

Cary Eclipse Fluorescence spectrophotometer – Site Preparation Checklist

Thank you for purchasing an Agilent **instrument**. To get you started and to assure a successful and timely installation, please refer to this specification or set of requirements.

Correct site preparation is the key first step in ensuring that your instruments and software systems operate reliably over an extended lifetime. This document is an **information guide AND checklist** prepared for you that outlines the supplies, consumables, space and utility requirements for your equipment for your site.

Customer Responsibilities

Make sure your site meets the following prior specifications before the installation date. For details, see specific sections within this checklist, including:

- The necessary laboratory or bench space is available.
- The environmental conditions for the lab as well as laboratory gases and plumbing.
- The power requirements related to the product (e.g., number & location of electrical outlets).
- The required operating supplies necessary for the product and installation.
- Please consult Other Requirements section below for other product-specific information.
- For more details, please consult the Cary Eclipse Site Preparation Guide part number 8510174000.

If Agilent is delivering installation and familiarization services, users of the instrument should be present throughout these services; otherwise, they will miss important operational, maintenance and safety information.

Important Customer Information

1. If you have questions or problems in providing anything described in Customer Responsibilities above, please contact your local Agilent or partner support/service organization for assistance prior to delivery. In addition, Agilent and/or it's partners reserve the right to reschedule the installation dependent upon the readiness of your laboratory.
2. Should your site not be ready for whatever reasons, please contact Agilent as soon as possible to re-arrange any services that have been purchased.
3. Other optional services such as additional training, operational qualification (OQ) and consultation for user-specific applications may also be provided at the time of installation when ordered with the system, but should be contracted separately.

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Dimensions and Weight

Identify the laboratory bench space before your system arrives based on the table below.

Pay special attention to the **total height and total weight requirements for all system components you have ordered and avoid bench space with overhanging shelves**. Also pay special attention to the total weight of the modules you have ordered to ensure your laboratory bench can support this weight.

Special Notes

1. The workbench should be about 90 cm (36 in) high. It must be stable and strong enough to support the total weight of equipment to be used. Remember to provide space for the computer, monitor and printer.
2. Ensure the workbench is free from vibration. Any equipment generating vibration during operation must be placed on the floor rather than alongside the Cary Eclipse on the workbench.
3. Allow at least two inches of space on both sides, and six inches at the rear of the system to permit free air circulation.
4. Allow eight inches in front of the Cary Eclipse. Some accessories attach to the front of the instrument and may overhang the workbench if adequate space is not provided.
5. Power cord and all other connections are located at the rear of the instrument. The Power switch is located on the front panel.
6. To avoid damage through the spillage of analyzed samples, the worktops should be covered with a material that is corrosion resistant and impervious to liquids.

Instrument Description	Weight		Height		Depth		Width	
	Kg	lbs	mm	in	mm	in	mm	in
Cary Eclipse packed	54	119	560	22	760	30	820	32
Cary Eclipse unpacked	31	68	280	11	610	24	600	24



Environmental Conditions

Operating your instrument within the recommended temperature ranges insures optimum instrument performance and lifetime.

The instrument warranty will be made void if the equipment is operated in sub-standard conditions.

Special Notes

1. Performance can be affected by sources of heat & cold e.g. direct sunlight, heating/cooling from air conditioning outlets, drafts and/or vibrations.
2. For optimum performance the area should have a dust-free, low humidity atmosphere. A layer of dust on the electronic components could act as an insulating blanket and reduce heat transfer to the surrounding air.
3. Air conditioning is recommended. The site's ambient temperature conditions must be stable for

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optimum performance. It is recommended that the ambient temperature of the laboratory be between 20 and 25°C, and be held constant to within ±2 °C throughout the entire working day.

4. The Cary Eclipse instrument is designed for operation in clean air conditions. The laboratory must be free of all contaminants that could have a degrading effect on the instrument's components.
5. Dust, acid and organic vapors, such as acetone, must be expelled from the work area. It is your responsibility to provide an adequate exhaust system. An exhaust system is not required for normal operation of the Cary Eclipse but should be installed if substances giving off toxic vapours are to be analyzed.
6. Sample preparation areas and materials storage facilities should be located in a separate room.

Instrument Description	Operating temp range °C (F)	Operating humidity range (%)	Heat Dissipation (BTU)
Cary Eclipse Non-operating (transit)	5 to 45 (41 to 113)	20 to 80	
Cary Eclipse Operating within performance specifications	10 to 35 (50 to 95)	8 to 80	331 BTU/hr



Power Consumption

The installation of electrical power supplies must comply with the rules and/or regulations imposed by local authorities responsible for the supply of electrical energy to the workplace.

