Section:	eRadHealth Menu
Role	
What is your r	role?
Note:	If you are acting as an agent of the actual manufacturer, please select your role, for example, Importer or Consultant. Later in the report, under Manufacturer Data, you will be prompted to enter both manufacturer and submitter information.
Submissio	n Information
FDA or Sta	ate Inspector
Abbreviate	ed Report Applicability
OEM Lase	er Applicability
Section:	: Manufacturer Data

Introduction

# **Electronic Product Radiation Safety Reporting Form**

This software application is intended to automate the hard copy product reporting forms in the effort of the Center for Devices and Radiological Health (CDRH) to become capable of accepting electronic submissions from industry and to improve our review process. This FDA Electronic Submission (eSub) software is the next version of the application developed to allow us to accept all Radiological Health reports and other submissions electronically and improve the ability of CDRH to accomplish its mandated product and industry evaluations in a timely and efficient manner.

All electronic reports and correspondence can either be transferred to CD and mailed to the address below, or can be sent via the FDA Electronic Submissions Gateway to CDRH. If you follow instructions to set up an account with the FDA Gateway, when you submit through it you will receive your acknowledgement email message with Accession Number within minutes!

Information about the FDA Electronic Submissions Gateway can be found at <a href="www.fda.gov/esg">www.fda.gov/esg</a>. Please contact the Gateway Helpdesk with your questions about that system.

Electronic submissions on CD should be mailed directly to the Document Control Center at:

U.S. Food and Drug Administration Center for Devices and Radiological Health Attn: eSubmitter Team Document Mail Center - WO66-0609 10903 New Hampshire Avenue Silver Spring, MD 20993-0002

Submissions received in the mail on CD will be processed within a few days of receipt.

You should be familiar with the regulatory requirements for radiological products at <a href="www.fda.gov/cdrh/radhealth/">www.fda.gov/cdrh/radhealth/</a> and medical devices available at <a href="www.fda.gov/cdrh/devadvice/">www.fda.gov/cdrh/devadvice/</a>. If you have specific questions about the regulations, please contact us at: <a href="DSMICA@fda.hhs.gov">DSMICA@fda.hhs.gov</a>.

If you have specific questions regarding this software, please contact the eSub team by email at: eSubmitter@fda.hhs.gov.

Thank you for using our electronic product reporting software. Please communicate your comments and suggestions to the eSub team as often as you like.

Thank you for your continued support of the FDA Electronic Submission Program (eSub).

General Information

# General Information for Radiological Health Products

Manufacturers of products subject to performance standards under the Federal Food, Drug, and Cosmetic Act (FFDCA), Chapter V, Subchapter C - Electronic Product Radiation Control are required to furnish various reports to the Center for Devices and Radiological Health (CDRH).

The Radiological Health staff, CDRH developed this software application for the Product and Annual reports. This application will assist manufacturers of electronic products that emit radiation in providing adequate reporting of radiation safety testing and compliance with federal performance standards. Title 21 of the Code of Federal Regulations (CFR), Parts 1002 and 1003 specify Reporting and Notification requirements 1,2,3.

Reports submitted on radiation safety of electronic products must follow the appropriate form (21 CFR 1002.7). This software application serves the same report responsibility, so long as the submitter or manufacturer prints out the cover letter and sends it in along with the CD containing the report files. The submitter of the report will receive an acknowledgment letter (or email message) with the

accession number that CDRH assigns to the report. Please reference this accession number in the future when providing additional information about this model family in either a supplement or the annual report. If a report is incomplete or inadequate CDRH may reject it and return it for completion. CDRH will not enter a rejected report into our database.

#### CDRH DOES NOT APPROVE THESE REPORTS OR THE PRODUCTS BEING REPORTED.

It is the manufacturer's responsibility to certify that their products comply with all applicable standards (21 CFR 1010 - 1050), based on a testing program in accordance with good manufacturing practices. Prior to the shipment of products in interstate commerce, 21 CFR 1002 requires the manufacturer to submit the product and Annual Reports and to comply with all applicable importation requirements (21CFR 1005). If there are deficiencies, CDRH may disapprove the firm's quality control and testing program, determine that the product contains a radiation defect, or determine that the product fails to comply with a standard. CDRH will notify the manufacturer if we make such a determination. CDRH may require the manufacturer to cease introduction into U.S. commerce until deficiencies are corrected, and to initiate a corrective action program (21CFR 1003 - 1004) for products already introduced into commerce.

CDRH can now accept and process 'CeSub' electronic submissions at this time, if all attachments are PDF files only, and the cover letter is printed out and included with a real signature. Translate any text that appears in a language other than English into English in a complete and accurate manner. Keep a copy (save a copy to your hard drive) of the completed report in your records.

We are providing our new software applications for the old reporting forms upon request during this beta testing period of development in Spring, 2005. Other regulatory information is still available on the Internet under <a href="https://www.fda.gov/cdrh/radhealth/">www.fda.gov/cdrh/radhealth/</a>. No copyright exists for these forms.

Reproduce these forms as needed. If you would like to comment on the reporting forms, website, or future electronic submissions, you may direct the comments to **cdrhesub@cdrh.fda.gov**.

A complete Product Report is required for each product model or model family. Product Reports are now more generally referred to as Radiation Safety Reports to distinguish the Radiological Health submissions from medical device submissions. CDRH suggests that a complete report on one model of a family be submitted, with a separate Supplemental Report for each of the other models in the family. The Supplemental Report should respond in detail to the parts of the form where there are differences to report, referencing the number of the affected item. Items that are unchanged will still appear in the supplement from the original report.

When new models of a product are introduced, if the models satisfy the criteria for an established reporting exemption or if the new models do not involve changes in radiation emission or performance requirements, then the manufacturer need not report the models prior to introduction into commerce. Rather, the manufacturer is only required to identify them in the annual report, or in quarterly updates to the annual report. Quarterly updates to annual reports may be submitted using the Annual Report software included in this application. [See 21 CFR 1002.13(c).]

All symbols, units, and unusual terms in the report must be adequately defined and consistently used. Please use the terms as defined in Section 1040.10(b) and in the IEEE Standard Dictionary of Electrical and Electronic Terms (IEEE Std. 1001972 and ANSI C42.1001972).

**Definitions** 

# **Definitions for Rad Health Products**

#### **Manufacturers**

Manufacturer is any person or organization engaged in the business of manufacturing, assembling, or importing of electronic products (21 CFR1000.3(n)). Manufacturers of electronic products subject to 21 CFR1000-1050 must:

- Design and manufacture their products to be in compliance with applicable performance standards;
- Test their products to assure compliance;
- Certify compliance of their products;
- Maintain test and distribution records and a file of correspondence concerning radiation safety, safety complaints, and inquiries;
- Use the published reporting forms or electronic software application to submit reports to CDRH, including Product reports describing the manner of compliance of the product design and testing program and Annual Reports summarizing their compliance testing;
- Report accidental radiation occurrences (i.e., possible, suspected, or known exposures);
- Report any radiation defects or noncompliances; and
- Recall (i.e., repair, replace, or refund the purchase price of) defective or noncompliant products.

#### **Accidental Radiation Occurrences**

An accidental radiation occurrence means a single event or series of events that has/have resulted in injurious or potentially injurious exposure of any person to electronic product radiation as a result of the manufacturing, testing, or use of an electronic product.

#### **Importers**

Importer is any person of organization engaged in the business of importing electronic products. An importer is considered to be a manufacturer. The requirements for Manufacturers given above also apply to importers if the requirements have not been done by the foreign manufacturer.

