



# Plastic Optical Fiber response for GEPOF technical feasibility

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# Supporters

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- Philippe Bolle (Skylaneoptics)
- 曹质文 / Mike Cao (Dongguan ipt Industrial Co.,LTD.)
- John Lambkin (Firecomms)
- Hugh Hennessy (Firecomms)
- Josef Faller (Homefibre)
- Manabu Kagami (Toyota R&D Labs)
- Bas Huiszoon (Genexis)
- Oscar Rechou (Casacom)
- Naoshi Serizawa (Yazaki)
- Thomas Lichtenegger (Avago Tech)

# Agenda

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- Objectives
- Measurement setup
- POF magnitude response

# Disclaimer

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- Technical characteristics provided in this presentation are limited to those directly affecting the optical link budget and, therefore, the Shannon's capacity analysis
- Other characteristics, like the ones related to the manufacturing processes, chemical composition of the core, cladding and jacket, tensile strengths, mechanical reliability, etc. are intentionally left outside of the scope of this presentation

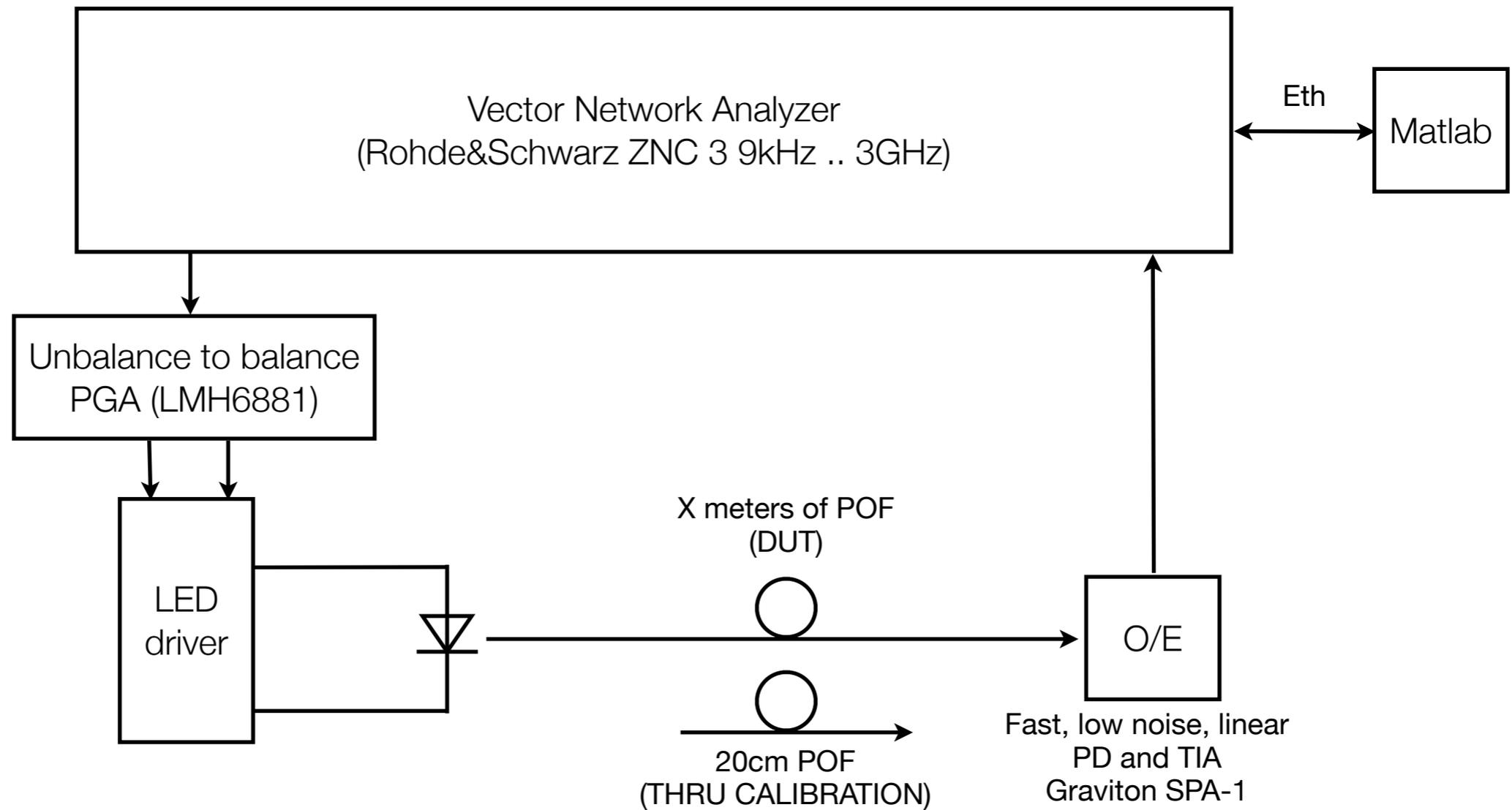
# Objectives

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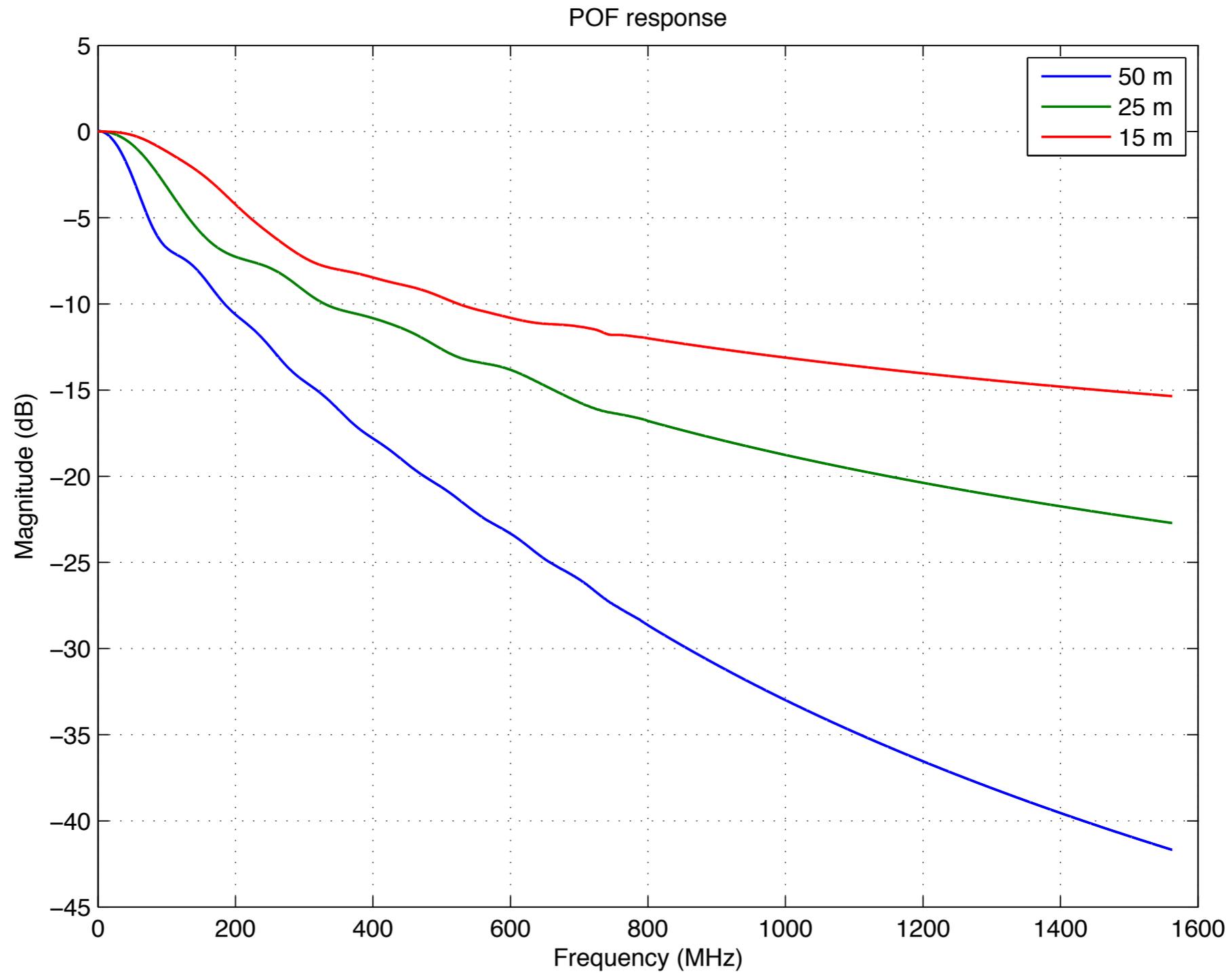


