Snowdragon Industrial Co.,Ltd

DATA SHEET

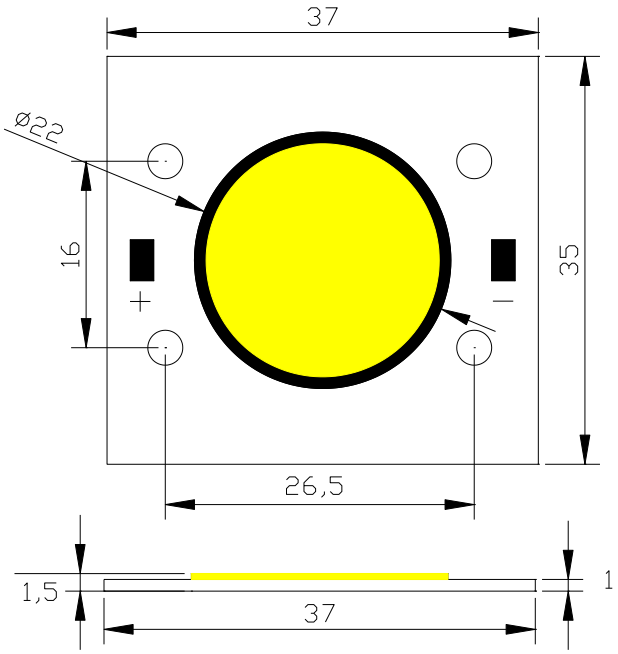
MODEL N.O.: SDP12WCOB35FC-W1

SDP15WCOB35FC-W1

ENG. N.O.: 13042503

PREPARED BY	CHECKED BY	APPROVED BY
CUSTOMER APPROVED SIGNATURES		

■ Mechanical Dimensions:



Note:

1. All dimensions are in millimeters

2. All dimensions without tolerances are for reference only.

Absolute Maximum Ratings (Ta = 25℃) :

Items	Symbol	Absolute maximum Rating (		Unit
		White (**12W**)	White(**15W**)	
Power Dissipation *	P_D	12400	15200	mW
DC Forward Current	I_F	400	400	mA
Peak Pulse Forward Current*	I_{FP}	800	800	mA
Reverse Voltage	V_R	--	--	V
LED Junction Temperature	T_j	125	125	℃
Operating Temperature	T_{op}	-30 ~ +80	-30 ~ +80	℃
Storage Temperature	T_{stg}	-40 ~ +100	-40 ~ +100	℃
Manual Soldering Temperature	T_{sol}	Max.350°C±20°C for 3 sec Max		

*Pulse width≦0.1msec Duty cycle≦1/10

Typical Electrical & Optical Characteristics (Ta = 25℃**)**:

Part No	Color Temperature	Forward Voltage(V)			Test Condition	Viewing Angle	Luminous Flux
		Min.	Avg.	Max.			
SDP12WCOB35FC-W1	6000-6500K	--	31	--	I_F =400 mA	120	1200-1300lm
SDP15WCOB35FC-W1	6000-6500K	--	38	--	I_F =400 mA	120	1400-1500lm

Notes

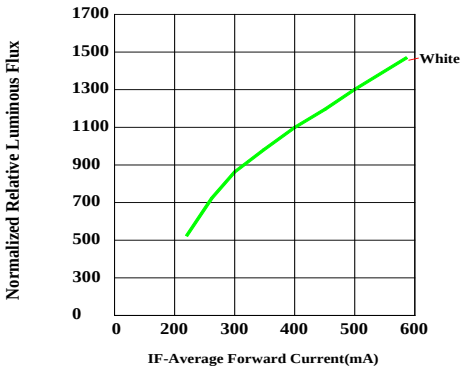
1.Absolute maximum ratings Ta=25℃.

2.Tolerance of measurement of forward voltage±0.1V.

3.Tolerance of measurement of Luminous Flux ±5%.

