VeraSol* Product Certificate

*Previously Lighting Global Quality Assurance

Sun King Boom Gen 2 Easybuy

Expiration Date: October 31, 2028[1]
Verify here: https://data.verasol.org/products/sek/boomgen2

This document verifies that the Sun King Boom Gen 2 with Easybuy was tested according to the following test methods and conformed with the following standards:

Test methods:	IEC TS 62257-9-5:2024[2]
Quality standards:	IEC TS 62257-9-8:2025[3]

Testing Details

Product Name:	Sun King Boom Gen 2 with Easybuy, Boom Gen 2
Model Number:	SK-324/SK-323
Company Name:	Greenlight Planet Inc.
Brand Name:	Sun King
Country of Origin:	China
Company Contact:	Nicky Xing, sales@sunking.com
Original QTM Sample Size:	n=2
Renewal Test Conducted:	n/a
Sample Procurement Method:	Random warehouse sampling
Testing Laboratory:	Shenzhen Academy of Metrology and Quality Inspection, Shenzhen, China

Documentation

Specifications sheet with verified test results and original version of this verification: https://data.verasol.org/products/sek/boomgen2

Elisa Lai
Program Lead

[1] VeraSol requires re-testing every three years or upon major product revisions, and in special cases reserves the right to grant an extension on results validity.
[2] https://verasol.org/solutions/test-methods
[3] https://verasol.org/solutions/quality-standards

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Category	Quality Standard	Verdict
Truth in Advertising (IEC TS 62257-9-8: 5.2.1, 5.2.2, 5.2.5, 5.2.6, and 5.2.7)	All reported information is accurate and all advertised features function as advertised. Luminous flux (light output) shall deviate no more than 15% from advertised values. Other numeric ratings deviate no more than 10% from actual performance (**Note**: It is always acceptable if actual performance is better than advertised).	Pass
Information and Performance Reporting Requirements (IEC TS 62257-9-8: 5.2.3)	Company name and uniquely identifiable name of product or model number are presented on the packaging or user agreement. All products have a method of indicating to the consumer what components and appliances are included with the product (this description is on the packaging, user manual, user agreement, or separate documentation presented at the time of purchase). Required component specifications are displayed on the packaging or user manual. PV module label includes required specifications (applicable to modules not integrated into other components). Capacity and voltage are marked on the battery. Light output and the corresponding solar run time are reported on the product packaging for at least the brightest setting.	Pass
	Impact of mobile phone charging on product performance is described on packaging.	Pass
PAYG Requirements (IEC TS 62257-9-8: 5.2.4)	Adequate instructions for using the pay-as-you-go (PAYG) system are included in the user manual (if present), in a user agreement, on in another location in/on the packaging. Company has declared operational details of the PAYG system.	Pass
Port Functionality and Truth-in-Advertising (IEC TS 62257-9-8: 5.3)	Ports are accurately advertised and meet voltage requirements.	Pass

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Lumen Maintenance (IEC TS 62257-9-8: 5.4)	The relative light output of all samples tested is ≥95% of initial light output at 1,000 hours (measured with the lumen maintenance test of IEC TS 62257-9-5), **OR**	Pass
	The relative light output of all samples tested is ≥90% of initial light output at 2,000 hours (estimated with the alternate method using ANSI/IES LM-80 data defined in IEC TS 62257-9-5).	
AC-DC Power Supply Safety (IEC TS 62257-9-8: 5.5.1)	Any included AC-DC power supplies or chargers carry recognized consumer electronics safety certifications.	n/a
Hazardous Substances Ban (IEC TS 62257-9-8: 5.5.2)	No battery contains cadmium or mercury at levels greater than trace amounts.	Pass
Circuit and Overload Protection (IEC TS 62257-9-8: 5.5.3)	Products include a current-limiting mechanism to prevent irreversible damage to the system. **Note**: The output overload protection test may be omitted for ports on appliances that are not intended to provide power.	Pass
Wiring and Connector Safety (IEC TS 62257-9-8: 5.5.4)	Wires, cables, and connectors are appropriately sized for the expected current and voltage. Connectors typically used in the power supplies for AC mains are not used except for AC power inputs.	Pass
PV Module Safety (IEC TS 62257-9-8: 5.5.5)	PV module wiring size is sufficient and all connections and joints are robust, module shows no significant visual defects, and markings are legible, and no safety hazards were observed.	Pass
Battery Protection and Safety (IEC TS 62257-9-8: 5.6.1, 5.6.2, and 5.6.3)	Protected by an appropriate charge controller that prolongs battery life and protects the safety of the user. All samples meet the charge control requirements. Lithium batteries carry adequate safety documentation and have overcharge protection for individual cells or sets of parallel-connected cells. Batteries of included appliances must also meet this standard.	Pass
Battery Durability (IEC TS 62257-9-8: 5.6.4)	The average capacity loss of all samples does not exceed 25% and there are no failed samples as defined in the battery durability storage test as defined in IEC TS 62257-9-5 Annex BB.	Pass