# **United States Agent for Foreign Manufacturers**

Every manufacturer of electronic products, prior to offering such product for importation into the United States, shall designate a permanent resident of the United States as the manufacturer's agent upon whom service of all processes, notices, orders, decisions, and requirements may be made for and on behalf of the manufacturer as provided in section 536(d) of the Radiation Control for Health and Safety Act of 1968 (21U.S.C. 360mm(d)) and this section. The agent maybe an individual, a firm, or a domestic corporation. For purposes of this section, any number of manufacturers may designate the same agent.

# From The Federal Food, Drug, and Cosmetic ActSec 536 [21 U.S.C. 360mm](d) Designation of agent for purposes of service

It shall be the duty of every manufacturer offering an electronic product for importation into the United

States to designate in writing an agent upon whom service of all administrative and judicial processes, notices, orders, decisions, and requirements may be made for and on behalf of said manufacturer, and to file such designation with the Secretary, which designation may from time to time be changed by like writing, similarly filed. Service of all administrative and judicial processes, notices, orders, decisions, and requirements may be made upon said manufacturer by service upon such designated agent at his office or usual place of residence with like effect as if made personally upon said manufacturer, and in default of such designation of such agent, service of process, notice, order, requirement, or decision in any proceeding before the Secretary or in any judicial proceeding for enforcement of this part or any standards prescribed pursuant to this part may be made by posting such process, notice, order, requirement, or decision in the Office of the Secretary or in a place designated by him by regulation.

Sec. 531 [21 U.S.C. 360hh] (1) the term **"electronic product radiation"** means:

- (A) any ionizing or non-ionizing electromagnetic or particulate radiation, or
- (B) any sonic, infrasonic, or ultrasonic wave, which is emitted from an electronic product as the result of the operation of an electronic circuit in such product.

Sec. 531 [21 U.S.C. 360hh](2) the term **''electronic product''**means:

- (A) any manufactured or assembled product which, when in operation,(i) contains or acts as part of an electronic circuit and (ii) emits (or in the absence of effective shielding or other controls would emit) electronic product radiation, or
- (B) any manufactured or assembled article which is intended for use as a component, part, or accessory of a product described in clause (A) and which when in operation emits (or in the absence of effective shielding or other controls would emit) such radiation.

Burden to Industry

# **Paperwork Reduction Act Statement**

Public reporting burden for this collection of information is estimated to average 26 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing, and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to:

U.S. Food and Drug Administration Center for Devices and Radiological Health Document Mail Center - WO66-0609 10903 New Hampshire Avenue Silver Spring, MD 20993-0002

"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number."

#### Manufacturer and Report Information

#### Information:

This general report requests names, addresses, phone numbers, etc. for your firm, various officials of your firm, consultants who may assist in preparing the report, parent firm (if any), importer and designated agent (for foreign firms). Some of this information is mandatory and its absence will prevent you from completing the report submission. You can check for missing data using the "Missing Data" report from the "Output" menu.

If you are acting as an agent or consultant for another firm who is certifying the product (or laser light show), please enter the certifying manufacturer and list yourself as the report submitter, below.

#### Information:

Attention: Variance Applicants

If you are acting as an agent or consultant for, or on behalf of, or filing for, a company that will be manufacturing or producing a Class IIIb or IV projector or laser light show or both which require an approved variance, the following explanations may provide further clarification.

Manufacturer: This is the firm or company who is requesting the variance, will certify the product or show, and will be the holder and owner of the variance. This is not the agent or consultant who may be filing this report or Variance request for the manufacturer; that agent may be the submitter, identified in a later screen.

Responsible Individual: This person works for the Manufacturer and is responsible for compliance of the projector and/or show. In the case of laser light shows, he or she may be the company president, CEO, or the laser light show head operator or a manager who oversees the shows.

Reporting Official: This person works for the Manufacturer and is responsible for reports, recordkeeping, and submitting FDA required documents and correspondence.

#### Manufacturer Responsible for Product Compliance

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This is the firm that takes responsibility for certification that the product meets the performance standard. This firm develops and maintains the quality control and testing program that is the basis for the certification of this product. Additionally, this firm usually is the owner of the product design and manufacturing process design.

Select the Manufacturer's address from the Establishment Address book:		
Establishment Information:		
Establishment Name		
Division Name		
Home Page		
Physical Location:		
Address		
Telephone Number		
Fax Number		
Mailing Location:		
Address		

#### Responsible Individual

Note:

The responsible individual is the highest level and most responsible individual affiliated with this establishment.

Select the Responsible Individual from the Contact Address book:

Contact Information:		
Contact Name		
Occupation Title	Occupation Title	
Email Address	Email Address	
Establishment Inform	ation:	
Establishment Name		
Division Name		
Physical Location:		
Address		
Telephone Number		
Fax Number		
Mailing Location:		
Address		
Manufacturer's F	Report	ting Official
Note:	and qu	s the person at the manufacturing facility that is knowledgeable and responsible for addressing all aspects of the testing uality control procedures for certification as reported to FDA in the product report. Documentation of changes intesting uality control procedures submitted to FDA must be signed by this individual.
Select the Reporting	Official f	from Contact Address book:
Contact Information:		
Contact Name		
Occupation Title		
Email Address		
Establishment Inform	ation:	
Establishment Name		
Division Name		
Physical Location:		
Address		
Telephone Number		
Fax Number		
Mailing Location:		
Address		
Report Submitte	r	
	T'	
Note:	docum	ubmitter maybe a consulting individual or firm providing assistance in report preparation and maintenance. All nents prepared by the submitter must have the manufacturer's reporting official signature for authenticity of submitted

doc	rumentation.				
Select the Submitter from	the Contact Address book:				
Contact Information:	Contact Information:				
Contact Name					
Occupation Title					
Email Address					
Establishment Information					
Establishment Name					
Division Name					
Physical Location:					
Address					
Telephone Number					
Fax Number					
Mailing Location:					
Address					
Comments:					
Internal Reference Number	or:				
Parent Establishme	nt				
Is there a parent establish	ment?				
	•				
Select the Parent Establish	hment and Contact from the Contact Address book:				
Contact Information:					
Contact Name					
Occupation Title					
Email Address					
Establishment Information:					
Establishment Name					
Division Name					
Physical Location:					
Address					
Telephone Number					
Fax Number					
Mailing Location:					

Address				
Manufacturer Designated United States Agent				
Manufacturer Designated United States Agent				
Note:	Manufacturers exporting to the U.S. must designate a U.S. agent, see 21 CFR 1005.25.			
Is there a United State	es agen	t that has been designated by the manufacturer?	[L]	
Written Agreeme	ent			
Item: 1 (could conta	in up to	10 items with none required)		
Note:	If any	of the required responses below do not apply to your designated agent, enter 'NOT APF	PLICABLE' or 'NA.'	
Select the Designated	d Agent	from the Contact Address book:		
Contact Information:				
Contact Name				
Occupation Title				
Email Address	Email Address			
Address				
Establishment Name				
Division Name				
Address				
Telephone Number	Telephone Number			
Fax Number				
Attach a copy of writte	Attach a copy of written agreement with the designated U.S. agent:			
[Multi-Line Plain Text]				
File Attachment				
Importer				
Item: 1 (could contain up to 10 items with none required)				
Select the Importer from the Contact Address book:				
Contact Information:				
Contact Name				
Occupation Title				
Email Address				
1			l l	

