

FEL Diagnostics Tasks

The following items provide a list of all diagnostic processes discussed up to the present, and the methods for each measurement proposed. A Point of Contact has been assigned to each measurement, and is also recorded. The lower quarter of this document provides a complete list of the diagnostics for the FEL.

I Emittance/Match Measurement(ϵ, α, β)

- Multislits

 - Physics Design (including Locations)
items already scheduled

- Quadrupole Scanning Method

 - Physics Design (including Locations)
Software Design (including algorithm)
Software Developed
Beam Test

- Multimonitor

 - Physics Design (including Locations)
Software Design (including algorithm)
Software Developed
Beam Test

II Beam Current

- Ceramic Break

 - Physics Design (including Locations)
Electronics Design

Electronics Procure
Electronics Install
Software Design (including algorithm)
Software Developed
Beam Test

- Dumps as F. Cups
 - Physics Design (including Locations)
 - Electronics Design
 - Electronics Procure
 - Electronics Install
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

III Beam Position

- Beam Position Monitor
 - Physics Design (including Locations)
 - Electronics Design
 - Electronics Procure
 - Electronics Install
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test
- Synchrotron Light Monitor
 - Physics Design (including Locations)
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

- OTR Viewer
 - Physics Design (including Locations)
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

IV Beam Profile

- Synchrotron Light Monitor
 - Physics Design (including Locations)
 - Electronics Design
 - Electronics Procure
 - Electronics Install
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test
- OTR Viewer
 - Physics Design (including Locations)
 - Electronics Design
 - Electronics Procure
 - Electronics Install
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

V M_{56} /Time of Arrival

- Phase Detector

 - Physics Design (including Locations)

 - Chose Between Cavity and CSR Signal Source

 - Electronics Design

 - Electronics Procure

 - Electronics Install

 - Software Design (including algorithm)

 - Software Developed

 - Beam Test

- IR Diodes + OTR/DTR

 - Physics Design (including Locations)

 - Electronics Design

 - Electronics Procure

 - Electronics Install

 - Software Design (including algorithm)

 - Software Developed

 - Beam Test

VI Bunch Length Monitor

- Happek device

 - Physics Design (including Locations)

 - Electronics Design

 - Electronics Procure

 - Electronics Install

 - Software Design (including algorithm)

 - Software Developed

 - Beam Test

- IR Diodes + OTR/DTR
 - Physics Design (including Locations)
 - Electronics Design
 - Electronics Procure
 - Electronics Install
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

- Zero Phasing
 - Physics Design (including Locations)
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

- Phase Compression
 - Physics Design (including Locations)
 - Modulator Design
 - Modulator Procure
 - Modulator Install
 - Electronics Design
 - Electronics Procure
 - Electronics Install
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

- Dispersed Slit
 - Physics Design (including Locations)
 - Software Design (including algorithm)
 - Software Developed
 - Beam Test

VII Energy

- High η BPM
Measurement Procedure Specified
Beam Test

VIII Energy Spread

- High η profile
Measurement Procedure Specified
Beam Test

IX 30 Hz System

- Transverse Modulation
Physics Design (including Locations)
Electronics Design
Electronics Procure
Electronics Install
Software Design (including algorithm)
Software Developed
Beam Test
- Longitudinal Modulation
Physics Design (including Locations)
Electronics Design
Electronics Procure
Electronics Install
Software Design (including algorithm)
Software Developed
Beam Test