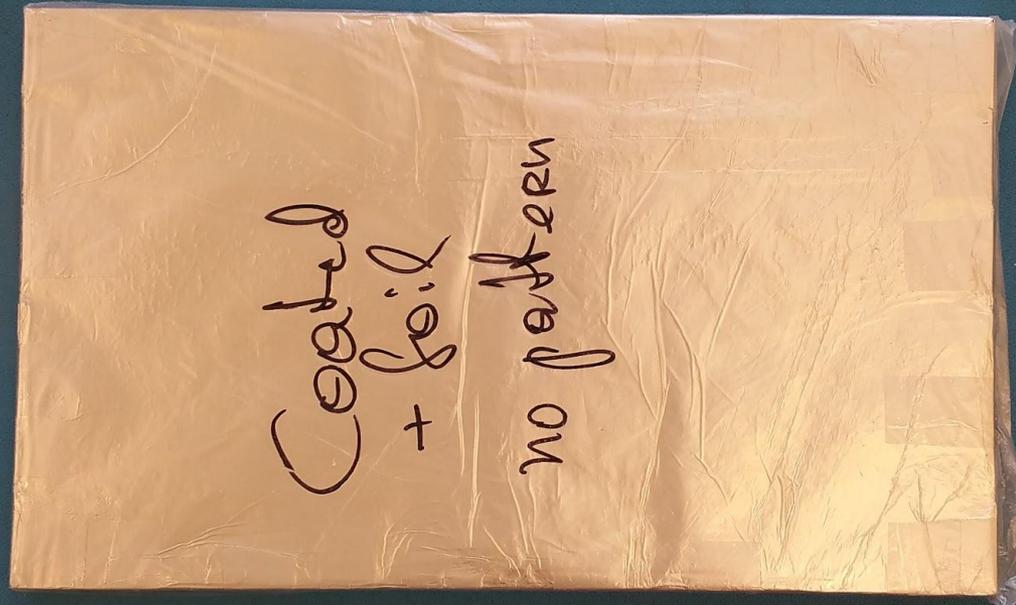
## **05-11-15**

Shawn Beckman  
Sebastian Seeds  
Sebastian Vazquez

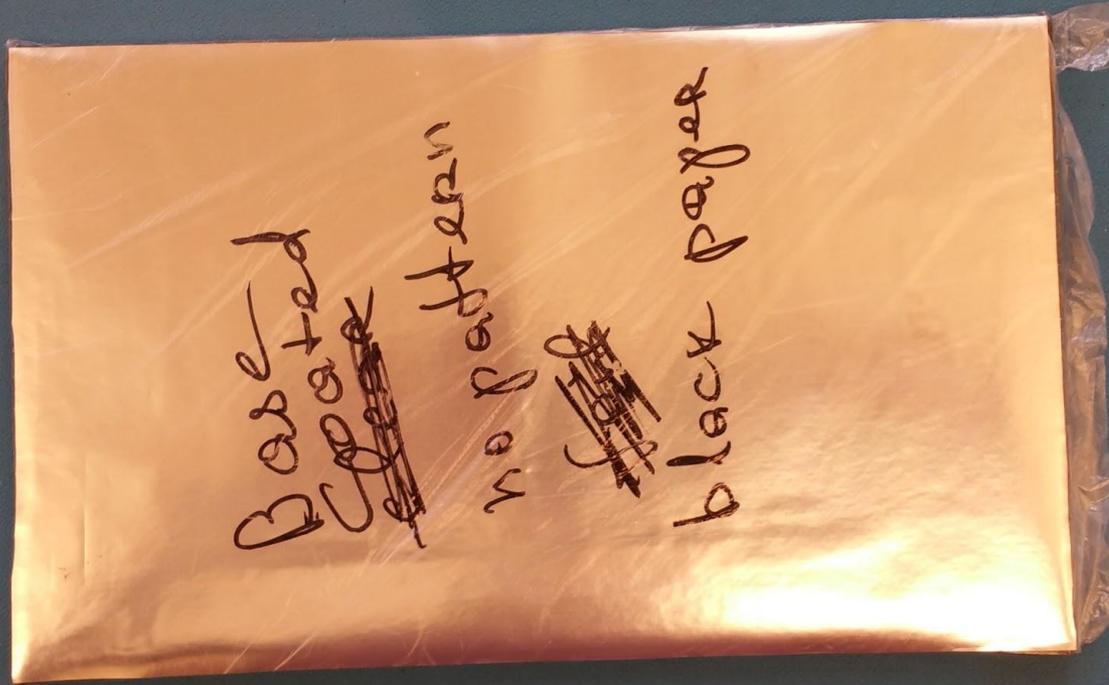
Panel 1 - Coated, wrapped, no pattern, with fiber