Establishment Information:				
Establishment Name				
Division Name				
Physical Location:				
Address				
Telephone Number				
Fax Number				
Mailing Location:				
Address				
Additional Manufactu	ring Locations			
Item: 1 (could contain up t	o 100 items with none required)			
•				
Producodes proces	If any of the products certified in this report are manufactured at locations other than listed in the Manufacturer Responsiblefor Product Compliance section, then the names, addresses, and FDA registration numbers should be provided. In addition any codes used on labels to identify a manufacturing location must be provided. Each factory location must assure all production procedures are followed identically step by step as provided in this report. If the procedures are not the same then separate reports should be filed.			
Select the Manufacturer Add	lress from the Establishment Address book:			
Establishment Information:				
Establishment Name	stablishment Name			
Division Name				
Home Page				
Physical Location:				
Address				
Telephone Number				
Fax Number				
Mailing Location:				
Address	Address			
Comments:	Comments:			
Code used on identification	abels:			
	<b>'</b>			
Section: Product	Section: Product Data			
Product and Model Id	antification			

At this time we are only accepting electronic versions of reporting guides contained within this software. Other reporting Note: guides that are not yet electronic are available for downloading from http://www.fda.gov/cdrh/comp/eprc.html. Product Type Reported Report Information Is this submission a supplement to an Annual Report submitted previously for the same reporting year? [L] Provide the Accession Number of the original report for which this is a supplement: (Note: Do not enter any Device Premarket Application or Notification document number here, such as PMAs, 510(k)s, IDEs, Please verify that your accession number matches the report type that is being filed. The third character of your accession number must correspond with its associated report type as shown in the table below: Third Character: **Report Type Description: Initial Product Report** Model Change Product Report 3 Annual Report 8 Abbreviated Report Variance Request Α R Laser OEM Registration and Listing Report [L] Are you requesting a new variance, a renewal, extension or amendment to a previous variance? If you are requesting a renewal, extension, or amendment, please provide the variance number that was issued by CDRH. If you are requesting a new variance, renewal, extension, or amendment, you must file a Variance Request separate from this Stop: report. To do this, open a new report (File > New) and select either "Laser Light Show Variance Request" or "Variance Request, Other" as your Type of Submission in the Submission Information Screen. If you select "Variance Request, Other" you must select the product for which you are requesting a variance at the end of the screen. Special Considerations Note: Check all items in this section that may apply to this submission. Noncompliances or Defects Does this document or any of its attachments contain: [L] A self-declaration or notification of noncompliance or defect? Provide an explanation:

[Multi-Line Plain Text]

#### Responses to Noncompliances or Defects

Does this document or any of its attachments contain and of these responses concerning noncompliances?			
A refutation of noncompliances?			
A request for an exemption from notification?			
Corrective action plans you may be conducting?			
A description of any design changes that correct noncompliances for future production?			
Provide an explanation:			
[Multi-Line Plain Text]			

## **Exemption Requests**

Does this document or any of its attachments contain:			
Exemption of a product for Q	exemption of a product for government use from a standard (1010.5)?		
Exemption for products for Q	Exemption for products for government use from reporting and recordkeeping (1002.51)?		
Special exemption of produc	Special exemption of products from reporting and/or recordkeeping (1002.50)?		
Request for approval of alte	Request for approval of alternate labeling?		
Application for alternate test procedures (1010.13)? [L]			
Provide an explanation:			
[Multi-Line Plain Text]			
Attach any necessary files.	Attach any necessary files.		
[Multi-Line Plain Text]	[Multi-Line Plain Text]		
[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]			

## Variance Requests

Message:	Click the plus sign to list the requirements from which you are requesting a variance.				
This submission inc	This submission includes an application for a variance from certain requirements.				
Item 1					
Item 2					
Item 3	tem 3				
Provide an explana	Provide an explanation and attach supporting files, if necessary. Click on the plus sign below to attach files.				
Details [HTML Text]		HTML Text]			

File Attachment	[Multiple File Attachments (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]
The el the Me  U.S. F Cente. Attn: e Docum 10903 Silver Additio Food a Divisio 5630 I	I Variance requests, two submissions must be made to the FDA.  Idectronic version should be submitted following the Packaging Files for Submission instructions located under Output in enu bar, and explained in subsection 4.3 of the User Manual. If sending a CD & submittal letter, please mail to:  Food and Drug Administration refor Devices and Radiological Health essubmitter Team ment Mail Center - WO66-0609  8 New Hampshire Avenue Spring, MD 20993-0002  Fonally, a paper version (hard-copy) of the signed Variance request document should be submitted to:  and Drug Administration on of Dockets Management (HFA-305)  Fishers Lane, Room 1061  ville, MD 20857

# Responses to Communications from FDA

Does this document or any of its attachments contain:			
A response to an inspection?	[L]		
What was the date of the inspection?	[Date]		
A response to a warning letter from the Food and Drug Administration (FDA)?	[L]		
What was the date of the Warning Letter?	[Date]		
A response to a report review inquiry from the Center for Devices and Radiological Health (CDRH) (the inquiry may have been in the form of a letter, email, or phone call)?	[L]		
What was the date of the inquiry?	[Date]		
A response to any other communication from FDA?	[L]		
What was the date of the communication?	[Date]		
Provide an explanation:			
[Multi-Line Plain Text]			

## Additional Information

Is there any other relevant information or additional comments that would help expedite the review of this submission? Click the plus sign below to attach any supporting files.	
File Attachment [Multiple File Attachments (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]	
Details [HTML Text]	

## Private Labeling

Is the product sold by other companies under different brand names?	[L]
---	-----

Private Labeling-Table		
Item: 1 (could contain up to 20 items with 1 required)		
a		
Give the name and address	of the manufacturer:	
Establishment Information:		
Establishment Name		
Division Name		
Email Address		
Address		
Address		
Telephone Number		
Fax Number		
Give the firm establishment r	egistration number of the manufacturer listed above (if known):	
	odel designations in the following table by clicking on the Add button. If	you prefer to attach a file, please click on the
Item 1		
Item 2		
Item 3		
List of Brand Names and/or I	Model Designations	
File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .	sgml, .mol, .xls, .csv, .zip)]
Details	[HTML Text]	
The Original Equipment Man	ufacturer (OEM) accession number (if known):	
Explain how the brand name	s and model designations correspond with your own brand names and	model designations:
[Multi-Line Plain Text]		
Medical Devices		
Provide the premarket 510(k), IDE, HDE, PDP, or PMA filing numbers related to this medical product, if one of these numbers has been assigned by FDA yet.		
[Multi-Line Plain Text]		
If it has not been assigned yet, provide an explanation and submit it as soon as you receive such a filing number.		
[Multi-Line Plain Text]		

Note: See www.fda.gov/cdrh for more information onmedical device premarket clearance procedures.

Document Key: Specialized Response content is defined within straight brackets []; Special code: [L] List of Values.

**Section: Laser Product** 

PART 1: DEFINITIONS

# **GENERAL DEFINITIONS**

This software application should be followed for all lasers and products containing, incorporating, or intended to incorporate, a laser or laser system [see the definition of "laser product" in section 21 CFR1040.10(b)(21)]. A separate form for reporting additional information concerning laser light shows is being published concurrently with this form and must be used in conjunction with this form when appropriate (Reporting Guide for Laser Light Shows and Displays).

## Laser Reporting and Recordkeeping (21 CFR 1002)

Applicability of reporting and recordkeeping requirements for laser products:

Class I, IIa, II, and IIIa laser products and laser products containing such lasers will require: Product Report, Annual Report, test records, manufacturer's distribution records, and dealer/distributor distribution records.

Note that for Class I laser products containing lasers of Class I, IIa, II, or IIIa no Supplemental Reports are required. Furthermore, some Class I laser products have already been exempted from the requirement for distribution records (see Notice to Industry dated August 9, 1988, Laser Notice # 41).

Class IIIb and IV laser products require all of the above plus Supplemental Reports when the criteria requiring submission of Supplemental Reports are met.

