Test Procedure:

Assumed initial conditions:

The injector energy is at 56 MeV to deliver beam to Hall B and the beam was set up towards the 4D dump.

Step 1: Controlled Access to install a film to record and ensure that the beam will hit the intended target.

Step 2: Tune beam for 1 min. to the 4D dump.

Step 3: Controlled Access to verify the beam position and install the target assembly (radiator, Gallium target and Zinc target)

Step 4: Tune beam to the target for 5 mins – Tune beam is assumed to be 100 nA. If it is 50 nA, increase the time to 10 mins.

(56 MeV at 0.1 microA = 5.6 W for 5 mins

Expected yields from Ga: Cu-67@800 Bq, Ga-67@250kBq

From Zn: Cu-67@1kBq )

Step 5: Controlled Access to remove the target assembly

Step 6: Injector Energy changed to 18.5 MeV to the 4D dump

Step 7: Controlled Access to install a film to record and ensure that the beam will hit the intended target

Step 8: Tune beam for 1 min. to the 4D dump.

Step 9: Controlled Access to verify the beam position and install the 2nd target assembly.

Step 10: 1 micorA CW beam @18.5 MeV (18.5 W of beam) to the target (2.5 -3 hrs)

Expected yields from Ga: Cu-67@7 kBq, From Zn: Cu-67@3.3kBq )

Step 11: Controlled Access to remove the target.

Step 12: Test run finished – log entries updated