



Lighting needs for iguana keepers



Q Why all the sudden fuss about high power 12% T5 lamps when iguana keepers have been told to use 5-6% T8 lamps over the past few years? Would the increase be too much? Do we really need to change?

A really good point that certainly does need clearing up. Firstly, Arcadia do make the

T5s in D3 6% and these would be suitable for lower enclosures or for a large enclosure for other lizards like the day geckos, whose thinner skins absorb UV more rapidly.

The truth is that reptile lamps should never really have been displayed and described as being species-specific in my opinion. What does the lamp percentage mean anyway? Well, with all Arcadia reptile lamps, the percentage of UVB

advertised on the packaging is the percentage of UVB out of 100% of the measurable light, but AFTER the all important initial 'burn in' of 100 hours of use, when UV lamps lose a lot of their UV emissions! So a 12% lamp is truly a 12% lamp after this burn in and for a year, based on a normal photoperiod use of 8-10 hours daily.

The lamp percentage should really be chosen in relation to the distance between the lamp and the animal. The further away from the lamp that you move, so the less UV that is available. This is because UVB does not travel very far from the light source, so a natural drop-off of power is normal. As a result, a 12% high output T5 lamp is fine for a bearded dragon at say, 38-51cm (15-20in) but as the enclosures get bigger, which they will do in the case of larger animals, so there is less available UV as the light has to travel further.

Let's say, as an example, that a D₃ 6% lamp is providing 289mws² at 10cm (4in), so the 12% equivalent would emit roughly the same amount of UV at 20cm (8in). This is effectively a doubling of UV reach, so the extra power is providing the same amount of UV that the animal requires, but from a greater distance away.

So when fitting out medium to large-sized enclosures that may be 1.2-1.8 (4-6ft) high, it is important to get as much power and UV energy into the enclosure as is safely possible. From the research available on the fantastic UV guide website (see <http://www.uvguide.co.uk/>), this shows that iguanas have a built-in sun protection factor. The areas of their body that are exposed for the longest in the wild have a greater degree of skin protection. This enables them to sit in full sun for long periods of time and bask without the risk of skin damage by the sun.

The question is are the 12% T5s strong enough to provide the levels of UV that these wonderful lizards require and pass through the skin in a sufficient quantity to start and complete the D₃ cycle as nature has dictated? I believe the answer is yes. The emission from a D₃+ high output T5 lamp and reflector is roughly the same as a 100w mercury vapour lamp but all along the lamp. High output T5 really does represent a huge jump forward in reptile care. It is certainly not as powerful as sunlight, but it is a big step in the right direction!

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