NEW PRODUCT

T5LED CONVERSION LAMPS

LED PERFORMANCE FOR T5HO FIXTURES



T5LED CONVERSION LAMPS

SunBlaster T5LED Conversion Lamps are the ideal choice for advanced growers who demand higher quality light output, reduced operating costs, lower energy consumption, increased end of life performance with virtually zero maintenance, and no replacement for 35,000 hours.

These **T5LED Conversion Lamps** provide the same great growing performance as our original T5HO fluorescent lamps, with the added benefits of reduced power consumption and an extended operating lifetime of approximately 35,000 hours. That's 3.5 times longer than our traditional fluorescent lamps! And they contain zero mercury, so they're friendlier to our environment.

Nothing could be easier!

Instantly converts T5HO fluorescent driven lighting fixtures to High Quality LED Horticultural output in just seconds. These **T5LED Conversion Lamps** are 100% compatible with all SunBlaster T5HO Strip Lights and most remote electronic ballasted T5HO lighting fixtures. **Two year warranty included.**

Immediate Benefits

- Instant Upgrade Convert in just seconds
- Improved lighting spectrum and output
- Increased Lamp Life Lamps last 3.5 times longer saving labor and maintenance expense
- Heat Reduction Lowering operating costs even further
- UL Listed 100% safe and easy installation and operation

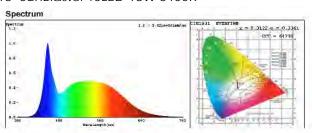


UPGRADE TO LED WHILE MAINTAINING A BUDGET

Item	Description	MSRP - CAN	MSRP - US	Pack Size
0900822	18" SunBlaster T5LED 18W 6400K - LED Conversion Lamp	22.95	17.99	6 24
0900823	24" SunBlaster T5LED 24W 6400K - LED Conversion Lamp	25.95	20.99	6 24
0900824	36" SunBlaster T5LED 30W 6400K - LED Conversion Lamp	32.95	26.99	6 24
0900825	48" SunBlaster T5LED 42W 6400K - LED Conversion Lamp	39.95	31.99	6 24



18" SunBlaster T5I FD 18W 6400K



Colorimetric Parameters Chromaticity Coordinate: x = 0.3122 y = 0.3361 / u = 0.1948 v = 0.4720 (duv= 7.06e-03) Dx;Dy:-0.0017,0.0122 Dx;Dy:-0.0017,0.0017,0.0122 Dx;Dy:-0.0017,0.0122 Dx;Dy:-0.0017,0.0017,0.0122 Dx;Dy:-0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.0017,0.00CCT= 6479K Prop WL: Ld=493.4nm Purity=7.0% Peak WL: Lp=453nm FWHM: =25.3nm Ratio:R=13.5% G=80.3% B=6.2%

Render Index: Ra = 85.3 AvgR = 78.6 TM30:Rf=84 Rg=93

R1 =83 R2 =91 R3 =95 R4 =83 R5 =84 R6 =87 R7 =89 R8 =71 R9 =14 R10=78 R11=83 R12=62 R13=85 R14=98 R15=78 LEVEL:OUT WHITE:ANSI_6500K

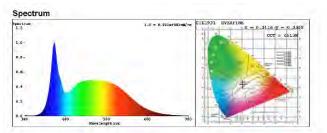
Photometric & Radiometric Parameters
Flux = 1762.1 lm Eff.: 113.33 lm/W Fe = 5.7195 W
Flux of emitted photons(µmol/s):25.781 Fluo, and blue light ratio:2.658 Fluorescent eff.:163.7

Photons1:2.528e+001 µmol/s(400~700nm) Photons2:6.277e+000 µmol/s(600~700nm) Photosynthetic:PPF(400-700nm):25.285µmol/s PRF(400-700nm):5634.5mW

Eff(PPF) (400-700nm):1.63µmol/s/W

Electrical parameters V = 120.09 V I = 0.2115 A P = 15.55 W PF = 0.6123 F=59.98 Hz

