

# Update on Error of Source Plate Calibration on Granite Beam

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# Rewind

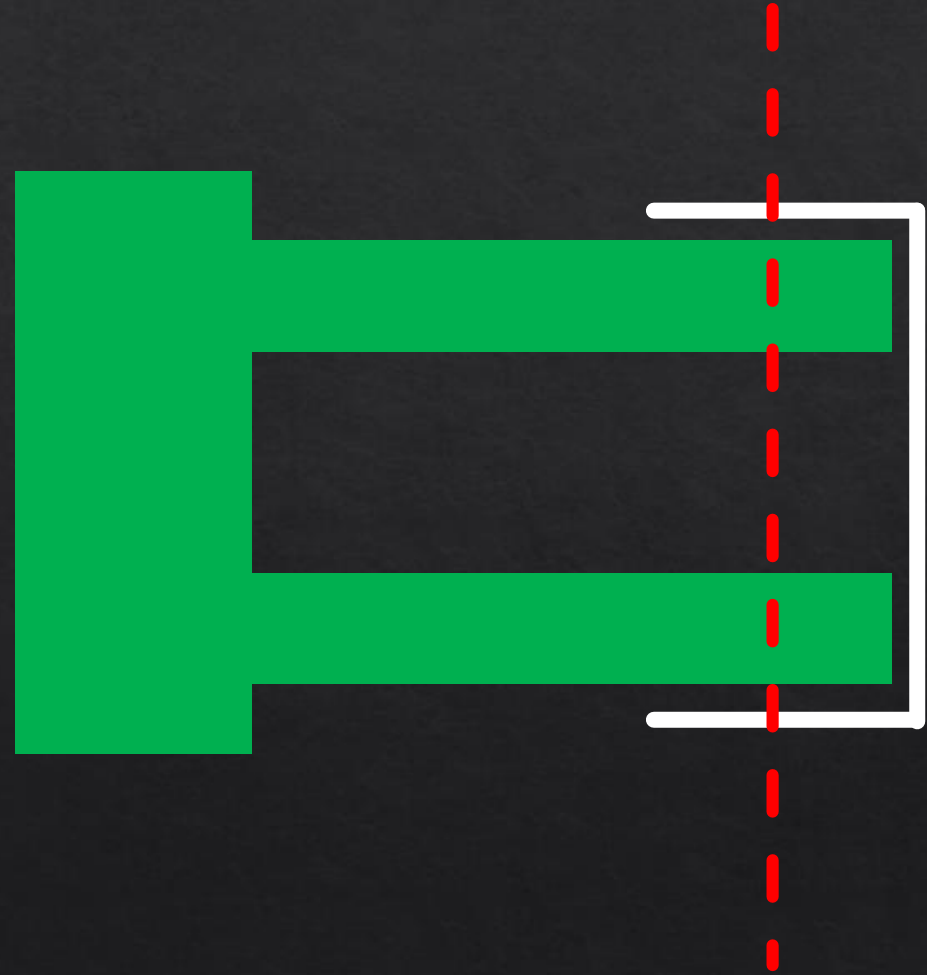
- ◇ X-separation of wide source plates is calibrated both on **granite beam (GB)** and **CMM**.
- ◇ GB calibrations are **100 $\mu$ m short** on average compared to that of CMM.

# Hypothesis

- ◆ Viewing from different angles, the effective light source can be deeper into the ferrule tip. (Brought up by Kevan)

