



1 DRAM, 24-Position Top-Down Photoredox Reactor for 15mm OD (1 Dram) Vials

The Top-Down Photoredox Reactor provides new avenues to keep your samples cool while being irradiated by a Lumidox® II LED array. Based on the Para-dox® Gen II 24 position (18mm spacing) reaction block design, the Top-Down Reactor incorporates the following new components:

- **New Lid** - provides simple and efficient alignment. It is precisely engineered to fit the nubs of a Lumidox II LED array lens mat and allows direct contact (photocouples) with the nubs of the Top Sealing Mat (see diagram below).
- **Clear Top Sealing Mat** - permits LED irradiation to pass through into the samples while preventing solvent loss. Made from the same chemically inert silicone as the Lumidox II array lens mat.
- **Reflective Mylar Bottom Film** - directs more irradiation into your samples instead of being absorbed by the reactor.
- **New Bottom Cover** – secures the mylar film in place. This bottom cover can be switched out with a Thermal Transfer Deck (TTD+) for additional cooling.



Cooler Samples

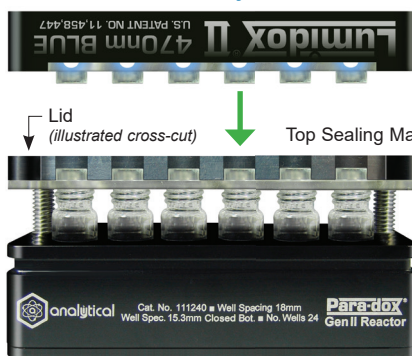
With top-down positioning of the array, conductive heat is transferred primarily to the lid and LED array, with no direct conductive heating of the vials. This differs significantly from when a Lumidox II array is placed underneath a reactor where the heat transfers to the reactor vial rack affecting the samples.

Better performance with magnetic stir plates

Since the LED array sits on top of the reactor instead of the bottom, the space between the bottom of your samples and a stir plate is reduced to just a few millimeters (thickness of bottom plate). This results in a stronger magnetic pull on stir bars for better overall stirring.



Lumidox II LED array with lens mat



Top-Down Photoredox Reactor

The Lid of the Top-Down Reactor aligns and "photocouples" the nubs of the Lumidox II array lens mat with the nubs on the top sealing mat, allowing for maximum irradiation into samples.



Mylar Bottom Film reflects light/irradiation back into samples

| Catalog No. | Description |
|-------------|---|
| 111240 | Para-Dox® Gen II, 24 Position, TOP-DOWN, 5-BOLT, Photoredox Reaction Block for 15mm OD (1 Dram) Vials, with 18mm Well Spacing |

*Solid base array shown. Active base arrays are also compatible.