

Solar Home System D180R

D180R
d.light design Ltd

Verify online:
<https://data.verasol.org/products/sek/dl-d180r>
Valid until: March 31, 2023

Results based on test procedures detailed in IEC TS 62257-9-5



Meets the Lighting Global Solar Home System Kit Quality Standards



Mobile charging

PAYG

Pay-As-You-Go option available

4

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 3-year warranty for the kit and a 1-year warranty for the torch and radio covering manufacturing defects in the system.

PERFORMANCE DETAILS

VeraSol Certified?	Included in Kit?	Appliance ^a	Description	Run time after a typical day of solar charging (assuming 5kWh/m ² /day)		Advertised Combination
				Used alone ^b	Used in combination ^c	Used in combination ^c
yes	included	Main lighting unit	3 light points on (High) totaling 460 lumens and 3.34 power	10 hours	4 hours	4.9 hours
yes		Torch	98 lumens torch, (Li-ion battery: 2 Ah 3.7 V)	14 hours	4 hours	1.2 hours
yes		Radio	portable radio (Li-ion battery: 0.6 Ah, 3.7 V) with power consumption of 0.4 W.	54 hours	3 hours	6.1 hours
no	not included	Mobile phone	Smart phone (5.7 Wh battery)	3.8 full charge(s)	1 full charge(s)	1.2 full charge(s)

Available daily electrical energy^f (Wh/day) 27

Performance measure	Brightness setting: High
Lighting full battery run time ^d for main unit (hours)	10
Lighting full battery run time of the Torch powered by Torch battery (hours)	5.2
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	3200

^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 ^g (lm/W)	CR ^f	CCT ^g	Distribution type	Lumen maintenance ^h
LED Bulb (8m)	2	2	High	120	120	85	6200	Wide	100%
Tube light (4m)	1	2	High	220	120	84	5800	Wide	100%
Torch	1	1	High	98	59	78	7300	Narrow	94%

^g 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

PORTS		
1	USB 2.0 type A	 Mobile phones, radios, and torches can be charged.
3	Barrel jack	 The three barrel jack ports are used for light points only.
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Strain relief test, Physical ingress protection, PV durability tests
Level of water protection	Main Unit (Powerpack)	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
	LED Bulb (8m)	Water ingress protection not tested, meant for indoor use only.
	Tubelight (4m)	Water ingress protection not tested, meant for indoor use only.
	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		10 (with cable losses) watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery package type		32700
Battery capacity		11 Ah
Battery nominal voltage		3.2 V
Battery status indication		Three types of indicators show battery state-of-charge: One is for solar charging, one is for locked situation, and one is for credit.
MARKS AND CERTIFICATIONS		
Factory certification		ISO 9001:2013; ISO14001:2015
PRODUCT DETAILS		
Manufacturer name		d.light design Ltd
Product name		Solar Home System D180R
Product model / ID number		D180R
Contact information		testing@d.light.com
Website		www.dlight.com
Dimensions (entire product in package)		Multiple packages. Contact manufacturer for more information.
Mass		2335 g
SSS INFORMATION		
Specs sheet expiration date		March 31, 2023
Quality standards framework version		2021
Revision		2021.03