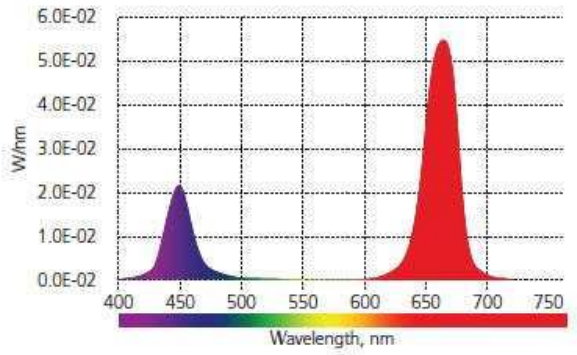
Horticulture LED Series

SPECTRUM

General Purpose, High Efficiency

The F1 spectrum is suitable for a variety of plant species throughout their growth cycle. It contains a high proportion of red light, which spurs photosynthesis during the vegetative growth stage and facilitates the flowering stage.



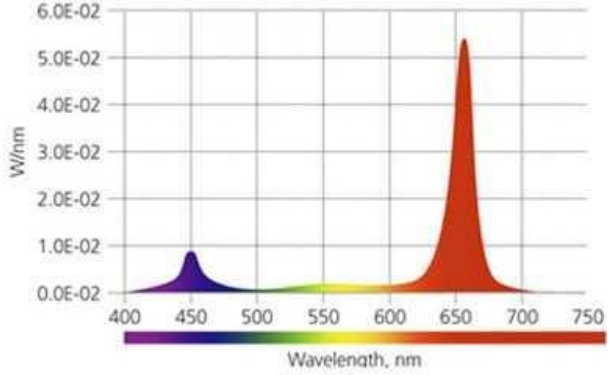
Wavelength distribution

Blue (400-499nm)	22.8%
Green (500-599nm)	0.3%
Red (600-699nm)	76.8%
Far Red (700-780nm)	0.1%

SPECTRUM

Best for Germination and Flowering

This spectrum produces the fastest germination for plant species whose germination requires light. It also gives the best flowering results among spectra.



Recommended for use in germination chambers and for flower production.

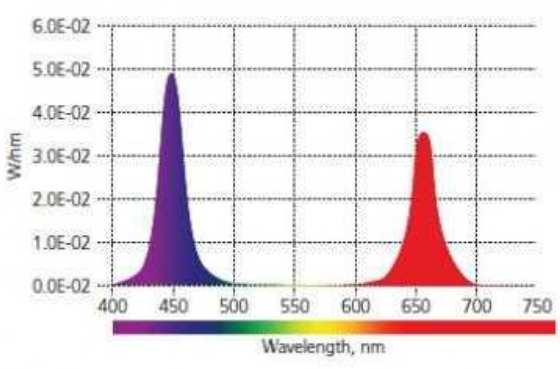
Wavelength distribution

Blue (400-499nm)	11.0%
Green (500-599nm)	7.7%
Red (600-699nm)	81.0%
Far Red (700-780nm)	0.3%

SPECTRUM

Best for Vegetative Growth

This spectrum has an enhanced blue region and provides the fastest vegetative growth results. The increased blue content reduces plant height, thereby improving plant appearance and space utilization. Recommended for the production of leafy green vegetables.



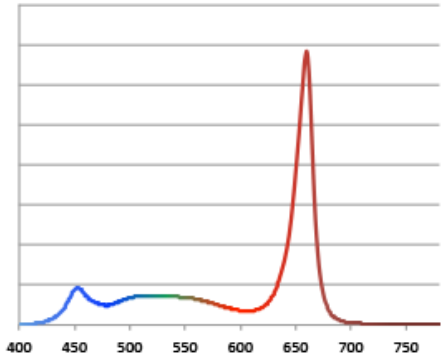
Wavelength distribution

Blue (400-499nm)	49.5%
Green (500-599nm)	0.5%
Red (600-699nm)	49.9%
Far Red (700-780nm)	0.1%

SPECTRUM

Best for human visualization

This spectrumis a good choice for growing situations where it’s important for people to see plants as we’re accustomed to seeing them — that is, green. The purplish light cast by many grow lights wouldn’t work in situations where we want to see the plants — for example, on a decorative grow wall.provides good light for plant growth, along with light that allows humans to see the plants.



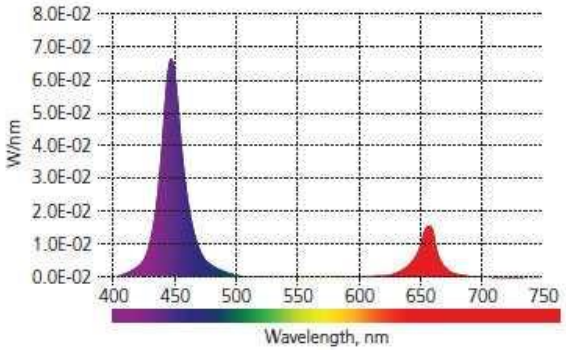
Wavelength distribution

Blue (400-499nm)	18%
Green (500-599nm)	17%
Red (600-699nm)	64%
Far Red (700-780nm)	0%

