

Welcome to

LANDAUER®

User Guide

Getting Started with Your Dosimetry Service



Contacting LANDAUER teams

Team	Contact Info	Types of Inquiries	
Customer Service	 01865 373008  admin@landauer.co.uk	• Account/subaccount maintenance • Add new services/products • Badge board and badge clip requests • Replace a lost dosimeter	• Dose report explanation • Report correction requests • Adding lifetime dose • High dose inquiry • Website navigation • myLDR tech support
Sales	 01865 373008  salesadmin@landauer.co.uk	• Request a quote enquiries • Website enquiries • Contract enquiries • Renewal queries	• Tender submissions • Pricing enquiries • Product availability
Shipping & Receiving	 01865 373008  shippingandreceiving@landauer.co.uk	• Shipment enquiries • Missing Dosimeters • Shipment Tracking	• Carrier queries • Delivery issues • Documentation queries
Credit Control	 01865 373008  creditcontrol@landauer.co.uk	• Amended Purchase Orders • Remittance Advice • Invoicing queries	

Following Your Dosimetry Service in 6 Steps



Receiving Your Dosimeters

LANDAUER ships the dosimeters either to a central department or to multiple locations. The **dosimeters are delivered around one week before the beginning** of the next wear period.

Your dosimeters are delivered in boxes or envelopes with at least one control dosimeter. The packing list can be download on myLDR.

Personal identification, including account number, participant number, wear begin date and unique serial numbers are all printed on the reverse side of **LUXEL+®** dosimeters and laser etched on **SATURN®** extremity rings and **VISION®** lens of eye dosimeters.

All routine shipments are sent to a central location or can be sent to multiple sites (series/sub account) at the same address or to different addresses.

Series within accounts are segregated on dosimetry reports, and the site name appears on the dosimeter.



Wearing Your Dosimeters

Luxel+

Remove the dosimeter tab (highlighted in orange in the diagram below) completely prior to using a LUXEL+ dosimeter, make sure the tab at the top of the dosimeter is completely removed by wiggling it back and forth to break off the plastic tab. Discard the tab.



Removing the tab indicates the dosimeter has been used and is ready for analysis.

Tabs that are partially removed (or not removed at all) can create confusion, add processing time or cause the dosimeter to be reported as “unused”.

Snap the dosimeter into the holder and attach it to the location specified by your RSO or radiation safety manager.



Saturn

For SATURN Ring dosimeters, the white plastic with your name etched into it should always be facing the source of radiation. Try to wear the ring on your dominant hand each time.

The front of the dosimeter should always face towards the source of radiation.



Vision

VISION can be applied to glasses, visors and caps.

Self gripping pads ensure a secure fit. It can be worn with or without PPE.

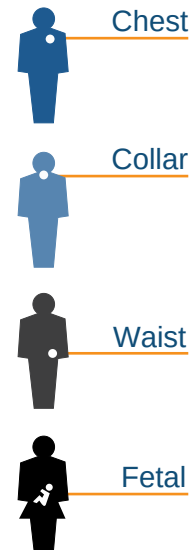
Non-lead glasses without PPE are optional.



For **area dosimeter**, ensure it is facing the radiation source and not the hallway or area outside the room.

Positioning Your Dosimeter Correctly

- wear LUXEL+ wholebody dosimeters at the location recommended by your RPA;
- wear SATURN ring dosimeters on the RPA recommended hand and finger with the detector facing the direction of radiation;
- wear VISION lens of the eye dosimeters in conjunction with radiation safety glasses or safety shields, with the detector behind the shielding;
- **never wear a dosimeter assigned to another user** and do not allow others to wear your assigned dosimeter;
- avoid taking your dosimeter home and hang them back on the badge boards generally available.



Area/environmental monitoring

LUXEL+ dosimeters can be used as a fixed area dosimeter in specific locations to determine the radiation exposure at various locations in the radiation field.

