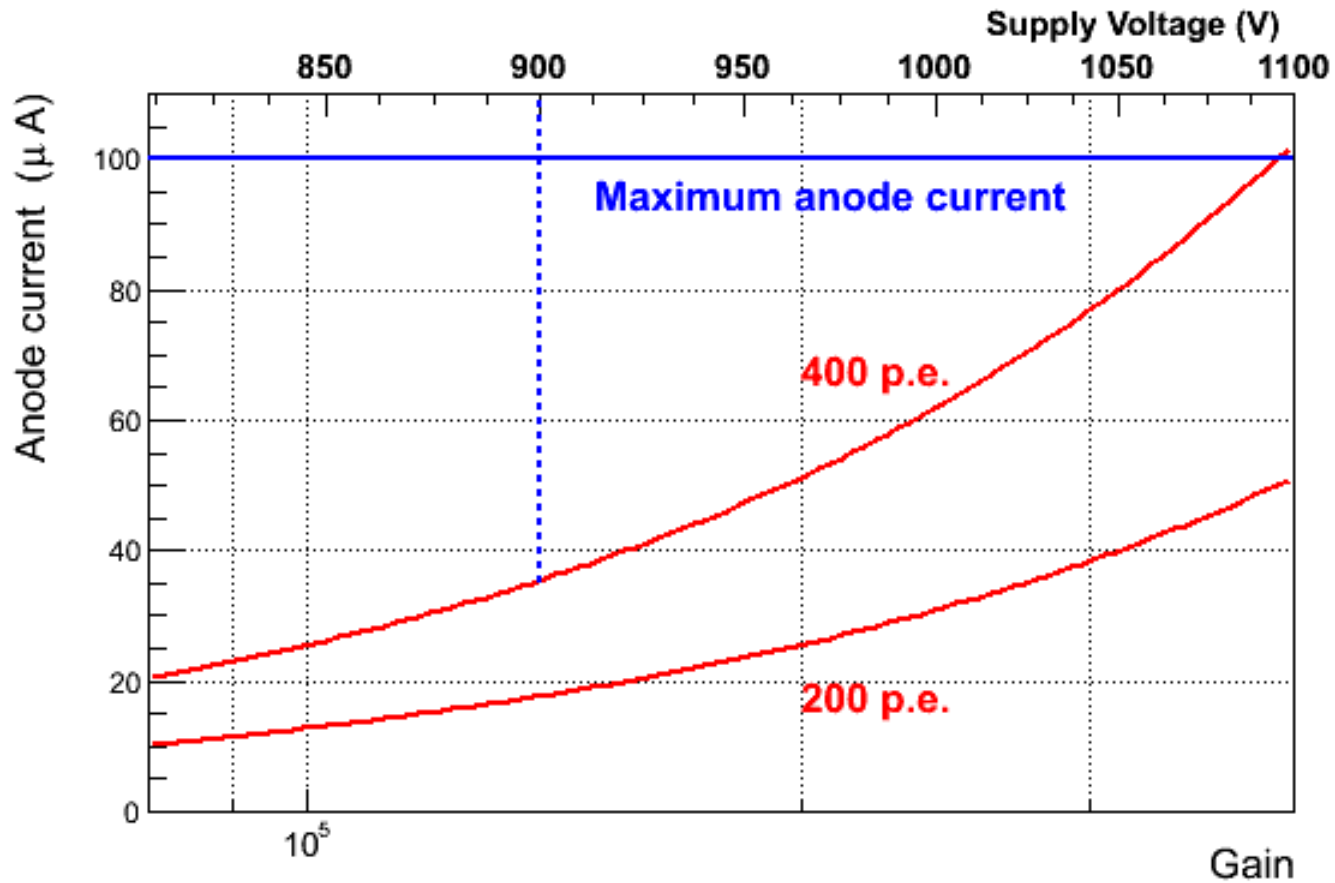


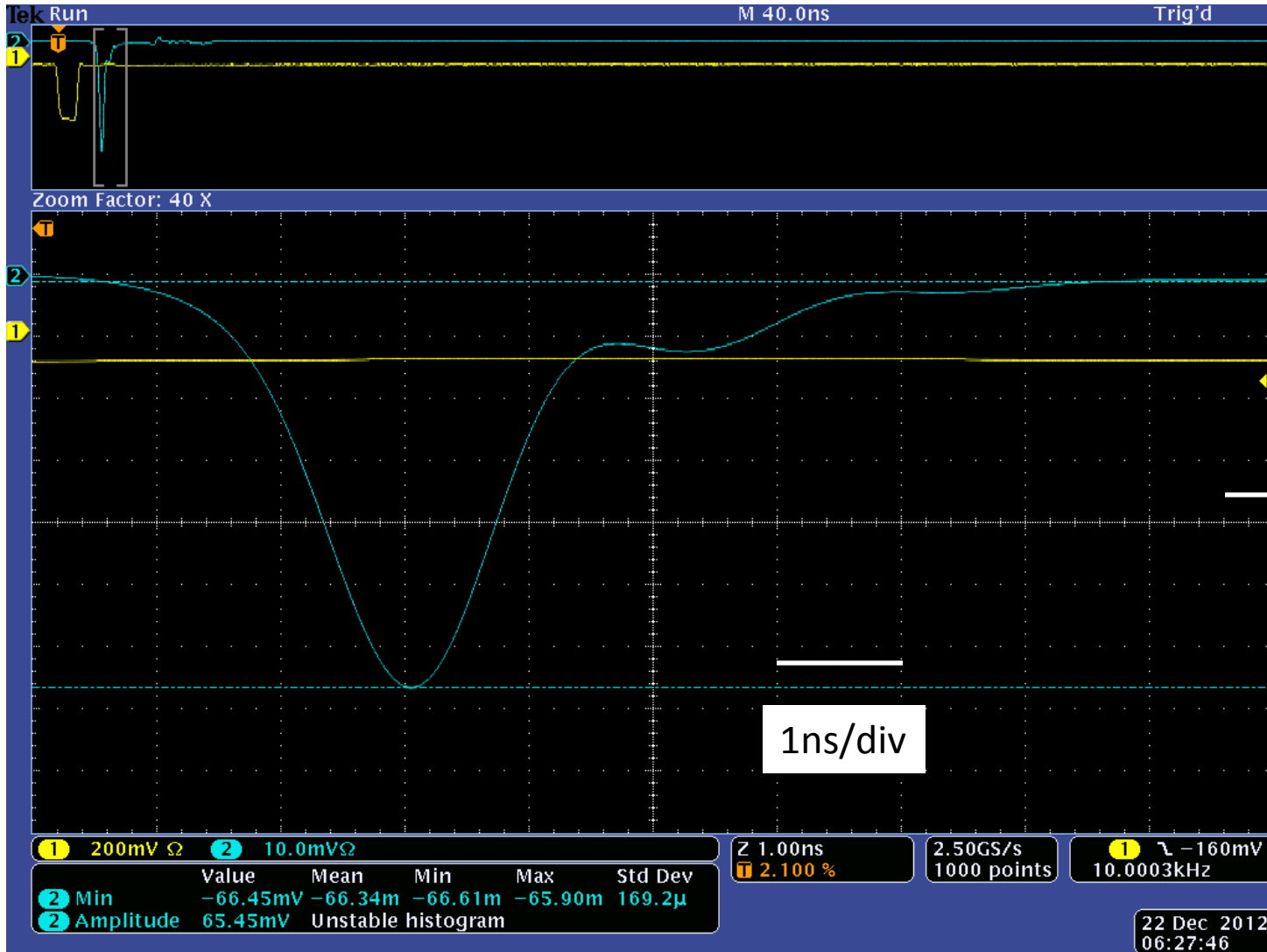
# High rate performance of H10580 PMT assembly