24" SunBlaster T5LED 24W 6400K



Colorimetric Parameters

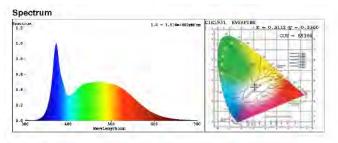
Chromaticity Coordinate: x = 0.3116 y = 0.3358 / u* = 0.1945 v* = 0.4718 (duv=7.20e-03) Dx.Dy.-0.0018,0.0123 CCT= 6513K Prep WL: Ld=493.2nm Purity=7.2% Peak WL: Lp=452nm FWHM: =24.9nm Ratio:R=13.4% G=80.4% B=6.2%

Photometric & Radiometric Parameters
Flux = 2015.4 lm Eff.: 109.19 lm/W Fc = 6,5398 W
Flux of emitted photons(µmol/s):29.463 Fluo, and blue light ratio:2.683 Fluorescent eff.:141.1 Photons1:2.890e+001 µmol/s(400~700nm) Photons2:7.133e+000 µmol/s(600~700nm) Photosynthetic:PPF(400-700nm):28.896umol/s PRF(400-700nm):6442.7mW

Eff(PPF) (400-700nm):1.57µmol/s/W

Electrical parameters V = 120.07 V I = 0.2813 A P = 18.46 W PF = 0.5464 F=59.98 Hz

36" SunBlaster T5LED 30W 6400K



Render Index: Ra = 84.9 AvgR = 78.1 TM30:Rf=84 Rg=93

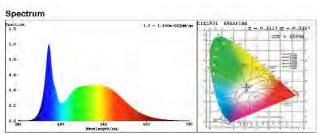
R1 =82 R2 =90 R3 =95 R4 =83 R5 =83 R6 =86 R7 =89 R8 =71 R9 =12 R10=76 R11=83 R12=83 R13=85 R14=97 R15=77 LEVEL:OUT WHITE:ANSI_6500K

Photometric & Radiometric Parameters

Flux = 3357.4 lm. Eff.: 109.33 lm/W Fo = 10.898 W
Flux of emitted photons(µmol/s):49.075 Fluo, and blue light ratio:2.615 Fluorescent eff.:146.7 Photons1:4.813e+001 µmol/s(400~700nm) Photons2:1.183e+001 µmol/s(600~700nm) Photosynthetic:PPF(400-700nm):48.129µmol/s PRF(400-700nm):10735mW Eff(PPF) (400-700nm):1.57µmol/s/W

Electrical parameters V = 120.05 V I = 0.4477 A P = 30.71 W PF = 0.5713 F=59.98 Hz

48" SunBlaster T5LED 42W 6400K



CCT= 6506K Prop WL: Ld=493.1nm Purity=7.2% Peak WL: Lp=451nm FWHM: =21.1nm Ratio:R=12.7% G=81.8% B=5.5%

Render Index: Ra = 80.5 AvgR = 72.6 TM30:Rf=80 Rg=92

R1=77 R2=86 R3=91 R4=78 R5=79 R6=81 R7=87 R8=64 R9=0 R10=86 R11=78 R12=56 R13=79 R14=95 R15=71 R6 =64 R9 =0 WHITE:ANSI 6500K LEVEL:OUT

Photometric & Radiometric Parameters

Flux = 4399.4 im Eff.: 117.97 in/W Fe = 13.885 W

Flux of emitted photons(µmol/s):62.289 Fluo, and blue light ratio:2,573 Fluorescent eff.:151.3 Photons1:6.129e+001 µmol/s(400~700nm) Photons2:1.402e+001 µmol/s(600~700nm) Photosynthetic:PPF(400-700nm):61.288µmol/s PRF(400-700nm):13712m/V Eff(PPF) (400-700nm):1.64µmol/s/W

