



Supplementary Figure 1. Spin polarization across a channel oriented along $[\bar{1}12]$.

B_{ext} scans as a function of position near the edges of the channel of a device

fabricated along $[\bar{1}12]$ with $w = 60 \mu\text{m}$ and $l = 306 \mu\text{m}$ for $V_p = 2 \text{ V}$. Amplitude A_0

and reflectivity R are also plotted.