

# HortiCoolture. LED it grow!



#LEDITGROW

*WE speed up  
the future*

## Horticulture LED Lighting

New horticultural products from the high power ceramic series. Specially chosen wavelengths (450 nm, 660 nm and 730 nm) increase photosynthesis, optimizing plant development and growth. With outstanding PPF-value, small size and low power consumption, the WL-SMDC is the future choice for horticultural lighting. Available ex stock. Samples free of charge.

For further information please visit:

[www.we-online.com/leditgrow](http://www.we-online.com/leditgrow)



For a short introduction of Horticulture LEDs read our Application Note:

[www.we-online.com/AN-Horti](http://www.we-online.com/AN-Horti)

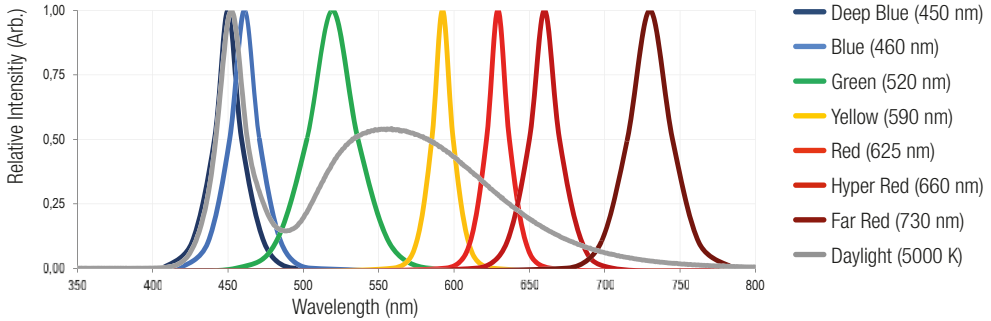
- High efficacy
- Individually adjustable color spectrum for each plant
- Full color spectrum available incl. white, UV and IR-LEDs
- Low thermal resistance
- Electrically neutral thermal path
- One footprint for all colors

# WL-SMDC Horticulture

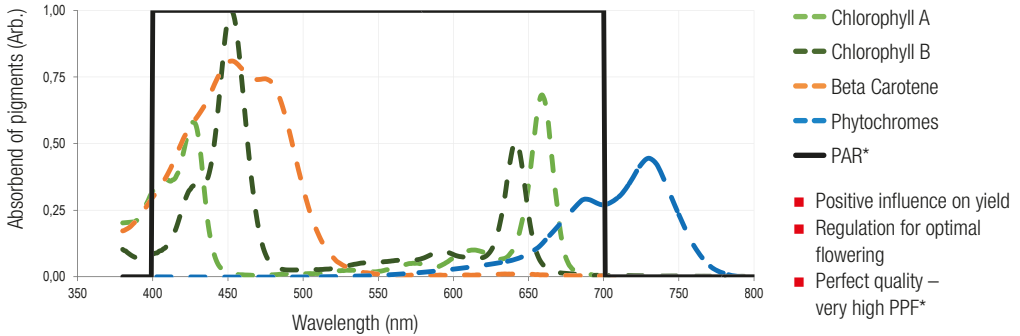
## SMD Mono-color Ceramic LED Waterclear

### What Plants Need

#### Emission Spectrum of WL-SMDC Horticulture LEDs



#### Photosynthetic Pigments and Light Receptors



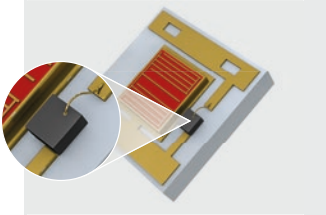
**\*PAR: Photosynthetically Active Radiation**  
Spectral range 400 to 700 nm for photosynthesis

**\*PPF: Photosynthetic Photon Flux**  
Rate of flow of photons within PAR

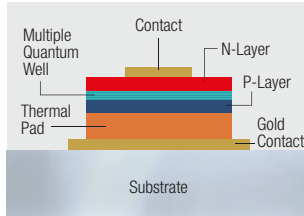
**Our LEDs have been developed for customized light solutions for each grower.**



## Innovative Structure



Zener diode for ESD protection



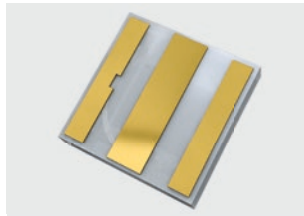
Vertical chip for perfect thermal stability and current control



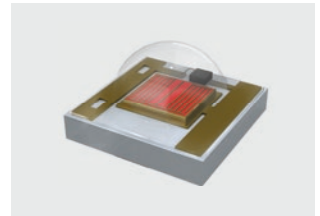
Ceramic substrate for low thermal resistance



Nonabsorbent material – MSL level 2

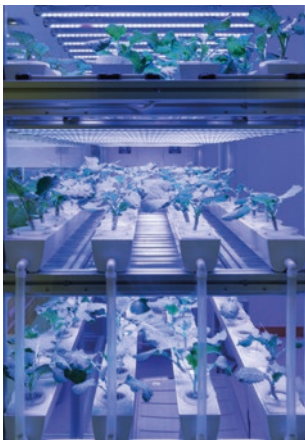


Gold contacts – low corrosion, perfect solderability



Small footprint – High emission power solderability

## Applications



- Vertical farming
- Supplemental lighting in greenhouses
- Indoor farming
- Multilayer cultivation
- Grow lamps
- Stadium lawn maintenance

# Product Overview

## High Power Horticulture LEDs

<b>Horticulture</b> <b>WL-SMDC Horticulture</b>		Order Code	Color	$\lambda_p$ (nm)	$\Phi_{e,typ.}$ (mW)
		150353DS74500	Deep Blue	450	600
		150353HS74500	Hyper Red	660	330
		150353FS74500	Far Red	730	240

... and for perfect cultivation also use

<b>Visible</b> <b>WL-SMDC</b>		Order Code	Color	$\lambda_p$ (nm)	$\Phi_{v,typ.}$ (lm)
		150353RS74500	Red	635	55
		150353YS74500	Yellow	593	50
		150353GS74500	Green	520	85
		150353BS74500	Blue	460	25

<b>Ultraviolet</b> <b>WL-SUMW</b>		Order Code	Color	$\lambda_p$ (nm)	$\Phi_{e,typ.}$ (mW)
		15335338AA350	Ultraviolet	385	750
		15335339AA350	Ultraviolet	395	900
		15035340AA350	Ultraviolet	405	900

<b>Infrared</b> <b>WL-SIMW</b>		Order Code	Color	$\lambda_p$ (nm)	$\Phi_{e,typ.}$ (mW)
		15435385A9050	Infrared	850	650
		15435385AA350	Infrared	850	700
		15435394A9050	Infrared	940	550
		15435394AA350	Infrared	940	650

<b>White</b> <b>WL-SWTC</b>		Order Code	Color	CCT (K)	$\Phi_{v,typ.}$ (lm)
		158353027	Sunrise	2700	95
		158353030	Warm White	3000	95
		158353040	Moonlight	4000	110
		158353050	Daylight	5000	121
		158353060	Cool White	6000	121

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More information on:  
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