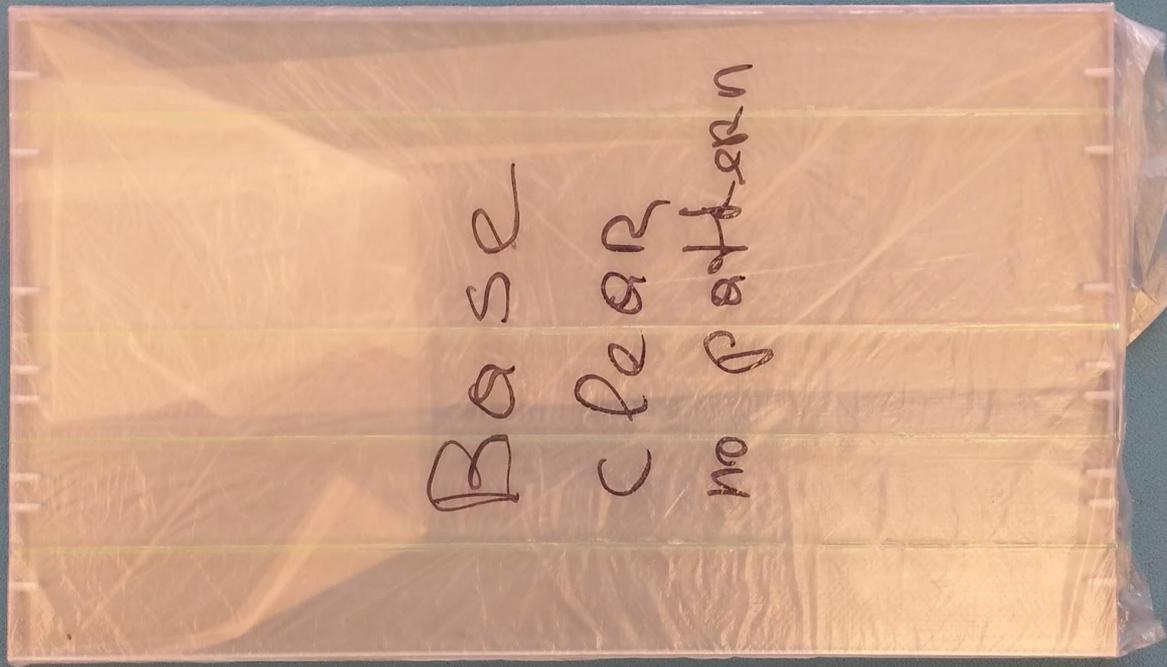
Panel 2 - Coated, with foil, no pattern, with fiber



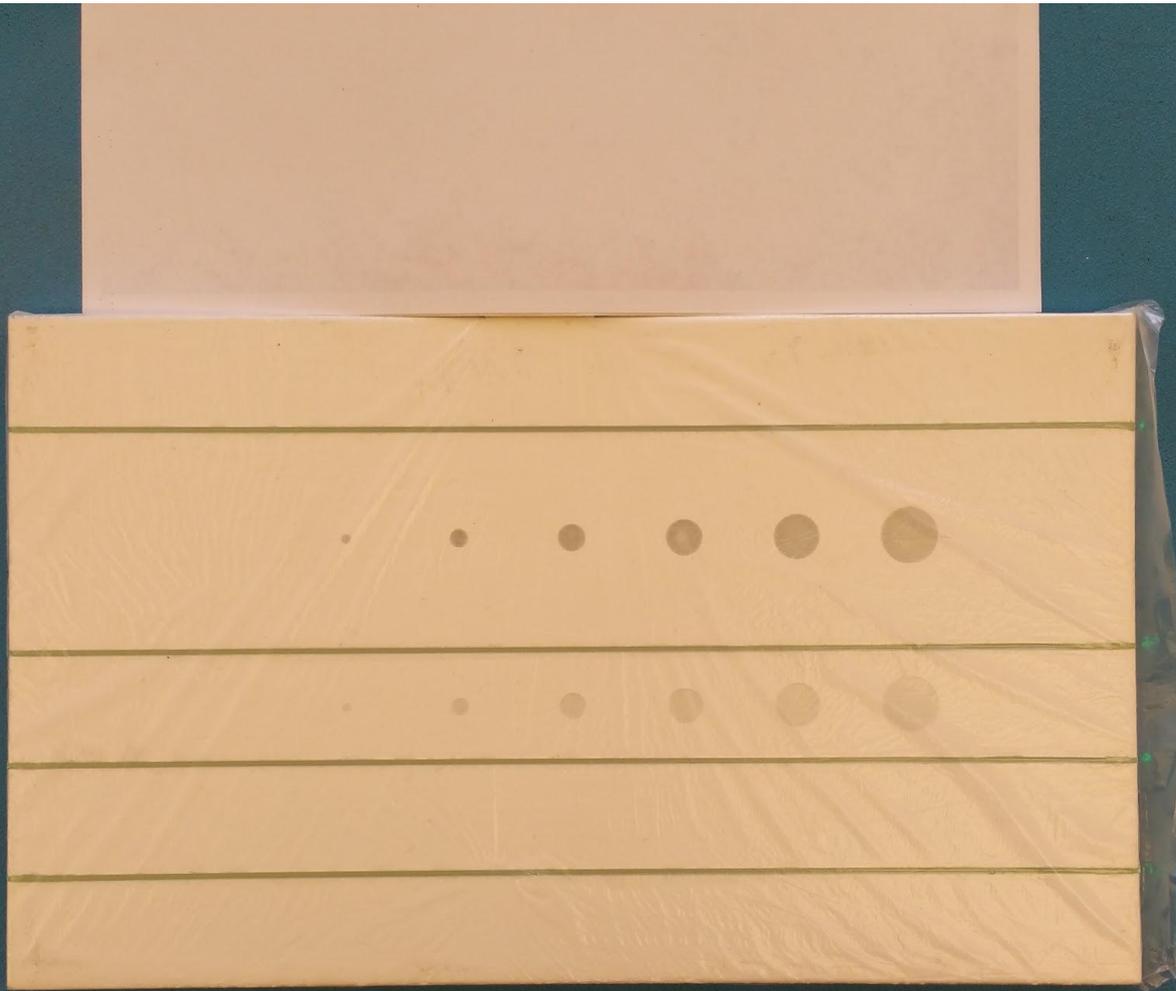
Panel 3 - Coated, no pattern, black paper, with fiber



