

PIP-II IT HWR - Bug #24755

Complete Travelers for HWR

08/11/2020 01:40 PM - Brian Chase

Status:	New	Start date:	08/11/2020
Priority:	Normal	Due date:	
Assignee:		% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			
LLRF Control @ 2K, Microphonics			
Note: During this part of the test plan, the SC cavities will be operated using full LLRF Voltage control, with LLRF system control of tuners to maintain cavity frequency at 162.500MHz and amplitude/phase control to yield fixed cavity gradient (10MV/m or as otherwise specified)			
5.7.1 In a serial fashion, bring each cavity to specified gradient and establish LLRF control mode (frequency and voltage held constant). Operate all 8 cavities continuously in this mode for 8hrs. Data logging should include all relevant RF and cryogenic parameters. Cavity trips and recover time/requirements should be noted and recorded.			
Cavity#			
Gradient			
LLRF Enabled?			
1			
MV/m			
2			
MV/m			
3			
MV/m			
4			
MV/m			
5			
MV/m			
6			
MV/m			
7			
MV/m			
8			
MV/m			
Comments:			
Responsible Authority/Designee:			

Date: [Click Here to Pick up the date](#)

5.7.2 With the LLRF system operating in fixed frequency mode (tuner locked), measure each cavities microphonics spectrum (detuning) for 1 hour, with the cavity at nominal operating gradient (10 MV/m). Data logging includes cryogenic data and cavity RF data. Dedicated DAQ for fast sampling of LLRF signals may be utilized.

Data: Upload File

Comments:

Responsible Authority/Designee:

Date: [Click Here to Pick up the date](#)