The following table show desired ADC channel for each layer in HAND due to 1 GeV/c protons

Layer	proton Ek_in [MeV]	Energy deposit in MeVee equivalent	ADC channel
Veto	480	11	660
1	469	27	1620
2	442	28.5	1710
3	413	29	1740
4	383	30	1800
5	353	32	1920
6	320	33	1980

Deposited energy in MeVee were calculated using the formula:

$$T_E = -8 \cdot e^{-0.1 \cdot T_p^{0.9}} + 0.95 \cdot T_p$$

The procedure to calculate the deposited energy in MeVee is following:

1) calculate the T_e when protons deposit all their kinetic energy, Ek_in (in MeV) into the scintillator.
2) calculate the T_e when protons for the next layer deposit all their Ek_in .
3) take the difference between the 1. and 2.

ADC channel was calculated based on the assumption that the channel 300 is equivalent to 5 MeVee energy deposit.

For the punch through protons (120 MeV kinetic energy) the desired channel is 6360 for all layers.