2. SPECIFICATION

General product information

INDOOR SUN = IND
PHILIPS = PH

Product Name	Lucius ReCom SE / DE 600W HV Kit	Lucius ReCom DE 800W HV Kit	Lucius ReCom DE 1000W HV Kit
Application	Horticultural Industry / Green Fields / Ideal for flowering		
Inclusion	Lucius Recom Ballast, ReCom Bracket - Focal / Broad Reflector - Indoor Sun Lamp / Philips Lamp		
Light Kit PPF Efficacy	IND:1.72 PPF/W PH:1.88PPF/W	IND: 1.73 PPF/W	IND:1.85 PPF/W PH: 1.88PPF/W
Maximum PPF	IND:1200 µmol/s PH:1300µmol/s	IND:1620 µmol/s	IND: 2220 µmol/s PH: 2270µmol/s
Light Kit Weight	4.4Kg / 9.7lbs	5.5Kg / 12.1lbs	5.6Kg / 12.3lbs
Operating Temperature	-20 to 40°C / -4 to 104°F		
Shipping and Storage Temperature	-40 to 70°C / -40 to 158°F		
Operating Humidity	0% to 90% non-condensing		
Waterproof and dustproof	IP20		

Lucius ReCom Ballast

INPUT	**Lucius ReCom DE Ballast**	600W	800W	1000W
	Nominal Voltage	USA:208/240V or 120/208/240V AU/NZ , UK, EU, Asia: 220/230/240V		
	Voltage Range	USA: 195~265 or 110~265V AU/NZ , UK, EU, Asia: 195~265V		
	Max Current	3A @ 240V 6A @ 120V	4A @ 240V 8A @ 120V	5A @ 240V 10A @ 120V
	Inrush Current	< 30A/0.8mSec	< 40A/0.8mSec	< 50A/0.8mSec
	Input Frequency	50/60Hz		
	Efficiency	97%		
	Power Factor	≥0.97		
	THDv	<10%		
	Plug	AU/NZS 4417 · US 240V NEMA 6-15 · US 120V NEMA 5-15 · UK BS1363A · EU DIN 49441		
	Cable	USA: 8ft, 3×16AWG AU/NZ, UK, EU, Asia: 2.4m, 3×1.5mm² *All input cables are equipped with the magnet ring to meet EMC requirements.		
PROTECTION	**Over-voltage**	Protection mode is activated when the voltage is greater than 275V.		
	Under-voltage	**240V**: Undervoltage between 175 ~ 195v leads to 90% output power drop. Protection mode is activated when the voltage is less than 175V. **120V**: Undervoltage between 95 ~ 110v leads to 90% output power drop. Protection mode is activated when the voltage is less than 95V.		
	Short Circuit	When the output is shorted, the ballast will be shut down & the LED will alarm error for short circuit protection. See **LED Status**. To reset the ballast error, disconnect and reconnect the power.		
	Open Circuit	When the output is disconnected for any reason during operation, the ballast will shut down & the LED will alarm error for open circuit protection. See **LED Status**. To reset the ballast error, disconnect and reconnect the power.		
	Over-temperature	When ambient temperature (Ta) is more than 40°C, the ballast will shut down & the LED will alarm error for high temperature protection. To reset the ballast error, keep the ambient temperature in the allowed operating range, disconnect & reconnect the power.		
	Lamp END of Life / Rectification	The ballast can protect against end of lamp life rectification.		
	Time Delay	All ballasts have built in ignition delay (0-6S randomly) to reduce the starting current.		
	LED Status	ON: Power is applied and the ballast is operating. (LED illuminated) OFF: Power is not available at the input. (LED off) Blinking: Protection Mode.		

OUTPUT	**Lucius ReCom DE Ballast**	600W	800W	1000W
	Output Frequency	>100KHz Ultra High Frequency		
	Voltage Range	<300V		
	Max Ignition	5KV		
	Ignition Interval	**1-5-5-5-5 minute** *After 5 ignition failed attempts to turn the lamp on, the ballast will be shut down and the LED will alarm error. See **LED Status**. To reset the ballast error, disconnect and reconnect the power.		
	Plug	AU/NZS 3112 · US BAASR · UK & EU IEC 60320 C-13		
	Cable	USA: 8in, 3×16AWG AU/NZ, UK, EU, Asia: 0.2m, 3×1.5mm² *All output cables are equipped with the magnet ring to meet EMC requirements.		
GENERAL INFORMATION	**Control Knob**	**600W**: MINIMUM - 400W - 600W - BOOST - LMC **800W**: 400W - 600W - 800W - BOOST - LMC **1000W**: 650W - 800W - 1000W - BOOST - LMC		
	Controller (Optional)	Able to connect to the Lucius Light Management Controller. Dimming, timing, temperature setting, simulating sunset and sunrise. See Lucius Light Management Controller instruction manual for more details.		
	Signal Wire	3.5mm Male Jumper Cable 5m		
	Ballast Dimension LxWxH	**600W**: 316x117x82.5mm **800W**:302x190x106mm **1000W**: 302x190x106mm		
	Ballast Weight	**600W**: 3.3Kg / 7.2lbs **800W**: 4.4Kg / 9.7lbs **1000W**: 4.5Kg / 9.9lbs		
	Compatible Lamp	**600W**: HPS 600W, HPS 600W/400V, HPS DE 600W/400V, MH 600W **800W:** HPS DE 800W/400V **1000W:** HPS 1000W, HPS DE 1000W/400V, MH 1000W		
	Certification	FC · cSAus · RCM · CE		
	Regulatory Standards	IEC 61347-1:2007+A1:2010 (also as used AS/NZS 61347.1:2002) IEC 61347-2-12:2005+A1:2011 EN 55015(AS/NZS CISPR 15:2011) IEC 61000		
	Manufacturing Code	600W AU/NZ: LRCE-6002441-HM1CDHA US: LRCE-6002441-HM1CDHS UK: LRCE-6002441-HM1CDHK EU: LRCE-6002441-HM1CDHE 800W AU/NZ: LRCE-8002441-HM1CD5A US: LRCE-800122441-HM1CD5S UK: LRCE-8002441-HM1CD5K EU: LRCE-8002441-HM1CD5E 1000W AU/NZ: LRCE-10002441-HM1CD5A US: LRCE-100012441-HM1CD5S US: LRCE-10002441-HM1CDHS UK: LRCE-10002441-HM1CD5K EU: LRCE-10002441-HM1CD5E		

