

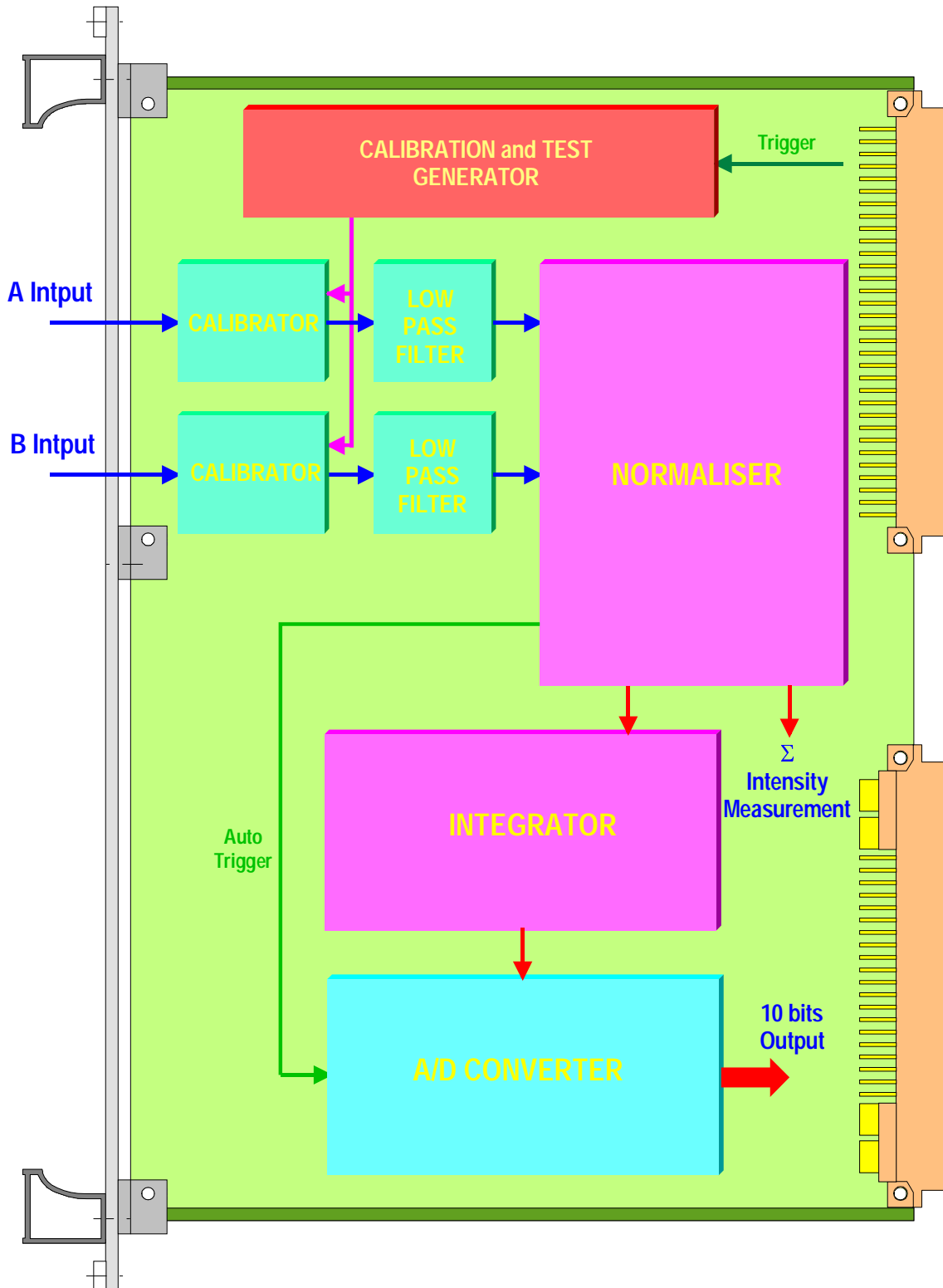
Normaliseur à Large Bande pour la Mesure de la Position des Faisceaux du LHC

Wide Band Time Normaliser (WBTN)

