Reviewer #1: It is a well-written instrumentation paper with logical structure and sequence. It demonstrates nicely the detailed methodical work it takes to prepare and qualify a scintillator system for a physics run. It certainly matches the criteria of publication to NIM A. The language is clear and the content is easy to follow. While reading it, questions came up only to be answered in later sections.

We thank the reviewer for his careful review and his very positive summary.

I only found minor issues with it which are presented in the order of finding and a couple of places where a more analytical description would offer clarification. I would recommend the manuscript for publication with minor revisions.

We thank for the recommendation. We updated the paper with minor revisions following the responses below.

\* please stick to the proper style of units 2-cm, 7.2 cm, 10.6-GeV. The dash probably prevents line-breaking.

TODO by Larry: We looked through the paper and updated the units to a consisted style with hypen

\* L55: "optimizing minimum energy deposition": I don't understand what optimization means in this context or what it refers to. Is it meant that by optimizing the detector design you allow in addition for a reduced number of fake neutrons measured outside the time window mentioned in the sentence before?

ADd text here

\* 58: typo, mesasurements

\* 59 typo, calibration

\* 144: typo, specification

Typos are corrected

\* Fig 6: what is the fit function used? Is this typical? Which distance are the points taken from? It is somewhat unclear to me how the information from Fig. 5 is compiled into Fig. 6. Are the points of Fig.5 averaged for the same Center-Equivalent Energy Deposit before presented in Fig. 6? How were they combined?

ADd text here

\* 274-291: add full stops at the end

fixed

\* 276: Enhanced Specular Reflector -> ESR, already defined before

fixed to ESR

\* 287: typo, amperemeters

fixed to ammeters

\* 319: shown in Fig. 15b. "Fig." is missing.

fixed

\* 320: 15,000. Is the comma international standard? Given other mentions in the text without the comma separating the thousands, I believe 15000 is the standard way to write it.

Changed to 15000 (no comma)

\* Fig 15a and b have caption issues, Fig. 15 is not included in caption. Similarly, for Fig 16.

Fixed captions and remove subcaptions. Updated text with references to pics. Note that the Figures will be placed on top of each other in a two-column page setup and not left-right like in the single colomn setup for review.

\* 388 length -> lengths

corrected

\* The abstract and summary should be more extended to touch upon the calibration procedures described in the paper. Reading only these 2 parts does not prepare the reader for the content and wealth of information which follow. I am somehow missing the punchline.

ADd response

Issues in bibliography

[4] cite arxiv preprint 0000?, please fix the citation

citation was changed to the published version

[6] broken URL for ET 9214 PMT, need to remove "el" at the end of the link

fixed

[8] broken URL, need to copy in the browser for it to work

fixed

[24] doesn't exist in the text or is mentioned after [25], seems to be fixed in submitted arxiv version

We checked that both references are mentioned in the text.

TODO Updates on efficiency