A Review of the New ***SuperBright II*** 3000 Series Ultraviolet Lights

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I recently had the opportunity to examine the new ***SuperBright II*** 3000 series ultraviolet lights offered by UV SYSTEMS, Inc. There are four models in this series: model 3254, which is short wave (SW) at 253.7 nm; model 3312, which is MW at 312 nm; model 3351, which is LW at 351 nm; and model 3368, which is LW at 368 nm. All models are compatible with the new **B2** battery pack. I specifically examined the SW model, 3254.

I have used the SuperBright lights for at least eight years, and have owned the SW model (2000SW) since it was first offered for sale. My experience is that SuperBright lights are quite powerful and, because of their lightness, quite convenient for use in the field. On the other hand, the plug-in type connections were not particularly reliable and the light was easily disconnected from its power source, especially in the field. Also, on two occasions, I dropped my light, and had to replace a broken lamp at a cost of approximately $65. I was therefore especially interested in testing the ***SuperBright II***, which presumably has been redesigned to eliminate these features that I found to be most frustrating.

When I unpacked the ***SuperBright II***, I noticed that it retained the sturdy lightweight housing that I liked in the SuperBright 2000SW lights. But I was most struck by the cords and connectors. The cords on the 3000 series are much heavier than on earlier models, and the old plug-in connectors have been replaced by screw-in connectors. Moreover, the cigarette lighter plug on the battery pack carrying case has been replaced by a permanent connection. (Of course, this means that one has to buy a new battery pack for the ***SuperBright II*** because it is not possible to use the old battery pack with the new connector.) The new cords and connectors are a definite improvement because the screw-in connectors eliminate inadvertent disconnections, which I found to be one of the most frustrating problems with the original SuperBright lights.

The new ***SuperBright II*** lamp has a neck lanyard (strap) that connects to the handle. To me, this simple addition is a major improvement over earlier models. The lanyard frees both hands, especially important for field collecting, and eliminates the risk of accidentally dropping the lamp. The improved connectors and the addition of a neck strap eliminate what I consider the two major drawbacks of the original SuperBright lamp.

The promotional materials provided by UV SYSTEMS claim that lamp life is longer, and further, that the new light delivers more UV output because the new ballast delivers more current and the reflector has been redesigned to improve efficiency. I was not able to evaluate these claims quantitatively, but the increase in UV output of the ***SuperBright II*** over my original SuperBright was definitely noticeable to the naked eye. (I've had my SuperBright 2000 SW light for some time, so I cannot say what part of this improvement is due to solarization of the filter in my SuperBright.) The new AC power supply (AC adapter) for the ***SuperBright II*** is considerably smaller than that for the original SuperBright, and it works from 100 to 240 V and from 50 to 60 Hz. This is definitely an advantage for one who travels, especially to foreign countries, because the new adapter is much lighter and it eliminates the need to carry several adapters (e.g., one for 110 V and one for 220 V).

The ***SuperBright II*** system incorporates a number of other improvements in addition to those mentioned above that aren't likely to be apparent from a casual examination that improve its overall utility (e.g., only two bolts must be removed to remove the cover, vs. four in earlier models; battery carrying case is made of more durable material). In summary, I was favorably impressed with the newly-designed SuperBright light. The ***SuperBright II*** light has some very nice improvements, and these were made without sacrificing the durability, compactness, and convenience of earlier models. At $449 (plus shipping) for the light and $99.95 (plus shipping) for the accompanying **B2** battery pack (essential for using the light in the field), the SW model 3254 is not inexpensive. Other models are comparably priced: The MW model costs $459 and the LW models cost $383.50. Nevertheless, the ***SuperBright II*** series offers durable and powerful lights that will serve the fluorescent mineral enthusiast well for a long time.

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