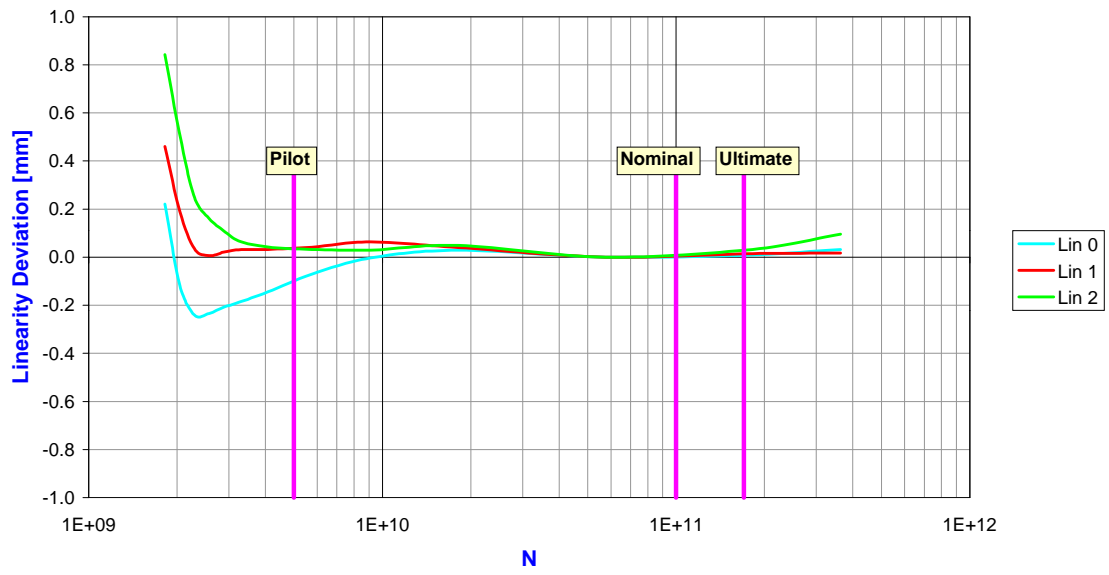
Mesure comparée des caractéristiques des trois prototypes de la 2^e génération

- Description de la carte WBTN
- Linéarité de la position centrale en fonction de l'intensité du faisceau et du temps entre les paquets (89 μ s et 25ns)
- Influence du bruit sur la position centrale en fonction de l'intensité du faisceau
- Comportement transitoire des 20 premiers paquets
- Linéarité sur un axe en fonction de la position
- Linéarité sur un axe en fonction de la position avec linéarisation de la fonction de transfert du pick-up
- Évolution vers le futur

