

**Tune Mode Generator Hot Check-Out (HCO) checklist (version 2, 4/1/24)**

Staff performing HCO: \_\_\_\_\_

Date: \_\_\_\_\_

**Step 1 – Visual inspection (indicate n/a if laser not tested)**

- Indicate pass/fail for each function.

**a. Hall A (Serial Nos. TMG= \_\_\_\_\_, Waveplate=\_\_\_\_\_, Shutter=\_\_\_\_\_)**

- i. \_\_\_\_\_ - Beam Sync (shutter closed, waveplate in)
- ii. \_\_\_\_\_ - Viewer Limited (shutter open, waveplate in)
- iii. \_\_\_\_\_ - Tune Mode (shutter open, waveplate in)
- iv. \_\_\_\_\_ - Continuous Wave (shutter open, waveplate out)
- v. Notes - \_\_\_\_\_

**b. Hall B (Serial Nos. TMG= \_\_\_\_\_, Waveplate=\_\_\_\_\_, Shutter=\_\_\_\_\_)**

- i. \_\_\_\_\_ - Beam Sync (shutter closed, waveplate in)
- ii. \_\_\_\_\_ - Viewer Limited (shutter open, waveplate in)
- iii. \_\_\_\_\_ - Tune Mode (shutter open, waveplate in)
- iv. \_\_\_\_\_ - Continuous Wave (shutter open, waveplate out)
- v. Notes - \_\_\_\_\_

**c. Hall C (Serial Nos. TMG= \_\_\_\_\_, Waveplate=\_\_\_\_\_, Shutter=\_\_\_\_\_)**

- i. \_\_\_\_\_ - Beam Sync (shutter closed, waveplate in)
- ii. \_\_\_\_\_ - Viewer Limited (shutter open, waveplate in)
- iii. \_\_\_\_\_ - Tune Mode (shutter open, waveplate in)
- iv. \_\_\_\_\_ - Continuous Wave (shutter open, waveplate out)
- v. Notes - \_\_\_\_\_

**d. Hall D (Serial Nos. TMG= \_\_\_\_\_, Waveplate=\_\_\_\_\_, Shutter=\_\_\_\_\_)**

- i. \_\_\_\_\_ - Beam Sync (shutter closed, waveplate in)
- ii. \_\_\_\_\_ - Viewer Limited (shutter open, waveplate in)
- iii. \_\_\_\_\_ - Tune Mode (shutter open, waveplate in)
- iv. \_\_\_\_\_ - Continuous Wave (shutter open, waveplate out)
- v. Notes - \_\_\_\_\_

**Step 2 – Laser power extinction (indicate n/a if laser not tested)**

- Perform test with in-line laser power meter inserted & attenuator=1000

Mode	Hall A	Hall B	Hall C	Hall D
Continuous Wave				
Tune Mode				
Viewer Limited				
Beam Sync				

**Step 3 – Waveforms (indicated n/a if laser not tested)**

- Perform test with fixed attenuator
- Record traces on a scope

**e. Hall A (attenuator = \_\_\_\_\_, power = \_\_\_\_\_ )**

- \_\_\_\_\_ - Beam sync (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (<10 us/div)
- \_\_\_\_\_ - Tune Mode (10 ms/div)
- \_\_\_\_\_ - Tune Mode (100 us/div)
- \_\_\_\_\_ - Continuous Wave (10 ms/div)
- Notes - \_\_\_\_\_

**f. Hall B (attenuator = \_\_\_\_\_, power = \_\_\_\_\_ )**

- \_\_\_\_\_ - Beam sync (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (<10 us/div)
- \_\_\_\_\_ - Tune Mode (10 ms/div)
- \_\_\_\_\_ - Tune Mode (100 us/div)
- \_\_\_\_\_ - Continuous Wave (10 ms/div)
- Notes - \_\_\_\_\_

**g. Hall C (attenuator = \_\_\_\_\_, power = \_\_\_\_\_ )**

- \_\_\_\_\_ - Beam sync (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (<10 us/div)
- \_\_\_\_\_ - Tune Mode (10 ms/div)
- \_\_\_\_\_ - Tune Mode (100 us/div)
- \_\_\_\_\_ - Continuous Wave (10 ms/div)
- Notes - \_\_\_\_\_

**h. Hall D (attenuator = \_\_\_\_\_, power = \_\_\_\_\_ )**

- \_\_\_\_\_ - Beam sync (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (10 ms/div)
- \_\_\_\_\_ - Viewer Limited (<10 us/div)
- \_\_\_\_\_ - Tune Mode (10 ms/div)
- \_\_\_\_\_ - Tune Mode (100 us/div)
- \_\_\_\_\_ - Continuous Wave (10 ms/div)
- Notes - \_\_\_\_\_

**Step 4 – Document hot check-out steps in electronic logbook.**

- Attach checklist and scope traces to ELOG/POLOG entry.