Special Notes

1. If a computer system is supplied with your instrument, be sure to account for those electrical outlets.
2. A separate power outlet receptacle should be provided for the Cary Eclipse system.
3. Good electrical grounding is essential to avoid potentially serious shock hazards. A 3-wire outlet with ground connection must be provided for the instrument. Make certain that power outlets are earth-grounded at the grounding pin.
4. All power supplies for the Cary Eclipse must be single-phase, AC voltage, three-wire system (active, neutral, earth) and should be terminated at an appropriate power outlet receptacle that is within reach of the power cord.
5. The use of extension cords or outlet adaptors is not recommended.
6. Cary Eclipse instruments are supplied with a 2 metre (6' 6") long power cord and three-pin plug assembly that is compatible with common standards applicable in the local area.
7. Avoid using power supplies from a source that may be subject to electrical or RF interference from other services (large electric motors, elevators, and welders, for example).

Instrument Description	Line Voltage & Frequency (V, Hz)	Maximum Power Consumption (VA)	Maximum Power Consumption (W)
Cary Eclipse	85 to 264 VAC 47 to 63 Hz	180VA	97W

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Optional Operating Supplies by Customer

Special Notes

1. For information on Agilent consumables, accessories and laboratory operating supplies, please visit <http://www.chem.agilent.com/en-US/products/columns-supplies/pages/default.aspx>
2. A Microcell Holder is supplied as standard with the Cary Eclipse.
Other sample holders are available for use such as the Solid Sample Holder.

Item Description	Vendor's Part Number	Recommended Quantity
Solid Sample Holder	G9811A	1
Quartz rectangular cuvettes	6610001200	2



Other Requirements

Use of the Cary Eclipse system and accessories may involve materials, solvents and solutions that are flammable, corrosive, toxic or otherwise hazardous.

Careless, improper, or unskilled use of such materials, solvents and solutions can create explosion hazards, fire hazards, toxicity and other hazards which can result in death, serious personal injury, and damage to equipment and property.

ALWAYS ensure that laboratory safety practices governing the use, handling and disposal of such materials are strictly observed. These safety practices should include the wearing of appropriate safety clothing and safety glasses.

It is your responsibility to provide an adequate exhaust system. An exhaust system is not required for normal operation of the instrument but should be installed if substances to be analyzed give off toxic vapors.

You are responsible for providing an acceptable operating environment. Attention paid to the operating environment will ensure the continued high performance of your Cary Eclipse instrument. The instrument warranty will be made void if the equipment is operated in sub-standard conditions.

The Cary Eclipse weighs 31 kg. To avoid injury to personnel or damage to equipment, always use two or more people when lifting or carrying the instrument. NEVER attempt to lift the instrument alone.

Your Agilent Cary Eclipse spectrophotometer has been designed to comply with the requirements of the Electromagnetic Compatibility (EMC) Directive and the Low Voltage (electrical safety) Directive (commonly referred to as the LVD) of the European Union. Agilent has confirmed that each product complies with the relevant Directives by testing a prototype against the prescribed EN (European Norm) standards.

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The Cary Eclipse is fitted with a connection for nitrogen purging of the sample compartment windows and sample compartment. Purging is optional and may only be required when using low temperature accessories that could cause condensation to form on the windows or cells as they cool.

Nitrogen supplies are not available from Agilent, but may be obtained from commercial suppliers. Liquid nitrogen (in conjunction with a heat exchanger) is recommended because it is generally less costly than compressed nitrogen and is of better quality. Where compressed nitrogen must be used, the gas must be dry, oil-free and uncontaminated.

Do not use compressed nitrogen from a supplier who uses oil or water in the compression process. These methods leave fine particles of oil or water suspended in the nitrogen that may be deposited on the instrument optics. Only use nitrogen from a supplier who fills containers from immersion pumps that are lubricated with liquid nitrogen.

The instrument warranty will be void if damage is caused by the use of contaminated nitrogen.

All gas supply installations must comply with the rules and/or regulations that are imposed by the local authorities responsible for the supply of compressed gas energy to the workplace.

Important Customer Web Links

- For additional information about our solutions, please visit our web site at <http://www.chem.agilent.com/en-US/Pages/HomePage.aspx>
- Need to get information on your product?
Literature Library - <http://www.agilent.com/chem/library>
- Need to know more?
Customer Education – <http://www.agilent.com/chem/education>
- Need technical support, FAQs? – <http://www.agilent.com/chem/techsupp>
- Need supplies? – <http://www.agilent.com/chem/supplies>

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