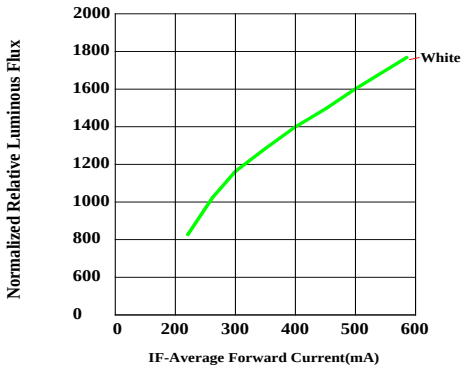
Typical Electrical/ Optical Characteristics Curves
(Ta=25 ℃ Unless Otherwise Noted) :

12**W**

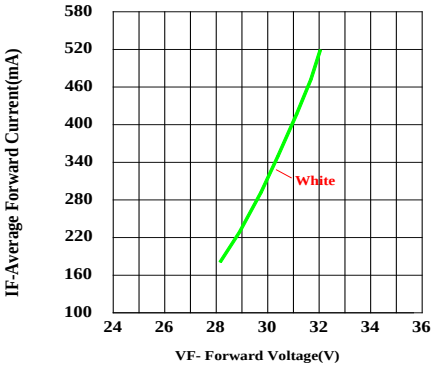


Relative Luminous Flux vs. Forwa rd Current for White

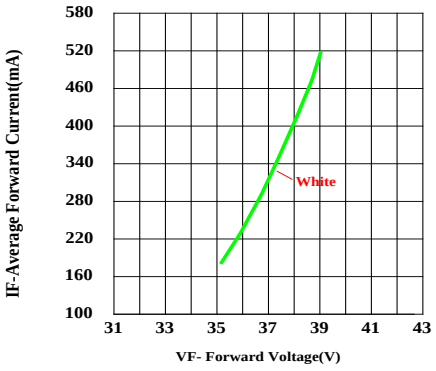
15**W**



Relative Luminous Flux vs. Forwa rd Current for White

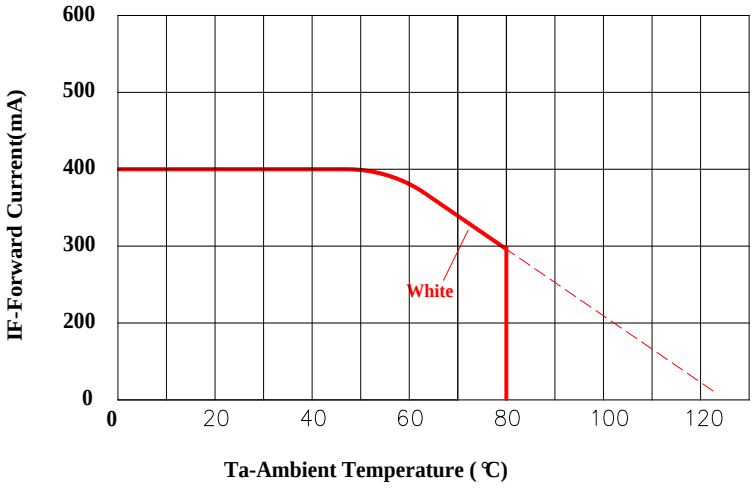


Forward Current vs. Forward Volt age for White

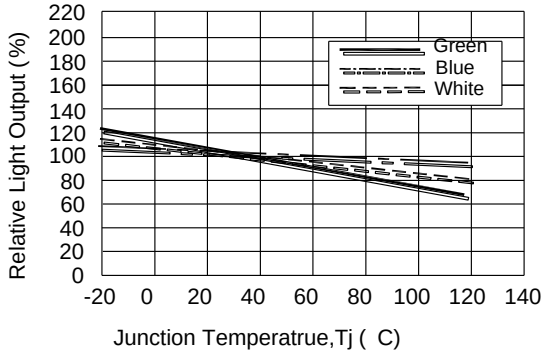


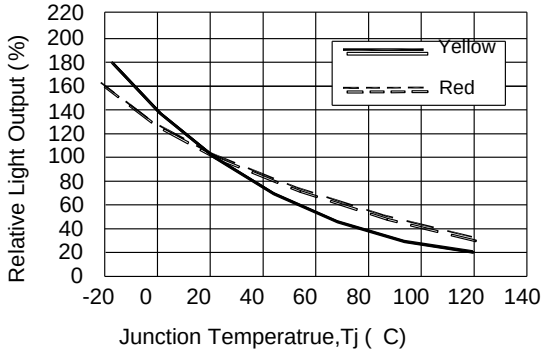
Forward Current vs. Forward Volt age for White

