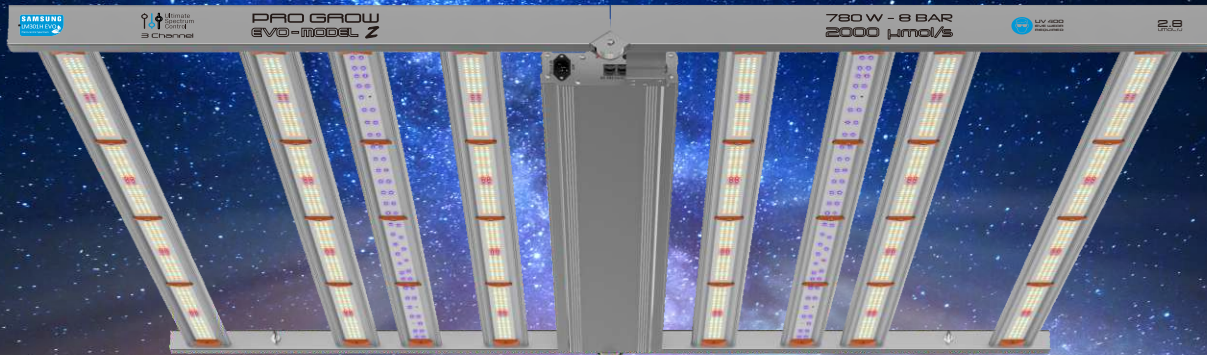


# PRO GROW

# EVO

# 2.8 μmol/J



## 780 W 2000 μmol/s



### ADJUSTABLE 3 CHANNEL LED



### WITH PHOSPHOR ENHANCED PLANT-CENTRIC SPECTRUM

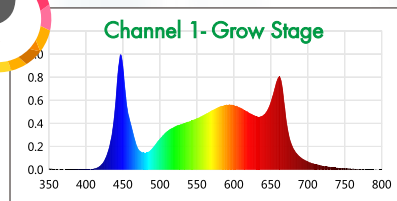


### EVO - MODEL Z

At its core is the addition of the new Samsung LM301H EVO Mint White diode. The phosphor coated EVO diode shifts the previous blue peak from 450 nm to 435 nm.

Plants grown under this plant-centric spectrum have bigger and thicker leaves and higher levels of nutrients.

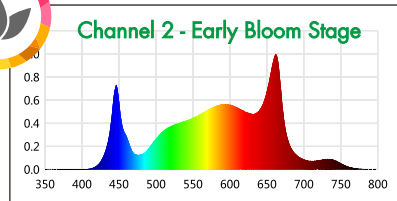
#### Growth



#### Increased Blue

New Mint White EVO diodes give plants a 'photon pump' resulting in up to 5% increased yields with no extra power usage. Deep blue targets peak chlorophyll & photosynthesis production for boosted vegetative growth & vigour.

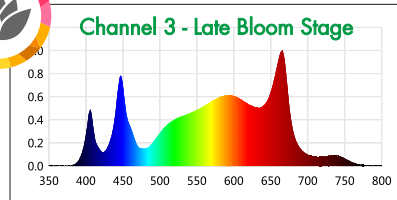
#### Early Bloom



#### Increased Red & Far-red

Higher Red and Far-red output for increased production in flowering plants. The right amount of Far-red light engages Emerson Effect, encourages early node staging and more flower sites.

#### Late Bloom



#### Increased Red, Far-red + UV

UV & Red & Far-red offers maximum BPF (ePar). This encourages lateral branching, less stretching, enhanced lower size and improves essential oils, taste and aroma.



