EXP1904: Reference reaction - Developing #416

Analyzing # 397 (Открыта): Variation of the parameters

BeamDet thickness

01/17/2020 07:27 AM - Ivan Muzalevsky

Status:	Открыта	**Start date:**	01/17/2020
Priority:	Нормальный	**Due date:**	
Assignee:	Ivan Muzalevsky	**% Done:**	100%
Category:		**Estimated time:**	0.00 hour
Target version:			

Description

Vary the BeamDet thickness within a reasonable range and report the effect on position of the peak corresponding to population of the ^{9}Li g.s..

History

#1 - 01/17/2020 07:50 AM - Ivan Muzalevsky

- Description updated

#2 - 01/17/2020 08:26 AM - Ivan Muzalevsky

- Description updated

- % Done changed from 0 to 100

#3 - 01/20/2020 03:12 PM - Ivan Muzalevsky

Using the results of the issue 415, transformation of the beam det volumes into the Si equivalent (**630 micron**) was made. It turned out similar to the **644 micron** provided by M.Golovkov and S.Krupko

But if one considers that the beam detector includes only half of the second ToF volume (117.5 micron of scincillator and 3.5 micron of mylar), the effective beamDet thickness in Si equivalent is approximately **555 micron**

#4 - 01/20/2020 03:13 PM - Ivan Muzalevsky

- File be10_beamEnergy.lpp added

#5 - 04/21/2020 08:38 PM - Ivan Muzalevsky

Vary the BeamDet thickness within a reasonable range and report the effect on position of the peak corresponding to population of the ^{9}Li g.s..

BeamDet thickness [Silicon microns]	9Li g.s. position 1 Tel [MeV]	9Li g.s. position 2 Tel [MeV]	9Li g.s. position 3 Tel [MeV]	9Li g.s. position 4 Tel [MeV]	Average 9Li
644	-0.105	0.372	0.098	0.162	0.12
630	**-0.118**	**0.359**	**0.085**	**0.149**	**0.107**
570	-0.174	0.303	0.032	0.095	0.051
555	-0.188	0.289	0.018	0.081	0.037
510	-0.230	0.247	-0.024	0.059	-0.005
450	-0.287	0.19	-0.081	0.002	-0.062

#6 - 04/21/2020 08:38 PM - Ivan Muzalevsky

- Description updated

Files

be10_beamEnergy.lpp	141 KB	01/20/2020	Ivan Muzalevsky