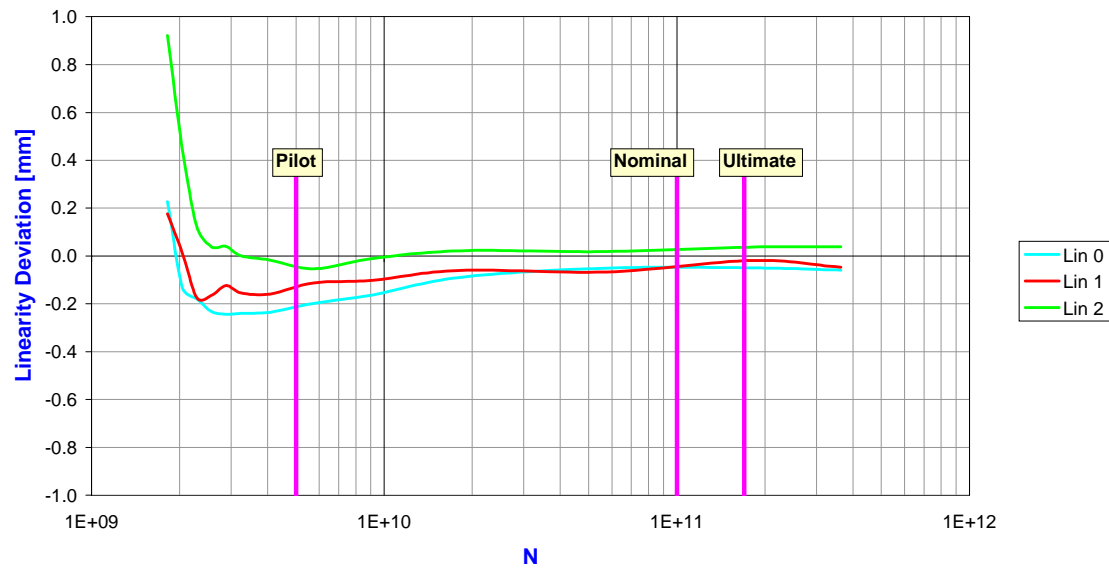
WIDE BAND TIME NORMALISER



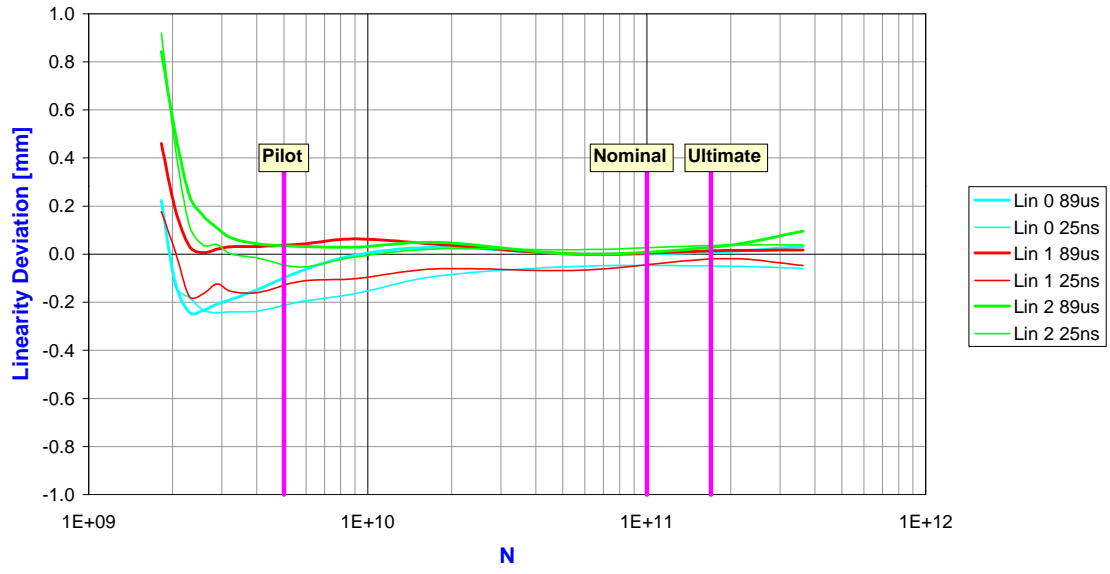
WBTN - 2nd Prototype
Linearity versus Beam Intensity (Period = 89 μ s)



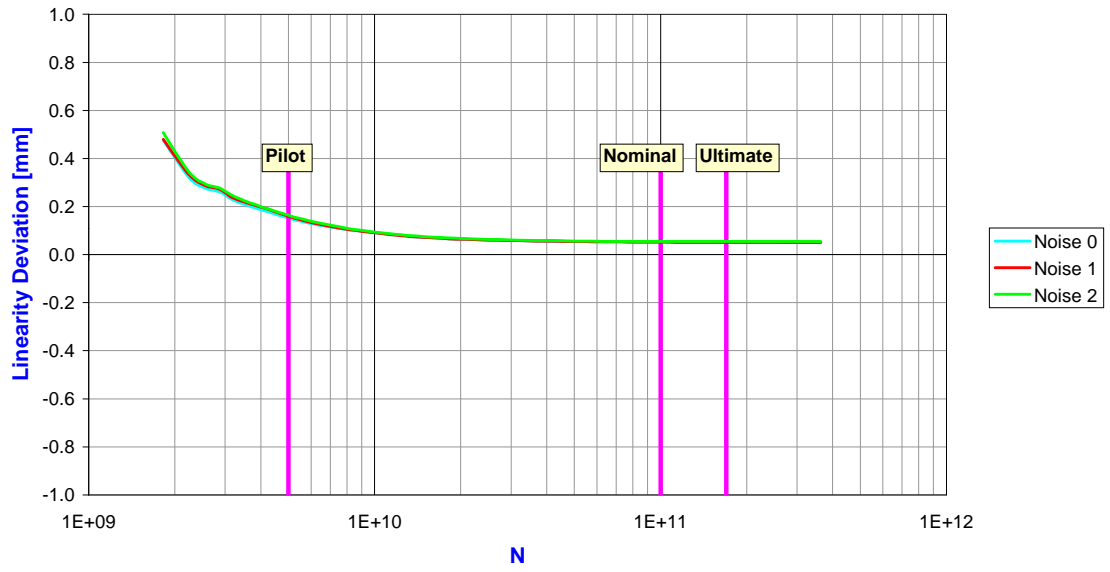
WBTN - 2nd Prototype
Linearity versus Beam Intensity (Period = 25 ns)