# Setup

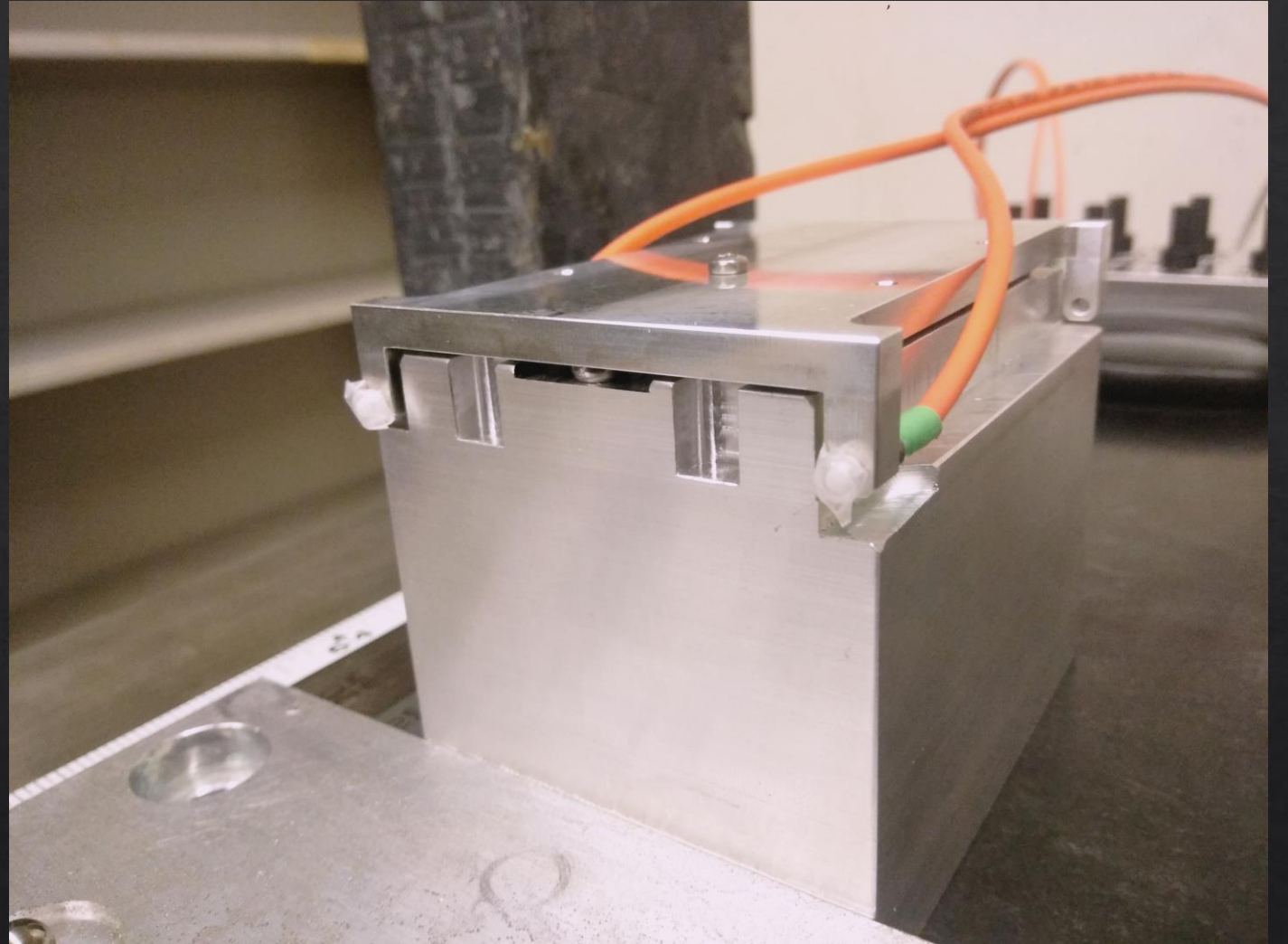
1. Use Scotch tape to cover up the ferrule tip as a secondary light source.
2. Repeat GM calibration for only source 1 & 2 of the 10 source plates.



