

X850

X850
d.light design
Results based on test procedures detailed in
IEC 62257-9-5 v.4

Verify online:
<https://data.verasol.org/products/sek/dl-x850>
Valid until: May 31, 2022



Meets the Lighting Global Solar Home System Kit Quality Standards



Mobile charging

PAYG

Pay-As-You-Go option available

6

Light point(s)



Plug-and-play



*Quality Verified TV sold separately

WARRANTY INFORMATION

The product carries a 2-year warranty with the exception of the following for which the warranty is 1 year: TV remote, solar radio, solar torch. The TV (sold separately) includes a 2-year warranty.

PERFORMANCE DETAILS

			Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
			Used alone ^b	Used in combination ^c
	Appliance ^a	Description		
included in kit	Main lighting unit	5 light points on high totaling 1380 lm and 12 W.	5.4 hours	1.7 hours
	Radio	portable (1 Ah battery, 3.7 V nominal voltage, with a power consumption of 0.39 W while in-use)	110 hours	1.7 hours
	Torch	1.8 Ah, 88 lumens torch, 3.7 V nominal voltage	37 hours	2.3 hours
sold separately	Mobile phone	Smart phone (5.7 Wh battery)	13 full charge(s)	0.57 full charge(s)
	Television	19" diagonal (8.3 W power consumption while in-use)	14 hours	1 hours
	Fan	fan (28 W)	4 hours	2.5 hours

Available daily electrical energy^c (Wh/day) 110

Performance measure	Brightness setting: 4 lamps and 1 tubelight on high; torch on high
Lighting full battery run time ^d for main unit (hours)	5.1
Lighting full battery run time torch (hours)	5.2
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any auxiliary lights included with the product)	8000

^a Only included appliances were tested. Run times and power ratings for appliances sold separately come from manufacturer ratings or standard estimates.

^b Without any other loads used during the run time

^c Based on an example use profile with all of the appliances listed in the "Used in combination" column used simultaneously.

^d Lighting full battery run time estimates do not account for mobile phone charging or other auxiliary loads; the run time is defined as the time until the output is 70% of the initial, stabilized output.

LIGHTING DETAILS									
Lamp name	Number of lamps	Number of settings	Setting	Light output (lm)	Lumen efficacy ^e (lm/W)	CRI ^f	CCT ^g	Distribution type	Lumen maintenance ^h
Hanging lamp	4	3	high	230	110	86	5779	Wide	100%
Tube light	1	3	high	460	110	87	5890	Wide	100%
Torch	1	2	high	88	67	73	6914	Narrow	96%

^e Lumen efficacy is the power consumption at a light point during the light output test.

^f Color Rendering Index. An index of 100 is equivalent to viewing objects in daylight; above 80 is considered good.




^g Correlated Color Temperature in degrees Kelvin. Describes color appearance as warm (2700-3000 K), cool (3000-5000 K), or daylight (>5000 K)

^h Percent of the original light output that remains after 2,000 hours of run time

SPECIAL FEATURES

TV	★	Quality verified d.light 19"TV available for purchase separately (model number SV19S)
Housing	★	Available with a metal or plastic housing

PORTS

3	USB 2.0 type A		Mobile phones and radios can be charged. Adapters are included.
3	Barrel jack		12 V ports available to charge devices and power appliances
4	Lamp Port		Barrel jack for lamps

DURABILITY

Overall durability and workmanship		Pass
Durability tests passed		Switch test, Drop test, Strain relief test, physical ingress protection.
Level of water protection	Main Lighting Unit	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
	Torch	Has protection from occasional rain ; met with appropriate warning label
	radio	Has protection from occasional rain ; met with appropriate warning label

SOLAR DETAILS

PV module type	Polycrystalline silicon
PV maximum power	40 watts

BATTERY DETAILS

Battery replaceability	Not easily replaceable with common tools.
Battery chemistry	Lithium iron phosphate
Battery package type	4x IFR 32700
Battery capacity	6 Ah (main unit)
Battery nominal voltage	12.8 V (main unit)
Battery status indication	LEDs indicate battery state of charge

MARKS AND CERTIFICATIONS

Factory certification	ISO 9001:2015; ISO 14001:2015
-----------------------	-------------------------------

PRODUCT DETAILS

Manufacturer name	d.light design
Product name	X850
Product model / ID number	X850
Contact information	testing@dlight.com
Website	www.dlight.com
Dimensions (entire product in package)	25 x 33 x 13 cm
Mass	2605 g

SSS INFORMATION

Specs sheet expiration date	May 31, 2022
Quality standards framework version	2019
Revision	2019.10