The laser standard applies to all laser products manufactured after August 1, 1976 (1040.10(a)), unless the products are either: sold to a manufacturer for use as components (or replacements) in products that will be certified (1040.10(a)(1)); sold by or for a manufacturer as repair or replacement components if they are properly labeled as such and have installation instructions (1040.10)(a)(2)); or intended for export only, are labeled as such, and comply with the requirements of the importing country (1010.20). Manufacturers of laser products that are sold to other manufacturers for use as components in their products are required to register and list such products.

# Laser Definitions from 21 CFR 1040.10(b)

**Laser** means any product that can be made to produce or amplify electromagnetic radiation at wavelengths greater than 250 nm but less than or equal to 13,000 nm or, after August 20, 1986, at wavelengths equal to or greater than 180 nm but less than or equal to 1.0 x 10 to the power of 6 nm primarily by the process of controlled stimulated emission.

**Laser energy source** means any product intended for use in conjunction with a laser to supply energy for the operation of the laser. General energy sources such as electrical supply mains or batteries shall not be considered to constitute laser energy sources. **Laser product** means any manufactured product or assemblage of components which constitutes, incorporates, or is intended to incorporate a laser or laser system. A laser or laser system that is intended for use as a component of an electronic product shall itself be considered a laser product (1040.10(b)(21)).

Laser radiation means all electromagnetic radiation emitted by a laser product within the spectral range specified in paragraph 1040.10(b)(19) that is produced as a result of controlled stimulated emission or that is detectable with radiation so produced through the appropriate aperture stop and within the appropriate solid angle of acceptance, as specified in 1040.10(e). Laser system means a laser in combination with an appropriate laser energy source with or without additional incorporated components. See paragraph 1040.10(e)(2) of the laser product performance standard for an explanation of the term "removable laser system."

# Specific-Purpose Products

Medical laser product means any laser product which is a medical device as defined in 21 U.S.C. 321(h) and is manufactured, designed, intended or promoted for in vivo laser irradiation of any part of the human body for the purpose of: (i) Diagnosis, surgery, or therapy; or (ii) relative positioning of the human body. Class IIIa, IIIb, and IV medical laser products must contain a means for measuring the delivered exposure or treatment level of radiation, accurate within plus or minus 20 percent. This requirement is not applicable to Class IIIa aiming devices except ophthalmic application. The instruction manual must include a procedure and schedule for recalibration of the measurement system. A modified aperture label is also specified (1040.11(a)).

**Surveying, leveling, or alignment laser product** means a laser product manufactured, designed, intended or promoted for one or more of the following uses:

- (i) Determining and delineating the form, extent, or position of a point, body, or area by taking angular measurement.
- (ii) Positioning or adjusting parts in proper relation to one another.
- (iii) Defining a plane, level, elevation, or straight line.

Surveying, leveling, and alignment laser products are generally used in agriculture and in the construction industry. They are restricted to 5mW visible radiant power and to Class I for other wavelengths and pulses less than 3.8 x 10 to the power of negative 4 seconds (1040.11(b)).

**Demonstration laser product** means any laser product manufactured, designed, intended, or promoted for purposes of demonstration, entertainment, advertising display, or artistic composition. The term "demonstration laser product" does not apply to laser products which are not manufactured, designed, intended, or promoted for such purposes, even though they may be used for those purposes or are intended to demonstrate other applications. Demonstration laser products (1040.10(b)(13)) include: laser products promoted for classroom demonstration of optical phenomena;

artistic displays and their associated apparatus;

laser light show projectors; and

laser light shows and displays themselves.

A general-purpose, scientific, medical or industrial laser product is not considered to be a demonstration laser product when it is demonstrated to a prospective purchaser. Demonstration laser products are restricted in their outputs to Class IIIa with its accompanying restrictions to Class I for short pulses and invisible wavelengths(1040.11(c)). Because these levels are too low for effective use in commercial theatrical lighting effects, CDRH may grant variances (1010.4) to manufacturers of laser light shows and display devices. As a condition of the variance, the manufacturer must agree to adhere to several safety conditions to provide a level of safety to the public equivalent to a fully compliant product. Consult the Compliance Guide for Laser Products, September 1985, Appendix B, Clarification of Certain Laser Light Show Requirements, for more information.

Report the model name and/or number, model family, brand name, or other designation of the

#### PART 2: PRODUCT AND MODEL IDENTIFICATION

#### 2.1 Model Designation

2.3 Product without a Laser

Note:

a model family or brand name, leave the field blank.		use			
Model D	Model Designation (Names and/or Numbers):				
Item	coignatio	(rtamos ana/or rtamosos).			
Item 1			Item 2		
2.2 App	roval of	Alternate Means			
Does this	s docume	ent or any of its attachments	contain:		
performa		ure or labeling would provide	of providing the equivalent or superio (this is applicable to the beam attenua		[L]
What red	quiremen	t are you requesting an appro	oval of alternate means from?		
[Multi-Line Plain Text]					
Provide an explanation:					
[Multi-Line Plain Text]					
	-				

Is it a product that does not incorporate a laser but is intended to incorporate a laser?

# OMB No. 0910-0025; Exp. May 31, 2010 If the product as introduced into commerce does not incorporate a laser, identify the manufacturer and models of the laser that you recommend: Item 1 Item 2 Item 3 [L] Is it a product that is intended to be used with a laser? If the product as introduced into commerce is intended to be used with a laser, identify the manufacturer and models of the laser that you recommend: Item 1 Item 2 Item 3 If you do not recommend a specific laser or laser system for use with the reported product, state the specifications of the laser or laser system which may be used with your product. This would include wavelengths, power or energy levels, etc. [Multi-Line Plain Text] 2.4 Modification of a Laser Product Note: Modification involves any changes to the product that affect its classification, performance or labeling requirements (as required by the standard or an approved variance). Is your laser product the result of the modification of a laser product certified by another manufacturer? 2.4.1 Other Manufacturers Item: 1 (could contain up to 20 items with none required) Give the name and address and/or firm establishment registration number of the manufacturer: [Multi-Line Plain Text] Identify the model(s), and brand name(s): Item 1 Item 2 Item 3 Provide the other manufacturer's accession number, if known: Explain how the brand names and model designations correspond with your own brand names and model designations:

### 2.5 Incorporation of Unmodified, Certified Laser Product

[Multi-Line Plain Text]

Does your laser product incorporate an unmodified, certified laser product?

[L]

#### 2.5.1 Other Manufacturers

#### Item: 1 (could contain up to 20 items with none required)

Give the name and address and/or firm establishment registration number of the manufacturer:

[Multi-Line Plain Text]

Identify the model(s) and brand name(s):

Item 1

Item 2

Item 3

Provide the other manufacturer's accession number, if known:

Explain how the brand names and model designations correspond with your own brand names and model designations:

[Multi-Line Plain Text]

#### 2.6 Incorporation of Uncertified Laser Product

Does your laser product incorporate an uncertified laser product as a component or component subsystem?

[L]

#### 2.6.1 Other Manufacturers

#### Item: 1 (could contain up to 20 items with none required)

Give the name and address and/or firm establishment registration number of the manufacturer:

[Multi-Line Plain Text]

Identify the model(s) and brand name(s):

Item 1

Item 2

Item 3

Provide the other manufacturer's accession number, if known:

Explain how the brand names and model designations correspond with your own brand names and model designations:

[Multi-Line Plain Text]

#### 2.7 Incorporation of Removable Laser System

Does your laser product incorporate a removable laser system or systems as defined by 21 CFR 1040.10(c)(2)?

[L]

#### 2.7.1 Other Manufacturers

#### Item: 1 (could contain up to 20 items with none required)

Is the removable system certified?