**SAMSUNG**  
LM301H

**OSRAM**  
HYPER RED

**OPTIMUM**  
DIODES



### 3 CHANNEL SPECTRUM TUNING



Take your crop to the next level with the PRO GROW EVO 780 W Model Z. Three separate light channels for grow, early bloom and late bloom deliver the best possible spectrum at the three most influential stages of a plants life. The addition of Mint White, Blue, UVA, UVB and Far-red diodes result in boosted plant growth, more flower sites, increased flower density, higher crop yield & improved essential oils, taste and aroma

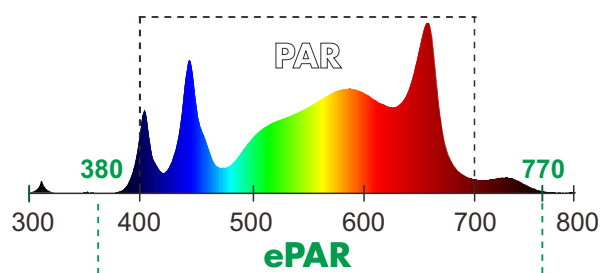
- BPF (ePar) > 2000  $\mu\text{mol/s}$
- PPF - 1900  $\mu\text{mol/s}$
- Efficacy - 2.82  $\mu\text{mol/J}$
- Sosen 0-10 V Driver
- 2510 SMD LED Diodes
- CRI 91 - Full Spectrum Array
- Dimmable to 40%, 60% or 80%

### SPECTRUM AND ePAR - PUSH PAST PAR



ePAR redefines the PAR spectrum to recognise the benefits of light waves outside of the 400 to 700 nm range. PRO GROW EVO 780 W Model Z includes 310 nm UVB, 395 nm UVA and 730 nm Far-red diodes. The additional diodes extend the spectral gap from 380 nm to 770 nm. This was previously only provided by a combination of HPS, MH & CMH lights but is now available from a single LED fixture.

EXTENDED PAR SPECTRUM GRAPH (ePAR)



### USE WITH SMART TOUCHSCREEN CONTROLLER

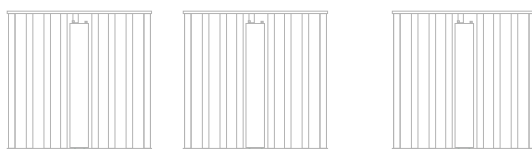


The PRO GROW EVO LED 780 W Model Z is compatible with the PRO GROW Smart Touchscreen Controller. Equipped with an RJ14 Cable, up to 160 fixtures can be daisy chained from the one controller. Simply switch all fixtures to EXT mode to begin controlled operation.



### SMART TOUCHSCREEN CONTROLLER COMPATIBLE

(sold separately)

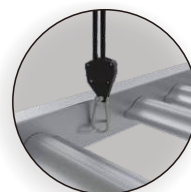


SINGLE CHANNEL.  
UP TO 160 FIXTURES

### FOLDABLE DESIGN



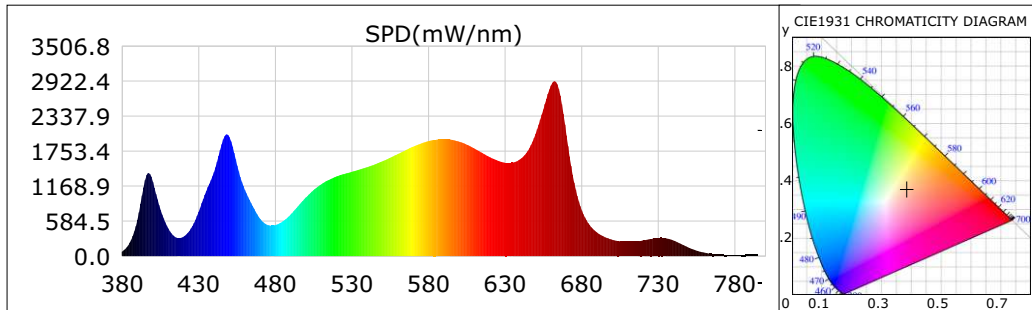
Simply unfold, plug and play with the PRO GROW EVO 780 W Model Z. Four quality rope ratchets are included for immediate installation.





