

The law of diminishing returns in X-ray CT

Is it always worth spending more time on a scan?

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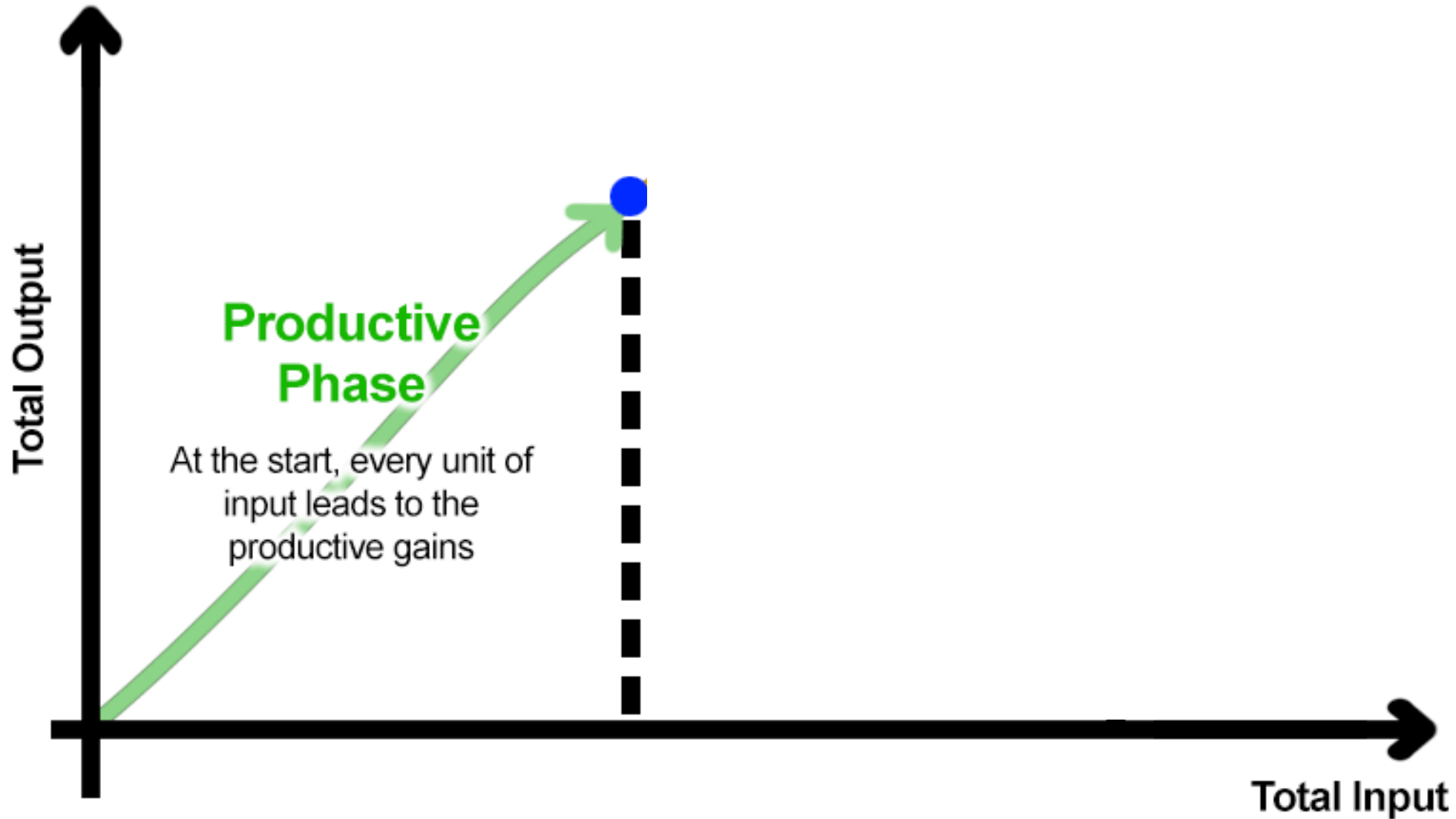
BAE SYSTEMS

Objectives

- What is the law of diminishing returns?
 - Does the law appear in X-ray CT?
 - Summary
-

**What is the law of
diminishing returns?**





Does the law appear in X-ray CT?

