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Your reference:
Your letter of:
My reference: 6.3-RB
My letter of:

To all users of the
Beta Secondary Standard 2 (BSS 2)

Handled by: Dr. R. Behrens
Telephone: ++49 (0)531-592-6340
Fax: ++49 (0)531-592-69-6340
E-mail: rolf.behrens@ptb.de

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Information for the users of the Beta Secondary Standard 2 (BSS 2)

Dear Sir or Madam,

Dear user of the Beta Secondary Standard 2 (BSS 2),

We would like to inform you about a few extensions and changes regarding the BSS 2:

1. Irradiations in terms of $H'(0.07)$ at angles of radiation incidence $\alpha > 60^\circ$ are possible by now.
2. Irradiations in terms of $H_p(0.07)$ using a rod phantom with $\alpha = 75^\circ$ are possible by now.
3. Up to now, the dose(rate) for irradiations in terms of $H_p(0.07)$ was independent of the chosen phantom, slab or rod. By now, it slightly depends on the phantom as the corresponding conversion coefficients for the rod have slightly changed.
4. Simultaneously, the uncertainty for irradiations in terms of $H_p(0.07)$ on the rod phantom was slightly reduced.

The extensions and changes can be implemented in your BSS 2 by importing the updated version 8.0 of the file "BetaFakt.ini". The up to date version of this file is available free for download at PTB's website: www.ptb.de/cms/fileadmin/internet/fachabteilungen/abteilung_6/6.3/f_u_e/BetaFakt.ini. The method to import the new version is described in subsection 3.4.5 "Conversion coefficients" of the Operation Manual as of 24th April 2013. The Operation Manual can be downloaded from the manufacturer's website: www.ezag.com/de/startseite/produkte/isotope-products/isotrak-calibration-sources/downloads/operation-manuals.html.

Detailed information is available in the following publication:

R. Behrens: *Correction factors for the ISO rod phantom, a cylinder phantom, and the ICRU sphere for reference beta radiation fields of the BSS 2*. [Journal of Instrumentation 10 P03014 \(2015\)](#).

Kind regards,

Dr. R. Behrens