

# APPENDIX 7

## Laser Data Sheet – SEMI S2

### A7-1 Equipment Information - (All Laser Product Classes)

Laser Equipment Manufacturer \_\_\_\_\_  
 Equipment Model # \_\_\_\_\_ Date Laser Data Sheet Completed \_\_\_\_\_  
 Laser Product Classification \_\_\_\_\_ (e.g., 1, 1M, 2, 2M, 3A, 3R, 3B, 4)  
 Classification Standard(s) \_\_\_\_\_ (e.g., IEC, FDA/CDRH, JIS)  
 Certification File Identification Number \_\_\_\_\_ (e.g., CDRH accession number, or if CDRH accession number has been applied for, but not yet received 'pending' may be used. If self declaring under IEC 60825-1 or if certification is not required, e.g., if class 1 laser product is incorporated without changes, then 'N/A' may be used)

### A7-2 Laser Information (Greater than Class 2 & embedded Class 3R (3A), 3B & 4)

Is access to laser radiation above the maximum permissible exposure (MPE) level required during maintenance or service tasks? YES NO  
 \_\_\_\_\_ \_\_\_\_\_

If NO, then the information in Parts A7-2, A7-3 and A7-4 need not be provided.

If YES, complete the information in Parts A7-2, A7-3 and A7-4 for each task and laser that requires access.

If there are multiple lasers contained within the laser equipment, provide the following for each task/laser combination that meets the above criteria.

#### Laser Parameters Laser   1  ,   2  ,   etc.

Laser Manufacturer \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
 Laser Model No. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

A7-2.1 Laser Medium Type (HeNe, Nd:YAG, Argon, KrF, Diode, etc.) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

A7-2.2 Wavelength(s) in nanometers (nm) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

A7-2.3 Laser Hazard Classification (individual laser) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

NOTE 1: If a laser is used in both continuous wave and pulsed modes, complete both A7-2.4 and A7-2.5.

#### A7-2.4 Continuous Wave Lasers

A. Power in Watts (W) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

B. Irradiance in Watts/square centimeter (W/cm<sup>2</sup> at aperture) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

#### A7-2.5 Pulsed Laser Characteristics

A. Pulse Duration in Seconds (s) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

B. Energy per Pulse in Joules (J) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

C. Pulse Repetition Frequency in Hertz (Hz) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

D. Average Power in Watts (W) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

E. Radiant Exposure Joules/square centimeter (J/cm<sup>2</sup>) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

F. Q-Switch controlled pulses (Yes/No) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

#### A7-2.6 Beam Parameters at maintenance or service access points

Exception: In the case of proprietary information, an acceptable alternative to providing the Beam Parameters is to provide NOHD results for each access point according to IEC 60825 or equivalent.

A. Beam shape Circular (C), Rectangular (R), Elliptical (E) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

B. Beam size (mm) Major axis (R/E) or diameter (C) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_  
 Minor axis (R/E) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_