Lamps

Brands	INDOON SUN			PHILIPS	
Lamp Power	600W	800W	1000W	600W	1000W
Type	HPS DE High Voltage 400V			HPS SE High Voltage 400V	HPS DE High Voltage 400V
Lamp Voltage	205	235	245	225	250
Max PPF	1200µmol/s	1620µmol/s	2220µmol/s	1300µmol/s	2270µmol/s
Lamp PPF Efficacy	1.79 PPF/W	1.82 PPF/W	1.92 PPF/W	1.94 PPF/W	1.96 PPF/W
Lumen	95000	125000	160000	100000	164000
CCT - CRI	2100K - 28%	2100K - 35%	2100K - 35%	2000K - 30%	2000K - 37%
Base / operating position	DE (K12 x 30s) / Horizontal (H)			SE (E39/40) / Universal	DE (K12 x 30s) / Horizontal (H)
Dimension (L x Dia)	393x33mm			279x47mm	394x33.5mm
Manufacturing Code	HPS600/H/T33/DE/PRO HV	HPS800/H/T33/DE/PRO HV	HPS1000/H/T33/DE/PRO HV		

Fixture

REFLECTOR					
Type	FOCAL SE	FOCAL DE	BROAD SE	BROAD DE	
Material	Stucco Aluminium Miro® 4				
Reflectivity	95%				
Application	Best choice for the professional gardeners Focal light concentration Highest average affective light Increased light penetration deep into plant canopy, ideal for high ceiling		Low ceiling preferred option Hanging close to the plant canopy Low bay / Wide spread Vented reflector reduce heat over plant		
Compatible Lamps	HPS SE 800W HPS SE 600W/400V HPS SE 400W CMH 315W MH SE 800W / 600W / 400W	HPS DE 1000W/400V HPS DE 800W/400V HPS DE 600W/400V CMH DE 630W/400V	HPS SE 800W HPS SE 600W/400V HPS SE 400W CMH 315W MH SE 400W	HPS DE 1000W/400V HPS DE 800W/400V HPS DE 600W/400V CMH DE 630W/400V	
Grow Light Coverage Area	See the table of Grow Light Coverage Area on the packaging box				
Manufacturing Code	LF-F	LF-F2	LF-B	LF-B2	

RECOM DE BRACKET			
Lamp Holder	SE (E39 / 40)	DE (K12x30s)	
Plug	 AU/NZS 3112  US BAASR  UK & EU IEC 60320 C-14		
Cable	USA: 6 in , 3×16AWG AU/NZ, UK, EU, Asia: 0.15m, 3×1mm²		
Manufacturing Code	AU : LRCF-4A US : LRCF-4S UK : LRCF-4K EU : LRCF-4E	AU : LRCF-2A US : LRCF-2S UK : LRCF-2K EU : LRCF-2E	

3. SAFETY PRECAUTIONS & WARNINGS

- The lamp and reflector can reach very high temperatures. Do not touch during or immediately after use. Allow sufficient time before touching the lamp or reflector after use.
- Do not hold and carry any of the products by the power cords, or pull the power cord with excessive force.
- Do not use the fixture outside the rated temperature range or outside the rated voltage range.
- Do not attempt to disassemble, repair, or modify the fixture.
- Never power on the ballast without the lamp connected.
- Do not use any of the products if any damage is present.
- Do not turn the ballast on and off rapidly, as this can cause damage to the ballast and the lamp.
- This product complies with all necessary radio interference regulations; however, there may still be a radio interference effect on sensitive equipment.
- This ballast should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 9kHz – 1GHz. Relocate the ballast should any interference occur.
- Avoid coiled cords. Coiled cords may lead to electromagnetic interference.
- Never stack ballasts. Operating ambient temperature of the ballast is -20 to 40°C (-4 to 104°F). By providing the ballast with ambient air temperature of less than 30°C (86°F), it can work more efficiently and avoid any damage.
- Before installation of the ballast, lamp & reflector, ensure the light kit is disconnected from any power and controller.
- Do not position the fixture in the following locations:
  - *Locations subject to direct water exposure*
  - *Locations subject to direct vibration or shock*
  - *Locations subject to excessive dust*
  - *Locations subject to direct sunlight*
  - *Locations subject to condensation or icing*
  - *Locations subject to corrosive or explosive gases*
  - *Locations subject to strong static electricity or harmonics*