

Starlight ONE (rev0)

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 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-starrev0>
 Valid until: July 31, 2022



Meets the Lighting Global Pico-PV Quality Standards



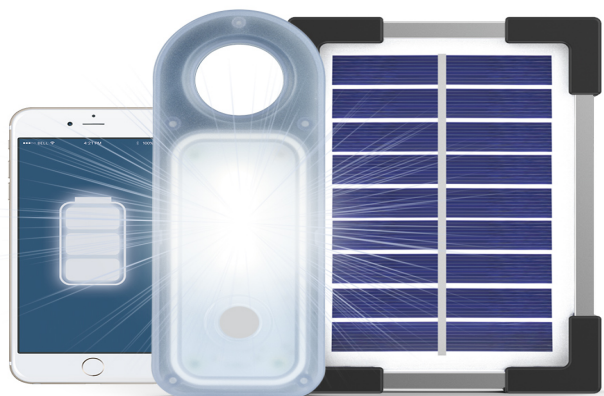
Mobile charging

1

Light point(s)



Plug-and-play



WARRANTY INFORMATION

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

PERFORMANCE DETAILS

		Run time after a typical day of solar charging (assuming 5kWh/m ² /day)			
		Appliance ^a	Description	Used alone ^b	Used in combination ^c
included in kit	Main lighting unit		An integrated light on High with 150 lumens and 1.5 W.	2.8 hours	1 hours
			An integrated light on Low with 9.5 lumens and 0.1 W	45 hours	--
sold separately	Smart Phone		Smart phone (5.7 Wh battery)	0.4 full charge(s)	0.2 full charge(s)
	Basic phone		Basic phone (3.7 Wh battery)	0.6 full charge(s)	--

Available daily electrical energy^c (Wh/day) 2.8

Performance measure	Brightness setting: High
Lighting full battery run time ^d for main unit (hours)	4.3
Total lighting service (lumen-hours/solar-day) (includes the both main lighting unit and any auxiliary lights included with the product)	420

^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
Integrated Light	1	3	High	150	110	84	3900	Wide	99%
			Medium	66	120	84	3900	--	--
			Low	9.5	120	85	3900	--	--

^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		
LEDs	 UV-free LEDs	
PORTS		
1	USB 2.0 type A  Mobile phones can be charged. Adapters are included.	
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	Has protection from permanent outdoor exposure. Met IP65.
	PV module	Has protection from permanent outdoor exposure.
SOLAR DETAILS		
PV module type	Polycrystalline silicon	
PV maximum power	1.5 watts	
BATTERY DETAILS		
Battery replaceability	Not easily replaceable with common tools.	
Battery chemistry	Lithium iron phosphate	
Battery package type	18650	
Battery capacity	1.8 Ah	
Battery nominal voltage	3.2 V	
Battery status indication	There is a red LED light to indicate the product is charging and a green LED to indicate the product is fully charged.	
PRODUCT DETAILS		
Manufacturer name	Niwa - Next Energy Products Ltd.	
Product name	Starlight ONE (rev0)	
Product model / ID number	Starlight ONE (rev0)	
Contact information	sales@niwasolar.com	
Website	www.niwasolar.com	
Tested as	Starlight ONE (1800 mAh battery upgrade)	
Dimensions (entire product in package)	18.1 x 18.3 x 4.1 cm	
Mass	562 g	
SSS INFORMATION		
Specs sheet expiration date	July 31, 2022	
Quality standards framework version	2018	
Revision	2020.01	