# Specifications



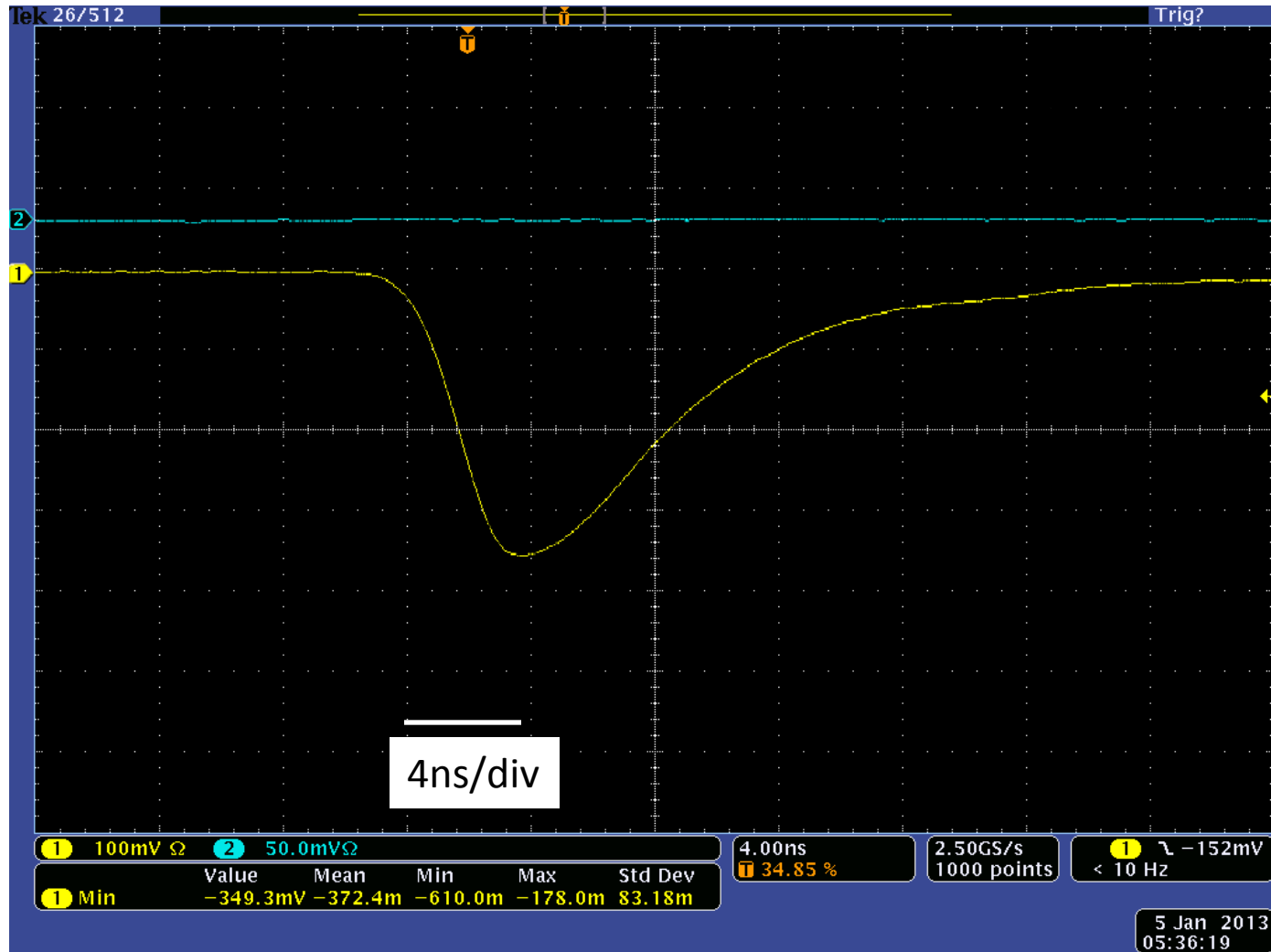
# Pulse Shapes

Laser



# Pulse Shapes

Cosmics

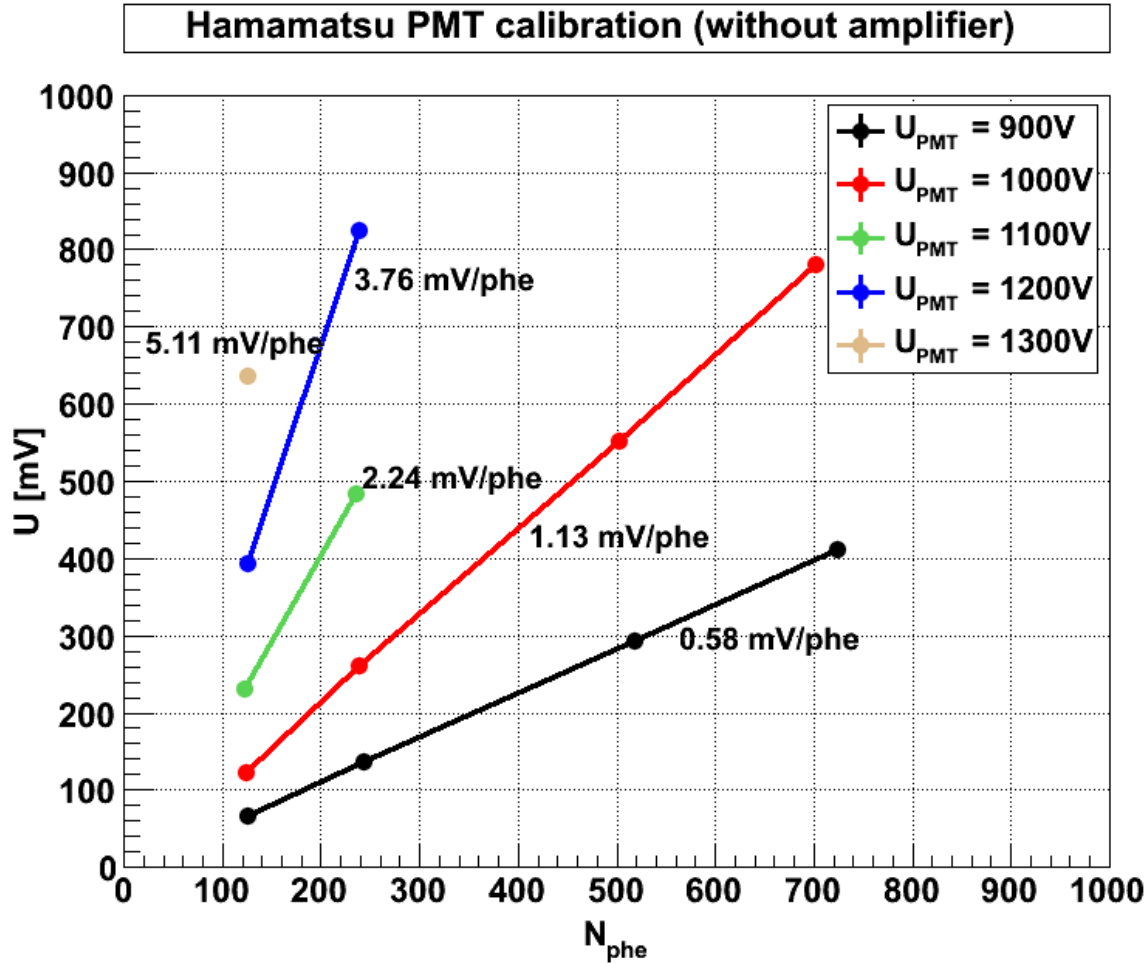