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Category	Quality Standard	Verdict
Physical and Water Ingress Protection: Testing and Sampling Requirements (IEC TS 62257-9-8: 5.7.2.1)	Connectors for permanent outdoor use meet the requirements for permanent outdoor exposure.	n/a
Physical Ingress Protection (IEC TS 62257-9-8: 5.7.2.2)	For **all products**: IP2X For **PV modules**: IP3X For **fixed outdoor products**: IP5X	Pass
Water Protection (IEC TS 62257-9-8: 5.7.2.3)	Degree of protection required is based on product type: **Fixed separate (indoor)**: No protection required **Portable separate**: Occasional exposure to rain **Portable integrated**: Frequent exposure to rain **Fixed integrated (outdoor)**: Permanent outdoor exposure **PV modules**: Outdoor rooftop installation	Pass
Drop Test Durability (IEC TS 62257-9-8: 5.7.3)	**Fixed separate (indoor)**: No requirement. **All other products**: All samples are functional after drop test; none result in dangerous failures.	Pass
Workmanship Quality (IEC TS 62257-9-8: 5.7.4)	All components and all products are rated “Good” or "Fair” for workmanship quality as defined in Annex F of IEC TS 62257-9-5. At most, one sample may fail to function when initially evaluated. No hazards or safety issues shall be present on initial inspection and none shall develop as a result of normal use.	Pass
Switch, Connector, and Strain Relief Durability (IEC TS 62257-9-8: 5.7.5 and 5.7.6)	All samples and products are functional after Switch, Connector, Gooseneck, and Strain Relief tests; none result in dangerous failures.	Pass
PV Overvoltage Protection (IEC TS 62257-9-8: 5.7.8)	If the battery is disconnected or isolated, the system must not be damaged and the load terminals shall maintain a voltage that is safe for their intended uses.	Pass

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Category	Quality Standard	Verdict
Miswiring Protection (IEC TS 62257-9-8: 5.7.9)	The user interface is designed to minimize the likelihood of making improper connections. If improper or reversed connections can easily be made, they cause no damage to the system or harm to the user.	Pass
Warranty (IEC TS 62257-9-8: 5.8.1)	Accurately specified and consumer-facing. Covers manufacturing defects under normal use. Minimum coverage of at least one (1) year for the full system and any included appliances.	Pass
Date of Manufacture (IEC TS 62257-9-8: 5.8.2)	Reported with precision to at least the month and year on the product, the packaging, or on a warranty card or other location that is accessible prior to purchase. This information may be coded within a sequential serial number.	Pass
Port Information Requirements (IEC TS 62257-9-8: 5.8.5)	The following are reported on either the product, the packaging, or in the user manual: For **all ports:** • Nominal voltage or voltage range For **USB "fast-charging" ports**: • Maximum power For **all other ports**: • Maximum current or maximum power	Pass

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Test Methods & Quality Standards

Products are tested according to the test methods described in IEC TS 62257-9-5:2024 and meet the requirements of IEC TS 62257-9-8:2025.

Additional details on the requirements listed above are available here:
https://verasol.org/solutions/quality-standards

About VeraSol

An evolution of Lighting Global Quality Assurance, VeraSol supports high-performing, durable off-grid products that expand access to modern energy services. VeraSol builds upon the strong foundation for quality assurance laid by the World Bank Group and expands its services to encompass off-grid appliances, productive use equipment, and component-based solar home systems. VeraSol is managed by CLASP in collaboration with the Schatz Energy Research Center at California State Polytechnic University, Humboldt. Foundational support is provided by the World Bank Group's Lighting Global program, UKaid, IKEA Foundation, and others. Please visit VeraSol.org for more information.

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