

# Radiance Compact Solar Lantern

F200  
Freeplay Energy

Verify online:  
<https://data.verasol.org/products/sek/fe-f200>  
Valid until: April 30, 2024

Results based on test procedures detailed in IEC TS 62257-9-5 and IEC TS 62257-9-8



Meets the requirements in IEC TS 62257-9-8:2020 for Size A Kits



Mobile charging

1

Light point(s)



Plug-and-play



## WARRANTY INFORMATION

12 months for entire product, including battery

## PERFORMANCE DETAILS

VeraSol Certified?	Included in Kit?	Appliance <sup>a</sup>	Description	Run time after a typical day of solar charging (assuming 5kWh/m <sup>2</sup> /day)	
				Used alone <sup>b</sup>	Used in combination <sup>c</sup>
yes	included	Main lighting unit	1 integrated lamp on max totaling 210 lumens and 1.7W power	3 hours	1.2 hours
no	not included	Radio	Portable radio (Li-ion battery: 1 Ah, 3.7 V) with power consumption of 0.5 W while in use	6.6 hours	0.91 hours
no	not included	Mobile phone	Basic phone (3.7 Wh battery)	11 full charge(s)	0.3 full charge(s)

Available daily electrical energy<sup>c</sup> (Wh/day)

4

## Performance measure

Brightness setting: max

Lighting full battery run time<sup>d</sup> for main unit (hours)

11

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

250

(includes the both main lighting unit and any lights with internal batteries included with the product)

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

<sup>b</sup> Without any other loads used during the run time

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

<sup>d</sup> 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 <sup>e</sup> (lm/W)	CRI <sup>f</sup>	CCT <sup>g</sup>	Distribution type	Lumen maintenance <sup>h</sup>
Integrated lamp	1	4	Max	210	120	74	6200	Omnidirectional	100%
Integrated torch	1	1	On	55	150	71	6100	Narrow	97%

<sup>e</sup> Lumen efficacy is the power consumption at a light point during the light output test.

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

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

<sup>h</sup> 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 radios can be charged. Adapters are included.	
DURABILITY		
Overall durability and workmanship	Pass	
Durability tests passed	Switch test, Drop test, Physical ingress protection, PV durability tests	
Level of water protection	Main Unit	Has protection from frequent rain; met IPX3
	PV module	Has protection from permanent outdoor exposure.
SOLAR DETAILS		
PV module type	Polycrystalline silicon	
PV maximum power	1.8 watts	
MAIN UNIT BATTERY DETAILS		
Battery replaceability	Easily replaceable with common tools; however, the warranty is void if product is opened.	
Battery chemistry	Lithium iron phosphate	
Battery capacity	5.8 Ah	
Battery nominal voltage	3.2 V	
Battery status/ other indicator lights	four indicators are for PV charging and battery level	
PRODUCT DETAILS		
Manufacturer name	Freeplay Energy	
Product name	Radiance Compact Solar Lantern	
Product model / ID number	F200	
Contact information	vjenkins@freeplayenergy.com	
Website	www.freeplayenergy.com	
Dimensions (entire product in package)	17 x 17 x 20 cm	
Mass	790 g	
SSS INFORMATION		
Specs sheet expiration date	April 30, 2024	
Revision	2022.04	