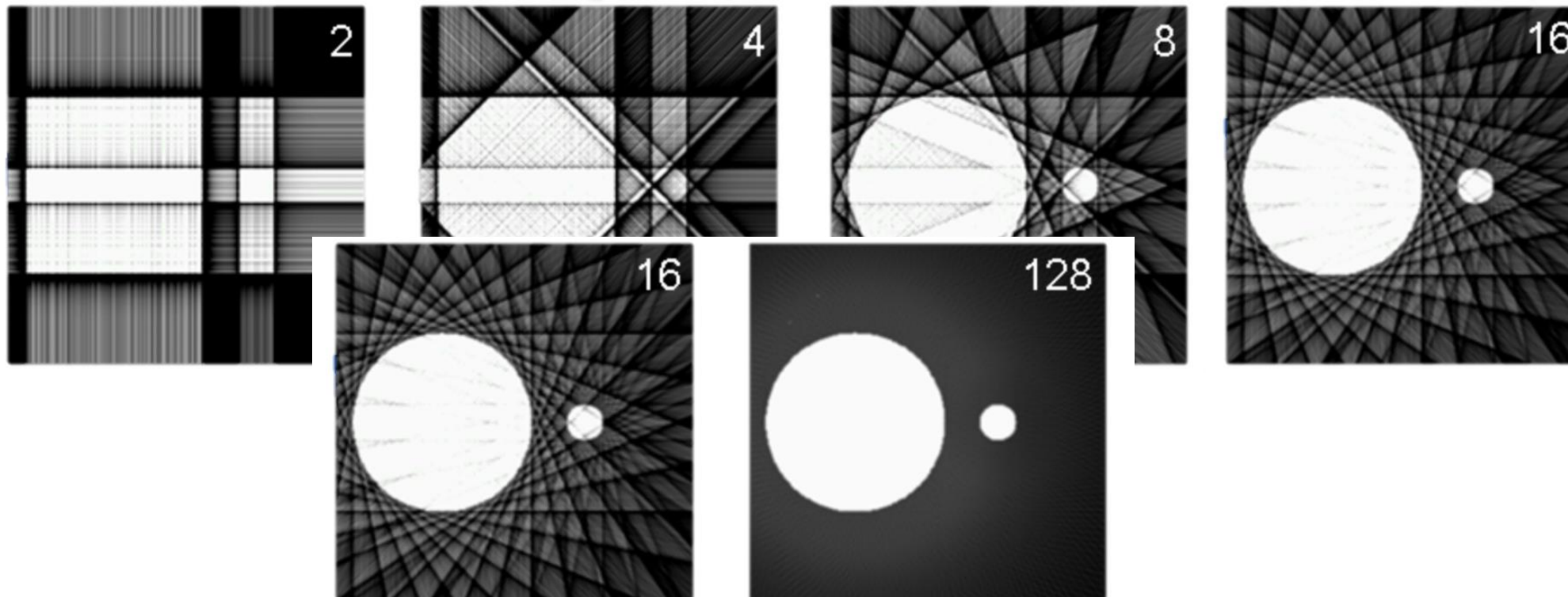
