Neolith-s veto gain check

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Abstract

By a gain check of the Neolith-s veto scintillators, high voltage values have been determined for the individual PMTs, which realize a height of -30 mV for the observed ⁶⁰Co compton edge signals. The results are listed.

1 Results

Gain check results are listed in Table 1. In the table, physical locations of the PMTs in the Neolith-s setup are also indicated.

Table 1: HV values of PMTs of veto scintillators, which lead to a pulse height (for the compton edge of 60 Co gamma rays) of -30 mV at the scintillator center. *D* refers to the distance of the source from the scintillator edge at which the checked PMT is located. 1U/D counter is located at the most left (high momentum) side.

Location	Counter	PMT-ID	HV (V)	Signal height (mV)		
	No.		()	D=0 cm	D=24 cm	D=48 cm
1U	1	101	-1340	-46	-30	-24
1D		201	-1350	-44	-30	-26
$2\mathrm{U}$	2	102	-1415	-57	-30	-25
2D		202	-1350	-43	-30	-21
$3\mathrm{U}$	3	103	-1290	-47	-30	-24
3D		203	-1270	-38	-30	-25
$4\mathrm{U}$	4	104	-1255	-44	-30	-22
4D		204	-1295	-51	-30	-23
$5\mathrm{U}$	5	105	-1295	-45	-30	-25
$5\mathrm{D}$		205	-1320	-50	-30	-24
$6\mathrm{U}$	6	106	-1355	-46	-30	-25
6D		206	-1305	-48	-30	-20
$7\mathrm{U}$	7	107	-1295	-48	-30	-24
7D		207	-1275	-45	-30	-24