Give the name and address and/or firm establishment registration number of the manufacturer:

[Multi-Line Plain Text]

Identify the model(s) and brand name(s):

Item 1

Item 2

Item 3

Provide the other manufacturer's accession number, if known:

Explain how the brand names and model designations correspond with your own brand names and model designations:

[Multi-Line Plain Text]

#### **Section: Technical Data**

#### PART 3: DESCRIPTION OF THE PRODUCT

Note:	In this section, you are asked to provide descriptions of the product, its intended function, and the
	laser radiation fields or paths and collateral radiation that may be accessible in operation,
	maintenance, or service modes of the product. This section was previously Part 5 of the product
	reporting guide.

#### 3.1 Product Description and Function

Note:	You may refer to brochures and manuals submitted as attachments to this report.

	Describe the product and	d its function:
File Attachment [Multiple File Attachments (.pdf, .jpg, .gif, .zip)]		[Multiple File Attachments (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]
	Details	[HTML Text]

#### 3.2 External and Internal Laser Radiation Fields and Paths

Note:	Include beam path diagrams indicating protective housing, beam attenuators, viewports, scanners,
	targets, etc. Indicate energy and power levels at locations inside and outside the product.

Describe the external and internal laser radiation fields and paths:	
[Multi-Line Plain Text]	
File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]	

#### 3.3 Operational Procedures and Accessible Radiation

[L]

Note:

Describe here the procedures used during operation and the laser or collateral radiation that is accessible during these procedures.

List the procedures performed during operation:

[Multi-Line Plain Text]

Do these procedures provide human access to ANY laser or collateral radiation?

[L]

Do the levels of laser or collateral radiation exceed the limits of Class I or Table VI?

[L]

Indicate those collateral and laser radiation fields to which human access is possible during those operation procedures. Include the locations and identifications of laser and collateral radiation made accessible by viewing optics, viewports, and display screens:

[Multi-Line Plain Text]

#### 3.4 Maintenance Procedures and Accessible Radiation

Note:

Describe here the procedures used during maintenance and the laser or collateral radiation that is accessible during these procedures.

List the procedures performed during maintenance:

[Multi-Line Plain Text]

Do these procedures provide human access to laser or collateral radiation levels in excess of Class I or Table VI?

[L]

Indicate those collateral and laser radiation fields to which human access is possible during those maintenance procedures:

[Multi-Line Plain Text]

#### 3.5 Service Procedures and Accessible Radiation

Note:

Describe here the procedures used during service and the laser or collateral radiation that is accessible during these procedures.

List the procedures performed during service:

[Multi-Line Plain Text]

Do these procedures provide human access to laser or collateral radiation levels in excess of Class I or Table VI?

[L]

Indicate those collateral and laser radiation fields to which human access is possible during those service procedures:

[Multi-Line Plain Text]

#### PART 4: CERTIFICATION, CLASSIFICATION, AND LEVELS OF RADIATION

Note:

This section, covers the description of the certification and identification labels and the detailed explanation of your classification of the product.

#### 4.1 Performance Standard Identification

With which performance standard does your product comply?

[L]

#### 4.2 Certification Label

Note:

Required on all laser products.

Is a certification label present on your product?

[L]

Does your certification label state that the product complies with the FDA performance standards except for deviations pursuant to Laser Notice #50, dated July 26, 2001?

[L]

Attach a copy of the certification label with an indication of its location on the product:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 4.3 Identification Label

Note:

Required on all laser products.

Attach a copy of the identification label with an indication of its location on the product:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 4.4 Performance Standard Classification

Under which laser product performance standard are you classifying your product?

[L]

#### 4.5 Laser Product Class

Indicate the Class of the Laser Product:

| [L]

#### 4.6 Operation

Note:

For classification purposes describe the radiation levels accessible in any of the operational configurations of the product.

#### 4.6.1 Radiation Parameters

Item: 1 (could contain up to 10 items with none required)

Give specifications of laser radiation fields to which human access is possible during operation (please provide as much of the following as is appropriate to your product).		
Identify which laser is being described.		
Primary lasing medium or laser type:	[L]	
If other, then please specify:		
Primary wavelength (nm):		
Maximum average radiant power (W):		
Beam divergence, if symetric:		
Beam divergence, if asymetric (horizontal/vertical):		
Beam diameter at laser aperture (mm):		
Is the laser output pulsed?	[L]	
Pulse energy (J):		
Peak power (W):		
Pulse duration (sec):		
Repetition rate (Hz):		
Maximum irradiance (W/cm2):		
Maximum radiant exposure (J/cm2):		
Maximum radiance (W/cm2sr):		
Maximum integrated radiance (J/cm2sr):		

#### 4.6.2 Basis of Reported Values

Т	The values reported for the laser product are based on:	[L]

Provide a diagram of your measurement set-up or the analysis used in your calculations. Provide pertinent dimensions such as separation distances, source and detector aperture size, etc. to show compliance with the standard under which you are classifying:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 4.7 Embedded Laser System

Note:	Describe here laser radiation fields contained within the protective housing of the product which may
	exceed the class of the product. The classification of the contained laser radiation is pertinent to
	safety interlock and protective housing label requirements.

#### 4.7.1 Internal Radiation Levels

Does the protective housing contain radiation in excess of the Class of the product (such as in a product that has a higher class laser embedded inside, such as a laser printer or workstation)?

#### 4.7.2 Classification of Embedded Laser Radiation

Give the classification of laser radiation contained by the protective housing:

#### 4.7.3 Radiation Parameters

#### Item: 1 (could contain up to 10 items with none required)

Give specifications of laser radiation fieldscontained by the protective housing (please provide as much of the following as is appropriate to your product).		
Identify which laser is being described.		
Primary lasing medium or laser type	[L]	
If other, then please specify:		
Primary wavelength (nm):		
Maximum average radiant power (W):		
Beam divergence, if symetric:		
Beam divergence, if asymetric (horizontal/vertical):		
Beam diameter at laser aperture (mm):		
Is the laser output pulsed?	[L]	
Pulse energy (J):		
Peak power (W):		
Pulse duration (sec):		
Repetition rate (Hz):		
Maximum irradiance (W/cm2):		
Maximum radiant exposure (J/cm2):		
Maximum radiance (W/cm2sr):		
Maximum integrated radiance (J/cm2sr):		

#### 4.7.4 Other Radiation Fields

Are their other radiation fields to be described?	[L]
Please describe other radiation fields:	
[Multi-Line Plain Text]	

#### 4.7.5 Basis of Reported Values

The values reported for the laser product are based on:	[L]

Provide a diagram of your measurement set-up or the analysis used in your calculations. Provide pertinent dimensions such as separation distances, source and detector aperture size, etc. to show compliance with the standard under which

you are classifying:		
[Multi-Line Plain Text]		
File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .		

#### 4.8 Maintenance

Note: Describe here the laser radiation fields accessible in maintenance configurations of the laser product.

#### 4.8.1 Radiation Class during Maintenance

Indicate the Class of the laser radiation accessible during maintenance: [L]

#### 4.8.2 Radiation Parameters

# Item: 1 (could contain up to 10 items with none required)

Give specifications of laser radiation fields to which human access is possible during maintenance (please provide as much of the following as is appropriate to your product).		
Identify which laser is being described.		
Primary lasing medium or laser type	[L]	
If other, then please specify:		
Primary wavelength (nm):		
Maximum average radiant power (W):		
Beam divergence, if symetric:		
Beam divergence, if asymetric (horizontal/vertical):		
Beam diameter at laser aperture (mm):		
Is the laser output pulsed?	[L]	
Pulse energy (J):		
Peak power (W):		
Pulse duration (sec):		
Repetition rate (Hz):		
Maximum irradiance (W/cm2):		
Maximum radiant exposure (J/cm2):		
Maximum radiance (W/cm2sr):		
Maximum integrated radiance (J/cm2sr):		

#### 4.8.3 Basis of Reported Values

The values reported for the laser product are based on:	[L]
---	-----

Provide a diagram of your measurement set-up or the analysis used in your calculations. Provide pertinent dimensions such as separation distances, source and detector aperture size, etc. to show compliance with the standard under which you are classifying:

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

[Multi-Line Plain Text]

#### 4.9 Service

Note: Describe here the laser radiation fields accessible in service configurations of the laser product.

