

by John J. Andros

*Editor's Note: John J. Andros is vice president and business leader of the Specialty Lamp Division (which includes the sunlamps manufactured for the indoor tanning industry) of Voltarc Technologies, Inc. This article is the first of a series intended to educate and inform tanning salon professionals about sunlamps so that they, in turn, can educate and inform their clients about the most important component of a sunbed.*

## The Search For The Ideal Sunlamp

First of all, I would like to define what Voltarc considers to be the "ideal" sunlamp for the indoor tanning industry. The ideal sunlamp will have:

1. Enough UVB (280 nm to 320 nm) photons (packets of light energy) to:
  - A. Stimulate optimal production of vitamin D.
  - B. Stimulate optimal production of melanin.
  - C. Thicken the epidermis.
2. A significant reduction in the amount of UVA2 (320 nm to 340 nm) photons:
  - A. That help induce photoaging (solar keratosis).
3. An increased amount of UVA1 (340 nm to 400 nm) photons:
  - A. In order to create a deeper, darker and longer lasting tan.
4. An optimal amount of PWR™ (250 nm to 302 nm) photons:
  - A. In order to attain desired Te (4 MED) times.
5. A higher level of client satisfaction.

We believe that a "family" (100-watt and 160- to 200-watts) of sunlamps meeting or exceeding the parameters set forth above would (1) tan far better than any of the sunlamps available today; (2) have enough power to stimulate optimal levels of vitamin D and melanin; (3) thicken the epidermis; (4) retain the desired Te (4 MED) times; and, (5) have *much less potential* to cause the adverse consequences associated with overexposure to UVR.

### Voltarc's PWR Series™ Sunlamps

It is with great satisfaction and pride that we announce the immediate availability of the Voltarc PWR Series™ sunlamps. These exciting new sunlamps (1) have "just enough" photons in the "erythema power" area (250 nm to 302 nm) to (a) attain the desired Te (4 MED) times; (b) stimulate the production of vitamin D and melanin; and, (c) thicken the epidermis; (2) have a *significantly increased* number of photons in the "tanning

power" area (340 nm to 434 nm) to help induce the deepest, darkest and longest lasting tan possible with a low-pressure (fluorescent) sunlamp; and, (3) have a *dramatically reduced* number of photons falling in the wavelengths (320 nm to 340 nm) known to be associated with photoaging (solar keratosis). The primary benefit from equipping your sunbeds with PWR Series™ sunlamps is that your clients will attain a higher level of satisfaction (i.e., a deeper, darker and longer lasting tan) with much less likelihood of experiencing the adverse consequences associated with overexposure to UVR.

### How does the new PWR Series™ sunlamp compare?

The table below compares the spectral distribution percentage for sunlight, a "typical" sunlamp used today and the new Voltarc PWR Series™ sunlamp.

	UVC%	UVB%	UVA%	UVA2%	UVA1%
Sunlight	0	4.3	95.7	15.3	80.4
Typical	0	4	96	20	76
PWR Series™	0	1	99	1	98

As you can see, the Voltarc PWR Series™ sunlamp has (a) reduced the UVB percentage to 1% without extending Te (4 MED) times (where the photons are located in this region is more important than how many photons there are); (b) *dramatically reduced* the number of UVA2 photons known to be associated with photoaging of the skin; and, (c) *significantly increased* the number of UVA1 "tanning photons" (22% over the typical sunlamp in use today). Taken together, the PWR Series™ sunlamp constitutes a *revolutionary improvement*, not just a minor evolutionary change, in sunlamp performance.

### Will the Voltarc PWR Series™ sunlamps dramatically improve the performance of your sunbeds?

There's only one way to find out! For more information about the new Voltarc PWR Series™ (patent pending) sunlamps, call (800) VOLTARC or log onto [www.voltarc.com](http://www.voltarc.com).