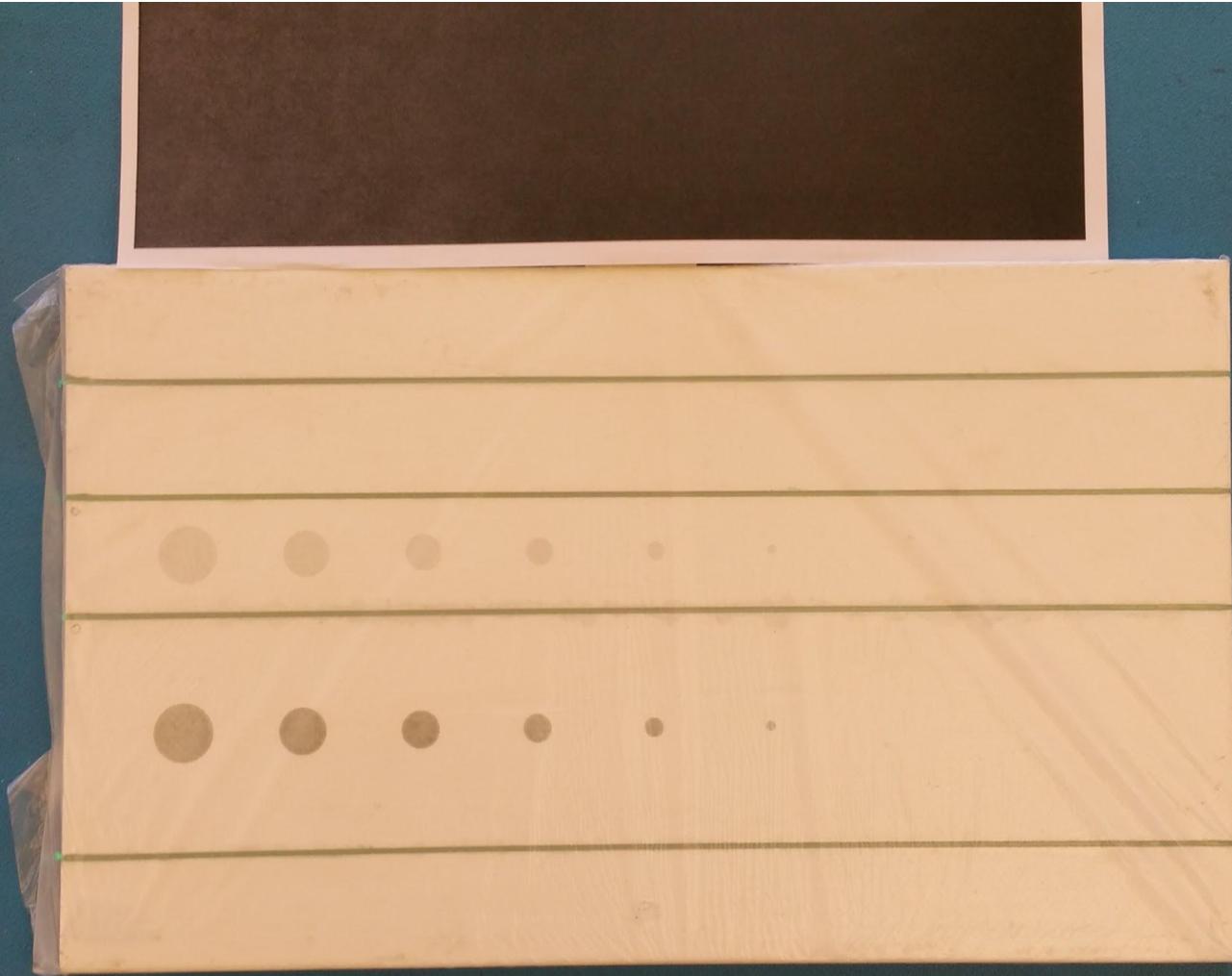
Panel 4 - Base, no coating, no pattern, with fiber