#### 4.9.1 Radiation Class during Service

Indicate the Class of the laser radiation accessible during service: [L]

#### 4.9.2 Radiation Parameters

#### Item: 1 (could contain up to 10 items with none required)

Give specifications of laser radiation fieldsto which human access is possible during service (please provide as much of the following as is appropriate to your product).		
Identify which laser is being described.		
Primary lasing medium or laser type	[L]	
If other, then please specify:		
Primary wavelength (nm):		
Maximum average radiant power (W):		
Beam divergence, if symetric:		
Beam divergence, if asymetric (horizontal/vertical):		
Beam diameter at laser aperture (mm):		
Is the laser output pulsed?	[L]	
Pulse energy (J):		
Peak power (W):		
Pulse duration (sec):		
Repetition rate (Hz):		
Maximum irradiance (W/cm2):		
Maximum radiant exposure (J/cm2):		
Maximum radiance (W/cm2sr):		
Maximum integrated radiance (J/cm2sr):		

#### 4.9.3 Basis of Reported Values

The values reported for the laser product are based on:

[L]

Provide a diagram of your measurement set-up or the analysis used in your calculations. Provide pertinent dimensions such as separation distances, source and detector aperture size, etc. to show compliance with the standard under which you are classifying:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 4.10 Collateral Radiation

Describe all collateral radiation fields associated with the product. Report the source(s) and levels and describe where and under what circumstances such radiation is accessible:

[Multi-Line Plain Text]

Provide a diagram of yourmeasurement set-up or the analysis used in your calculations. Provide pertinent dimensions such as separation distances, source and detectoraperture size, etc. to show compliance with the standard under which you are classifying:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### PART 5: COMPLIANCE WITH PERFORMANCE REQUIREMENTS

Note:

In this section, you will describe how your product complies with the performance requirements. This section was previously Part 7 of the product reports.

#### 5.1 Protective Housing

Note:

Required for all classes of laser products (see 1040.10(f)(1) and Compliance Guide).

Describe the product's protective housing and how it serves to prevent unnecessary human access to levels of laser radiation in excess of Class I:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Describe how the protective housing prevents access to unnecessary collateral radiation in excess of Table VI:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.2 Safety Interlocks

Note:

Applicable for all Classes of laser products (see 1040.10(f)(2)(i) and Compliance Guide).

Does your product have portions of the protective housing that are intended to be opened or removed for:

Operation:

[L]

OMB No. 0910-0025; Exp. May 31, 2010			
Maintenance: [L]			
Service:		[L]	
Does your laser product incorporate any safety interlocks?		[L]	
What types of interlocks (select all that apply):			
Item 1			
Item 2			
Item 3			
If other, then please specify:			
Provide an electrical block diagram illustrating the logic of all interlock systems	S:		
[Multi-Line Plain Text]			
File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .:	kpt, .xml, .dtd, .sgml, .mol, .	xls, .csv, .zip)]	
Provide a detailed mechanical diagram showing where they all are located on	the product:		
[HTML Text]			
File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .:	kpt, .xml, .dtd, .sgml, .mol, .	xls, .csv, .zip)]	
5.2.1 Safety Interlock Types			
What type of safety interlock is this? [L]			
Is this optional?	[L]		
Non-Defeatable Safety Interlocks			
With which laser product performance standard does this type comply?	[L]		
Select how this type operates:	[L]		
If other, please explain how it operates:			
Is this type designed to allow defeat? [L]			
Actuated during:			
Item 1			
Item 2			
Item 3			
To what radiation level does this type prevent access?			

[Multi-Line Plain Text]

Defeatable Safety Interlocks

Note:

Applicable to all laser products (see 1040.10(f)(2)(ii) and (iii)and ComplianceGuide).

How does each interlock preclude replacement of the housing while that interlock is defeated?

[Multi-Line Plain Text]

Describe the means of providing a visible or audible indication of defeat:

[Multi-Line Plain Text]

Fail Safe or Redundant Safety Interlocks

Note:

Applicable to all required safety interlocks that prevent access to Class IIIb or IV (IEC: 3b and 4) levels of laser radiation. (see 1040.10(f)(2)(iii).

Describe how each safety interlock is "fail-safe," (i.e., precludes removal or displacement of the interlocked portion of the protective housing upon failure of the safety interlock or is redundant):

[Multi-Line Plain Text]

Describe the possible modes of failure of each safety interlock and the resultant effect upon the radiation safety of the laser product:

[Multi-Line Plain Text]

State the rating of each safety interlock, including the number of operational cycles before failure:

[Multi-Line Plain Text]

#### 5.3 Remote Interlock Connector

Note:

Applicable to Class IIIb or IV (and IEC:3B and 4) laser systems (see 1040.10(f)(3) and Compliance Guide).

Does the product have a remote interlock connector that disables the laser radiation when the circuit is open?

[L]

Describe the electrical and mechanical construction and operation of the remote connector (give its circuit and physical location):

[Multi-Line Plain Text]

Record the open-circuit electrical potential difference between the terminals of the remote interlock connector:

#### 5.4 Security Master (Key) Control

Note:	Required for Class IIIb or IV (and IEC:3B or 4) laser systems (see 1040.10(f)(4) and Compliance Guide).	
Does your product have a Security Master control? [L]		
What type of security control is it?		[L]
If other, then please specify:		
Describe how it works,including how the key control prevents unauthorized use of the product:		
[Multi-Line Plain Text]		
Is the key control removable in the "On" position? [L]		
Describe the function of the key control and how it renders the laser inoperable when the "key" is removed:		
[Multi-Line Plain Text]		

#### 5.5 Laser Radiation Emission Indicator

Note: Required for Class II, IIIa, IIIb, or IV (and IEC: 3R, 3B, and 4) laser systems (see 1040.10(f)(5) andCompliance Guide).		e 1040.10(f)(5)	
Does the product incorporate any emission indicators?			
Describe in detail the mechanical and electrical characteristics of all emission indicators installed pursuant to Section 1040.10(f)(5)(i) or (ii) and give their locations:			

[Multi-Line Plain Text]

What type of emission indicator is incorporated? [L]

If "other", please describe:

[Multi-Line Plain Text]

How is your emission indicator warning fail-safe or redundant?

[Multi-Line Plain Text]

#### 5.5.1 Separation of Laser and Operation Control

Are the laser head, laser energy source or operation controller(s) separable by more than 2 meters? [L]

Does the laser head and each control have an emission indicator?

[L]

#### 5.5.2 Emission Delay

Note:	Requiredfor Class IIIb and IV(and IEC: 3B and 4) (see 1040.10(f)(5)(ii) and Compliance Guide).
INOIC.	

Is there a specific delay betweenthe indication of emission and the actual emission?	[L]	
How is emission delay achieved?	[L]	
If other, then please explain further:		
Please provide additional information, as needed:		
[Multi-Line Plain Text]		
How many seconds is the emission indicator actuated priorto laser emission?		

