

Laser Sources Operator LS3 or LS4 Long-pulse Pre-Operations Checklist S-AB-P-088 Rev D

Intent

This checklist is to be used to prepare for long-pulse shot operations as part of the LSO Shot Preparation Checklist (S-AB-P-085).

Checklist: *(Completed copy to be filed with reports from first shot of the day.)*

Configure LS3 and/or LS4 for long-pulse operation.

- 1** Select **Restore** ⇒ **LS(3,4) _Preshot**

LSO: “Activate IFES for LS3 and/or LS4 (per S-AB-P-023).”

- 2** LS3 Pulse Shape is _____. Delay is _____ ns”
 LS4 Pulse Shape is _____. Delay is _____ ns”

LST: “IFES activated on LS3 and/or LS4, aye”

- 3** Activate the SBSS System per S-AB-P-176.

LSO: “Activate the regen for LS3 and/or LS4 (per S-AB-P-149).”

LST: “Regen activated on LS3 and/or LS4, aye”

Regen after 20 min. warmup:

	LS3	LS4	
Energy	mJ	mJ	
Energy Stability	%	%	
Spatial Profile Normal	(Y / N)	(Y / N)	
4 Pulse Train Normal	(Y / N)	(Y / N)	<input type="checkbox"/>
Regen	Pointing <input type="checkbox"/>	Pointing <input type="checkbox"/>	
	Centering <input type="checkbox"/>	Centering <input type="checkbox"/>	
Apodizer	Pointing <input type="checkbox"/>	Pointing <input type="checkbox"/>	
	Centering <input type="checkbox"/>	Centering <input type="checkbox"/>	
Phase Modulator Alignment	Pointing <input type="checkbox"/>	Pointing <input type="checkbox"/>	
	Centering <input type="checkbox"/>	Centering <input type="checkbox"/>	

- 5** Instruct the LST to activate the LARA for LS3 and/or 4 (per S-AB-P-089)

(continues)

Verify pointing and centering		LS3		LS4		
6	LARA Input	Pointing	<input type="checkbox"/>	Pointing	<input type="checkbox"/>	<input type="checkbox"/>
		Centering	<input type="checkbox"/>	Centering	<input type="checkbox"/>	
	LARA Output	Pointing	<input type="checkbox"/>	Pointing	<input type="checkbox"/>	
		Centering	<input type="checkbox"/>	Centering	<input type="checkbox"/>	

7 Obtain PI or Shot Director approval of pulse shape from ROSS.

8 Run the Sources configuration macro(s)
 Select **Restore** ⇒ **LS(3,4)_Qual Shot**
 from the Macros pull-down menu.

- Select **lock** from the commands menu for each macro run

9 Select **Compare** ⇒ **LS(3,4)_Qual Shot**
 from the Macros pull-down menu.

- Review** the macro reports for errors. (Do not proceed until each macro is clean.)

10 File this checklist in the days Shot folder.

(done)

LSO: _____ Date: _____

Document Release:

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This document is a component of Vol. VIII OMEGA EP System Shot Operations Manual, Chapter 2, Laser Sources Operating Procedures, S-AB-P-005.

Approval for release of this document into the PDM system was granted by:

- S. Loucks; Director, LLE Engineering Division
- S. Morse; OMEGA EP Project Manager
- J. Edwards; OMEGA EP System Engineer
- J. Puth; OMEGA EP Laser Sources Subsystem Engineer