

# LIGHT

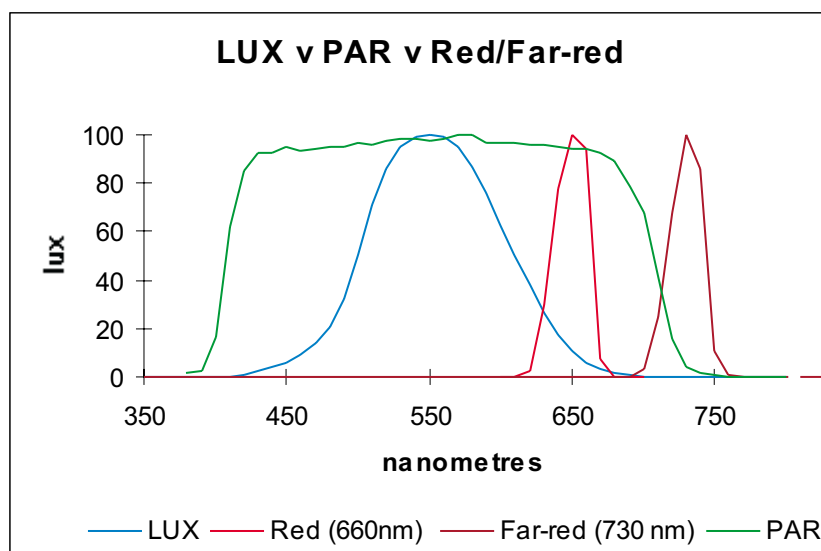
## Comparing Light Measurements from PAR, Lux and Red-Far Red sensors

Lux units refer to the light spectrum which the human eye sees. This is a different shape spectrum to the light that plants 'see'. This is explained in more details in Skye's 'Light Guidance Notes' booklet.

The SKR 110 Red / Far-red (660/730 nm) sensor has a different shaped spectrum again, it is usually used to assess the quality of light received by the plant rather than the total amount or intensity. A PAR sensor such as the Light Meter for Growers is usually used for measuring light intensity.

Approximate conversions between micromoles/m<sup>2</sup>/sec and lux are possible when comparing PAR measurements (400-700nm) to lux measurements, as these are both broad band spectrums which partly overlap (please see 'Light Guidance Notes' booklet for conversion factors).

However, it is not valid to compare measurements taken by the SKR 110 sensor with lux measurements, as these 2 spectrums for the 660nm channel and the 730 nm channel do not even overlap with the lux spectrum. The graph below shows exactly how the spectrums for the PAR sensor (400-700 nm) compares to the lux sensor spectrum (515-615 nm), red (660 nm) and far-red (730 nm) spectrums.



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