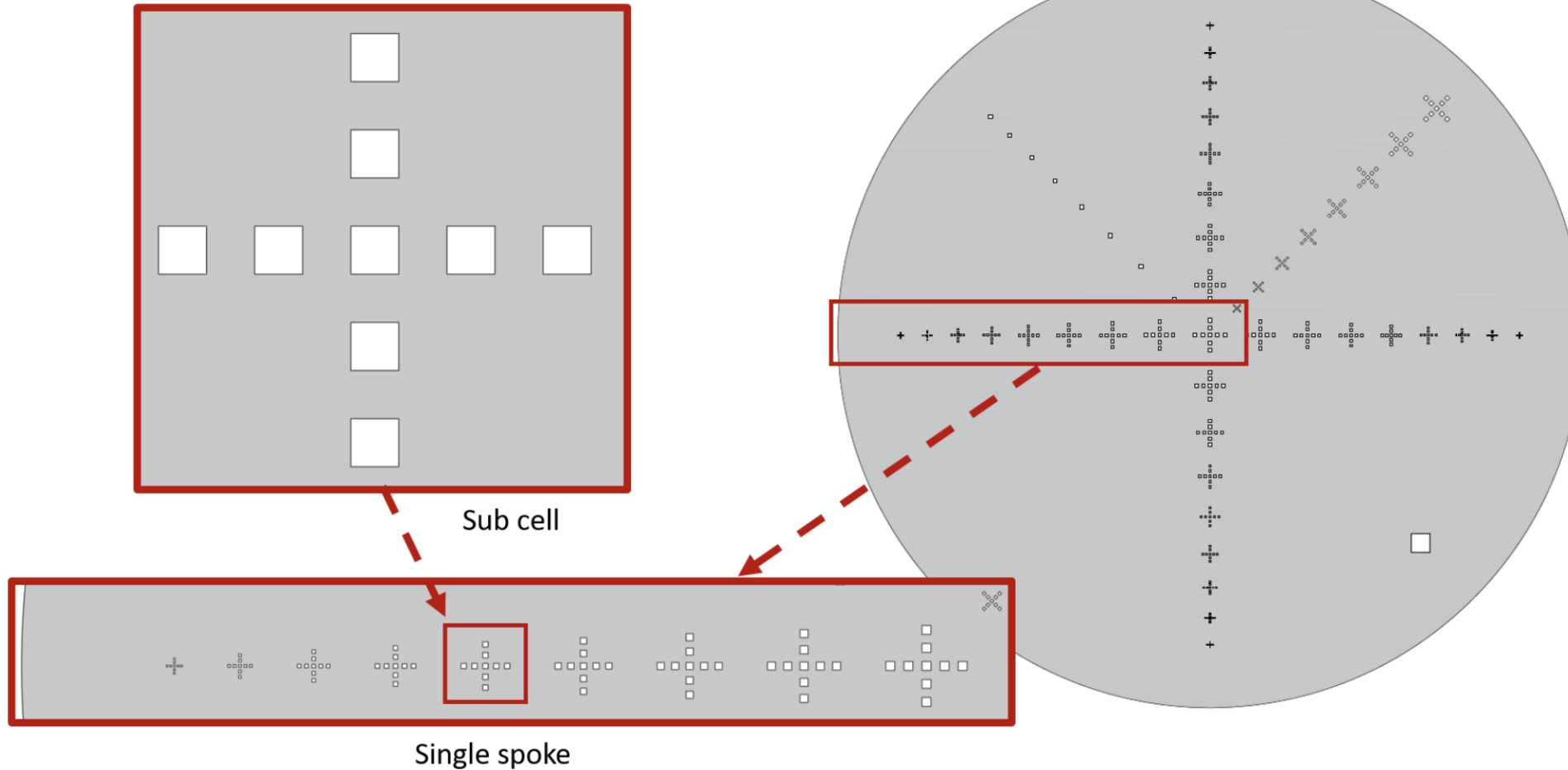


