Pbar Note 467

August 22, 1986

RELATIVE $\bar{p}$ YIELD FROM TUNGSTEN, COPPER AND ALUMINUM TARGETS

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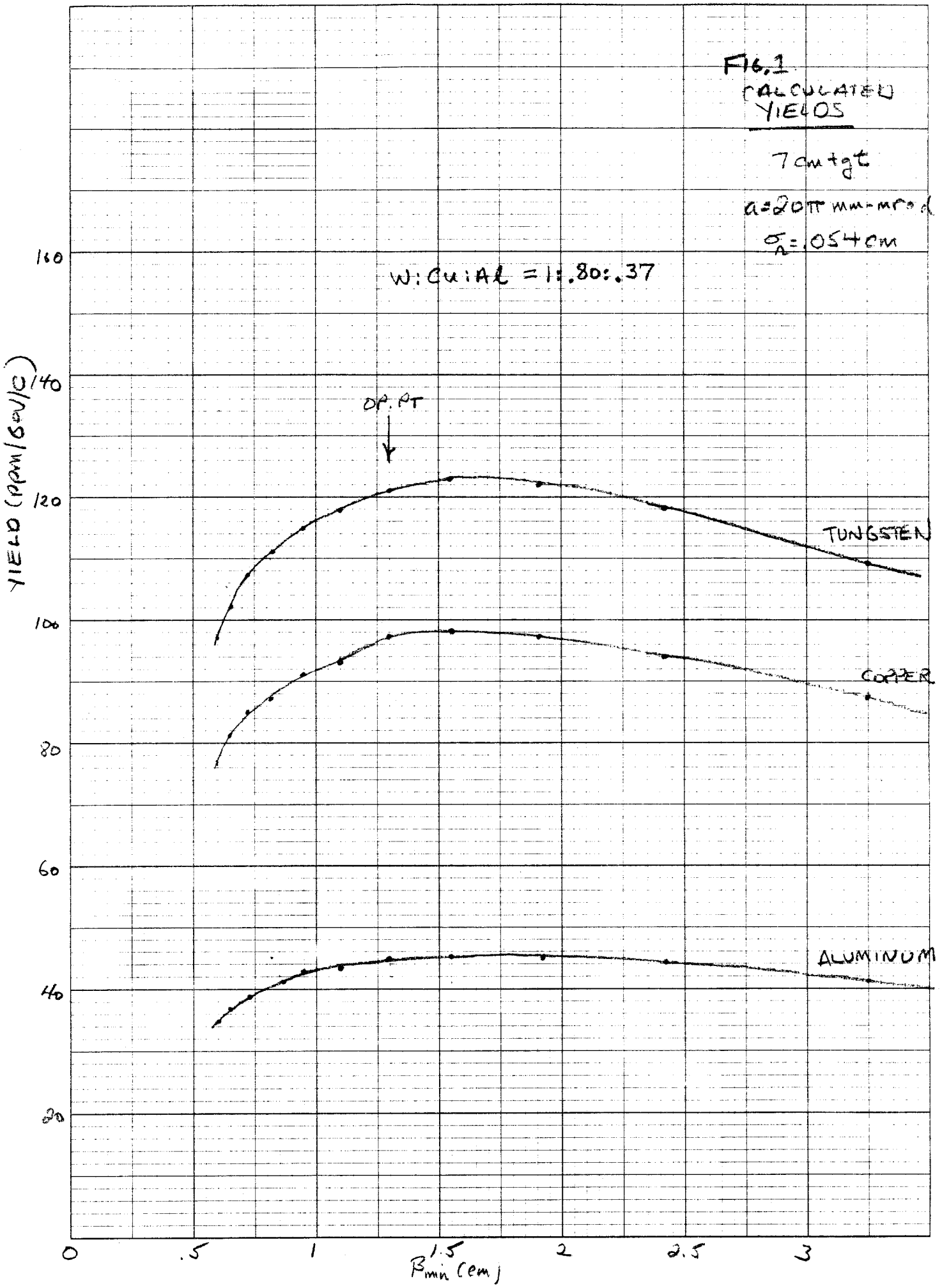
Figure 1 shows the calibrated $\bar{p}$ yields for 3 different target materials, vs βmin (aspect ratio at the target cuter) The calibration was done using the technique described in $\bar{p}$ note 449. The ratio of the yields at the TeV I design operating point, for a 20π acceptance, is W:Cu:Aℓ = 1:0.80:0.37.