Electrical parameters

V = 120.03 V I = 0.5508 A P = 37.29 W PF = 0.5641 F=59.98 Hz



TECHNICAL INFO SHEET

SUNBLASTER

LED | T5HO LIGHT KITS & COMBOS | T5LED CONVERSION LAMPS







T5HO STRIP LIGHTS

LED STRIP LIGHTS

T5LED CONVERSION LAMPS

SUNBLASTER LED STRIP LIGHTS	48"	36"	24"	18"	12"
Spectrum	6400K	6400K	6400K	6400K	6400K
Power	48W	36W	24W	18W	12W
Lumens per watt	107	108	106	108	104
Lumen Output	5,150	3,900	2,550	1,950	1,250
LED Count	96	72	48	36	24
Lamp Life expected hours	50K	50K	50K	50K	50K
Certifications	UL	UL	UL	UL	UL

SUNBLASTER T5HO STRIP LIGHTS	48"	36"	24"	18"	12"
Spectrum	6400K	6400K	6400K	6400K	6400K
Power	54W	39W	24W	17W	11W
Lumens per watt	78	77	77	70	64
Lumen Output	4,150	2,850	1,650	1,180	720
Mercury Content	≤5.0mg	≤5.0mg	≤3.0mg	≤2.8mg	≤2.8mg
Lamp Life expected hours	10K	10K	10K	10K	10K
Certifications	UL	UL	UL	UL	UL

SUNBLASTER T5LED CONVERSION	48"	36"	24"	18"
Spectrum	6400K	6400K	6400K	6400K
Power	42W	30W	18W	16W
PPF umols/s/W	1.64	1.57	1.57	1.63
Lumens per watt	108	112	84	97
Lumen Output	4,550	3,360	2,014	1,760
LED Count	140	93	63	64
Increase over T5 fluorescent	6%	18%	22%	49%
Lamp Life expected hours	35K	35K	35K	35K
Certifications	UL	UL	UL	UL





Sample : Date : 2018-09-19 10:50:52

Specification **0900822 18" SunBlaster T5LED** Sam. Status : Sample No. : T5LED17 Standard :

Manufacturer : Instrument : HaasSuite(EVERFINE)

Assessor : WYS

Remark : --- Test by : WYS

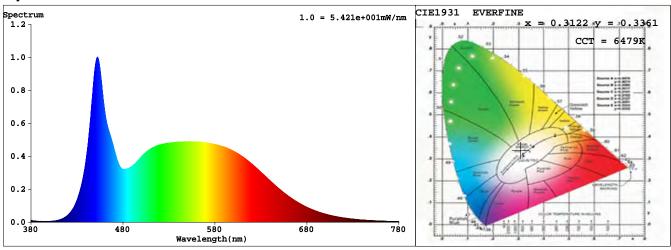
Test Condition

Temprature : 25.3Deg RH : 65.0% WL Range : 380nm-780nm IP : 51075 (78%)

Test Mode : Fast Test T : 48 ms

Sensitivity: High

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3122 \text{ y} = 0.3361 / \text{ u}' = 0.1948 \text{ v}' = 0.4720 \text{ (duv=}7.06e-03)}$ Dx,Dy:-0.0017,0.0122

Peak WL: Lp=453nm FWHM: =25.3nm Ratio:R=13.5% G=80.3% B=6.2%

Render Index: Ra = 85.3 AvgR = 78.6 TM30:Rf=84 Rg=93

R1 =83 R2 =91 R3 =95 R4 =83 R5 =84 R6 =87 R7 =89

R8 = 71 R9 = 14 R10 = 78 R11 = 83 R12 = 62 R13 = 85 R14 = 98 R15 = 78

LEVEL:OUT WHITE:ANSI_6500K

Photometric & Radiometric Parameters

Flux = 1762.1 lm Eff.: 113.33 lm/W Fe = 5.7195 W

Flux of emitted photons(µmol/s):25.781 Fluo. and blue light ratio:2.658 Fluorescent eff.:163.7

Photons1:2.528e+001 µmol/s(400~700nm) Photons2:6.277e+000 µmol/s(600~700nm)