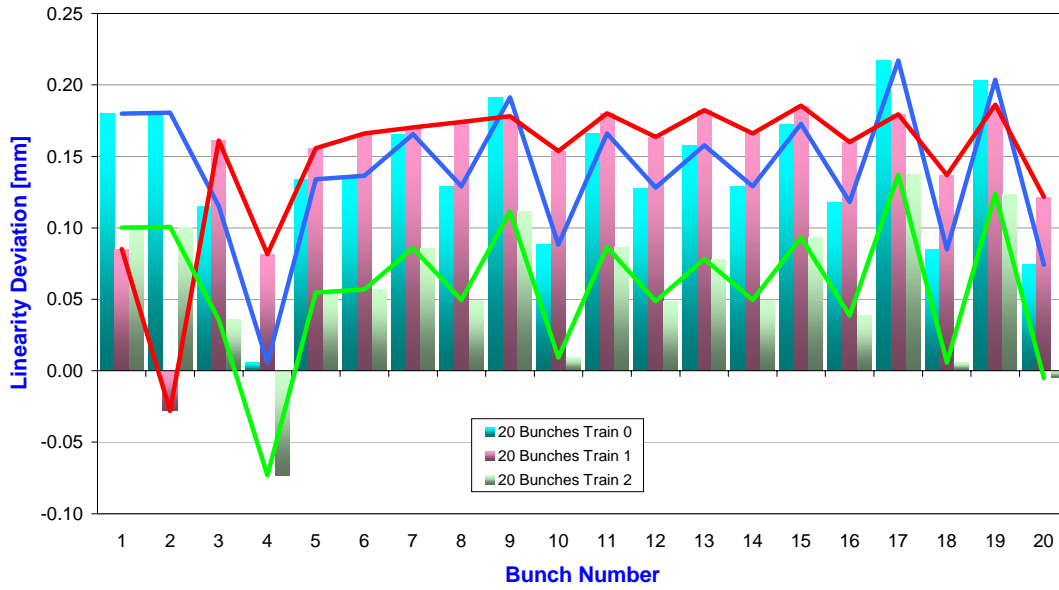
WBTN - 2nd Prototype Linearity versus Beam Intensity



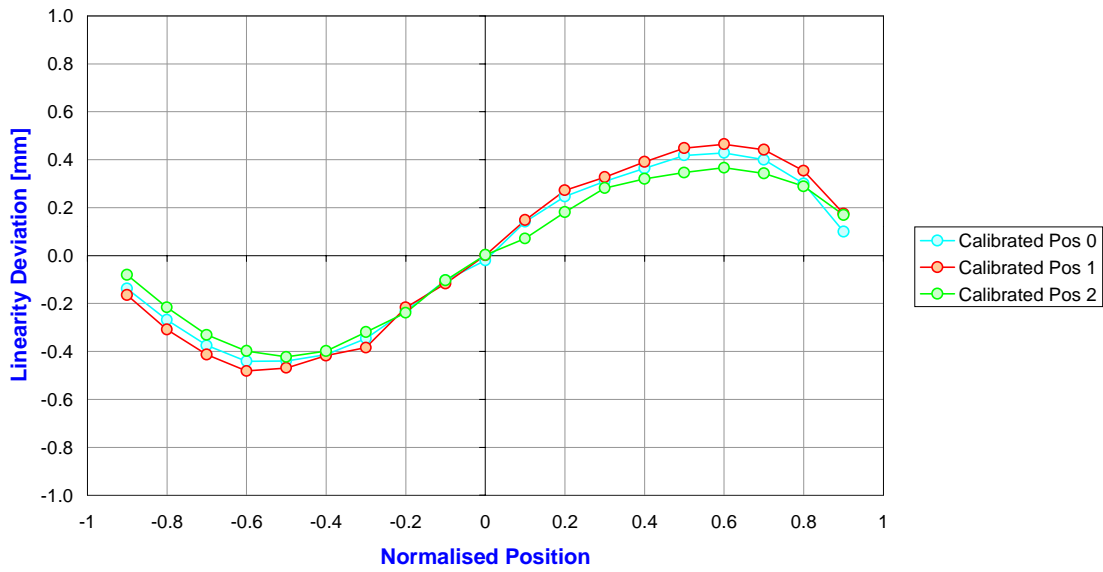
WBTN - 2nd Prototype RMS Noise versus Beam Intensity



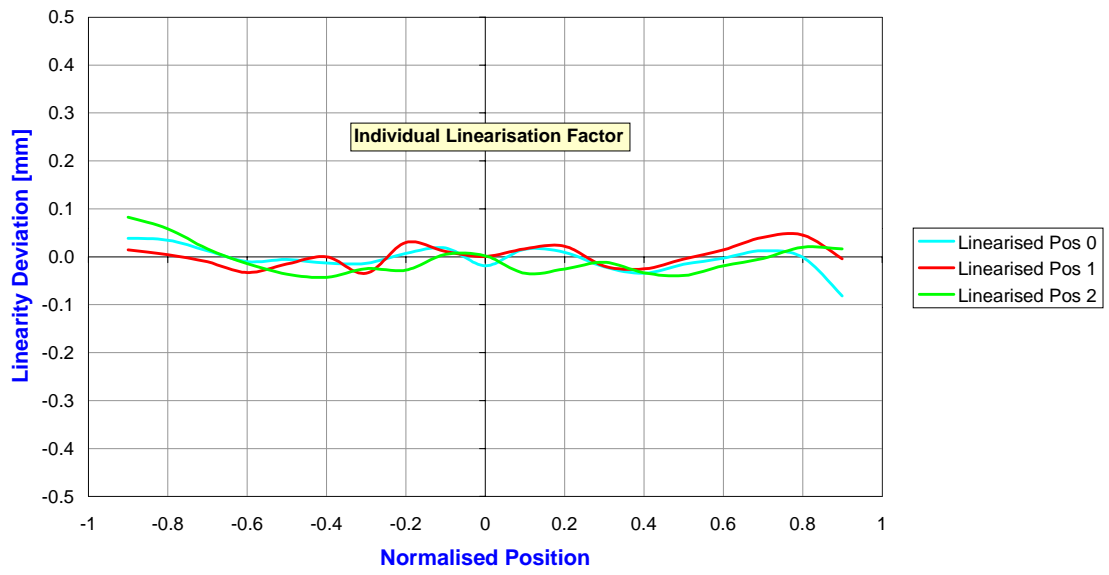
WBTN - 2nd Prototype
20 Bunches Train Position versus Continuous Beam