Image Quality Indicator (IQI)

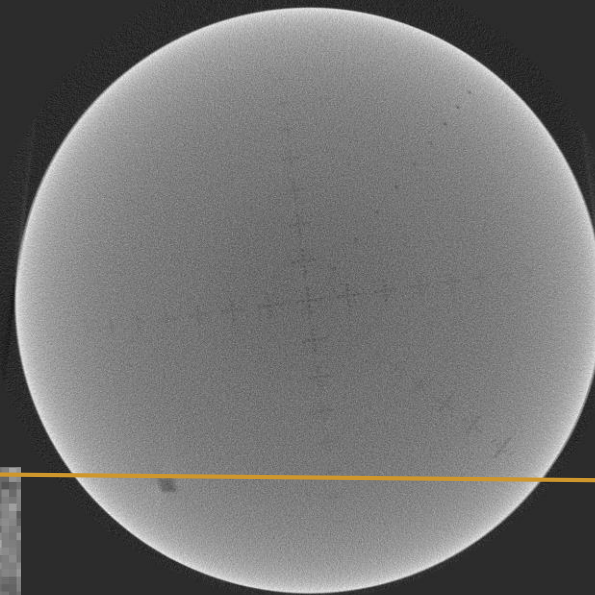
Aletheia Star target



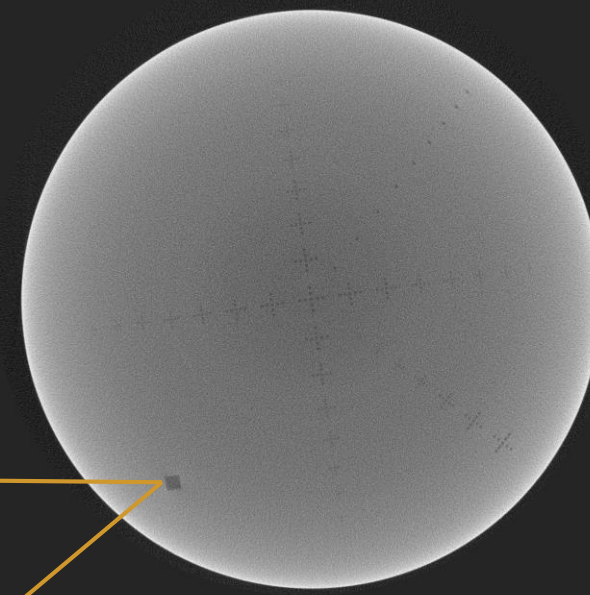
Single spoke



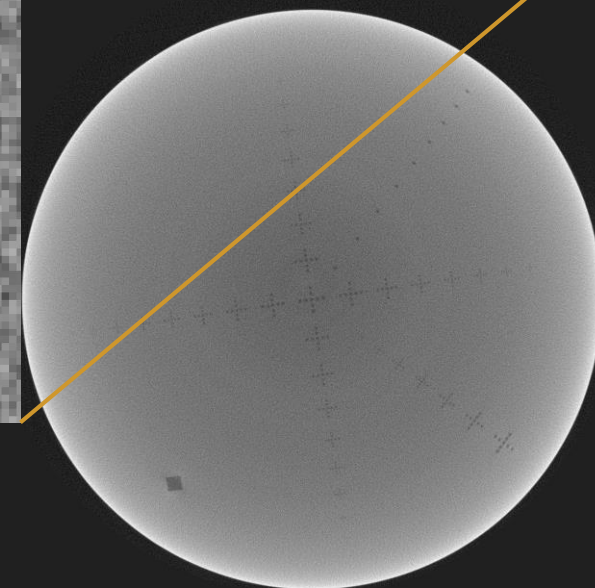
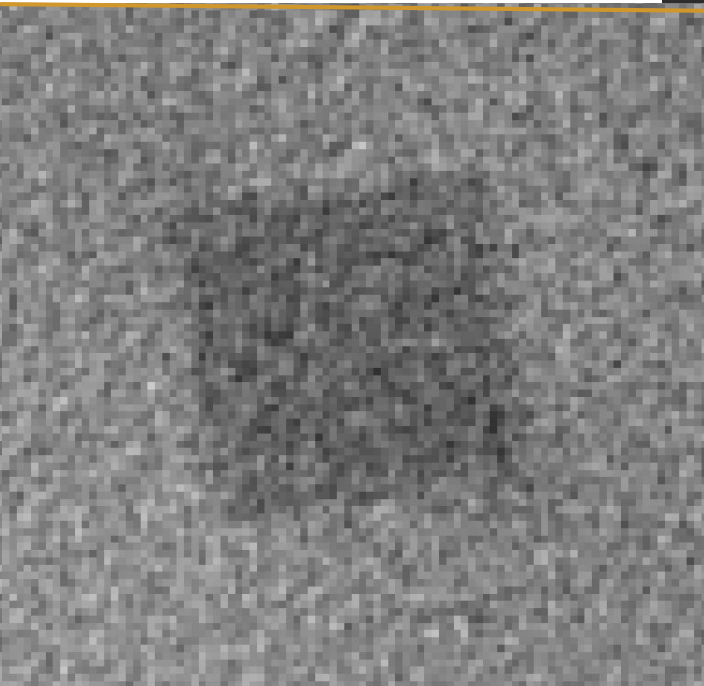
Initial Observations