**CIE Colorimetric Parameters**

Chromaticity coordinates:  $x=0.3847$   $y=0.3672$   $u(u')=0.2319$   $v=0.3319$   $v'=0.4979$   
 CCT:  $T_c=3807K$  ( $duv=-0.00578$ ) Color Ratio:  $R=0.196$   $G=0.769$   $B=0.034$   
 Peak Wavelength: 662.2nm Half Bandwidth: 136.6nm  
 Dominant Wavelength: 583.3nm Color Purity: 0.256  
 CRI: Ra= 91



**Plant Optical Param**  $v(lm)$ : 116409.64  $Qv(lm.s)$ : 116409.64

$\Phi$   
 $\Phi_{e,\lambda}(W/nm)$ : 434.62  $Q_e(J)$ : 434.62  
 $\Phi_e(W)$ : 406.91  $\Phi_{fr}(W)$ : 14.99  
 $\eta_e$ : 0.51  $\eta_{fr}$ : 0.02  
 PPE( $\mu mol/s/w$ ): 2.43 Kfr: 0.11  
 Erb\_Ratio: 1.77 PPF( $\mu mol/s$ ): 1927.10  
 PFu<sub>v</sub>(360-400)( $\mu mol/s$ ): 48.66 PPF(400-500)( $\mu mol/s$ ): 334.81  
 PPF(500-600)( $\mu mol/s$ ): 740.66 PPF(600-700)( $\mu mol/s$ ): 847.48  
 PPF<sub>fr</sub>(700-800)( $\mu mol/s$ ): 89.93 PPF<sub>t</sub>( $\mu mol$ ): 1951.10  
 $\Phi_{ch-A.t}(J)$ : 46.43  $\Phi_{ch-A}(W)$ : 46.43  
 $\Phi_{ch-B.t}(J)$ : 19.45  $\Phi_{ch-B}(W)$ : 19.45  
 $\Phi_b.t(J)$ : 89.98  $\Phi_b(W)$ : 89.98  
 $\Phi_y.t(J)$ : 160.49  $\Phi_y(W)$ : 160.49  
 $\Phi_r.t(J)$ : 159.34

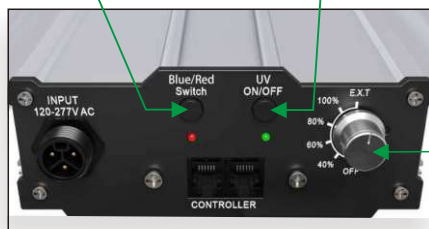


**MANUAL CHANNEL OPERATION**



**Control Channels Via The Fixture:**

Blue/red exchange button. Swap from channel 1 to channel 2 & 3  
 UVA/UVB button. Engage for channel 3



Manual dimming switch. Switch to EXT when using the Z - Smart Controller



**CAUTION: UV light is barely visible. Always wear UV 400 eye protection when UVA/UVB (channel 3) is in operation.**

**PAR DISTRIBUTION (with red, Far-red & UV)**



Mounting Height: **12 (30CM)**

Mounting Height: **24 (60CM)**

Mounting Height: **36 (90CM)**

Mounting Height: **48 (120CM)**

271	448	511	507	447	273
548	992	1085	1082	983	549
703	1246	1365	1359	1227	705
726	1281	1411	1398	1263	726
596	1053	1165	1147	1030	586
276	449	507	502	456	270

290	393	459	459	393	292
418	595	687	684	599	420
514	727	841	833	724	519
517	732	844	841	732	520
430	590	698	698	601	429
290	393	453	451	399	291