- To present laboratory measurements of POF response for different link lengths, where the light source is a red LED with almost EMD launching condition
- The POF part selected for characterization is Mitsubishi Rayon Eska GH4001 (SI-POF NA 0.5), because it is representative of the current harness used in MOST150 POF
- In addition, similar fiber with different jacket (not affecting optical performance) is the most widely used today in the consumer market
- Attenuation is not reported in this presentation, so the magnitude is normalized at DC
- The results presented here will be used for Shannon's capacity analysis in [perezaranda\_01\_0514\_shannoncap]

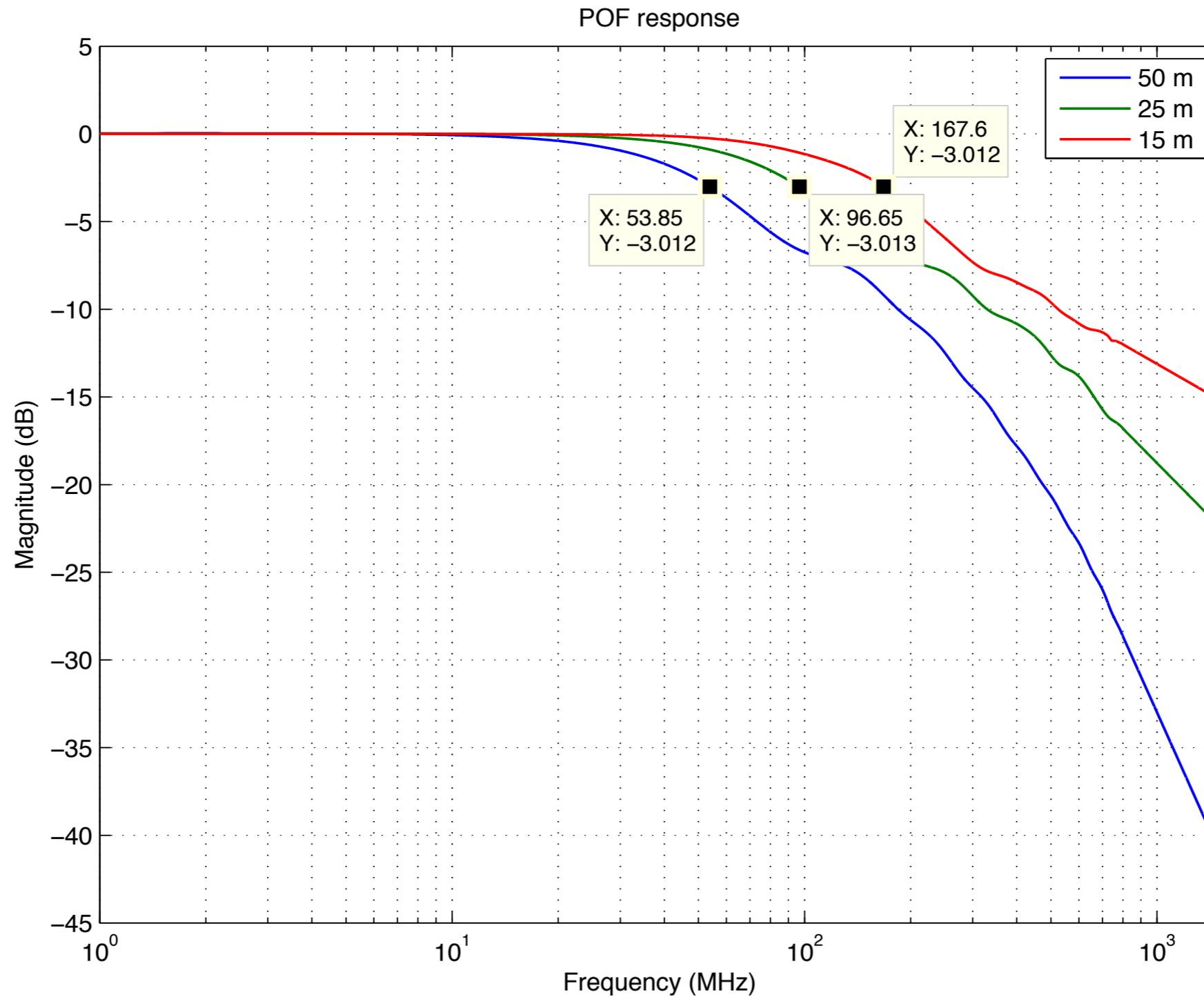
# Measurement setup



# POF magnitude response



# POF magnitude response





Questions?