

# VeraSol

## Standardized Specifications Book

**Manufacturer:** Afreesun Limited

**Component Family Name:** ACOLOR/ALAMP Family

**Date of Standardized Specifications Book Expiration:** June 30, 2024

**Verify Online:** <https://data.verasol.org/products/sek/afs-acolor-family>

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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\*.

**Quality Standards Framework Version:** 2021

**Revision:** 2024.03

# Component-Level Standardized Specifications Sheet

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ACOLOR/ALAMP Family

## Battery / Control Box

Name / Model Number	Battery Chemistry	Nominal Voltage (V)	Battery Capacity Rating (Ah)	Measured Battery Capacity (Ah)
Lantern-10/ Lantern-20/ Lantern-20R	Lithium-ion	3.7	2.6	2.6
Lantern-20S	Lithium-ion	7.2	2.6	2.6
Lantern-30	Lithium-ion	3.7	5.2	5.2
Lantern-30S	Lithium-ion	7.2	5.2	5.2

## PV Module

Name / Model Number	Peak Power at STC Rating (W)	Measured Peak Power at STC (W)
3 W PV module	3	2.8
4 W PV module	4	Not tested
5 W PV module	5	4.9
6 W PV module	6	Not tested
8 W PV module	8	Not tested
10 W PV module	10	9.7
12 W PV module	12	13
16 W PV module	16	Not tested
20 W PV module	20	19

## Light Sources\*

Name / Model Number	Luminous Flux Rating (lm)	Measured Luminous Flux (lm)	Measured Lamp Efficacy (lm/W)
	High	High	High
Lantern-10 desk lamp	100	130	150
Lantern-10 torch	100	100	110
Lantern-20/ Lantern-20R/ Lantern-20S	200	200	150
Lantern-30/ Lantern-30S	300	320	140
Secondary-10/ Security-10	100	95	150

**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 have passed the applicable Lighting Global Quality Standards or 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

Afreesun Limited

ACOLOR/ALAMP Family

System Name	Number of each component included in each system																
	Lantern-10	Lantern-20	Lantern-20S	Lantern-30	Lantern-30S	Secondary-10	Security-10	3 W PV module	4 W PV module	5 W PV module	6 W PV module	8 W PV module	10 W PV module	12 W PV module	16 W PV module	20 W PV module	remote
ALAMP1+ (ASHARE PLUS-10)			1							1							1
ALAMP-2 (ASHARE PLUS-20)			1				1				1						1
ALAMP-3			1			1	1				1						1
ALAMP-4	1		1			1	1					1					1
ALAMP-6	1				1	2	2								1		1
ALAMP-8	1				1	3	3								1		1
ACOLOR-10 (ASHARE-10/AC-10)	1																
ACOLOR-20 (ASHARE-20/AC-20)		1						1									
ACOLOR-30 (ASHARE-30/AC-30)	1	1								1							
ACOLOR-40 (AC-40)	1			1								1					
ACOLOR-50 (AF-50)	1	2										1					
ACOLOR-60 (AF-60)	1	1		1									1				
ACOLOR-70 (AC-70)**	1	3											1				
ACOLOR-80 (AC-80)	1	2		1										1			
ACOLOR-100 (AC-100)	1			3												1	

\*\*Tested as full systems. Individual SSS available on VeraSol website.

## NOTICE:

Only the ACOLOR Solar Lighting System (ACOLOR-70) was fully tested as a system according to Edition 4 of IEC 62257-9-5. The Individual Standardized Specifications Sheet (SSS) that reports system-level performance is available for the ACOLOR Solar Lighting System (ACOLOR-70) at <https://data.verasol.org>. 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 have passed the applicable Lighting Global Quality Standards or the requirements in IEC 62257-9-8.

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

## Warranty Information

A 2-year warranty covering manufacturing defects in the system.