# 5.5.3 Emission Indicator Visibility through Protective Eyewear

Note:	Applicable to Class II, IIIa, IIIb or IV (and IEC: 3R, 3B, and 4) laser systems [1040.10(f)(5)(iv)].	
Is protective eyewear supplied with the laser system?		[L]
Is protective eyewear recommended?		[L]
Can all visible emission indicators be seen through eyewear?		[L]

#### 5.6 Beam Attenuator

Note:	Required for Class II, IIIa, IIIb or IV (and IEC: 3B or 4) laser systems (see 1040.10(f)(6) and Compliance Guide).
Note:	You may be able to use currently approved alternate means or you may need to apply for approval of alternate means of providing this protection if this alternate means provides protection equivalent to a beam attenuator.
Does your product have a beam attenuator? [L]	
Does your product have an alternative? [L]	
Describe or attach request for approval of alternate means:	
[Multi-Line Plain	Text]
File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

## 5.6.1 Beam Attenuator Description

## Item: 1 (could contain up to 20 items with none required)

Does your product incorporate any of the following:	[L]
For the beam attenuator, describe the mechanical and electrical characteristics:	
[Multi-Line Plain Text]	

Does the attenuator prevent access by any part of the human body to all laser and collateral radiation in excess of the accessible emission limits of Class I and Table VI?

[L]

Describe how it does this:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Describe how the beam attenuator is permanently attached:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.7 Location of Controls

Note: Applicable to Class II, IIIa, IIIb or IV laser products (see 1040.10(f)(7) and Compliance Guide).

Are operational and adjustment controls located so that exposure to laser radiation, above the accessible emission limits of Class I and Table VI, is unnecessary?

[L]

Describe:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.8 Viewing Optics

Note: Applicable to all laser products (see 1040.10(f)(8) and Compliance Guide).

Does the product incorporate any of the following viewing optics:

[L]

If so, please further describe the viewing optic that is incorporated:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Is the laser and collateral radiation that is accessible by virtue of viewing optics, viewports, or display screens less than the accessible emission limits of Class I and Table VI during operation and maintenance?

[L]

Provide calculations and/or measurements, including pertinent attenuation factors, window transmission characteristics, etc.:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.8.1 Attenuation of Viewing Optics

Do the viewing optics, viewports, or display screen incorporate a shutter or variable attenuator?

[L]

Describe in detail, using diagrams or photographs and radiation transmission or reflection spectra, each shutter or variable attenuator incorporated into viewing optics, viewport, or display screen:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Describe how exposure of the eye to laser or collateral radiation in excess of the accessible emission limits of Class I (or IEC: 1M) and Table VI is prevented, for the following:

In the event of failure of the shutter or variable attenuator, as required by Section 1040.10(f)(8)(ii):

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Whenever the shutter is opened or the attenuator is varied:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.9 Scanning Safeguard

Note:	Required for certain laser products with scanned laser radiation (see 1040.10(f)(9) and Compliance
	Guide)

Note: A safeguard is required when scan failure would cause the product to exceed the emission limits of its class.

Does the product incorporate a scanning safeguard? 

Describe the mechanical, electrical, and functional characteristics of any required scan failure safeguard:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

[L] Is the classification of the product based on the level of scanned radiation?

What is the reaction time?

Provide calculations to show that the safeguard's reaction time is adequate to prevent human access to laser radiation in excess of the product's class:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.10 Manual Reset

Note: Applicable to Class IV laser systems manufactured after August 20, 1986. (see 1040.10(f)(10) and Compliance Guide).

Does the product incorporate a manual reset mechanism or means that prevents automatic restart following interruption of emission caused by power failure of at least 5 seconds or deactivation through the remote interlock connector?

[L]

Provide the circuit and physical description and location of the manual reset mechanism:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Does emission delay reactivate when power is resumed after an interruption of 5 seconds or more?

[L]

Must the emission be manually restarted following interruption via the remote interlock connector?

[L]

#### 5.11 Medical Laser Product

Note: Applicable to Class III or IV (and IEC: 3B or 4) medical laser products intended for in-vivo surgical, therapeutic, or diagnostic irradiation of the human body (see 1040.11(a) and Compliance Guide).

Note:

The requirement in section 1040.11(a) does not apply to visible aiming beams less than the accessible emission limits of Class IIIa except for ophthalmic indications.

Describe the means incorporated into the product to measure the level of laser radiation intended for irradiating the human body; include circuit diagrams and/or optical system diagrams:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.11.1 Laser Radiation Levels

Is the radiation level continuously monitored?

[L]

Explain how the radiation level is monitored:

[Multi-Line Plain Text]

Describe how the system can assure the accuracy of the displayed value to within 20%:

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

[Multi-Line Plain Text]

#### 5.11.2 Measurement and Monitoring Uncertainties

Specify the uncertainty in the measurement system and describe the method by which it was derived:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Specify the uncertainty in the monitoring system and describe the method by which it was derived:

#### [Multi-Line Plain Text]

Describe how the displayed power/energy level is either measured at the point of delivery or measured earlier and then the actual output calculated:

[Multi-Line Plain Text]

If the displayed level is calculated, then provide calculations incorporating system constants, losses, attenuation factors, etc. to demonstrate accurate calibration of the delivered beam to +/-20%:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.11.3 Calibration Procedures

Are procedures and a schedule for recalibration of the measurement system included in the user instructions?

[L]

Identify location in the user instructions:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 5.12 Surveying, Leveling, or Alignment Laser Products

Note: As a surveying, leveling, or alignment laser product it is subject to the requirements of section 1040.11(b).

Note: If the product's class exceeds Class IIIa then an approved variance from the performance requirements in this section would be necessary prior to introduction into commerce.

Is a variance request being submitted with this report?

#### 5.13 Demonstration Laser Products

Note:

As a demonstration laser product it is subject to therequirements of section1040.11(c).

Note:

If the product's class exceeds Class IIIa then an approved variance from the performance requirements in this section would be necessary prior to introduction into commerce.

Note:

An Application for a Variance from 21 CFR 1040.11(c) for a Laser Light Show, Display, or Device (form FDA 3147) must be submitted, following the instructions on the form. ALaser Light Show report may also be required for Class IIIb or IV shows or displays.

Is a Laser Light Show report being submitted along with this report?	[L]
Is a variance application for a laser light show projector and laser light show being submitted along with this report?	
Does its user instructions include a warning not to direct the laser radiation at the audience?	[L]

#### PART 6: COMPLIANCE WITH LABELING REQUIREMENTS

Note:	In this section, you will describe how your product complies with the labeling requirements. This section was previously Part 3 of the product reporting guide.
Note:	For each of the following labels required for the product being reported, provide a sample or a facsimile of each label. Clearly indicate the locations on the product of allrequired labels. Submitting diagrams, photographs, blueprints, product literature, etc. is acceptable (see laser notices # 16, 17, 45, and 50).

#### 6.1 Performance Standard Identification

With which performance standard do your product's labels comply: [L]

#### 6.2 Warning Logotype Label

Note:	Required on Class II, III, and IV laser products. (see 1040.10(g)(1), (2),(3),(4),(8),(9),(10) and Compliance Guide).
Attach a copy with an indication of its location on the product:	
[Multi-Line Plain Text]	
File Attachr	t [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

# 6.3 IEC Warning Label

Note:	Required on all Class 1, 1M,2, 2M, 3R, 3B, and 4 laser products.
Attach a copy of both labels with an indication of their locations on the product.	
[Multi-Line Plain Text]	
File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 6.4 Class Ila Warning Label

Note:	Required on Class IIa laser products (see 1040.10(g)(1)(i) and Compliance Guide).	
Attach a copy with an indication of its location on the product:		
[Multi-Line Plain Text]		
File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]	

#### 6.5 Aperture Label

1040.10(g)(5),(8),(9),(10) or for medical laser products see 1040.11(a)(3) and Compliance Guide).		Required on Class II, III and IV (IEC: 3R, 3B, and 4) laser products (for nonmedical laser products see 1040.10(g)(5),(8),(9),(10) or for medical laser products see 1040.11(a)(3) and Compliance Guide).
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Attach a copy with an indication of its location on the product:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 6.6 Protective Housing Labels

Note: See 1040.10(g)(6),(7),(8),(9),(10), Compliance Guide, and Laser Notice 17.