Forward Current VS Ambient Temperature

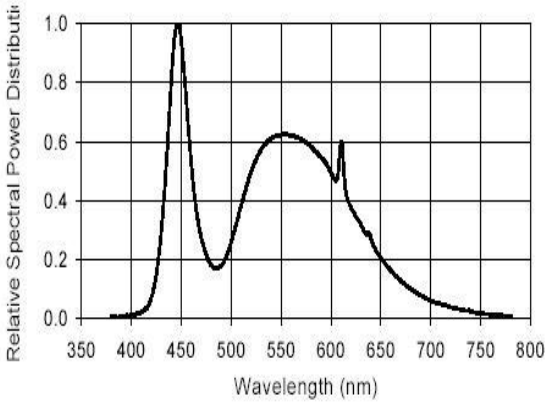


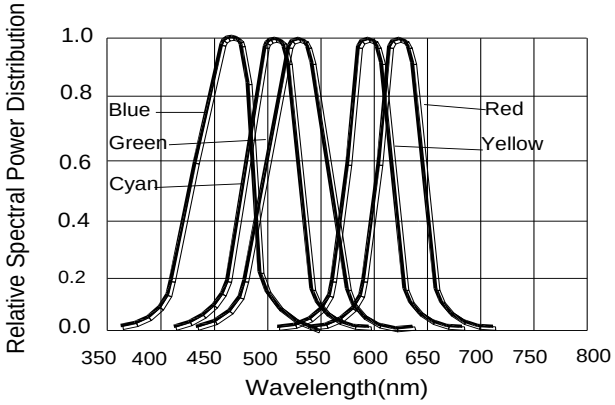
Light Output Characteristics





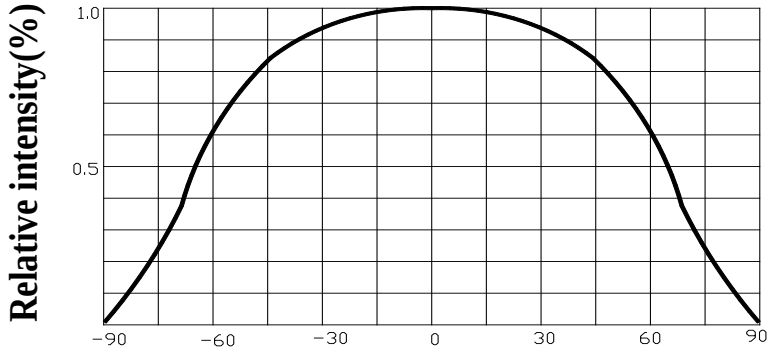
Wavelength Characteristics





Relative Intensity vs. Wavelength(nm)

Angular displacement VS Relative intensity



Angular Displacement(degress)

Reliability

1.Test Items And Results

	Test Item	Reference Standard	Test Conditions	Test Hours/cycle	Units Tested	Ac/Re
Operation Test	Operating Life Test		**(12W)**T_A=25℃±5℃，IF=400mA **(15W)**T_A=25℃±5℃，IF=400mA	1000 Hrs	22	0/22
Environment Test	High Temperature Storage	JEITA ED-4701 200 201	T_A=100℃±5℃	1000 Hrs	22	0/22
	Low Temperature Storage	JEITA ED-4701 200 201	T_A= - 40℃±5℃	1000 Hrs	22	0/22
	High Temperature.& Humidity Storage		T_A=85℃±5℃， RH=85%±5%RH	1000 Hrs	22	0/22
	Thermal Shock	JEITA ED-4701 300 307	-40°±5℃ ←→+85℃±5℃ 30min dwell / 5 min transfer	50 Cycles	22	0/22
Soldering Test	Solder ability		350±5℃，5 ±1 sec	1 time Over 95%Wetting	22	0/22
	Resistance to Soldering Heat		350±5℃，5 ±1 sec	1 time	22	0/22

Note：It is required that the LEDs should be attached heat-sink when these LEDs are Operating.