

VeraSol Standardized Specifications Book

Manufacturer: BioLite, Inc.

Component Family Name: Solar Home 5000+ Family

Date of Standardized Specifications Book Expiration: December 31, 2024

Verify Online: <https://data.verasol.org/products/sek/bio-shs5000plusfam>

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This VeraSol Standardized Specifications Book presents a **component-level Standardized Specifications Sheet** listing the available components in the product family by component type, each individual component's performance rating, and performance results for each component tested according to the Edition 4 of IEC 62257-9-5. Following the component-level Standardized Specifications Sheet is a **list of the systems** covered by this Specifications Book that use combinations of these components.

NOTICE: Systems or kits developed using components from the component family will each perform differently and have not all been evaluated on a system-level basis. All systems listed in this Specifications Book are regarded to have passed the applicable Lighting Global Quality Standards or to meet the requirements in IEC 62257-9-8.

Revision: 2022.12

Component-Level Standardized Specifications Sheet

BioLite, Inc.

Solar Home 5000+ Family

Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)
Control Unit with 97.3 Wh battery	Lithium Ion	12.8	7.6	8.3

PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
50 W PV module	50	49

Light Sources*

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	High	High	High
Hanging Light	200	200	140
Motion Sensor Light	200	200	140

Appliances*

Name / Model Number	Description	Rated Power (W)	Measured Power During Use (W)	Rated Battery Capacity (Ah)	Measured Battery Capacity (Ah)
24" TV	24" diagonal screen	8.4	8.0	--	--
32" TV	32" diagonal screen	8.4	8.3	--	--

NOTICE: As indicated, not all components listed on this page were tested according to the Quality Test Method (QTM) in Edition 4 of IEC 62257-9-5. However, based on the satisfactory performance of the tested components in the family, the components that were not tested are regarded to meet the requirements in IEC 62257-9-8. In addition, all tested components passed an internal inspection, the full array of applicable QTM durability tests, as well as ingress protection testing (where applicable).

*Light points and appliances may perform differently when used with different systems.

List of Covered Systems

BioLite, Inc.

Solar Home 5000+ Family

System Name	Number of each component included in each system					
	Hanging Lamp	Motion Sensor Lamp	50 W PV Module	Control Unit with 97.3 W battery	24" TV	32" TV
SH5000+ 24" TV - 4 lights**	3	1	1	1	1	
SH5000+ 24" TV - 1 light	1		1	1	1	
SH5000+ 32" TV - 4 lights	3	1	1	1		1
SH5000+ 32" TV - 1 light	1		1	1		1

**Tested as full system. Individual SSS available on VeraSol website.

NOTICE:

Only the SolarHome 5000+ was fully tested as systems according to Edition 4 of IEC 62257-9-5. Individual Standardized Specifications Sheets (SSS) that report system-level performance are available for the SolarHome 5000+ at <https://data.verasol.org/products/sek/> Systems that were not tested, but that were developed using components from the component family will perform differently than the system(s) shown in the individual system-level SSS. All systems listed above are regarded to meet the requirements in IEC 62257-9-8.

Unless otherwise noted, the following information applies to all listed systems and components:

Warranty Information

Two year warranty on all kits and components

Available Daily Electrical Energy and Port Information

BioLite, Inc.

Solar Home 5000+ Family

System Name	Available Daily Electrical Energy (Wh/day)	Includes ports for charging?
SH5000+ 24" TV - 4 lights**	120	yes
SH5000+ 24" TV - 1 light	120	yes
SH5000+ 32" TV - 4 lights	120	yes
SH5000+ 32" TV - 1 light	120	yes

**Tested as full system. Individual SSS available on VeraSol website.

NOTICE:

The available daily electrical energy (Wh/day) is calculated for fully tested systems following the energy service calculations as described in IEC/TS 62257-9-5 Ed. 4. For products in a family that are not tested as a full system, estimations of available daily electrical energy (Wh/day) are calculated according to an alternative method using data from the test reports of fully-tested products and components. Estimating Wh/day values requires making assumptions about system efficiencies, power consumption, and user behavior. As with any calculation based on multiple assumptions, there is some degree of error in the Wh/day estimate, which may be greater or less than the actual value for a given product.