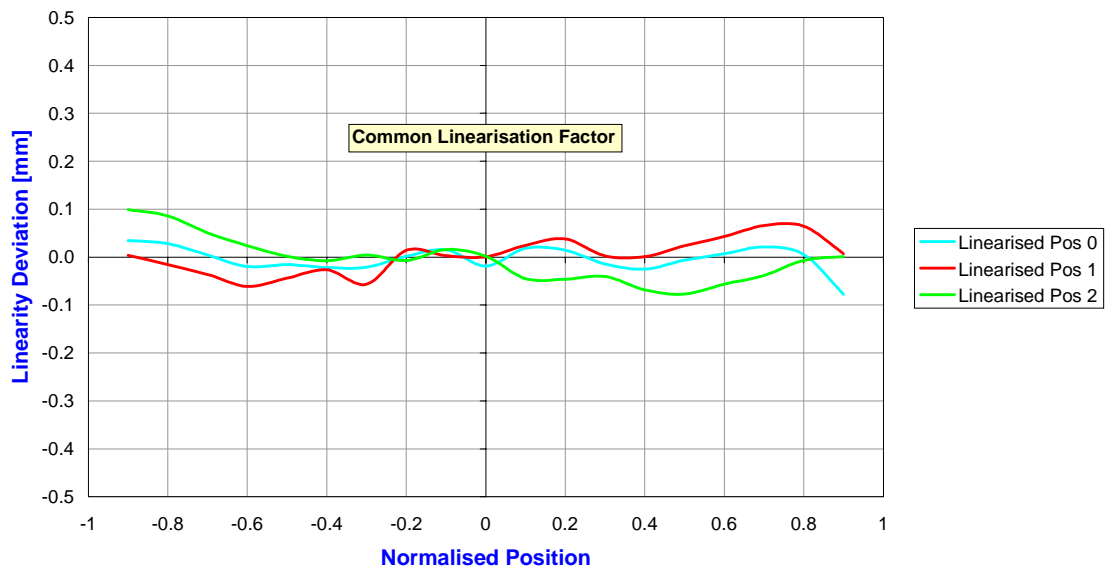
WBTN - 2nd Prototype
Linearity versus Position (Period = 89 μ s)



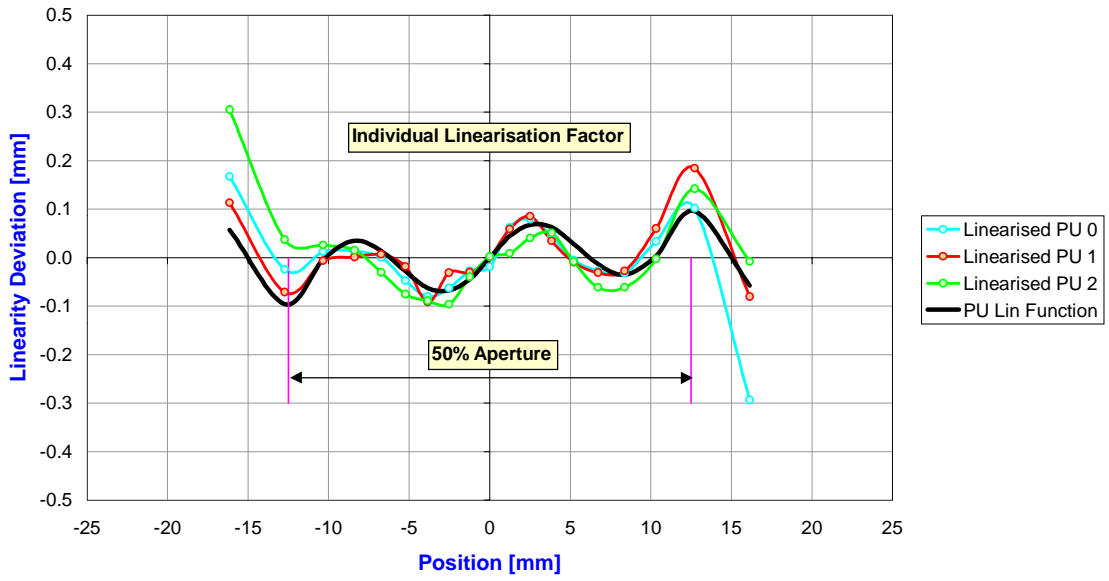
WBTN - 2nd Prototype
Linearity versus Position (Period = 89 μ s)