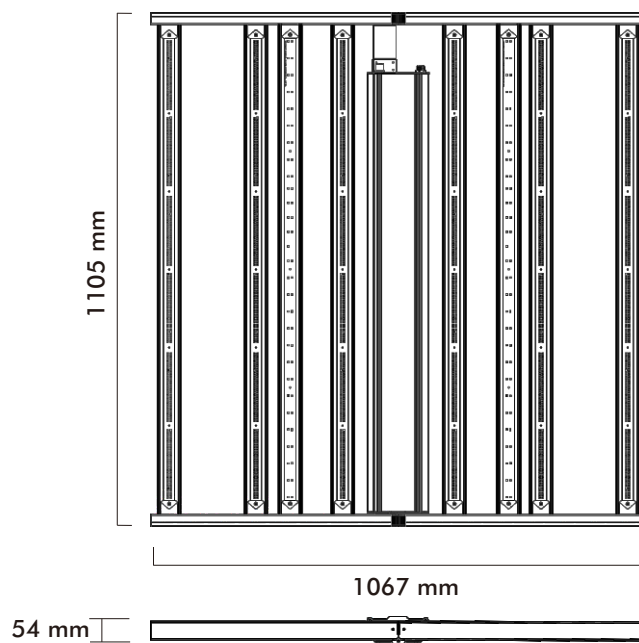
256	315	361	360	320	262
322	409	463	465	419	328
370	473	533	533	476	380
370	471	534	534	478	380
326	410	464	466	413	331
256	314	353	352	319	257

214	248	373	373	251	218
247	293	321	322	298	251
271	322	353	353	325	277
270	322	353	353	325	277
246	290	317	321	295	252
211	244	266	266	248	212

## SPECIFICATIONS

Model:	780 W Model E 8 Bar
Light Source:	2510 x Single Mount Diode/LED's
Input Voltage:	100V-240 V AC
Frequency Range:	50~60 Hz
Power/Watts:	780 W
Net Weight:	13.7 kg
Light Beam Angle:	120 Degree
Body Case Material:	Die Cast/Pressed Aluminum
IP Grade:	IP55 (water resistant)
Size:	L-1105 mm x W-1067 mm x H-54 mm
Lifespan:	>50,000 Hours
Min Operating Temp:	-40°C
Max Operating Temp:	40°C
Warranty:	2 Year Warranty

## DIMENSIONS



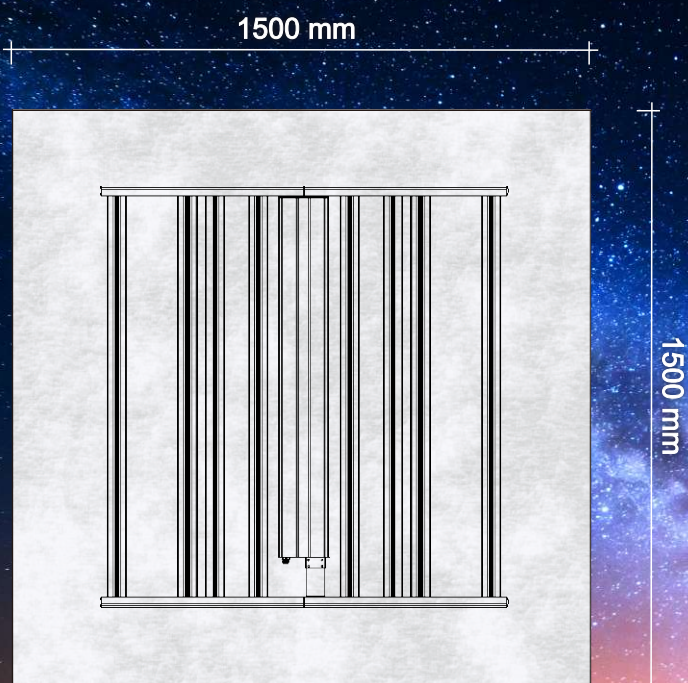
## VOLTAGE

VOLTAGE	240 V
AMPERAGE	3.25 A

PRO GROW  
LED - MODEL Z

780 W - 8 BAR  
2000  $\mu$ mol/s

## MAXIMUM RECOMMENDED LIGHT COVERAGE



SCAN FOR MORE INFO



[www.progrownet.au](http://www.progrownet.au)



SAMSUNG  
LM301H

OSRAM  
HYPER RED

OPTIMUM  
DIODES

WHG  
Wholesale Horticultural Group