$$A_{\max}(\text{Laser}) / A_{\max}(\text{Cosm}) \sim 4$$

# Calibration

Use FADC-250

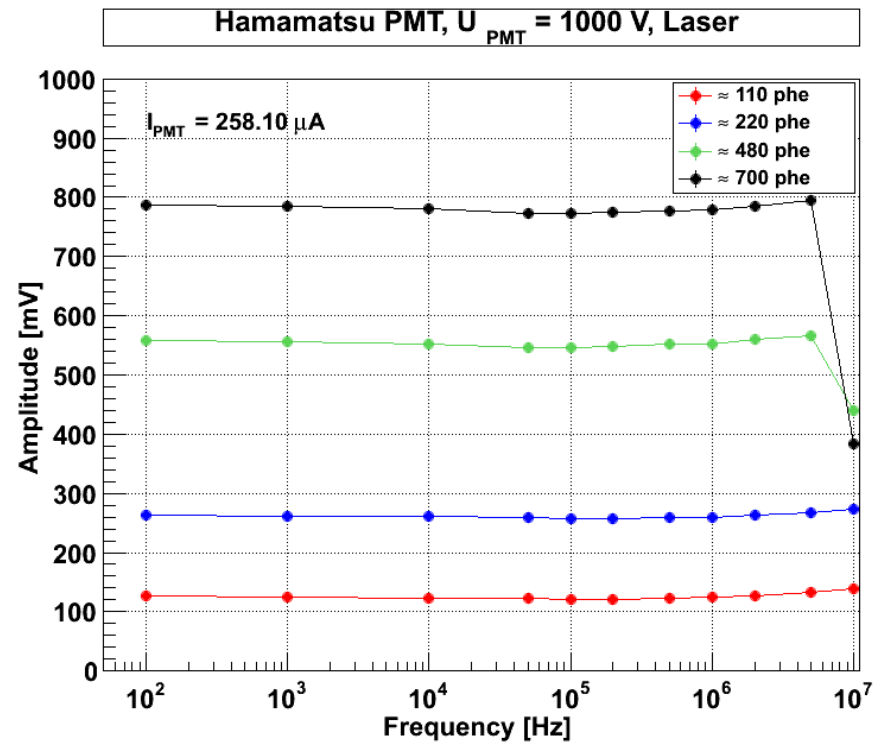
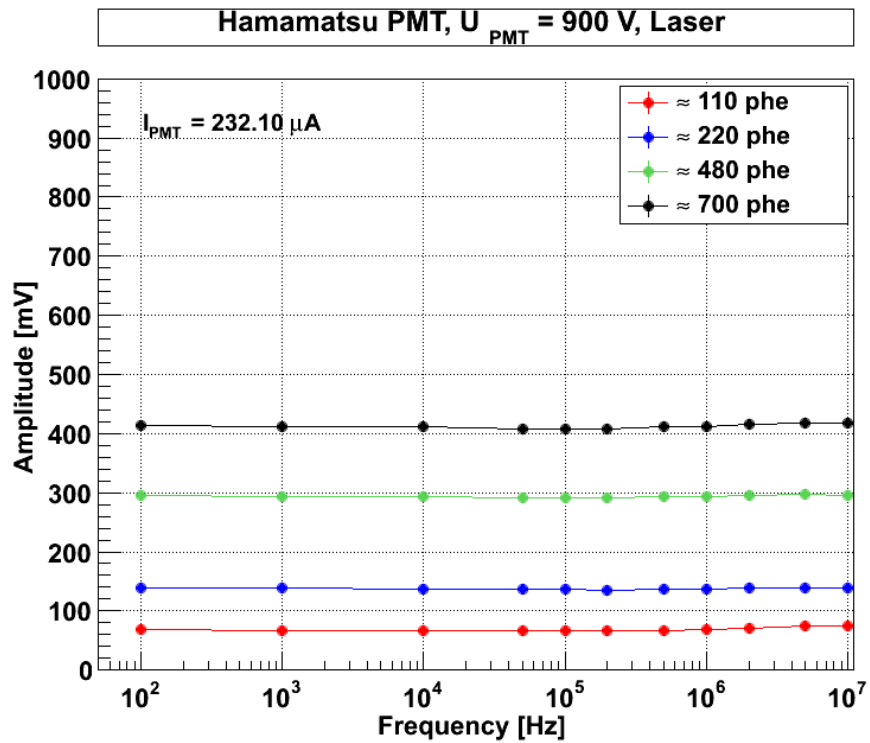