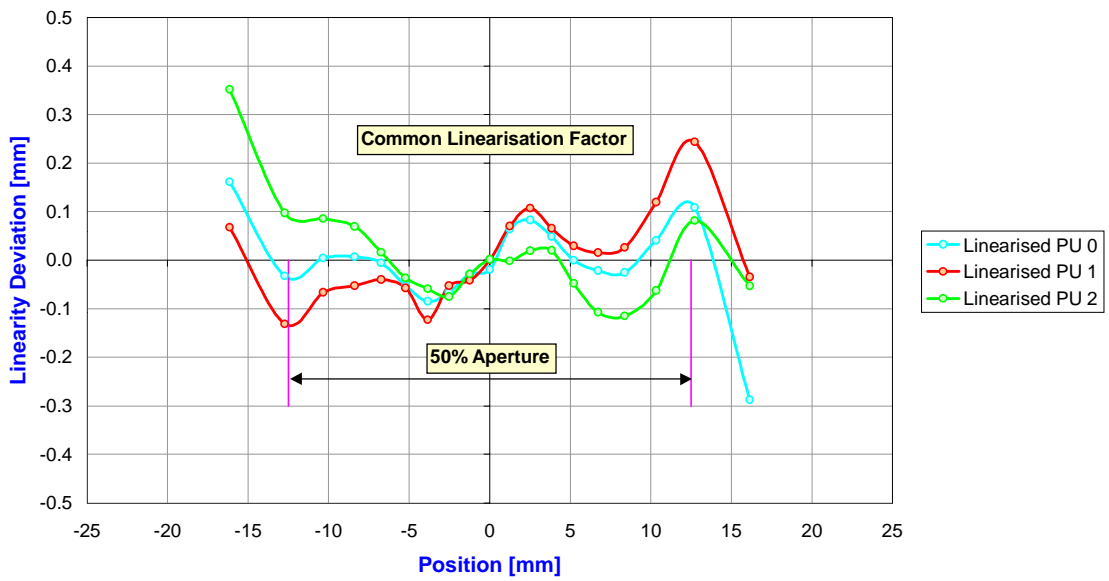
WBTN - 2nd Prototype
Linearity versus Position (Period = 89 μ s)



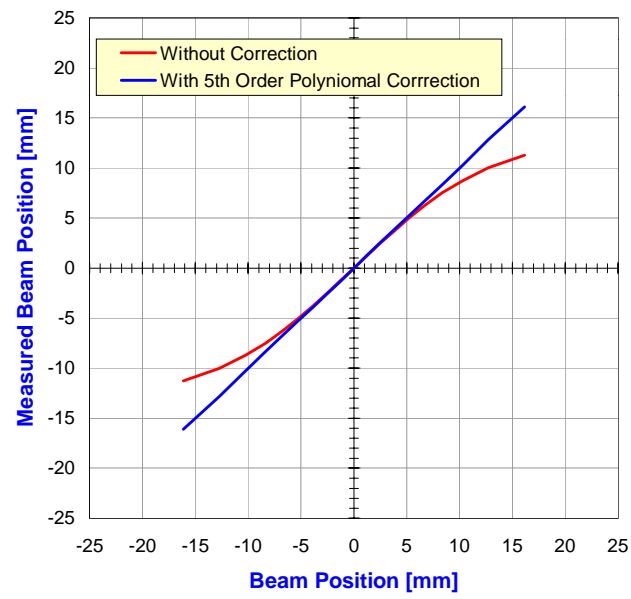
WBTN - 2nd Prototype
Linearity versus Position (Period = 89 μ s)