Fig. 2 is a xerox of a hardcopy of data from the last commissioning run; it shows a scan of ISPECW (proportional to the circulating beam in the Debuncher, and hence the $\bar{p}$ yield into a fixed acceptance) vs. the height of the target stack. The target height correlates with different target materials, as the labelling on top indicates Averaging over the discs of various materials, we find for the experimental relative yields.

W:Cu:Aℓ=1:0.93:0.41



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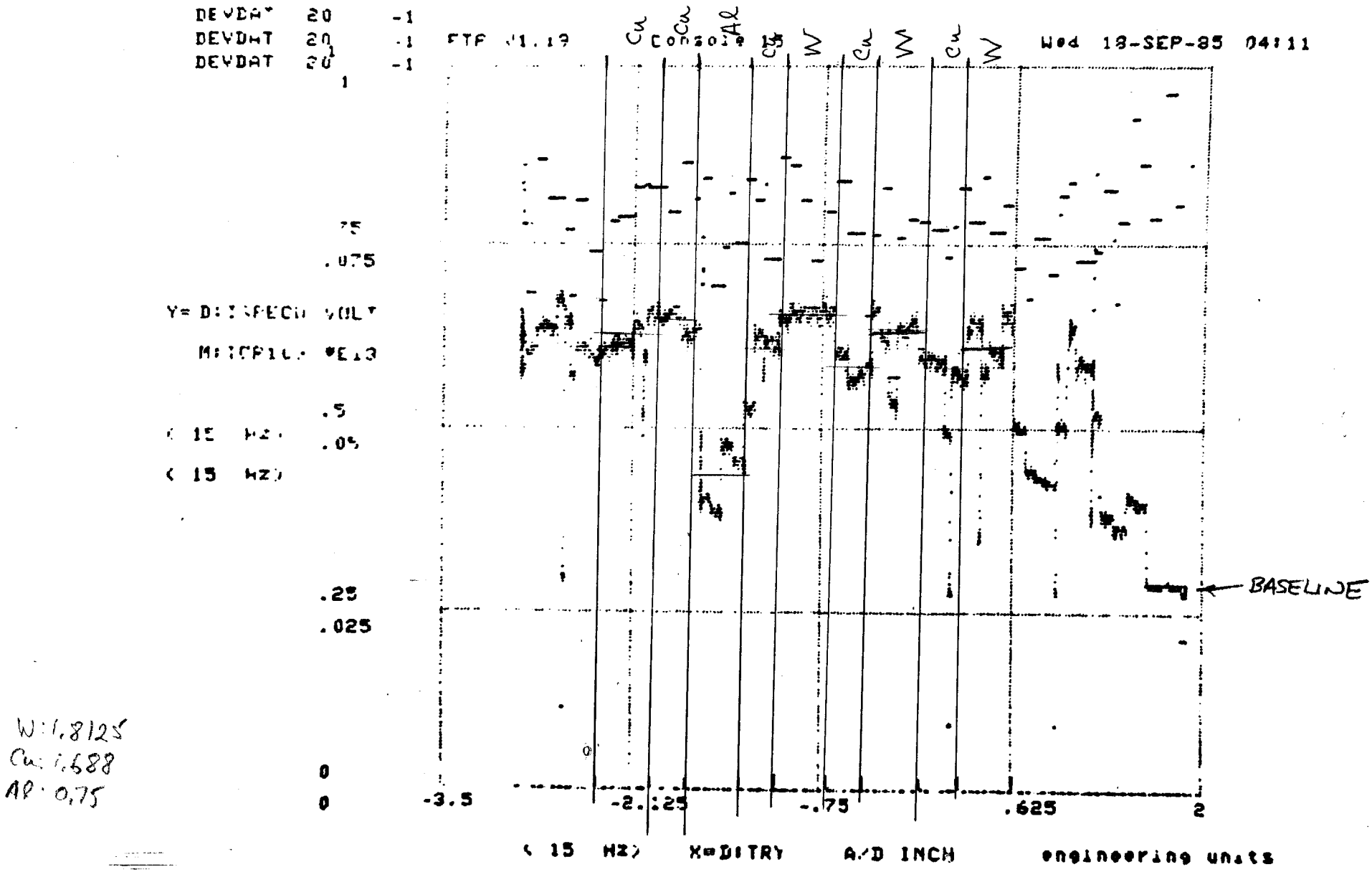
K&E 10 X 10 TO THE INCH • 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.

FIG 2. MEASURED YIELDS

W : Cu : Al = 1 : .93 : .41



W: 1.8125
Cu: 1.688
Al: 0.75