HOME X Family
Niwa Next Energy Products Ltd.
Verify online:
www.lightingglobal.org/products/niwa-homeX
WARRANTY INFORMATION
A 2-year warranty covering manufacturing defects in the system
PERFORMANCE DETAILS
<table>
<thead>
<tr>
<th>Appliance</th>
<th>Description</th>
<th>Used alone</th>
<th>Used in combination</th>
</tr>
</thead>
<tbody>
<tr>
<td>included in kit</td>
<td>Main lighting unit</td>
<td>5.7 hours</td>
<td>4.1 hours</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>Smartphone (5.7 Wh battery)</td>
<td>2.3 full charge(s)</td>
<td>1 full charge(s)</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>Basic phone (3.7 Wh battery)</td>
<td>4.1 full charge(s)</td>
<td>—</td>
</tr>
</tbody>
</table>

Run time after a typical day of solar charging (assuming 5kWh/m²/day)

Available daily electrical energy: 20 Wh/day

Performance measure

<table>
<thead>
<tr>
<th>Lighting full battery run time for main unit (hours)</th>
<th>5.7</th>
</tr>
</thead>
</table>

Total lighting service (lumen-hours/solar-day)

Brightness setting: High

Performance measure

Total lighting service (lumen-hours/solar-day)

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

<table>
<thead>
<tr>
<th>Lamp name</th>
<th>Number of lamps</th>
<th>Number of settings</th>
<th>Setting</th>
<th>Light output (lm)</th>
<th>Lumen efficacy (lm/W)</th>
<th>CRI</th>
<th>CCT</th>
<th>Distribution type</th>
<th>Lumen maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED lamp</td>
<td>4</td>
<td>2</td>
<td>High</td>
<td>150</td>
<td>140</td>
<td>84</td>
<td>5200</td>
<td>Wide</td>
<td>100%</td>
</tr>
</tbody>
</table>

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

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

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

Percent of the original light output that remains after 2,000 hours of run time.
## PORTS

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>USB 2.0 type A</td>
<td>Mobile phones and tablets can be charged. Adapters are included.</td>
</tr>
<tr>
<td>3</td>
<td>Barrel jack</td>
<td>3 barrel jacks are used for light points only</td>
</tr>
</tbody>
</table>

## 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

- 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

## DSS INFORMATION

- Specs sheet expiration date: March 31, 2022
- Quality standards framework version: 2020
- Revision: 2020.03