

HOME X Family

5800

Niwa Next Energy Products Ltd.

Results based on test procedures detailed in IEC 62257-9-5 v.4

Verify online:

<https://data.verasol.org/products/sek/niwa-homex>

Valid until: May 31, 2023



Meets the Lighting Global Pico-PV Quality Standards



Mobile charging

4

Light point(s)



Plug-and-play



WARRANTY INFORMATION

A 2-year warranty covering manufacturing defects in the system

PERFORMANCE DETAILS

	Appliance ^a	Description	Run time after a typical day of solar charging (assuming 5kWh/m ² /day)	
			Used alone ^b	Used in combination ^c
included in kit	Main lighting unit	4 lights on high with 600 lumens and 4 W power	5.7 hours	4.1 hours
sold separately	Mobile phone	Smartphone (5.7 Wh battery)	2.3 full charge(s)	1 full charge(s)
	Mobile phone	Basic phone (3.7 Wh battery)	4.1 full charge(s)	--

Available daily electrical energy^f (Wh/day) 20

Performance measure	Brightness setting: High
Lighting full battery run time ^d for main unit (hours)	5.7
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any lights with internal batteries included with the product)	3420

^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
LED lamp	4	2	High	150	140	84	5200	Wide	100%

^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

PORTS		
1	USB 2.0 type A	 Mobile phones and tablets can be charged. Adapters are included.
3	Barrel jack	 3 barrel jacks are used for light points only
DURABILITY		
Overall durability and workmanship		Pass
Durability tests passed		Switch test, Strain relief test, Physical ingress protection.
Level of water protection	Main Unit	Water ingress protection not tested, meant for indoor use only.
	PV module	Has protection from permanent outdoor exposure
SOLAR DETAILS		
PV module type		Polycrystalline silicon
PV maximum power		8.2 watts
MAIN UNIT BATTERY DETAILS		
Battery replaceability		Not easily replaceable with common tools.
Battery chemistry		Lithium iron phosphate
Battery package type		1 x 32700
Battery capacity		6.5 Ah
Battery nominal voltage		3.2 V
Battery status indication		One indicator for PV charging, three for battery state of charge
MARKS AND CERTIFICATIONS		
Factory certification		ISO 9001:2015
PRODUCT DETAILS		
Manufacturer name		Niwa Next Energy Products Ltd.
Product name		HOME X Family
Product model / ID number		5800
Contact information		sales@niwasolar.com
Website		https://niwasolar.com/
Dimensions (entire product in package)		20 x 38 x 15 cm
Mass		2845 g
SSS INFORMATION		
Specs sheet expiration date		May 31, 2023
Quality standards framework version		2020
Revision		2023.02