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| Traveler Title | SNS PPU Field Probe Cable Cryocycle | | | |
| Traveler Abstract | Testing RF cable performance at 2K | | | |
| Traveler ID | SNSPPU-VTA-COAX-CRYO | | | |
| Traveler Revision | R1 | | | |
| Traveler Author | Peter Owen | | | |
| Traveler Date | 11-Feb-21 | | | |
| NCR Informative Emails | POwen, King, | | | |
| NCR Dispositioners | POwen, King | | | |
| D3 Emails |  | | | |
| Approval Names | P. Owen | J. Kent | L. King | N. Huque |
| Approval Signatures |  |  |  |  |
| Approval Dates |  |  |  |  |
| Approval Title | Author | Reviewer | Reviewer | Project Manager |

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| --- | --- | --- | --- | --- |
| References | List and Hyperlink all documents related to this traveler. This includes, but is not limited to: safety (THAs, SOPs, etc), drawings, procedures, and facility related documents. | | | |
| CRM9007000-1059 | VTA OSP |  |  |  |
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| Revision Note |  |
| R1 | Initial release of this Traveler. |

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| Step No. | Instructions | Data Input |
| 1 | Connect up to 6 cables in series, record the order of the serial numbers in the string.  Place the cable series assembly on the lowest baffle of a test stand. This test stand can be used simultaneously for a cavity test. Connect the ends of the cable assembly to the RF cables on the test stand.  For example, SNSPPU cavities do not use the HOM cables on the test stand, so these can be used for this procedure. | <<TEST STAND ID>>  <<SNCOMMENT>> |
| 2 | Wait until the test stand is loaded in the dewar and been at 2K for at least 2 hours. This is best done after a VTRF test. | <<DEWAR#>>  <<DATE>> |
| 3 | Using a network analyzer, perform a thru-calibartion.  Connect the analyzer to the test stand. Measure the loss (HOMA to HOMB) at 805MHz. Note the loss for both S11 and S21 | <<805LOSS11>>  <<805LOSS21>> |
| 4 | If the loss is greater than -1.5 dB per cable tested, instantiate an NCR. Record the trace with a TDR from both feedthroughs. Save the trace to the USB drive and upload here | <<FILETDR1>>  <<FILETDR2>> |
| 5 | Once data is taken, warm up the dewar. After test stand is pulled, return the cables to inventory. |  |