Area monitoring dosimeters can be used to ensure that adequate protection is provided from ionising radiation for both staff and members of the public.

LUXEL+ dosimeter is identified by the icon opposite.



Area/environmental
monitoring

Caring for Your dosimeters

While our dosimeters are robust and withstand normal use, damage to dosimeters may prevent reliable dose assessment. So please take reasonable care of them.

When the dosimeter is not worn, **the participant should store it in a radiation free area**, preferably in a designated location. This location should be out of direct sunlight and away from excessive heat or radioactive sources.

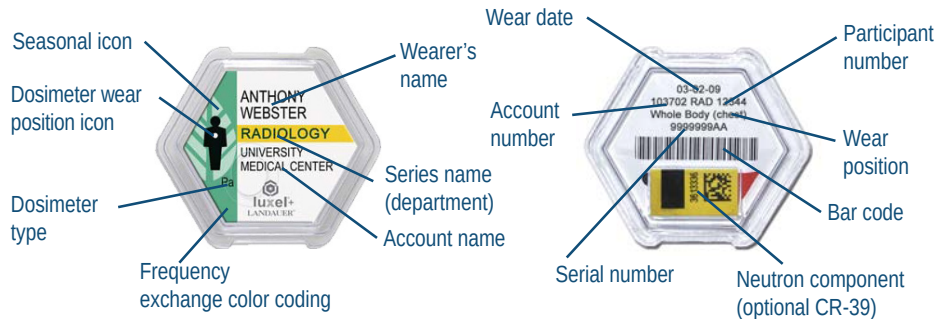
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LANDAUER proposes dosimeter badge boards, which can be mounted to ease the collection of returned dosimeters and the distribution of new dosimeters for your staff.



Understanding Your Dosimeter

For **LUXEL+**, it is very important for you to wear your badge so that the image is facing outward. There is a small oval on the front of the badge, and this should be facing the source of radiation as much as possible to ensure the badge is providing the most accurate dose reading.



For **SATURN**, the dosimeter must be used with the sensitive elements facing the predominant direction of the radiation.





LUXEL+, SATURN and VISION control dosimeters are clearly labelled CONTROL.

Using a Control Dosimeter

- A separate dosimeter known as “control dosimeter” is included with each shipment free of charge for each type of dosimeter.
- It is important to return this control dosimeter with the original shipment grouping for accurate analysis by the LANDAUER laboratory.
- The **control exposure is read and subtracted from each individual dosimeter** in the shipment - separating the occupational dose from the background exposure.
- It monitors the background radiation both at the badge board location and during the transit from and to the LANDAUER laboratory.

Instructions

- The control dosimeter(s) should be stored on the badge board.
- **Store control dosimeters away from radiation** (radioactive sources, X-ray rooms, other dosimeters), together with dosimeters not being worn, in a radiation-free location, i.e. normal background.
- **Control dosimeters MUST be returned with the dosimeters** of the same wear period and from the same batch for which they were issued.
- **Do not wear** and do not use the control dosimeter for any other purpose.

Understanding Control Dosimeter options



The control rules and its hierarchy are available upon request.

Additional control dosimeter

Depending on the size of your account/s, you may have multiple Control dosimeters that need to be included with the overall badge return shipments.

If you require additional controls to be added to your account, please contact us.

Master control dosimeter

We can supply a master control dosimeter to replace multiple individual series controls, if all your dosimeters are sent out and stored at a single location.

Series/ Sub account control dosimeter

If you store your dosimeters at different locations and have set up series for your account, we can supply control dosimeters to accompany each series. It will allow more accurate dose measurement at the said location.

Returning Your Dosimeters

To manage easily your shipments, LANDAUER proposes a simple procedure to ship back your dosimeters.

