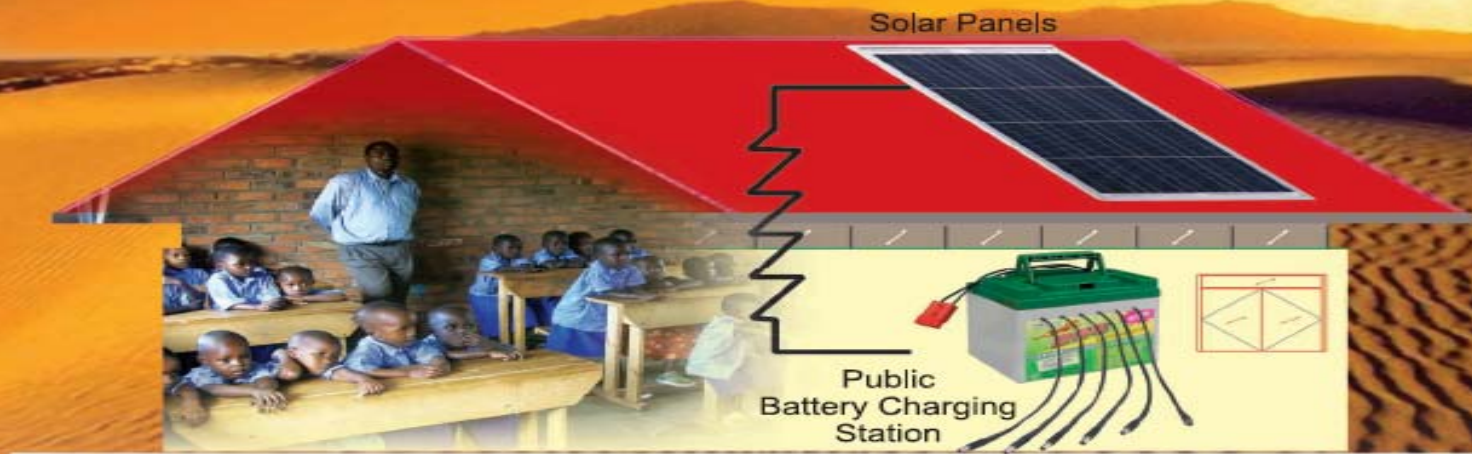


# Solar charge station &LED lamp



# The New Solar Power Technology African Schoolchild Lamp

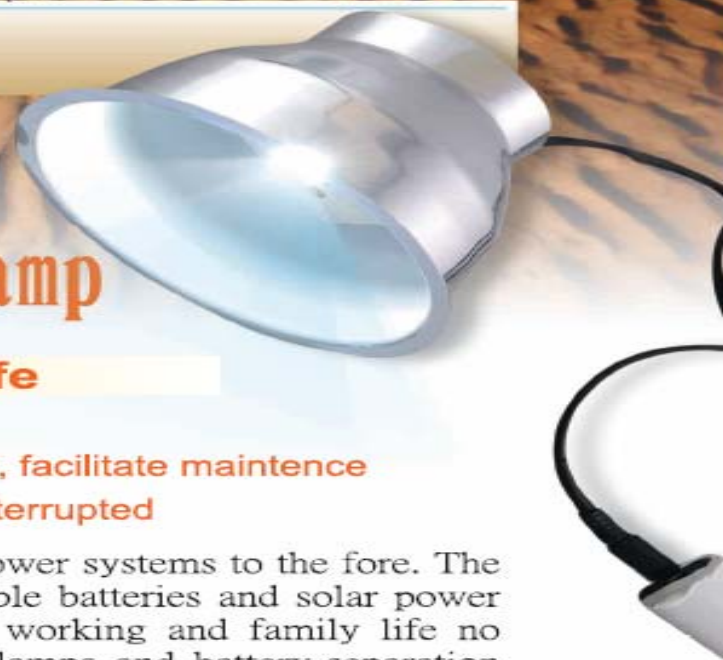
## To facilitate the creation of a new life

Talcen from nature—Sound, odorless, no noise

Facilate maintenance—To facilitate quick, qrido charge, facilitate maintenance

To enjoy life—lighting to facilitate the daily life of uninterrupted

The evolution of technology brings new life and new power systems to the fore. The latest of which is the new LED light. Using rechargeable batteries and solar power we can provide adequate lighting at night. Studying, working and family life no longer needs to be suspended at nightfall. With shell lamps and battery-separation design, ongoing maintenance is simple. During the day, the battery can be charged from local schools and other public areas set up as battery will have enough energy to provide a comforting light all night long. The use of Solar energy is, completely natural, noiseless and inexhaustible, the only light to accompany a quiet peaceful night...