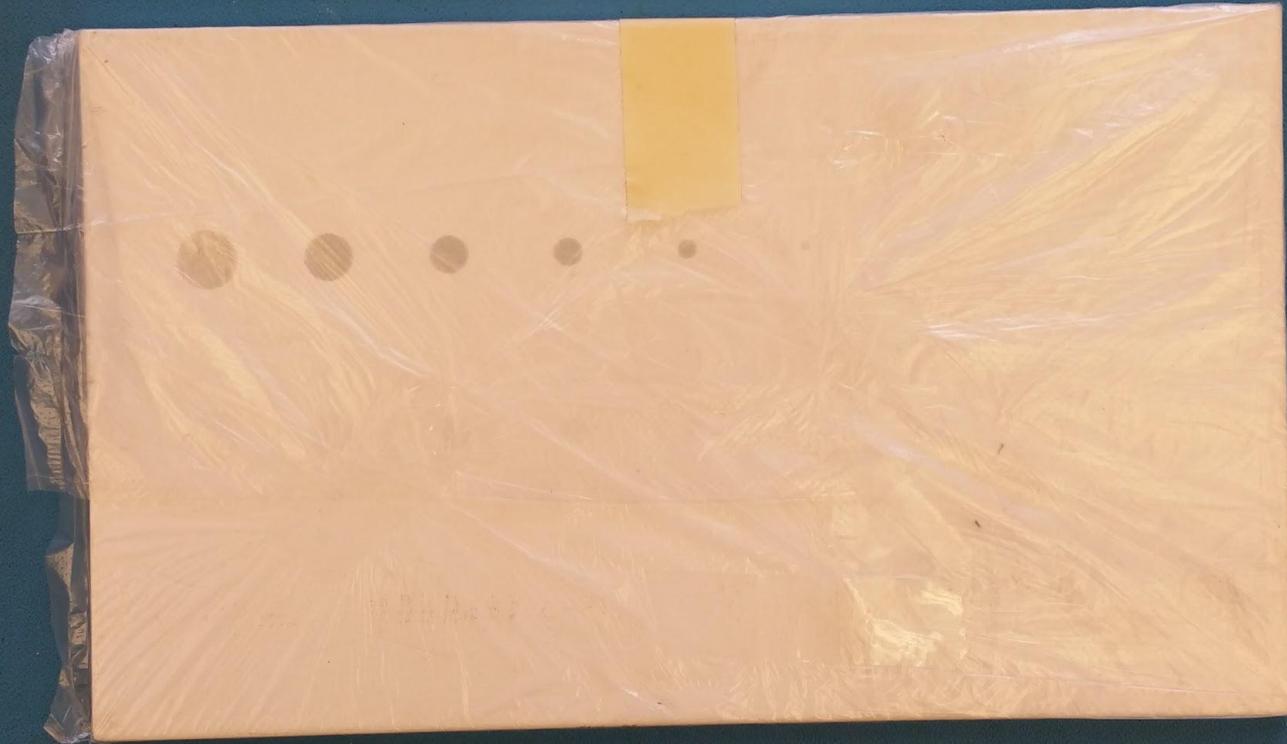
Panel 5 - Coated, pattern on front, with fiber



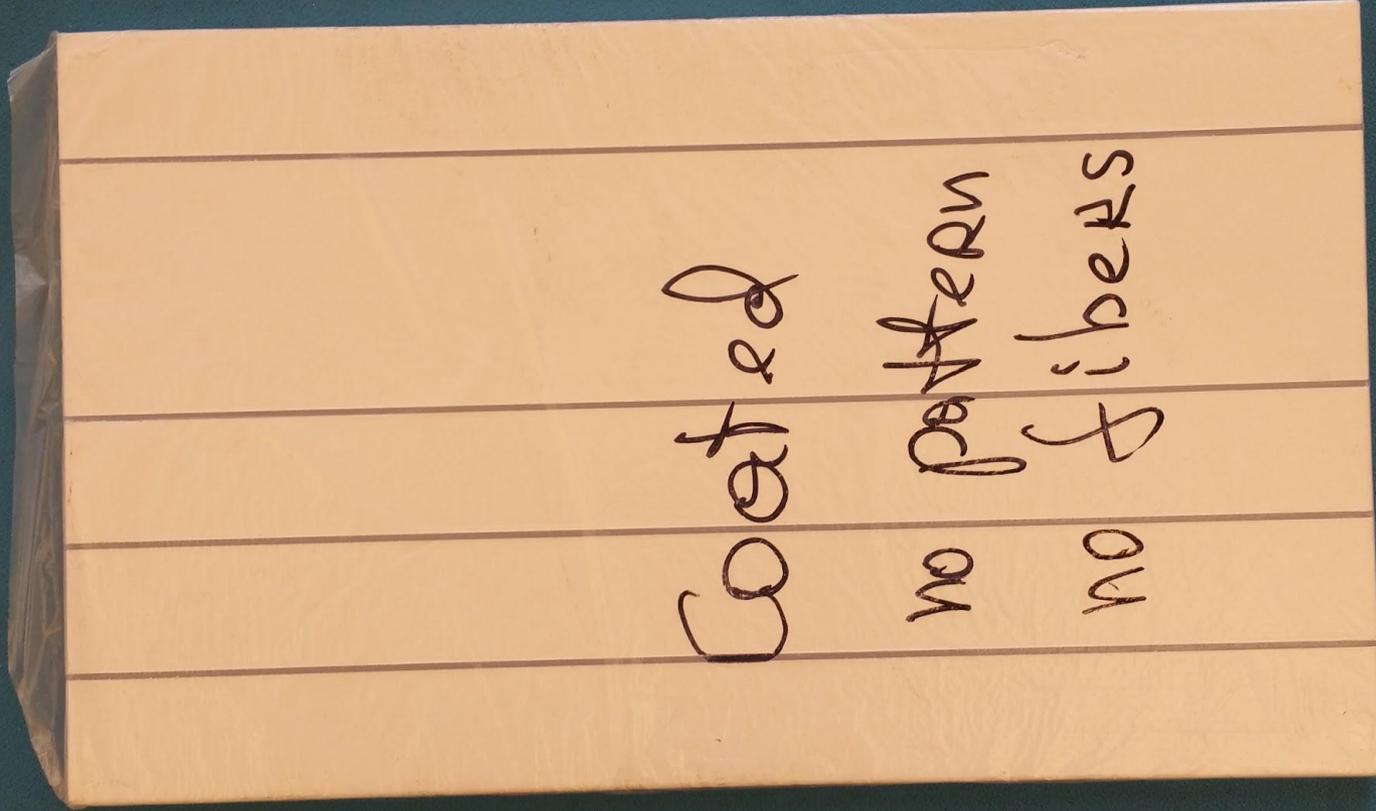
Panel 6 - Coated, Pattern front and back, with fiber