Determine single photoelectron peak



Amplitude from laser

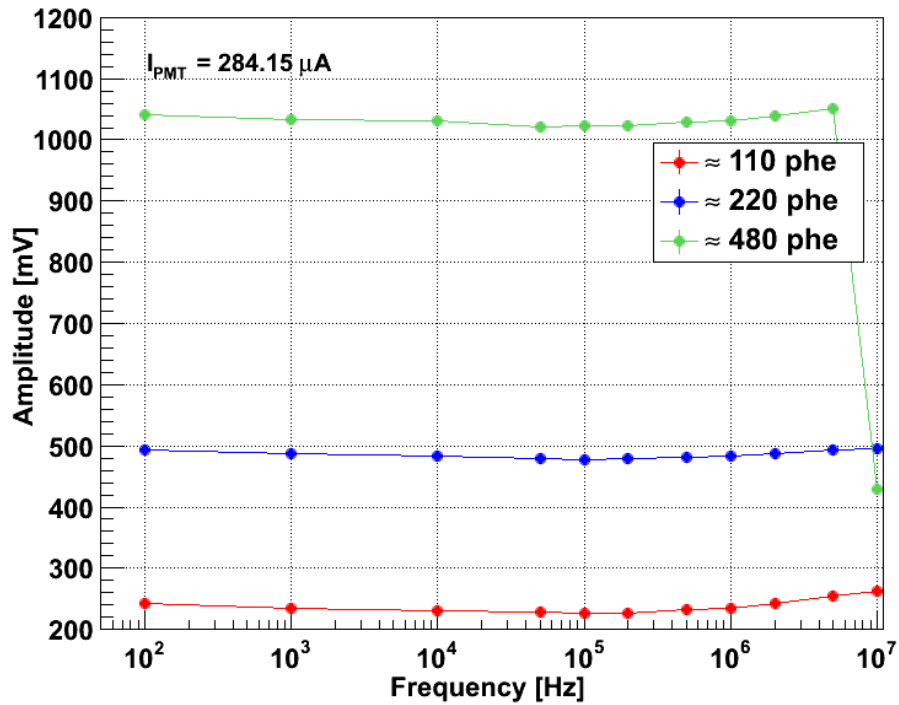
Amplitude from scint  
~ 4 times smaller