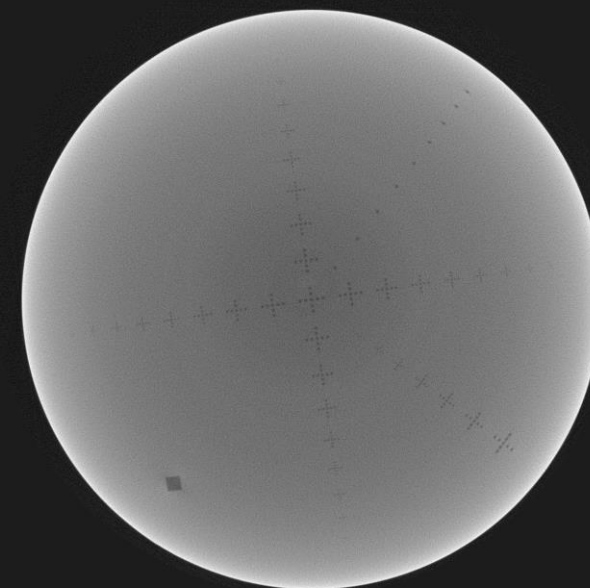
Frame Averaging 1



Frame Averaging 2

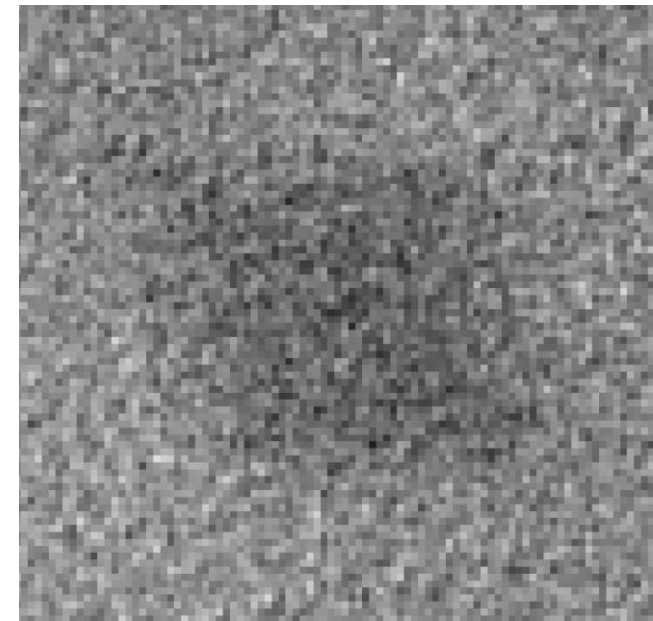


Frame Averaging 4

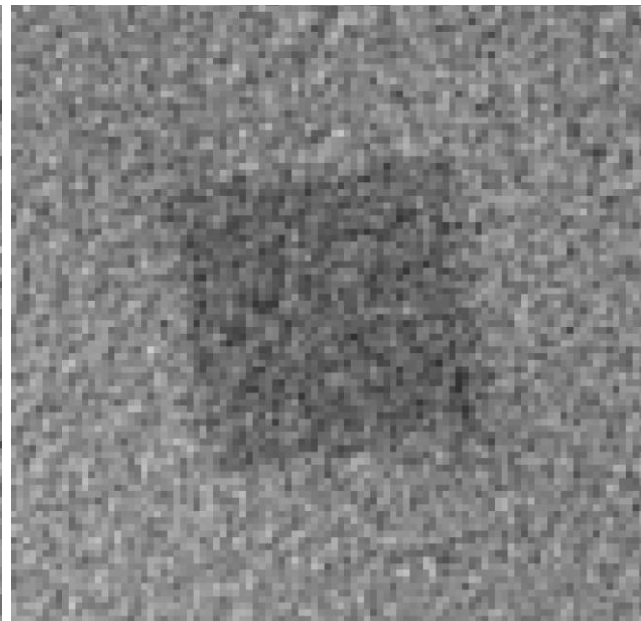


Frame Averaging 8

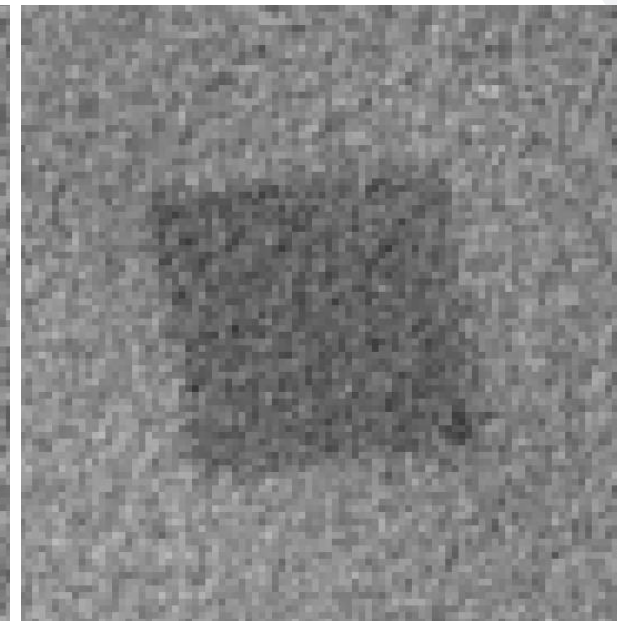
Signal to noise ratio comparisons



