

LCLS-II 3.9GHz Cryomodule Final Design Review
Monday/Tuesday, January 30-31, 2017
<https://indico.fnal.gov/conferenceDisplay.py?confId=xxxx>

Recommendation No. 1 **Status: Closed**
Date Closed: April 2018

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| Owner | C. Ginsburg |
| Recommendation | <p>Perform operational analysis for available RF-power to address</p> <ol style="list-style-type: none"> 1. high QL spread due to: <ol style="list-style-type: none"> a. Deviation in field flatness; b. machining & assembly tolerance over/under build 2. Microphonic due to: <ol style="list-style-type: none"> a. Unknown instability within the support system and/or cryogenic system <p>Should include the impact of coupler overheating from increased rf-power input.</p> |
| Project Response | Assigned to Solyak/Khabiboulline. Analysis completed. Design Verification completed. |

Recommendation No. 2 **Status: Closed**
Date Closed: May 2017

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| Owner | C. Ginsburg |
| Recommendation | Provide complete listing of all technical specifications and their status (draft, reviewed, approved, etc.) |
| Project Response | Assigned to Harms. Document available. |

Recommendation No. 3 **Status: Closed**
Planned Date Closed: April 2018

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| Owner | C. Ginsburg |
| Recommendation | <p>Add the following activities to verification testing:</p> <ol style="list-style-type: none"> 1. Incorporate measured performance of coarse & fine tuning into the LLRF control system (most notably damping microphonics) 2. Incorporate mockup of max-offset of power coupler (mimic compensation for differential thermal contraction) <p>Investigate long term stability; establish steady-state operational condition at high power performance.</p> |
| Project Response | These activities will be incorporated into the test plan for Design Verification horizontal tests. HTS tests are planned for June 2017. DV complete April 2018. |

Recommendation No. 4**Status: Closed****Date Closed: 17 April 2017**

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| Owner | C. Ginsburg |
| Recommendation | The stress analysis document for the 3.9 GHz Cryomodule under Seismic Loads should be finalized by SLAC no later than 01-March-2017. |
| Project Response | Engineering Note LCLSII-4.5-EN-0968-R0 is signed off. |