# Scintillating Fiber Analysis

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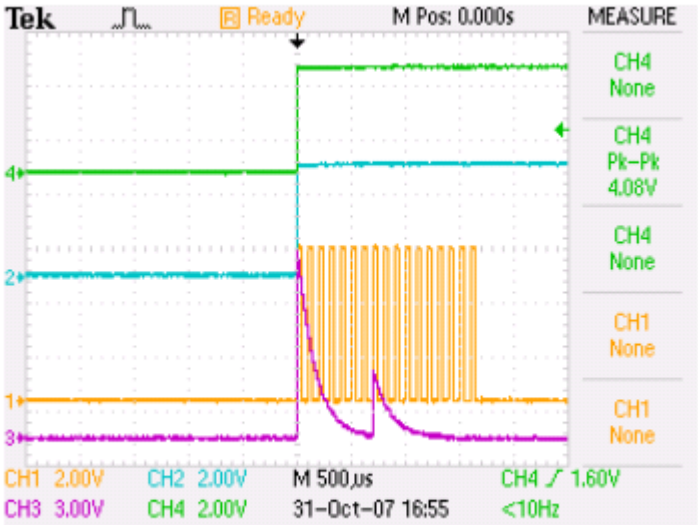
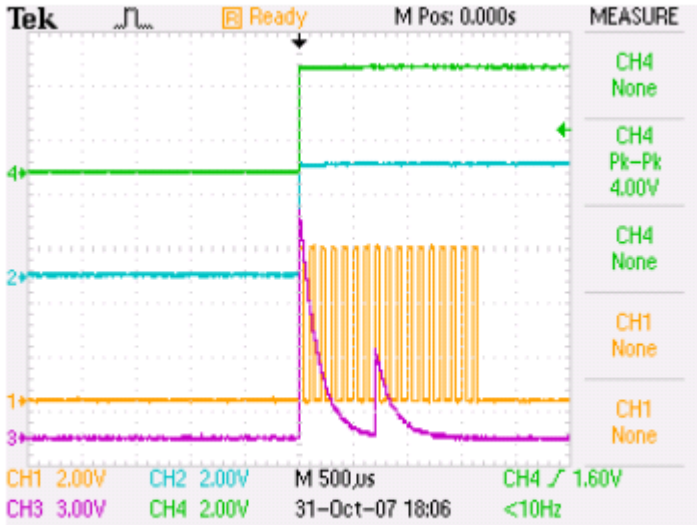



**Shot 8036**
**14 GeV**
**dt = 700µs**
**15Tp + 5Tp**
**0T**
**Target Out**

**Shot 8042**
**14GeV**
**dt = 700µs**
**15Tp + 5Tp**
**7T**
**Target Out**

# Analysis of 8036

No Beam Current Transformer

Integrated pulse heights

Pump 10.44V – $(-0.8 \times 10^{-2})$V = 10.45V

Probe 3.72V – $(1.2 \times 10^{-1})$V = 3.60V

Ratio:

Pump/Probe = 2.90 (3.2% difference from 3)

# Analysis of 8042

Integrated SF pulse heights

Pump 12.60V – (-0.8 x $10^{-2}$)V = 12.61V

Probe 4.92V – (1.9 x $10^{-1}$)V = 4.73V

Current Transformer

Pump 706003 (au)

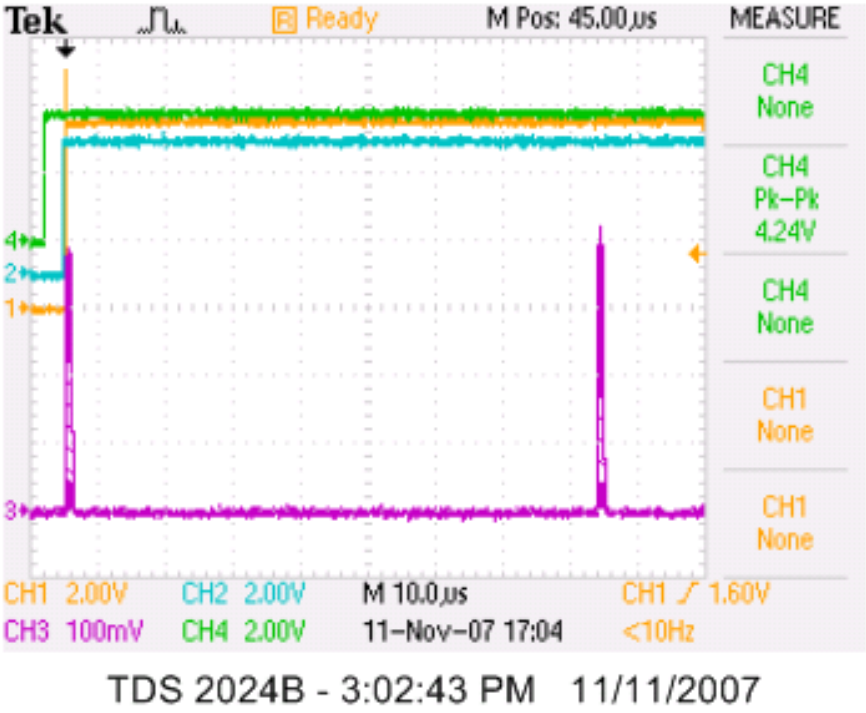
Probe 232730 (au)

Ratios:

Beam Current 3.03

SF 2.67 → 13.6% difference

# Shot 17011




14 GeV

dt = 80µs

4Tp + 4Tp

7T

Target In

# Analysis of 17011

Integrated SF pulse areas

Pump 172.4 x $10^{-9}$ V-s

Probe 175.6 x $10^{-9}$ V-s

Current Transformer

Pump 187829 (au)

Probe 196504 (au)

Ratios:

Beam Current 0.956

SF 0.984 → 2.9% difference