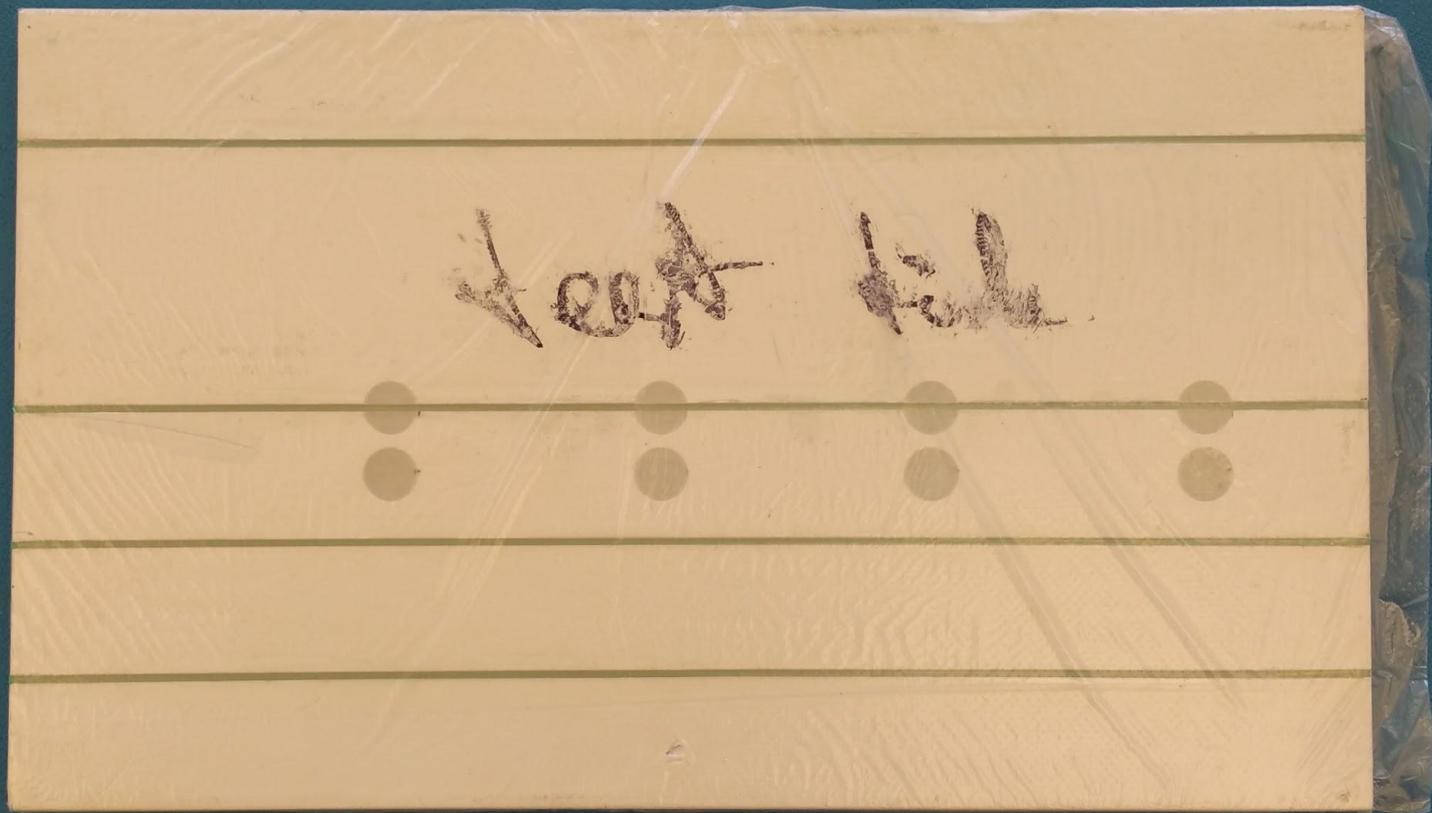
Panel 7 - Coated, pattern back, with fiber