Does your product have any protective housing labels?

[L]

Does your product have any noninterlocked protective housing labels?

[L]

Attach a copy with an indication of its location on the product:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Indicate how the label(s) are visible both prior to and during opening or removal of housing:

[Multi-Line Plain Text]

Does your product have any defeatably interlocked protective housing labels?

[L]

Attach a copy with an indication of its location on the product:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Indicate how the label(s) are visible both prior to and during interlock defeat:

[Multi-Line Plain Text]

Does your product have any optionally interlocked protective housing labels?

[L]

Attach a copy with an indication of its location on the product:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Indicate how the labels are visible both prior to and during opening or removal of the housing:

[Multi-Line Plain Text]

#### PART 7: COMPLIANCE WITH INFORMATIONAL REQUIREMENTS

Note:

In this section, you will describe how your product complies with the informational requirements. This section was previously Part 4 of the product reporting guide.

#### 7.1 User Information

Submit a copy of user information (operator's manuals) for your laser product. If the manual is very extensive, submit those portions that confirm compliance with Section 1040.10(h) [and 1040.11(a)(2), if a medical laser product]:

[Multi-Line Plain Text]

ol, .xls, .csv, .zip)]
[L]

Note: These materials may also have been used in the product description required by Part 3.

#### 7.2 Promotional Literature

Submit copies of any sales literature, including catalogs, specification sheets, and descriptive brochures for Class IIa, II, and IV laser products:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Note: This material is needed to demonstrate compliance with Section 1040.10(h)(2), which states that a reproduction of the warning logotype is required in all catalogs, specification sheets, and descriptive brochures.

#### 7.3 Servicing Information

Submit a copy of the relevant radiation safety sections of your product's servicing information (from your service manual):

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

# **Section: Quality Control**

#### PART 8: PRODUCT DESIGN VERIFICATION

Note:	In this section, any attached files must identify the manufacturing facility and name of the responsible
	Quality Assurance manager for the activity. This section waspreviously Part 9 of the laser product
	reporting guide.
	In this section, you will also describe those design considerations, verification activities, and controls
	implemented to ensure that the reported product will remain in compliance with the Federal laser

product performance standard during its useful life.

Quality control and product testing should be based on design considerations and factors that can affect product compliance with the Federal laser product performance standard.

#### 8.1 Critical Design Requirements

List the factors identified during design that may provide product compliance with the Federal laser product performance standard or performance as related to accessible or emitted laser radiation (e.g. performance specifications, component selection):

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 8.2 Life Testing

Note:	In this section you will describe those verification activities conducted to assure product compliance
	with the Federal laser product performance standard over its useful life.

Note:	Maintenance and/or service instructions must include schedules for maintenance and replacement of
	components that may be necessary for the compliance of the product during its useful life.

Testing of features designed to meet Federa	al laser product performance requirements:
---	--

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Acceptance of electrical and electronic components:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Dimensional stability and rigidity of mechanical parts and assemblies such as housings and mounts:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Environmental stability of components such as filter materials, coatings, and adhesives:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Other factors that might affect your product's radiation safety:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Provide an estimate of the useful life of the product (in years):

#### 8.3 Change Controls

Describe the controls implemented to assure compliance with the Federal laser product performance standard (e.g. control of design changes, user and service information changes, labeling changes to assure that compliance of the product is not jeopardized.):

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### PART 9: QUALITY CONTROL TESTS AND PROCEDURES

Note:

In this section, any attached files must identify the manufacturing facility and name of the responsible Quality Assurance manager for the activity. This section was previously Part 8 of the laser product reporting guide.

Section 1010.2(c) requires that certification be based on a test, in accordance with the standard, of each unit or on a program in accordance with good manufacturing practices.

Failure to maintain an adequate testing program may result in disapproval of the program by CDRH.

#### 9.1 Quality Control Documentation

Note:

Attach samples of documents that describe, specify, or relate to procedures or tests used to ensure compliance of your reported product with the standard, including compliance with all performance, labeling, and informational requirements.

Specification controls for critical components:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Manufacturing and assembly control procedures:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Inspection and test control procedures:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Assembly and test traveler forms:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .ipg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Inspection and test reports and checklists:

[Multi-Line Plain Text]

File Attachment

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Other(s), specify:	
[Multi-Line Plain Text]	
File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 9.2 Alternate Quality Control Procedures

If formal quality control and testing procedures have not been implemented or are not sufficient to assure that your product(s) will comply with the standard, explain how you assure that your products comply and submit supporting documentation:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### PART 10: INSTRUMENTATION AND CALIBRATION

Note:	In this section, you will describe the instrumentation used for compliance testing your product and the
	instrumentation calibration procedures.

#### 10.1 Component Testing

Do you purchase components or services from contractors or original equipment manufacturers in lieu of conducting your own in-house testing?	
Provide certificates or sample test/inspection records from suppliers or original equipment manufacturers, etc. to assure that those entities are operating in a state of control.	
ct]	
[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .	.zip)]
ľ	n in-house testing?  or sample test/inspection records from suppliers or original equipment manufacturers, etc. to as

Describe those tests and controls used to determine whether the reported product is produced be in compliance with the Federal laser product performance standard:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Do you conduct in-house compliance testing for your product?

[L]

Do you have testing done by an outside contractor?

[L]

#### 10.2 Compliance Testing

Describe those tests and controls used to determine whether the reported product is produced to be in compliance with the Federal laser product performance standard:

[Multi-Line Plain Text]

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

List the instruments you use to determine compliance of the reported product with the standard. Describe these instruments or provide copies of specification sheets. Identify each detector's aperture size, if applicable.

File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]	
[Multi-Line Plain Text]		
Indicate how the me 1040.10(e):	asurement system collects or accounts for the total radiant energy or power specified in Section	
[Multi-Line Plain Text]		

[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

Provide a measurement error analysis (for all sources of error identified) and an uncertainty statement for all measurement data reported. (If it isclear from the measurement data, including the total estimated uncertainty, that the levels are well below the applicable class limit, then an error analysis and uncertainty statement are not required. For example, an error analysis and uncertainty statement would not be required for a 1.5 milliwattHeNe laser product classified in Class IIIa.):

[Multi-Line Plain Text]

File Attachment

File Attachment [Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]

#### 10.3 Calibration

Provide instrument calibration schedules and indicate how your instruments are calibrated (e.g.,calibrated by your company against a working standard, returned to the manufacturer of the instrument, sent to an independent calibration laboratory) [If your laser product operates at a level closely approaching a specified limit, high accuracy and traceabilty to the National Institute of Standards and Technology (previously known as the National Bureau of Standards) are important]:

importantj:			
[Multi-Line Plain Text]			
File Attachment	[Single File Attachment (.pdf, .jpg, .gif, .tif, .avi, .wmv, .xpt, .xml, .dtd, .sgml, .mol, .xls, .csv, .zip)]		
Stop:	You have reached the end of this report. Please verify that all PDFs that are to be included in this submission are correctly attached to a specific file attachment question. Otherwise, they will not be packaged with your report. Check to make sure you have no missing data (select Missing Data Report from the Output menu). Once you have confirmed that there is no missing data and all your files are attached, click on the Package Submission icon on the tool bar.		
Message:	Form FDA 3632 Guide for Preparing Product Reports on Lasers and Products Containing Lasers (03/06)		