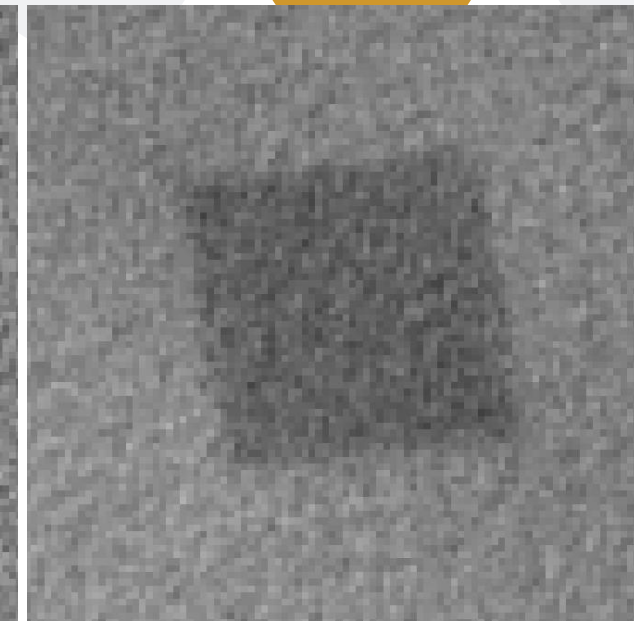
Frame Averaging 1



Frame Averaging 2



Frame Averaging 4



Frame Averaging 8

Metrology-Grade Investigation



How much time can you afford?

Thank you

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