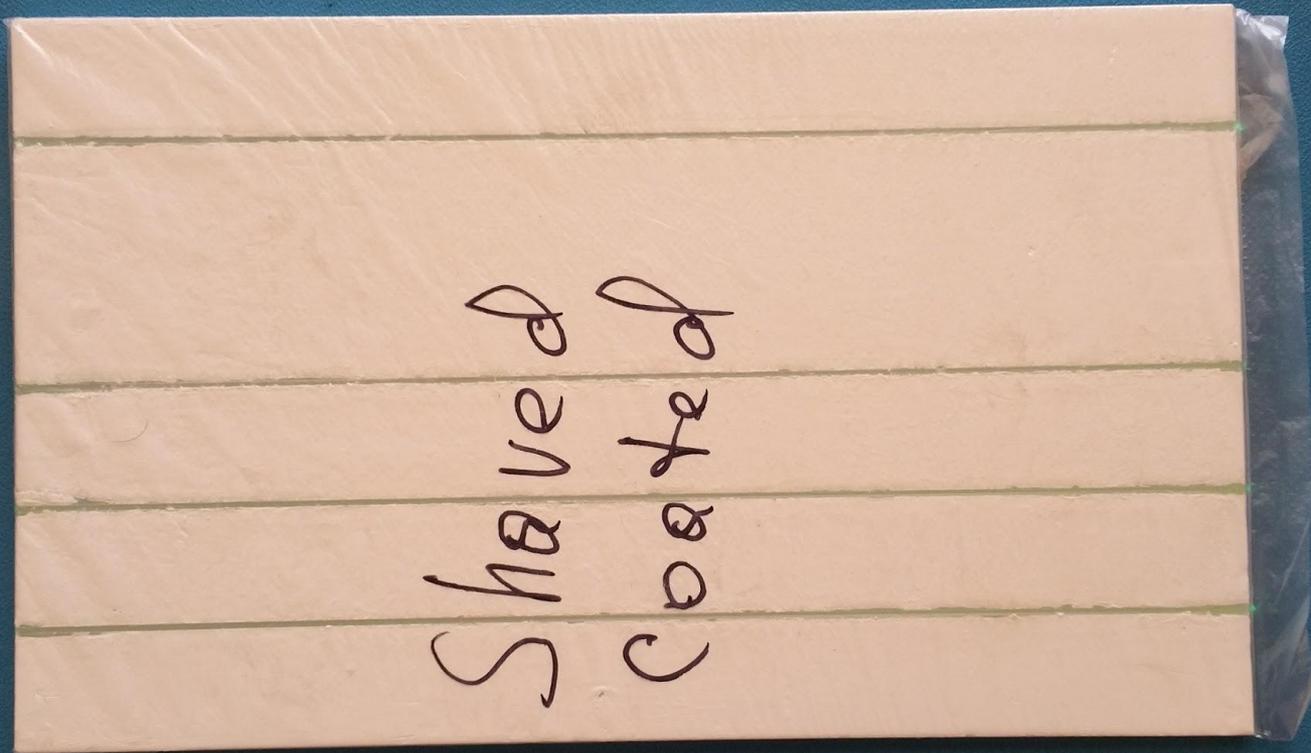
Panel 8 - Coated, no pattern, no fiber



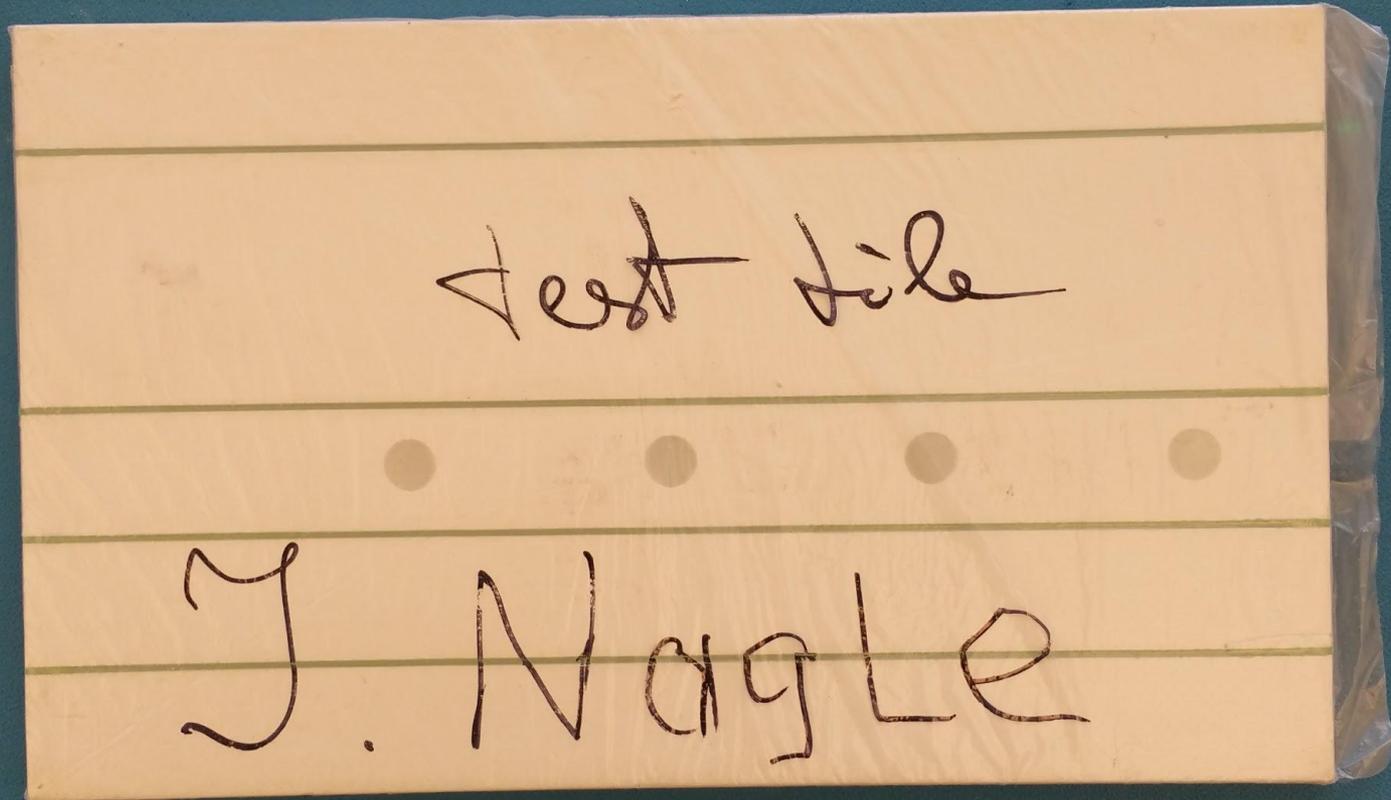
Panel 9 - Coated, test tile, double pattern front, with fiber



