

## SPDP Laser Shutdown Procedure S-AB-P-043 Rev B

The SPDP 2-wavelength source is a Class IV laser system that consists of three active, light producing components. Two low power (~50mW) fiber lasers are used as inputs to a fiber amplifier that produces a collimated beam at full output power (~10W). With one of the low power “seed” sources pre-configured to 1053nm and the other to 1058nm, the full system can operate at either wavelength.

Appropriate eye protection must be worn by ALL individuals in the Laser Bay prior to turning the laser ‘ON’.

### Shutdown Procedure:

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- |   |  |                          |
|---|--|--------------------------|
| <b>1</b>  | On the front of the IPG amplifier, press the ‘SELECT’ button until the ‘CURRENT SETPOINT’ is flashing, and then press ‘ENTER’. Decrease the current to 0.01A using the keypad and then press ‘OK’. | <input type="checkbox"/> |
| <hr/>   |  |                          |
| <b>2</b>  | Press the ‘EMISSION’ button on the front of the IPG amplifier. This will disable output from the amplifier. Verify that the ‘EMISSION’ warning light is no longer illuminated.                     | <input type="checkbox"/> |
| <hr/>   |  |                          |
| <b>3</b>  | On the front panel of EACH of the NP Photonics sources, find the ‘POWER MODE’ toggle and switch it to ‘OFF’.   | <input type="checkbox"/> |
| <hr/>   |  |                          |
| <b>4</b>  | On the front panel of EACH of the NP Photonics sources, find the ‘PUMP’ toggle and switch it to ‘OFF’.   |                          |
| <b>4</b>  | The power level on the LCD display will begin dropping. Wait until it stabilizes to a value of less than 1 mW before proceeding.   | <input type="checkbox"/> |
| <p>Note: The power level may never reach exactly zero, but it will stabilize near zero.</p> |  |                          |
| <hr/>   |  |                          |
| <b>5</b>  | On the front panel of the IPG amplifier, find the safety key and turn it from ‘ON’ to ‘STANDBY’. The unit’s LCD display will turn off.   | <input type="checkbox"/> |
| <hr/>   |  |                          |
| <b>6</b>  | On the front panel of EACH of the NP Photonics sources, find the safety key and turn it from ‘ON’ to ‘STANDBY’. The units’ LCD displays will turn off.   | <input type="checkbox"/> |

(continues)

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7 Notify the Shot Director that the SPDP laser has been shutdown.



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(End of Procedure)

### **S-AB-P-043 SPDP Laser Shutdown Procedure**

#### **Document Release:**

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