Ordering Information

Catalog #	Description
Lumimark Microplate Luminescence and Absorbance Systems	
170-7170	Lumimark Microplate Luminescence and Absorbance System, 100–240 V, 50/60 Hz, power cord, serial cable, Lumimark software, instructions
170-7172	Lumimark System, with 2 liquid dispensers
170-7175	Lumimark Plus Microplate Luminescence and Absorbance System, with onboard software control and data reduction
170-7177	Lumimark Plus System, with 2 liquid dispensers
170-7173	One Dispenser Upgrade Kit, Lumimark or Lumimark Plus systems
170-7174	Two Dispensers Upgrade Kit, Lumimark or Lumimark Plus systems
170-7178	Lumi Test Plate Kit, for Lumimark or Lumimark Plus systems

Lumimark Software Requirements

Minimum PC requirements include a Pentium® 166 PC computer, 64 MB RAM, 240+ MB hard drive, 256-color monitor, serial port, compatible 256-gray-level graphics card or equivalent local bus, expansion slot, and Windows® 95, 98, NT, or 2000 platforms.

Lumimark System Specifications

Luminescence

Detection system:	Photon-counting photomultiplier tube
Spectral sensitivity range:	300–700 nm
Sensitivity at 545 nm:	50 amol ATP
Dynamic range:	8 orders
Filters:	Filterwheel for up to 15 luminescence and absorbance filters
Sample formats:	Opaque and transparent microplates, filter-bottom microplates, or other sample arrays of similar dimension
Dispensers:	Optional 1- or 2-dispenser systems Standard volume/stroke: 50 µl (metal free, exchangeable tubing)

Absorbance

Spectral range:	405–690 nm
Filter capacity:	Up to 15 filters
Indication range:	0–4.5 OD
Resolution:	0.001 OD
Accuracy:	±1% and 0.005 OD at 1 OD

Physical

Width:	50 cm
Depth:	34 cm
Height	26 cm
Weight:	~14 kg
Computer interface:	RS232 port

The Lumimark Plus system with software onboard.

Bio-Rad Laboratories

Life Science Group

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Bulletin 2608 US/EG Rev A *00-314 1200 Sig 1200*

luminescence for the sensitive types

For Glow- or Flash-Type Chemistries,
Lumimark Microplate Luminescence and Absorbance Systems
Go to the Extremes.

BIO-RAD

Lumimark systems are flexible to your needs sensitive to light

Lumimark systems offer a high level of flexibility and value. High-sensitivity Lumimark systems are ideal for long-lasting glow-type luminescence, and can be optimized for flash- or glow-type luminescence with optional sample injectors. In addition to all types of luminescence detection, Lumimark can perform standard absorbance assays. The Lumimark Plus system has software onboard.

Features	Benefits
Absorbance capabilities	Ideal for use with multiple detection methods
Superior sensitivity	The instrument is so sensitive that a black plate can be used to improve the signal-to-noise ratio; the same assay on another instrument needs a white plate
Optional liquid dispenser	System is ideal for both flash- and glow-type chemistries
Optional onboard control	Saves space when necessary
RS232 port for computer control	Easy setup
Customizable lag time and wait time	Ideal for kinetic and low-background readings

Lumi Test Plate kit
The Lumi test plate kit, which includes a luminescence test plate and its accessories, is used to verify performance of Lumimark or Lumimark Plus systems.

The following performance parameters can be verified with the Lumi test plate:

Dynamic Range
The dynamic range covers 5.5 orders of magnitude, and can be checked by taking the reading from row A.

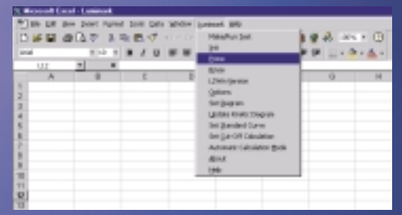
Cross-Talk
Cross-talk is checked by measuring a high-signal well and the 8 surrounding wells, which have no luminescence sources. The ratio of the highest value of the 8 surrounding wells to the high-signal well must be ≤5 x 10^{-5}.

Reproducibility
The Lumi test plate kit checks reproducibility by calculating the coefficient of variation, which must be ≤1%, for 8 measurements on one well.

Lumimark Software
You can define tests to be executed on the Lumimark system, run them on the instrument, and receive the related measurements to evaluate the results.

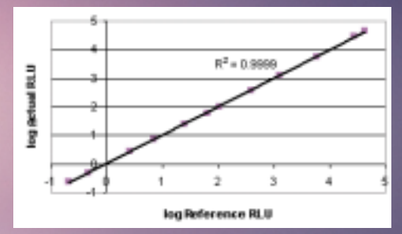
Lumimark software is designed as an Excel® macro that leads you through the steps to set up templates and tests, and to have them performed by the instrument. Through a menu structure, it's simple to transfer your specific applications into a test.

L2Win™ software is used to communicate with the instrument. Whenever the software establishes a connection, a window appears on the screen, providing information on the current communication between the computer and the instrument. This window closes after the command has been processed.



Lumimark software allows you to control the instrument with an Excel-based application, so data reduction can be accomplished in a familiar environment.

The user-friendly Lumimark software makes construction of a test easy.



Accurate linear dynamic luminescent reading with the Lumi test plate kit.