SPECTRUM

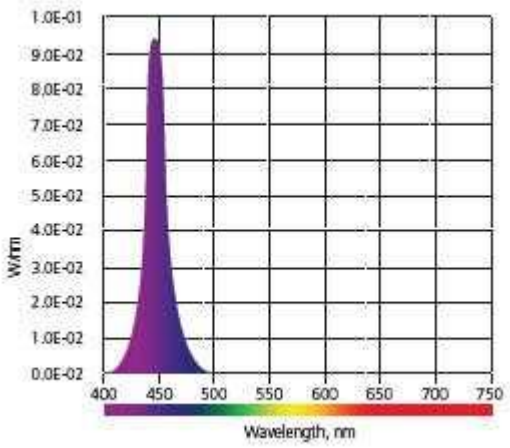
Best for Vegetative Growth

This spectrum has the highest blue content spectra and produces stocky plants with short internodal distances, highly desirable at the seedling stage. Recommended for growing seedlings prior to transplantation.



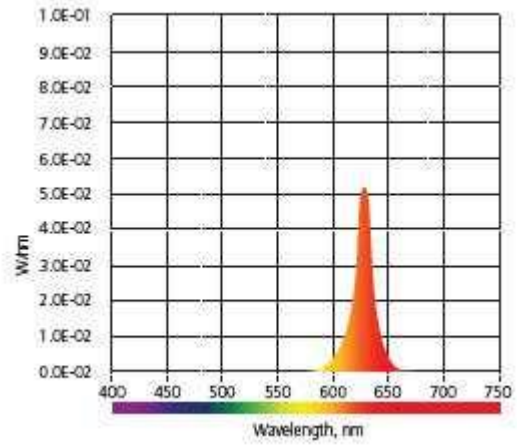
Wavelength distribution

Blue (400-499nm)	74.5%
Green (500-599nm)	0.6%
Red (600-699nm)	24.8%
Far Red (700-780nm)	0.1%



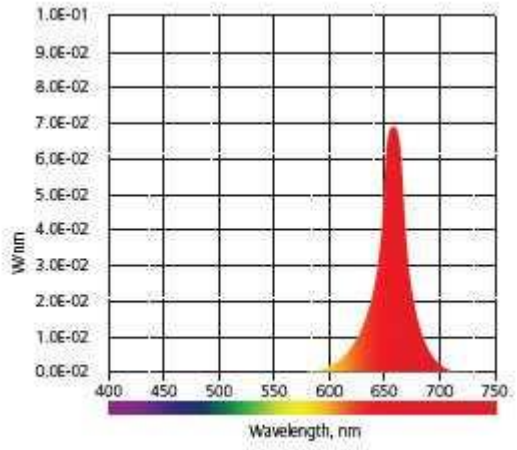
450 nm BLUE

This light enacts regulation by cryptochromes and phototropins, mediating various plant responses, such as phototropic curvature, inhibition of elongation growth, chloroplast movement, stomatal opening and seedling growth regulation. Can be directly absorbed by chlorophyll in photosynthesis. Recommended as supplemental light for seedlings and young plants during the vegetative stage of their growth cycle, especially when “stretching” must be reduced or eliminated.



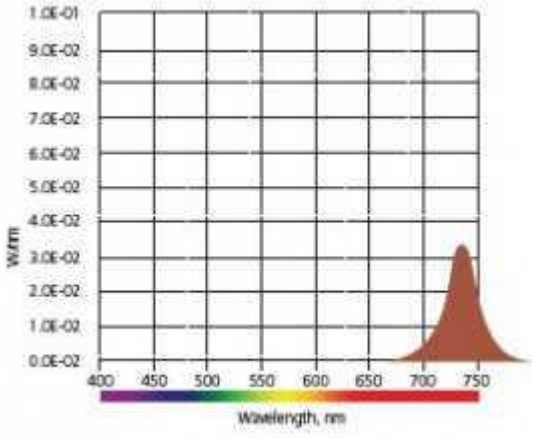
624 nm RED

This wavelength region has the highest photosynthetic relative quantum yield for a range of plants. At the same time, its action on red-absorbing phytochrome is considerably weaker compared to that of 660 nm red light and can be used to balance the phytochrome equilibrium towards lower values (closer to those of daylight) than those achievable with 660 nm red light, especially when used together with 730 nm red light.



660 nm DEEP RED

This wavelength has a very strong photosynthetic action and also exhibits the highest action on red-absorbing phytochrome regulated germination, flowering and other processes. Most effective for light cycle extension or night interruption to induce flowering of long-day plants or prevent flowering of short-day plants. Most energy-efficient source for photosynthesis among all available supplemental LEDs.



730 nm FAR RED

Although this wavelength is outside the photosynthetically active range, it has the strongest action on the far-red absorbing form of phytochrome, converting it back to the red-absorbing form. It becomes necessary for plants requiring relatively low values of the phytochrome photoequilibrium to flower. Can be used at the end of each light cycle to promote flowering in short-day plants.