# Rate Dependence

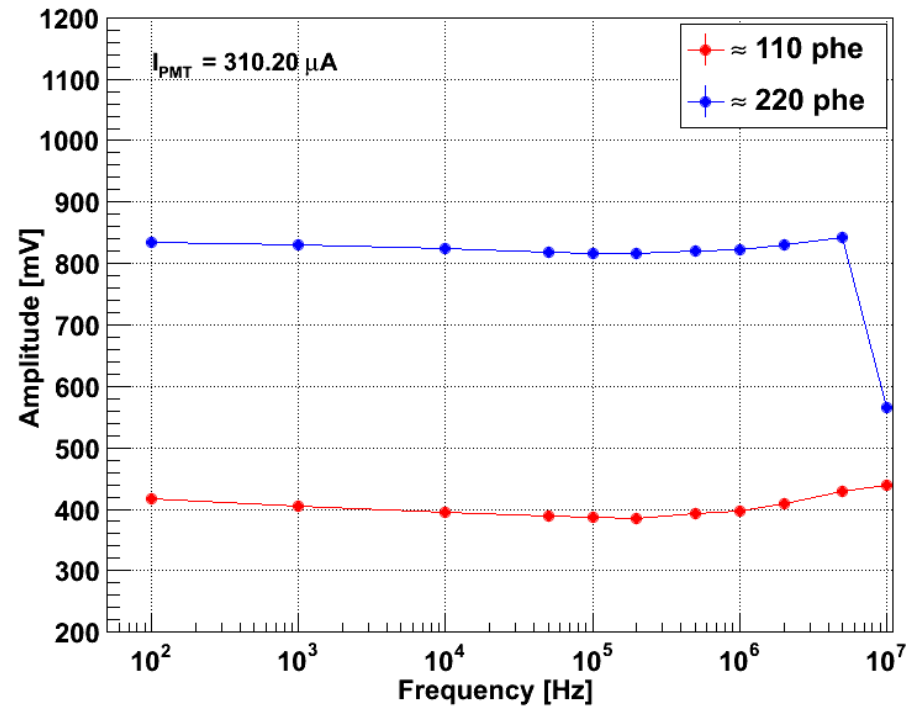


# Rate Dependence

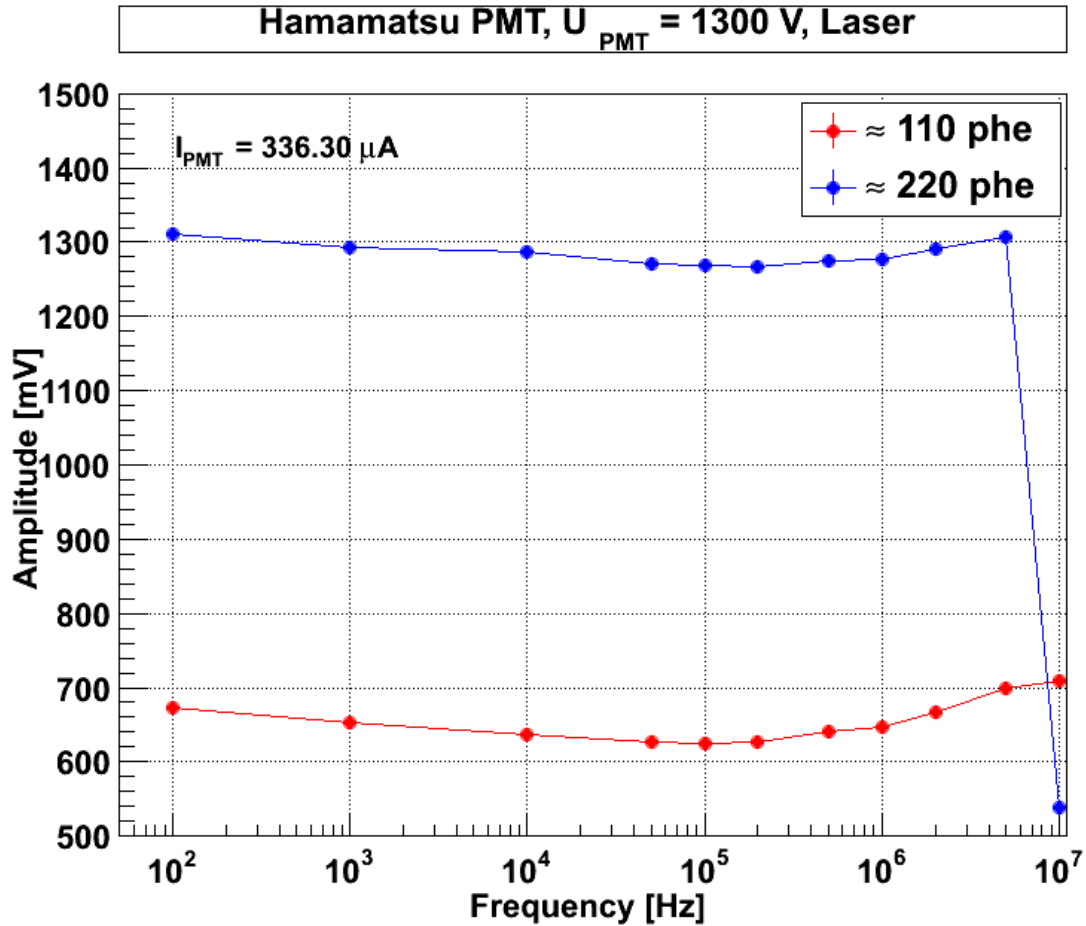
Hamamatsu PMT,  $U_{\text{PMT}} = 1100 \text{ V}$ , Laser



Hamamatsu PMT,  $U_{\text{PMT}} = 1200 \text{ V}$ , Laser