# PV Module



<b>Model Type</b>	<b>PM30ASC</b>
<b>Nominal Peak Power, Pmax</b>	<b>30W ± 2.5W</b>
<b>Peak Power Voltage, Vpm</b>	<b>3.7~4V</b>
<b>VPeak Power Current, Ipm</b>	<b>7.76A</b>
<b>AOpen Circuit Voltage, Voc</b>	<b>4.82V</b>
<b>VShort Circuit Current, Isc</b>	<b>8.08 A</b>
<b>Module Efficiency</b>	<b>12.81%@30W</b>
<b>Dimension [L x W x H]</b>	<b>679 x 346 x 25 mm</b>
<b>Weight (Kg)</b>	<b>3.1 Kg</b>

# Storage & Charge Station

Item	Description	Quantity
Solar Panel	30W $\pm$ 2.5W PV Module with 3m cable	2
Storage Battery System	3.3V 80 $\pm$ 10%AH (250WH)/per set	1
Charge Station	12 Charge Ports(1A)/per set	2
1W LED Lamp	1W LED @250 $\pm$ 10% mA	50
Hand-Set Battery	3.3V 1.2 $\pm$ 10%AH	50

- **Every port can charge the hand-set battery fully in 1.5 hours.**
- **The duration for LED Lamp is about 4~4.5 hours.**



### **Feature :**

- Excellent Operating Life
- High Efficacy
- Low Thermal Resistance
- SMD Device
- Instant Light
- Fully Dimmable
- No UV
- Superior ESD Protection
- RoHS Compatibility

## Absolute Ratings

Parameter	Rating
	White Series / Royal Blue / Blue / Green / Amber / Red
Typical DC Forward Current (mA)	350~700 mA
LED Junction Temperature	125°C
LED Operating Temperature	-40°C~110°C
Storage Temperature	-40°C~110°C
Soldering Temperature	Max. 260°C / Max. 10sec. (JEDEC 020c)
ESD Sensitivity	2,000 V HBM (JESD-22A-114-B)
Reverse Voltage	Not design to be driven in reverse bias ( $V_R \leq 5V$ )
Preconditioning	Acc. to JEDEC Level 2

### Luminous Flux and Forward Voltage at 350mA

	Part number	Color	Luminous Flux(lm) or Radiometric Power*(mW) @ 350mA		Forward Voltage V <sub>F</sub> (V) @350mA	
			Min	Typ.	Min	Max
P20	P20-W	Daylight	75	90	2.8	3.8
		Neutral White	70	80	2.8	3.8
		Warm White	50	60	2.8	3.8
	P20-R	Red	35	45	2.0	3.4
	P20-A	Amber	35	45	2.0	3.4
	P20-G	Green	45	60	2.8	3.8
	P20-B	Blue	10	18	2.8	3.8
	P20-D	Royal Blue	250*	300*	2.8	3.8

Note:

1. Luminous flux is measured with an accuracy of  $\pm 10\%$
2. The forward voltage is measured with an accuracy of  $\pm 0.1V$