Photosynthetic:PPF(400-700nm):25.285µmol/s PRF(400-700nm):5634.5mW

Eff(PPF) (400-700nm):1.63µmol/s/W

Electrical parameters

V = 120.09 V I = 0.2115 A P = 15.55 W PF = 0.6123 F=59.98 Hz



Sample : Date : 2018-09-18 10:02:59

Specification **0900823 24" SunBlaster T5LED** Sam. Status : Sample No. : T5LED24 Standard :

Manufacturer : Instrument : HaasSuite(EVERFINE)

Assessor : WYS

Remark : --- Test by : WYS

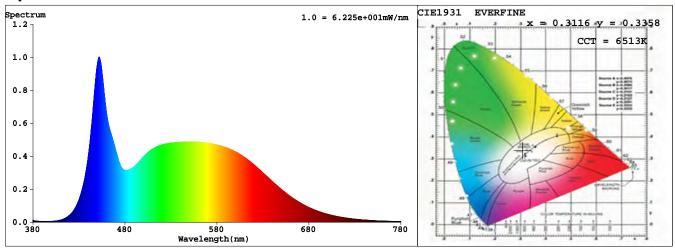
Test Condition

Temprature : 25.3Deg RH : 65.0% WL Range : 380nm-780nm IP : 52339 (80%)

Test Mode : Fast Test T : 43 ms

Sensitivity: High

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3116 \text{ y} = 0.3358 / \text{ u}' = 0.1945 \text{ v}' = 0.4718 \text{ (duv=}7.20e-03)}$ Dx,Dy:-0.0018,0.0123

Peak WL: Lp=452nm FWHM: =24.9nm Ratio:R=13.4% G=80.4% B=6.2%

Render Index: Ra = 85.1 AvgR = 78.3 TM30:Rf=84 Rg=93

R1 =83 R2 =90 R3 =95 R4 =83 R5 =83 R6 =86 R7 =89

R8 = 71 R9 = 13 R10 = 77 R11 = 83 R12 = 62 R13 = 85 R14 = 97 R15 = 77

LEVEL:OUT WHITE:ANSI 6500K

Photometric & Radiometric Parameters

Flux = 2015.4 lm Eff.: 109.19 lm/W Fe = 6.5398 W

Flux of emitted photons(µmol/s):29.463 Fluo. and blue light ratio:2.683 Fluorescent eff.:141.1

Photons1:2.890e+001 µmol/s(400~700nm) Photons2:7.133e+000 µmol/s(600~700nm)

Photosynthetic:PPF(400-700nm):28.896µmol/s PRF(400-700nm):6442.7mW

Eff(PPF) (400-700nm):1.57µmol/s/W

Electrical parameters

V = 120.07 V I = 0.2813 A P = 18.46 W PF = 0.5464 F=59.98 Hz



Sample : Date : 2018-09-18 10:11:25

Specification **0900824 36" SunBlaster T5LED** Sam. Status : Sample No. : T5LED36 Standard :

Manufacturer : Instrument : HaasSuite(EVERFINE)

Assessor : WYS

Remark : --- Test by : WYS

Test Condition

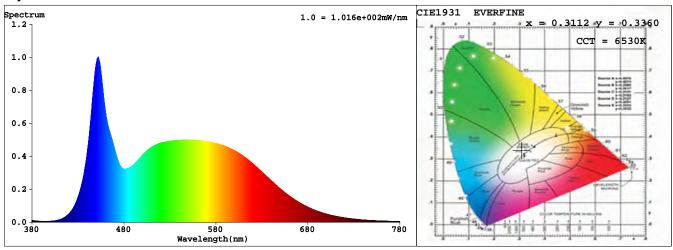
 Temprature
 : 25.3Deg
 RH
 : 65.0%

 WL Range
 : 380nm-780nm
 IP
 : 54695 (83%)

Test Mode : Fast Test T : 27 ms

Sensitivity: High

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: x = 0.3112 y = 0.3360 / u' = 0.1942 v' = 0.4718 (duv=7.48e-03) Dx,Dy:-0.0018,0.0128

