

Friday September 13, 2024:

1. Bench Test in TL 1137: ePAS sign in, Pre-Job Brief, and MSD
2. Measure rise time, ringing, and circular polarization and document results – Matt and Shukui
3. Kent visit: measure rise time in TL 1137

Week of September 16, 2024:

1. Screen updates – Jim
2. Follow-up on software operation in Accelerator – Jim
3. non-NRTL safety inspection and QR sticker – Steve and Jim
4. Upload new firmware to Helicity Generator Board to provide Hel and nHel signals in laser room – need ePAS and ATLis (Riad,Ed)

Monday

1. Start long burn-in at operating frequency (30 Hz then 2000 Hz) and voltages – Steve, Jim
2. Rewire of xport fiber converter chassis – Jim

Tuesday

1. CEBAF Laser Room Planning Walk-thru – Riad, Shukui, Jim
 1. Plan to measure RTP eight applied HVs from UVA Prototype – need ePAS and ATLis (Jim)
 2. Plan to measure IA rise time
 3. Where to put drivers on laser table
 4. Where to install xpot in rack
 5. How / where to re-route fibers, com cables, power cables
 6. What goes where, who will do

Wednesday

1. Kent visit: measure rise time in TL 1137

Thursday

1. General installation ePAS and ATLis – Riad
2. Team review of planning and ePAS

Friday

1. CEBAF Laser Room Planning Walk-thru – Riad, Shukui, Steve
 1. Measure rise time, ringing, and circular polarization of existing RTP and document results
 2. Carefully plan connection process of RTP to new drivers

Week of September 23, 2024 – Installation:

1. Cut off HV cables to RTP cell, re-connect to old HV drivers and measure again
2. Ethernet cables pull to xport controller chassis
3. Route comms fibers from controller to drivers on laser table.
4. Install and connect drivers
5. Set drivers to operational voltages
6. Measure new driver rise time, ringing, and circular polarization and document results

Week of September 30, 2024:

1. Measure electrical pickup in laser room and ISB using Parity DAQ – MOLLER Collaboration

NEW RTP Cell Controls

TP Cell Counts Set (0 - 65535 Counts = 0 - 10 Volts)

Voltage 1

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV1 OUT

Voltage 6

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV2 OUT

Voltage 3

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV3 OUT

Voltage 8

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV4 OUT

Voltage 2

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV5 OUT

Voltage 5

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV6 OUT

Voltage 4

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV7 OUT

Voltage 7

COUNTS SET
 COUNTS READ
 VOLTS OUT

HV8 OUT

QTR Wave Counts

V L/4
 V L/4,1
 V L/4,2

PITA Counts

V PITA
 V PITA,1
 V PITA,2

Alpha Position U/V Counts

V apos,U
 V apos,V

Delta Position U/V Counts

V dpos,U
 V dpos,V

Inver Calc Counts

C1
 C2
 C3
 C4
 C5
 C6
 C7
 C8

Green = ON

RTP1 HELICITY
 RTP1 HV
 RTP1 ALARM

RTP1 HV1 RDY
 RTP1 HV2 RDY
 RTP1 HV5 RDY
 RTP1 HV6 RDY



Green = ON

RTP2 HELICITY
 RTP2 HV
 RTP2 ALARM

RTP2 HV3 RDY
 RTP2 HV4 RDY
 RTP2 HV7 RDY
 RTP2 HV8 RDY