## General Characteristics at 350mA

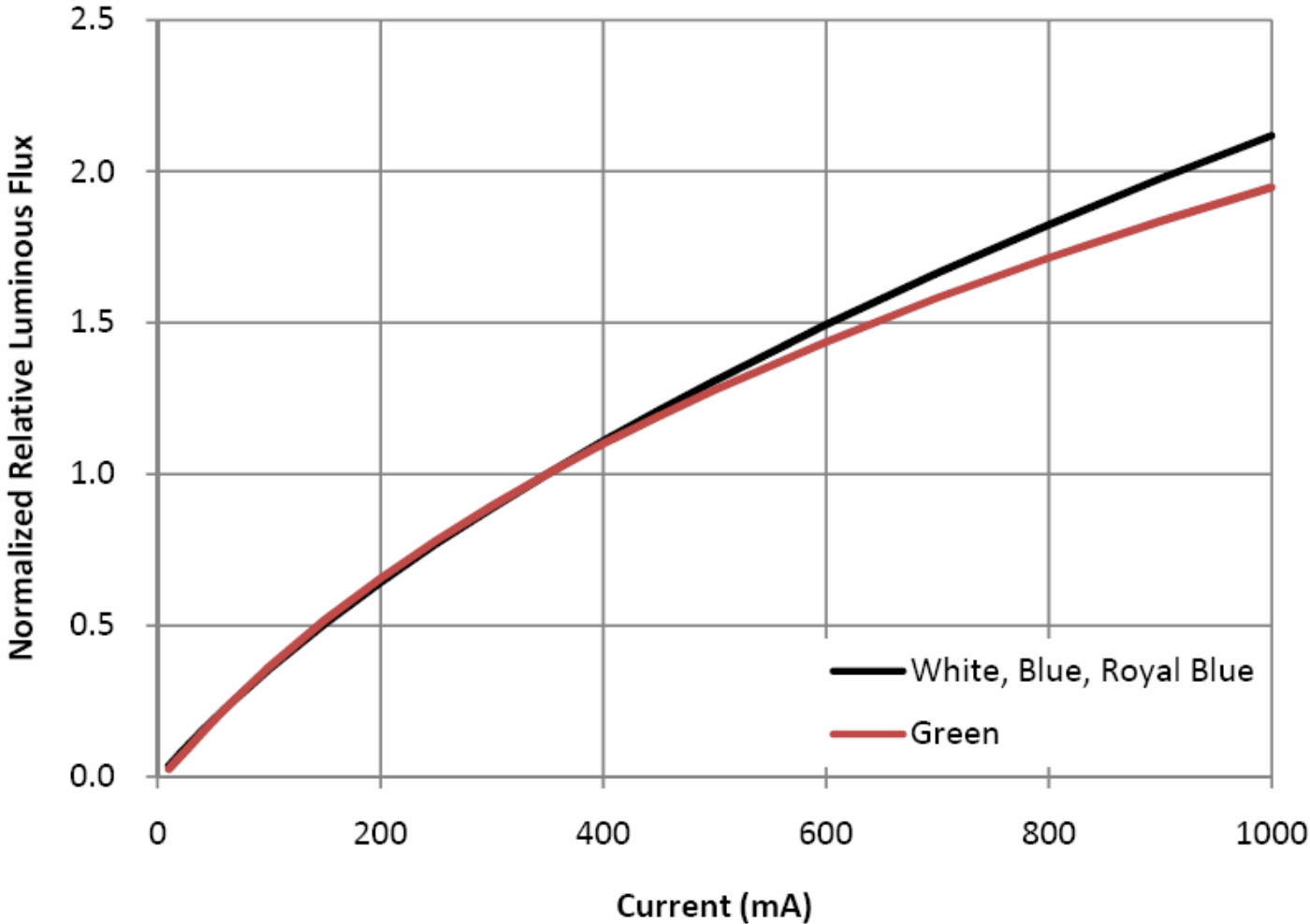
Part number	Color	Typ. CRI	Dominant Wavelength $\lambda_d$ Peak Wavelength $\lambda_p$ * Correlated Color Temperature, CCT		$2\theta_{1/2}$	Temperature Coefficient of $V_f$ (mV/°C)	Thermal Resistance Junction to Lead (°C/W) $RO_{J-L}$
			Min	Max			
P2O-W	Daylight	70	4750K	7000K	145	-3	10
	Neutral White	75	3700K	4750K	132	-3	10
	Warm White	80	2600K	3700K	125	-3	10
P2O-R	Red	-	620	635	145	-	10
P2O-A	Amber	-	580	600	145	-	10
P2O-G	Green	-	520	535	150	-3	10
P2O-B	Blue	-	460	470	140	-3	10
P2O-D	Royal Blue	-	440*	460*	140	-3	10

Notes :

1. The CCT is measured with an accuracy of  $\pm 200K$
2. The peak/dominant wavelength is measured with an accuracy of  $\pm 1nm$