Tape Used

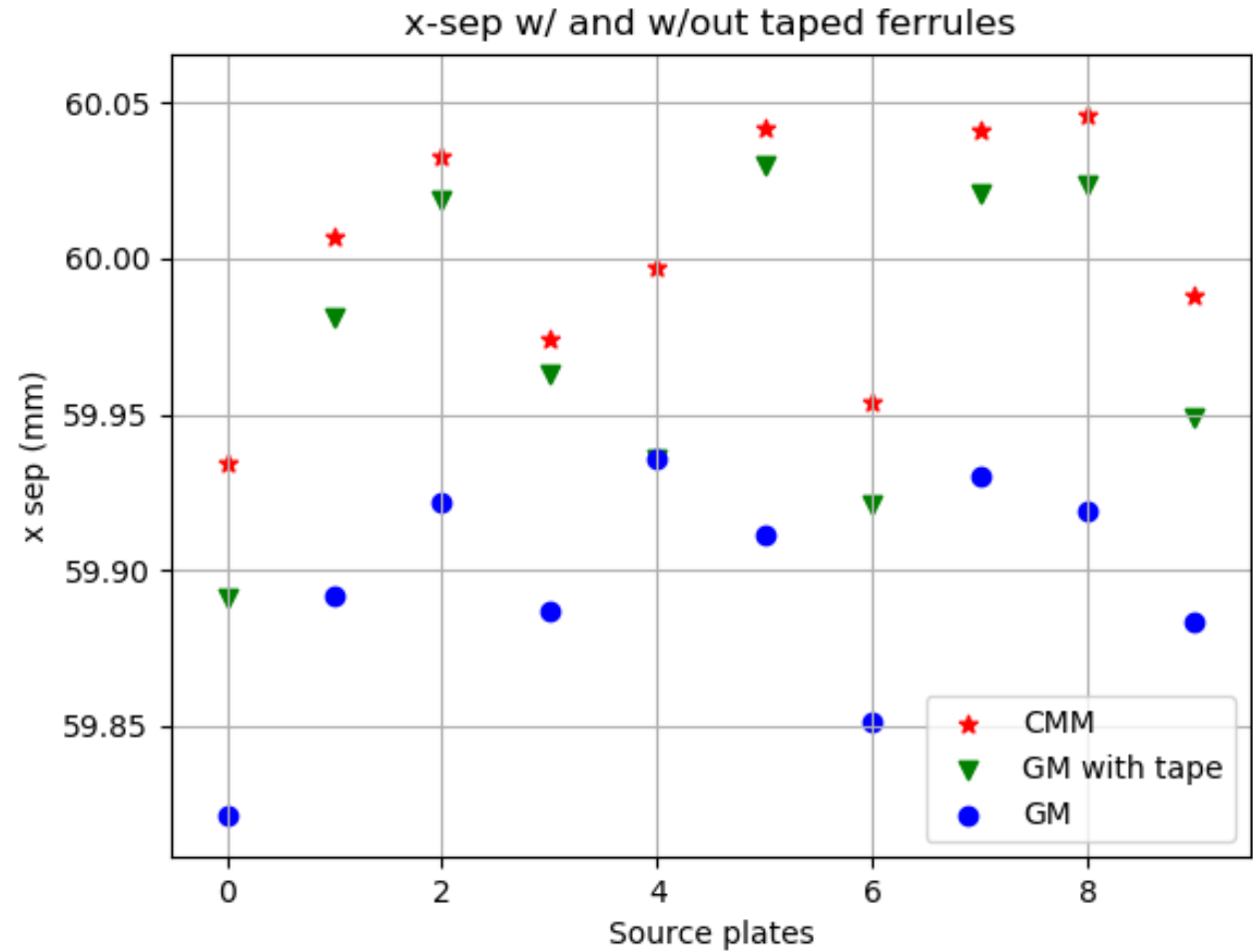


# Taped Ferrules in Source Plate



# Result

- ◇ Except SP #4, the GM calibration with tape gets closer to CMM calibration.



# Result

	Mean (mm)	Std (mm)
<b>(GM data)–(CMM data)</b>	–0.1064	0.0191
<b>(GM taped data)–(CMM data)</b>	–0.0281	0.0152



## Next Step

- ◆ Add additional layer(s) of tape to decrease transparency (or use a different type of tape which is less transparent).