CCT= 6530K Prcp WL: Ld=493.3nm Purity=7.3%

Peak WL: Lp=452nm FWHM: =25.6nm Ratio:R=13.3% G=80.5% B=6.2%

Render Index: Ra = 84.9 AvgR = 78.1 TM30:Rf=84 Rg=93

R1 =82 R2 =90 R3 =95 R4 =83 R5 =83 R6 =86 R7 =89

R8 = 71 R9 = 12 R10 = 76 R11 = 83 R12 = 63 R13 = 85 R14 = 97 R15 = 77

LEVEL:OUT WHITE:ANSI_6500K

Photometric & Radiometric Parameters

Flux = 3357.4 lm Eff.: 109.33 lm/W Fe = 10.898 W

Flux of emitted photons(µmol/s):49.075 Fluo. and blue light ratio:2.615 Fluorescent eff.:146.7

Photons1:4.813e+001 µmol/s(400~700nm) Photons2:1.183e+001 µmol/s(600~700nm)

Photosynthetic:PPF(400-700nm):48.129µmol/s PRF(400-700nm):10735mW

Eff(PPF) (400-700nm):1.57µmol/s/W

Electrical parameters

V = 120.05 V I = 0.4477 A P = 30.71 W PF = 0.5713 F=59.98 Hz



Sample Date : 2018-09-18 10:19:29

Sam. Status 0900825 48" SunBlaster T5LED Specification Sample No. : T5LED48 Standard

Manufacturer Instrument : HaasSuite(EVERFINE)

Assessor : WYS

: High

Remark Test by · ___ : WYS

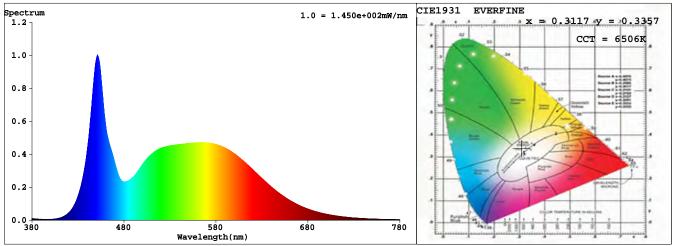
Test Condition

Temprature : 25.3Deg RH: 65.0% WL Range : 380nm-780nm IΡ : 58295 (89%)

Test Mode : Fast Test Т : 21 ms

Sensitivity

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3117 \text{ y} = 0.3357 / \text{u}' = 0.1947 \text{ v}' = 0.4717 \text{ (duv=}7.06e-03)}$ Dx,Dy:-0.0017,0.0121

CCT= 6506K Prcp WL: Ld=493.1nm Purity=7.2%

Peak WL: Lp=451nm FWHM: =21.1nm Ratio:R=12.7% G=81.8% B=5.5%

Render Index: Ra = 80.5 AvgR = 72.6 TM30:Rf=80 Rg=92

R1 = 77R2 = 86R3 = 91R4 = 79R5 = 79R6 = 81R7 = 87

R8 = 64R9 = 0R10=66 R11=78 R12=56 R13=79 R14=95 R15=71

LEVEL:OUT WHITE:ANSI 6500K

Photometric & Radiometric Parameters

Flux = 4399.4 lm Eff.: 117.97 lm/W Fe = 13.885 W

Flux of emitted photons(µmol/s):62.289 Fluo. and blue light ratio:2.573 Fluorescent eff.:151.3

Photons1:6.129e+001 µmol/s(400~700nm) Photons2:1.402e+001 µmol/s(600~700nm)

Photosynthetic:PPF(400-700nm):61.288µmol/s PRF(400-700nm):13712mW

Eff(PPF) (400-700nm):1.64µmol/s/W

Electrical parameters

V = 120.03 V I = 0.5508 A P = 37.29 W PF = 0.5641 F=59.98 Hz

LED TUBE INSTALLATION GUIDE - WARNING

NOTE: This lamp can replace 54W fluorescent T5 tubes with G5 bases.