Panel 10 - Coated, full panel shaved, with fiber



Panel 11 - Coated, test tile, single pattern, with fiber



Panel 12 - Coated, pitted pattern front, with fiber



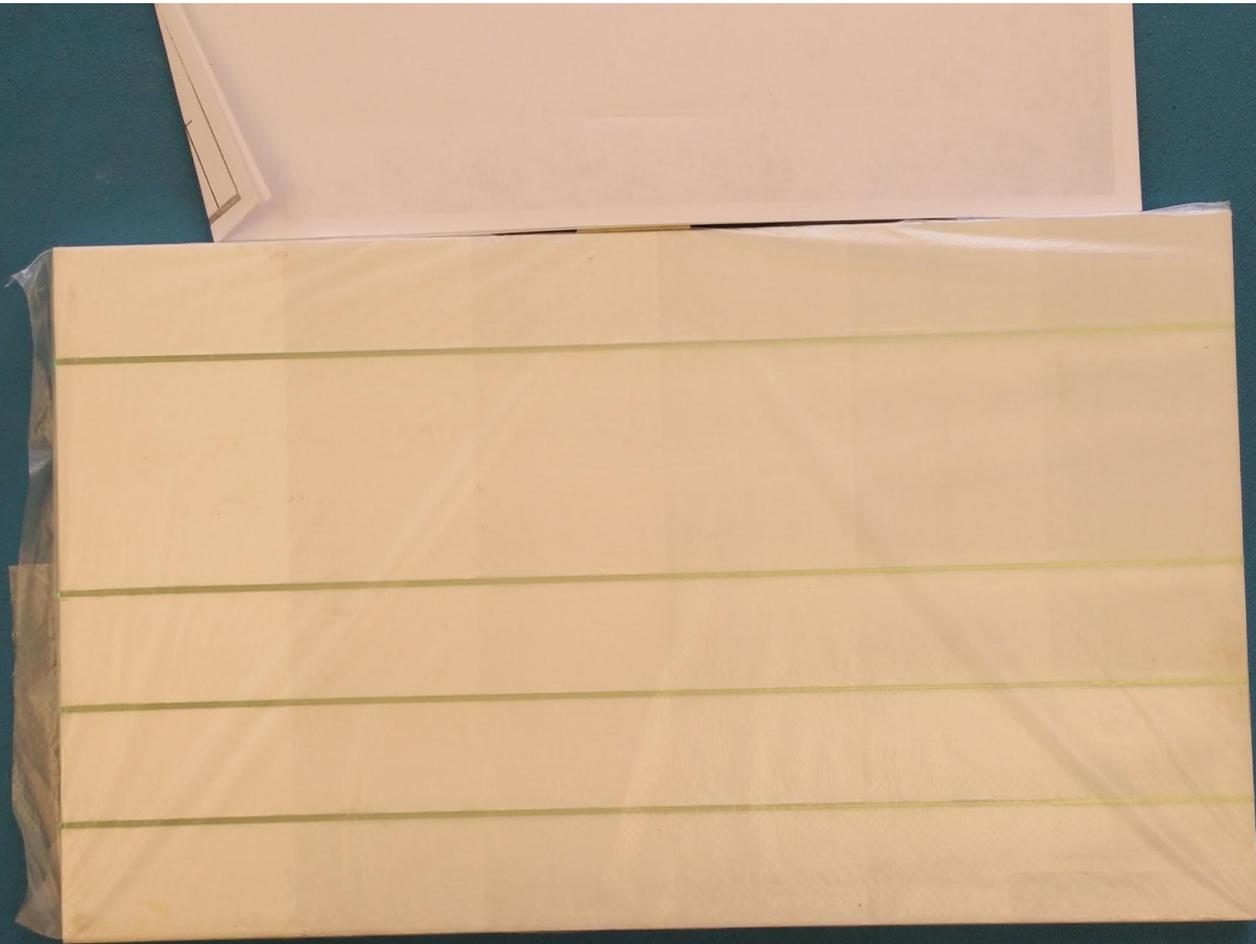
Panel 13 - Coated, pitted pattern back, with fiber