- Return envelopes provided.
- Approximately one week before the beginning of the next wear period, delivery of new dosimeters will be effective.
- **Store them in a radiation-free area** until the start of the next wear period.
- On the first day of this period, exchange the dosimeters worn during the previous wear period with the new one.
- Return used and unused dosimeters (including area monitors), together with **their corresponding control dosimeters** of the same wear period in the LANDAUER return envelopes.
- Dosimeters must be returned within 120 days of the end of the wear period.
- Don't forget to complete required customs declaration forms where applicable.
- Please **keep all the grey LUXEL+ dosimeter holders** of worn badges. They should be re-used with the new dosimeters.
- **Fully remove tabs from WORN BADGES ONLY.** Unworn LUXEL+ badges with the tab intact will be reported as «Unused» and not analysed.



Managing Special Returns

Pay attention to contaminated dosimeters

- If you suspect your dosimeters to be contaminated, you should consult your RPA or RSO to decontaminate them. **Call our Customer Service** as soon as possible to advise us that it has happened as it may affect the dose.
- Note that it is illegal to send radioactively or biologically contaminated material through the post.



For emergencies, a special procedure

- If one of your employees has received, or is suspected of having received, a significant radiation dose, it is necessary to immediately arrange the emergency return of their dosimeter.
- The **irradiated dosimeter must be sent separately**, if possible, with an appropriate control dosimeter. It should not be returned with other dosimeters.



Return postage is not included in our service and must be paid when sending dosimeters back to LANDAUER.

Accessing Your Reports



Choosing an approved dosimetry service provides confidence that:

- Each type of dosimeter is processed using methods specifically designed for its technology.
- Dose assessments are performed by trained and experienced specialists using dedicated equipment.
- Robust quality control procedures ensure accurate and reliable dose measurements.
- Dose results can be reviewed, verified, and reassessed whenever necessary.

All processing is performed by LANDAUER and has been approved by the HSE for the UK and the EPA for Ireland in accordance with our certificates of approval.

Once the dosimeter analysis has been completed:

- your report is made available within 14 days of receipt of the dosimeters in our laboratory;
- it provides a clear record of the dose received and the type of exposure for each monitored worker.

Understanding Your Report

Reports cover each wear period and include:

- the doses assessed for the wear period;
- cumulative totals for quarter to-date, year-to date and lifetime dose;
- personal data and identification;
- explanatory information;
- other relevant data used in the management of a dosimetry program.

In accordance with UK & Ireland legislation, reports are issued within 14 days of receipt of the dosimeters at our UK office. Any high-dose results are communicated immediately by email upon identification.

Reporting FAQs

- **I am looking at my report, and I don't see any numbers for my doses. I only see an "M" value reported. What does "M" mean?**

"M" stands for minimal, meaning that after Control Subtraction, the resulting Occupational Dose was below the Minimal Reporting capabilities of the dosimeter.

For example, "Minimal Dose Equivalent Reported" for Luxel + is 1 mrem (0.01 mSv).

- **I am looking at my report, and I don't see any doses. I only see "unused" printed. What does "unused" mean?**

The "unused" note indicates that the dosimeter was not used for the specific wear period. LANDAUER identifies any dosimeter as unused when it is returned with the tab still connected. The unused dosimeter is processed, but the dose is not shown on the report. Also, the dose is not included in the dose accumulation for that participant.



Managing Your Account with myLDR

LANDAUER has transitioned to a paperless environment as we continue our efforts to improve our data privacy and information security processes, as well as to further protect our client's Personal Data. LANDAUER now delivers all dosimetry reports electronically via the secured myLDR account management portal.

myLDR.com is a secured online account management portal, available with authorised login credentials. It is the most expedient method of receiving your dosimetry services and reporting information.

An automatic email notification is sent to the email address(s) on file to alert you when completed reports are available to be reviewed, downloaded and signed.

UK approved record keeping

LANDAUER provides an approved HSE record keeping service.

EPA dose transmission

LANDAUER transfers dose to the EPA National Dose Register on a yearly basis.



Changes to an account must be submitted to admin@landauer.co.uk using the correct forms from our www.landauer.co.uk

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