CAUTION - RISK OF FIRE. IF THE LAMP OR LUMINAIRE EXHIBITS UNDESIRABLE OPERATION (BUZZING, FLICKERING, ETC.), IMMEDIATELY TURN OFF POWER, REMOVE LAMP FROM LUMINAIRE AND CONTACT THE MANUFACTURER.

WARNING - Risk of fire or electric shock. LED Retrofit Kit installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and relevant local code.

WARNING - Risk of fire or electric shock. Install this kit only in the luminaires that have the construction features and dimensions shown in the photographs and/or drawings and where the input rating of the retrofit kit does not exceed the input rating of the luminaire.

WARNING - To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

- Disconnect power at the source before installation, inspection or removal. Do not simply switch off fixture.
- Not intended for use with emergency exit fixtures or emergency exit lights.
- THIS LAMP ONLY OPERATES ON ELECTRONIC BALLASTS. IF LAMP DOES NOT LIGHT WHEN THE LUMINAIRE IS ENERGIZED, REMOVE LAMP FROM LUMINAIRE AND CONTACT LAMP MANUFACTURER OR QUALIFIED ELECTRICIAN.
- This lamp is not compatible with all ballasts. Before replacing existing fluorescent lamps, check compatibility of LED lamps and luminaire ballast.
- Do not use if product is damaged.
- This lamp might not be compatible with all dimmers. Please visit www.topstarintel.com for compatability information.
- Do not make or alter any open holes in an enclosure of wiring or electrical components during kit installation.
- Risk of fire or electric shock. Do not open or modify. No user serviceable parts inside.
- SUITABLE FOR DAMP LOCATIONS. Suitable for use in wet locations when used in an outdoor-rated fixture. Not for use where directly exposed to the weather or water.
- Complies with Part 15 of FCC. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.
- No external weight or mechanical force should be applied to lamp or components.
- MIN. LAMP COMPARTMENT DIMENSIONS 48.03"(L) x 23.82"(W) x 4.72"(H).
- Intended for operation with the following ballasts:

Philips #: ICN-2S54-T GE #: GE254MVPS-D

Fulham #: RHA-UNV-254-LT5

LED TUBE INSTALLATION GUIDE - INSTALLATION STEPS

- Switch-off power to luminaire
- 2 Remove the cover lens (if provided).
- 3. Carefully remove all existing fluorescent tubes from luminaire. Note: Verify that the ballast is compatible with LED T5 tubes, see the ballast compatibility list.
- Install LED lamp (one for each fluorescent lamp removed, ensure pins are firmly seated in lampholders). 4
- Switch on power to luminaire and installation is now complete.

SunBlaster T5LED Conversion Lamp Installation Guide & Warning Guide

SunBlaster **T5LED Conversion Lamps** are compatible with all SunBlaster T5HO Strip Lights. SunBlaster **T5LED Conversion Lamps** can replace most T5HO lamps with two pin, G5 bases.

Installing your lamp

- 1. Switch-off power to your lighting fixture. Disconnect power at the source before installation, inspection or removal. Do not simply switch off fixture. Not intended for use with emergency exit fixtures or emergency exit lights.
- 2. Carefully remove all existing lamps from your lighting fixture.
- 3. Install T5LED Conversion lamp (ensure pins are firmly seated in lamp holders).
- 4. Switch on power to your lighting fixture and installation is now complete.

Suitable for damp locations.

Suitable for use in wet locations when used in an outdoor-rated fixture. Not for use where directly exposed to the weather or water. Complies with Part 15 of FCC. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received including interference that may cause undesired operation.

Caution - Risk of Fire. If the lamp or luminaire exhibits undesirable operation (buzzing, flickering, etc.) immediately turn off and remove from power, remove lamp and contact SunBlaster.

Warning - This lamp operates on electronic ballasts. If lamp does not light when luminaire is energized, remove lamp and contact SunBlaster or a qualified electrician. Risk of fire or electric shock. Do not use if product is damaged. **Do not open or modify**. **No user serviceable parts inside**.

Contact SunBlaster

www.sunblasterlighting.com