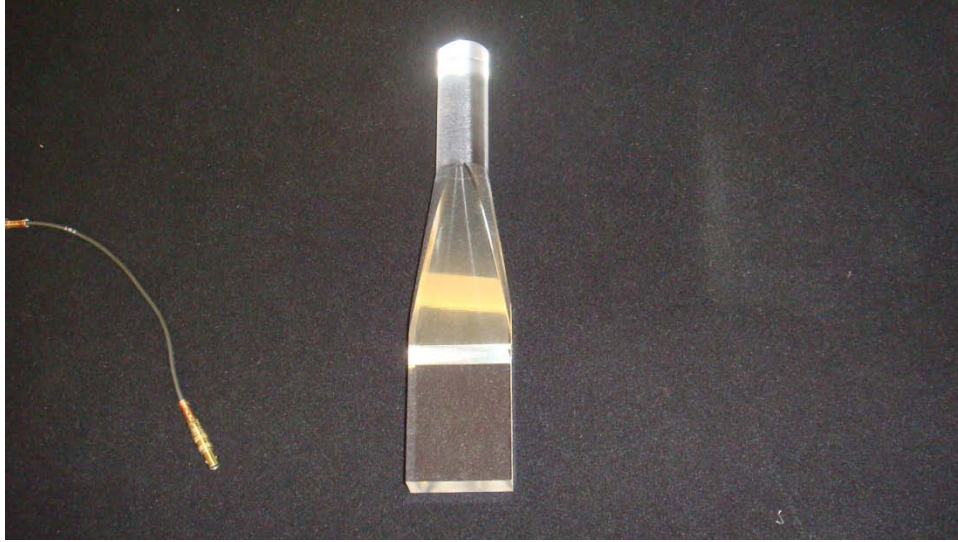


# Rate Dependence





# Estimates for NPE



~1000 p.e. for 4 cm wide and 2.5 cm thick scint

Expect 250 - 400 p.e. for 6 cm thick fixed-array counters

