

Subject: Testing the 9 MHz Cavity inside IR4

Present: D. Beavis, J. Sandberg, R. Karol, C. Schaefer, M. Minty, J. Reich, S. Pontieri, P. Sampson, M. Fedurin, H. Kahnhauser, C. Naylor, and A. Etkin

The committee approved the testing of the 9 MHz cavity in IR4 with a single layer interlock.

Discussion

The committee discussed the potential radiation levels from the cavity when it is operated at 80 kV with a 15 kW power supply¹. Based on the materials, provided the committee would anticipate dose rates less than 500 mrad/hr at a meter. The dose rates could be substantially lower. The committee rejected the use of administrative procedures without a better understanding of the dose rates. The device will be near the isle for the area and the area is not a high radiation area. The committee concluded that a simple one layer interlock with no reachback should be easy to implement. If the area is secured for either RF or beam operations then the 9 MHz cavity may be allowed to be turned on. In addition, a chipmunk will be placed near the cavity as a warning device should there be a failure in the single interlock layer. The chipmunk can also be readout to provide characterization of the dose rates from the cavity. If the dose rates are low the intent is to leave the single layer interlock in place unless a review occurs for the removal.

A change form will be prepared for the single layer interlock and the local chipmunk. (CK-4/15/15-Reich&Beavis-937)

CC:

Present
RSC
RSC Minutes File
A. Drees

¹ D. Beavis and S. Polizzo, March 24, 2015; http://www.c-ad.bnl.gov/esfd/RSC/Memos/3_24_15_9MHzCavity.pdf