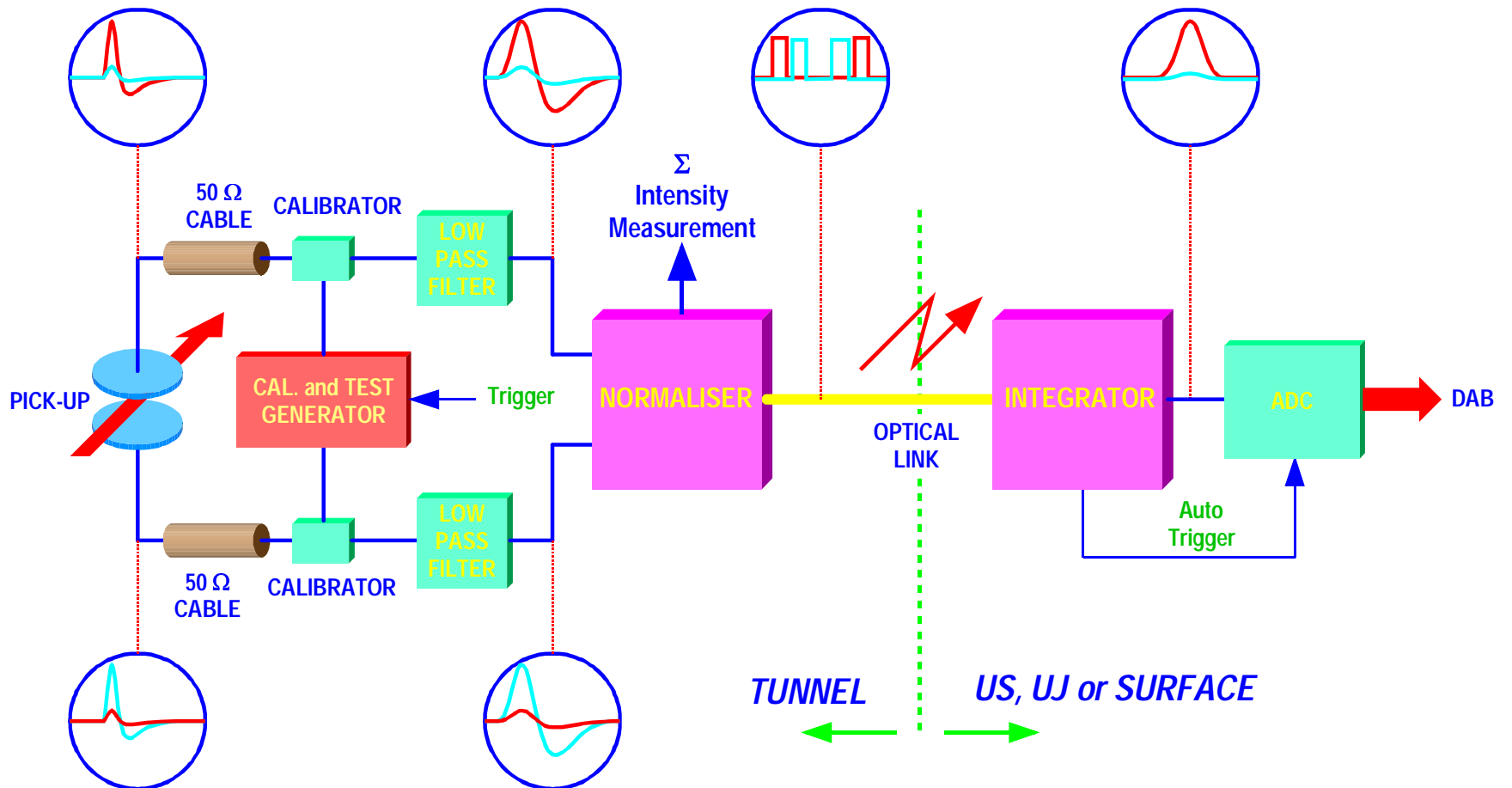
WBTN - 2nd Prototype
Linearity versus Position (Period = 89 μ s)

