

From: Keith Welch <welch@jlab.org>
Subject: Re: Hall B RSAD and new targets
Date: August 12, 2019 at 6:02:43 PM EDT
To: Stepan Stepanyan <stepanya@jlab.org>
Cc: Pavel Degtiarenko <pavel@jlab.org>, Patrizia Rossi <rossi@jlab.org>, Ed Folts <folts@jlab.org>, Paul Vasilauskis <vasilaus@jlab.org>, David Hamlette <hamlette@jlab.org>

Hello Stepan,

As discussed, this email represents formal approval to use a W target that is thicker than the targets listed in the RSAD for the current Hall B run. As described, you will use the target thicknesses and maximum currents listed below, in addition to those already listed in the RSAD.

15 um with 160 nA
20 um with 120 nA

These combinations will cause up to about 20% higher luminosity than those already approved. This is well within the normal range of target and beam power combinations used in Hall B. The only potential radiological result from this change is the potential for some small amount of activation in the target and downstream hardware, which is also well bounded by standard running conditions.

I will place this correspondence with the original RSAD file in our documentation.

Thank you,
Keith

From: Stepan Stepanyan <stepanya@jlab.org>
Sent: Saturday, August 10, 2019 4:03 PM
To: Keith Welch <welch@jlab.org>
Cc: Pavel Degtiarenko <pavel@jlab.org>
Subject: Re: Hall B RSAD and new targets

Hello Keith,

Thanks for the reply, I will wait on your decision.

Regards, Stepan

On Aug 10, 2019, at 11:21 AM, Keith Welch <welch@jlab.org> wrote:

Hi Stepan,
I'm copying Pavel. This seems to be a relatively minor change to me, but we might need to formally approve in writing. If Pavel concurs, I don't see why we can't do that via email, unless we have some sort of precedent that precludes that.
Thanks,
Keith

From: Stepan Stepanyan <stepanya@jlab.org>
Sent: Friday, August 9, 2019 4:18 PM
To: Keith Welch <welch@jlab.org>
Subject: Fwd: Hall B RSAD and new targets

Dear Keith,

Our RSAD was approved for running on 4 um W target with up to 500 nA beam. Because of x-rays loading our SVT layer closest to the target, we decided to run with 8 um W target (it is in RSAD) with up to 250 nA (so far we run up to 200 nA). Now we think that it will be much better to run with even thicker target. We are preparing a new target frame (we have a spare) that will have 8 um, 15 um and 20 um tungsten foils. The beam currents that we want run with these new targets will result to a 20% higher luminosity than what was in the original RSAD:
15 um with 160 nA
20 um with 120 nA

Do we need to make any changes to RSAD?

Thanks, Stepan

----- Forwarded Message -----

Subject:
Hall B RSAD
Date:
Wed, 29 May 2019 17:19:16 -0400
From:
Keith Welch <welch@jlab.org>
To:
Stepan Stepanyan <stepanya@jlab.org>, Ed Folts <folts@jlab.org>, Patrizia Rossi <rossi@jlab.org>
CC:
Cynthia (Thia) Keppel <keppel@jlab.org>, Volker Burkert <burkert@jlab.org>

All,

Please see the attached signed RSAD for Hall B's upcoming run. Thanks to Stepan for making sure the RSAD is correct for this run period. We'll also post this on our Docushare page, and I'll send you an update when it is there.

Regards,
Keith