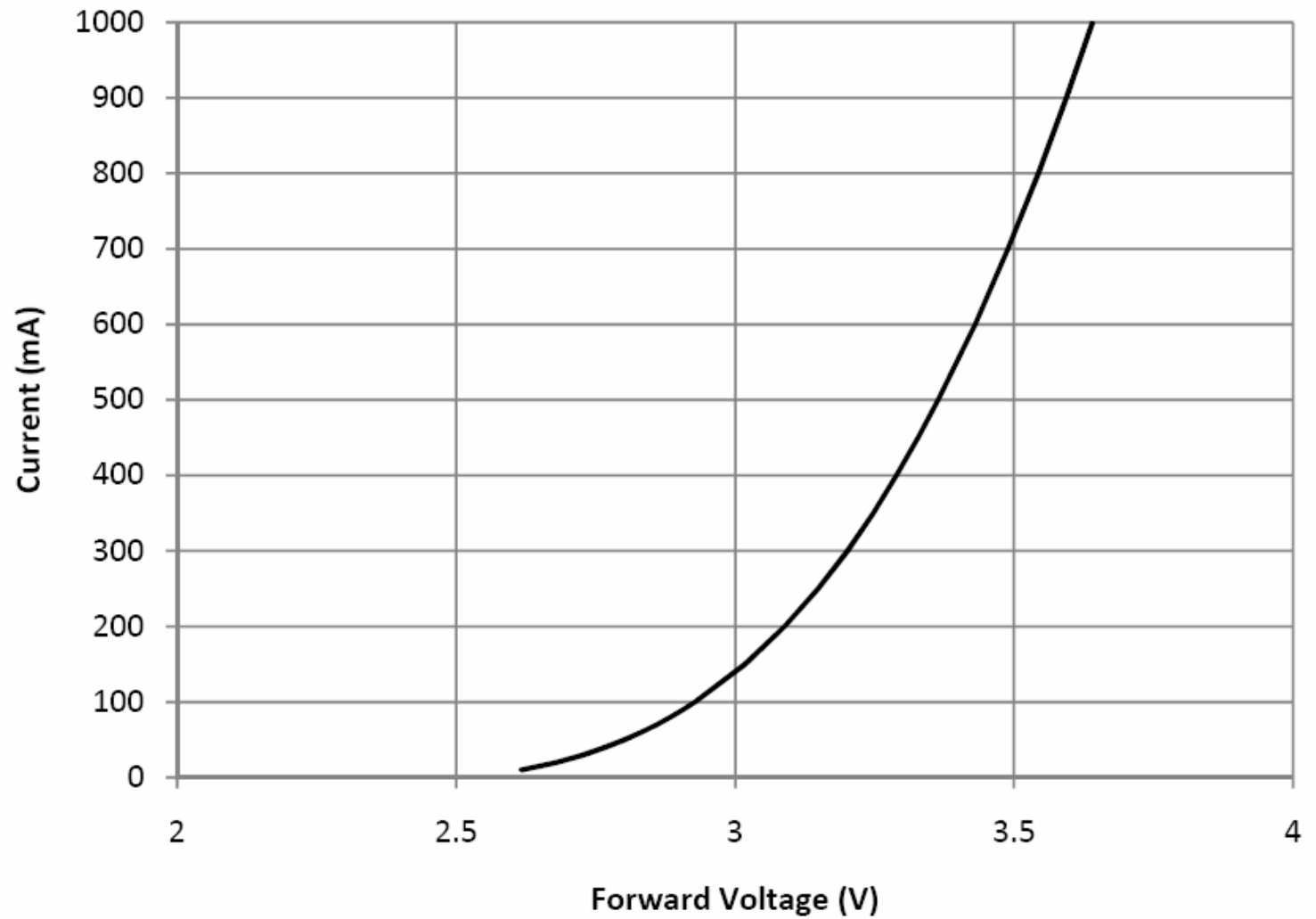
# Typical Forward L-I Characteristics

White Series / Green / Blue / Royal Blue



# Typical Forward I-V Characteristics

White Series / Green / Blue / Royal Blue



# Hand Set

(1W LED & Portable battery 1.2AH)



# Picture