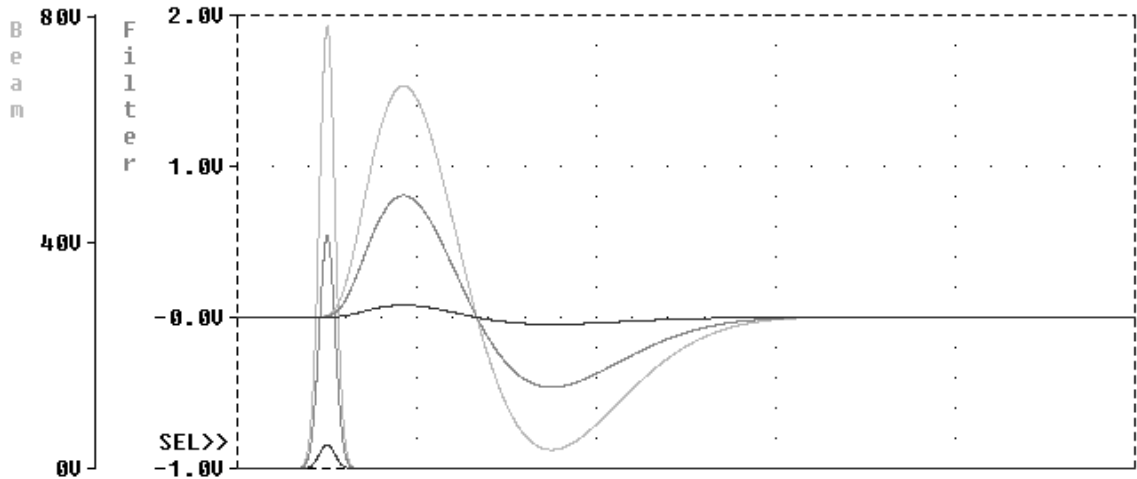


Pick-Up Transfert Function

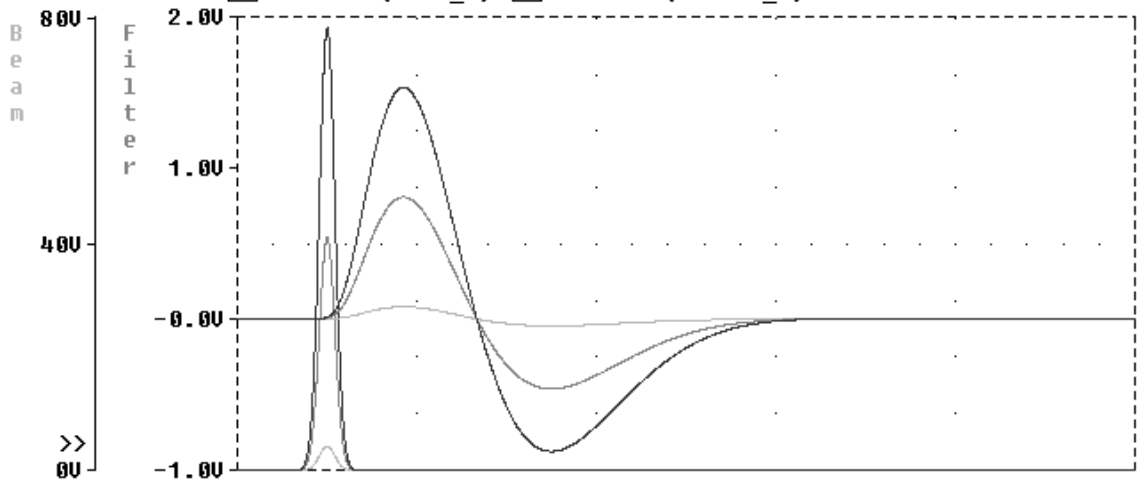


'LHC' BEAM POSITION MEASUREMENT

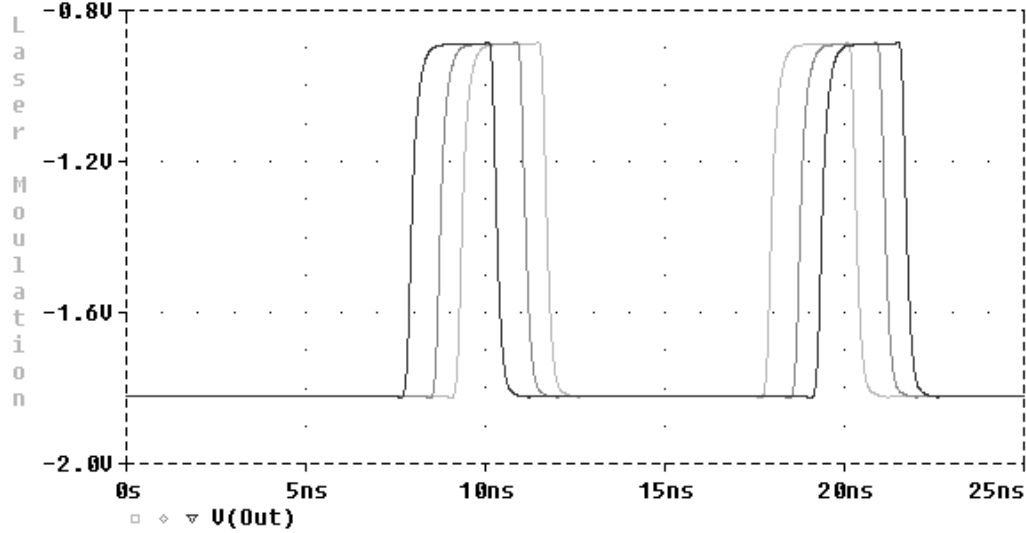




1 □ ◇ ▽ U(Beam_L) 2 □ ◆ ▽ U(Filter_L)



1 □ ◇ ▽ U(Beam_R) 2 □ ◆ ▽ U(Filter_R)



Time