Panel 14 - Coated, pitted pattern front and back, with fiber



Panel 15 - Coated, shaved pattern front, with fiber



Panel 16 - Coated, shaved pattern back, with fiber



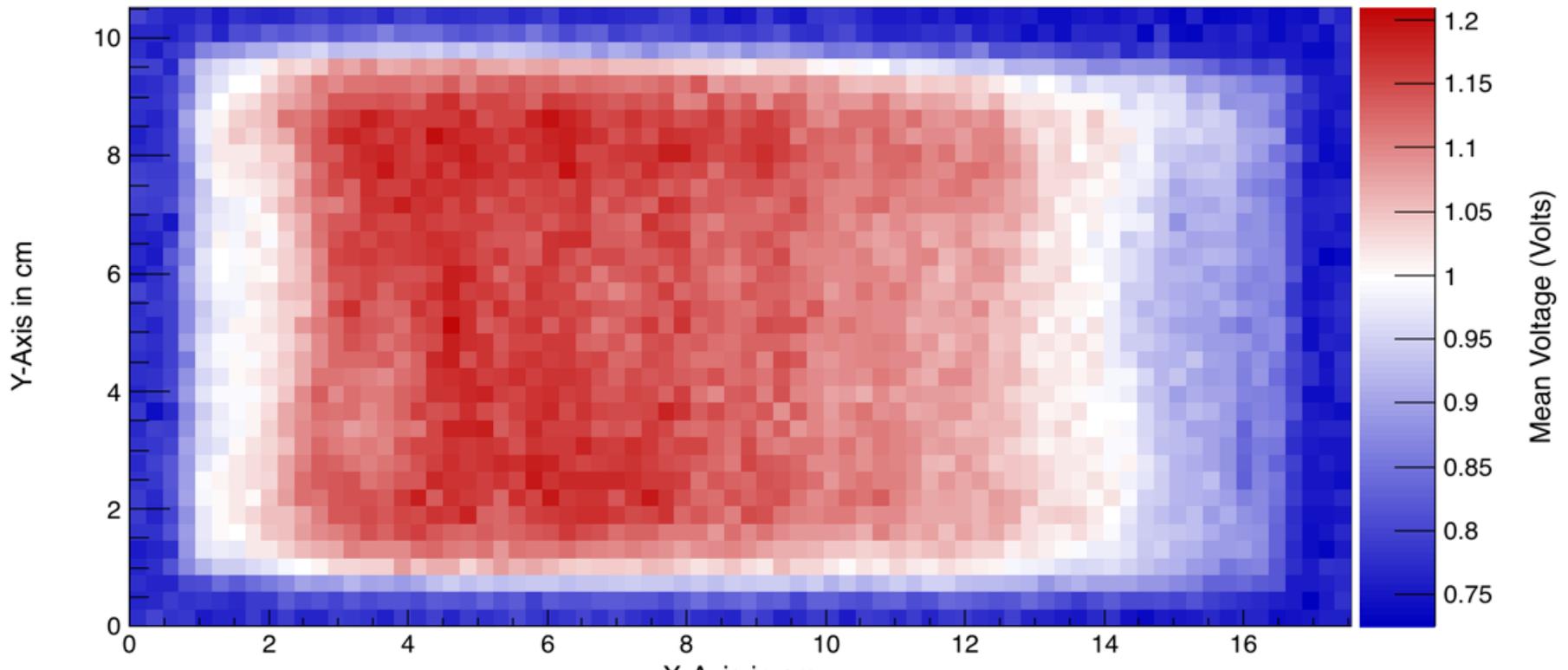
Panel 17 - Coated, shaved pattern front and back, with fiber.



# Our Setup

- Two S10362-11-050C Hamamatsu SiPMs
  - Triggering on double coincidence
- Data taking
  - Averaged pulses together and integrate to get mean value in V\*s for each data point
- SiPM mounting rigs designed for protruding fibers
- Example from our test stand:

Pulse Averaged Test Scan, Mean: 0.488614 Volts



# Questions

- Testing order
  - Are certain panels of more interest than others?
- 4 fiber layout
  - Is there a specific reason for having 4 fibers in different positions?
- SiPM mounting and coupling
  - Are there existing SiPM mounts for the embedded fibers?
  - Our optical grease (saint gobain - BC-630) corrodes the white coating of the panels. Is there an existing method of coupling fibers to SiPMs without optical grease?

# Questions - cont'd

- What is the purpose of these holes?

