TX-2016B8VSA1-NP3CD-01

PRODUCT SPECIFICATION

Features:

◆Excellent transiting heat from LED chip operating under 2500mA.

◆High luminous output.

◆No UV.

◆Encapsulated materials are environmentally certified and meet environmental requirements.

Chip Material:

◆GaN

Emitting Color:

◆ Blue(B)

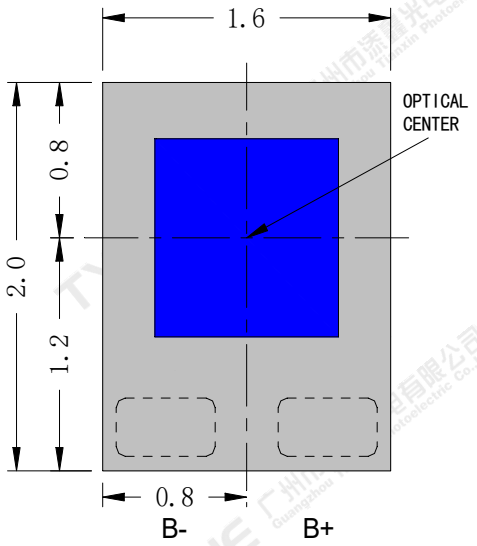
Applications:

◆Portable Flashlight

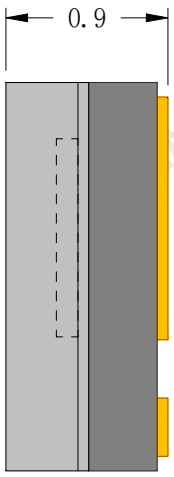
◆Garden lighting

◆General Lighting

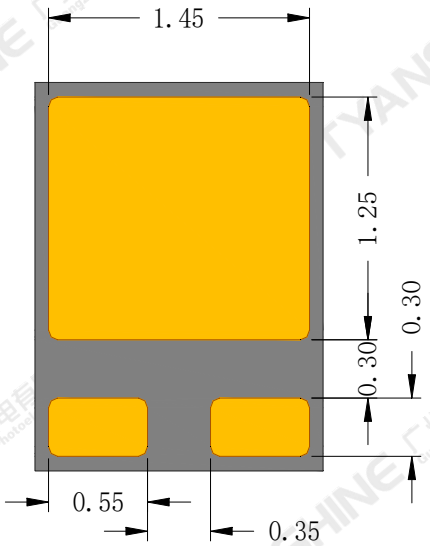
Package Dimensions:



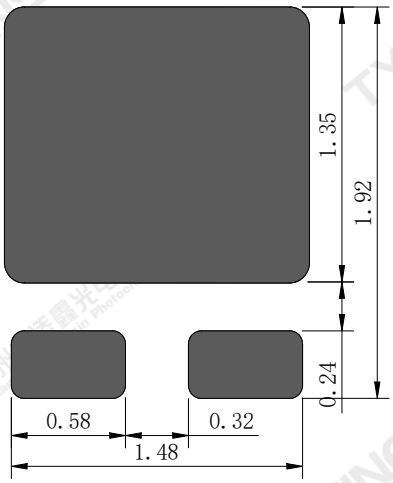
Top view



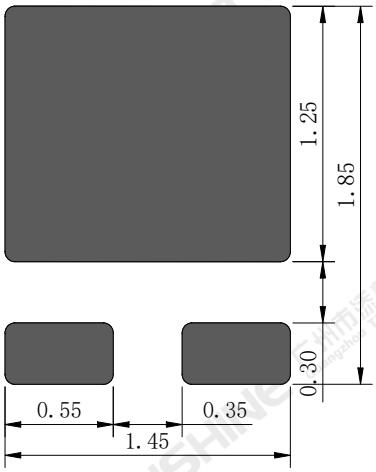
Side view



Bottom view



Recommended solder pad



Recommended stencil pattern

Notes:

1.All dimensions are in millimeters .

2.Tolerances unless otherwise mentioned are ±0.1mm .

Absolute Maximum Ratings (Tc=25℃)

Parameter	Symbol	Ratings	Unit
Forward Current	IF	2500	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	10.25	W
Junction Temperature	Tj	150	℃
Electrostatic Discharge Threshold (ESD)	ESD	ESD sensitive device	V
Storage Temperature	T_{stg}	-40~+70	℃
Operation Temperature	T_{opr}	-30~+85	
Ceramic side temperature(notes 4)	T_{cs}	85	

Notes:

1.Specifications are subject to change without notice.

2.The data on this specification is for reference only and the actual data is in accordance with the acknowledgment.

3.Precautions for ESD:

STATIC SHIELD Electricity and surge damages the LED. It is recommended to use a wrist band or anti-electrostatic glove when handling the LED. All devices, equipment and machinery must be properly grounded.

4.Temperature on the side of the ceramic substrate near the heat sink.

Electrical Optical Characteristics (Tc=25°C，IF=1.0A)

Parameter	Symbol	Emitting Color	Min.	Typ.	Max.	Units
Luminous Flux	φ_v	B1	33	37	42	lm
		B2	64	69	74	
Forward Voltage	V_f	B	2.9	3.2	3.4	V
Peak Emission Wavelength	λp	B1	445	448	452	nm
		B2	448	462	466	
Dominant Wavelength	λd	B1	450	453	467	nm
		B2	463	467	471	
Spectral Line Half-Width	△λ	B	15	19	23	nm
Viewing Angle at 50％IV	$2\theta_{1/2}$		—	120	—	Deg
Reverse Current	I_R		—	—	2	μA
Thermal Resistance Junction to Case	$R\theta_{J-C}$		—	4.8	—	K/W
Temperature Coefficient of Voltage	V△F/T		—	-3.3	—	mV/℃

Notes:

1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.

2.$\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.

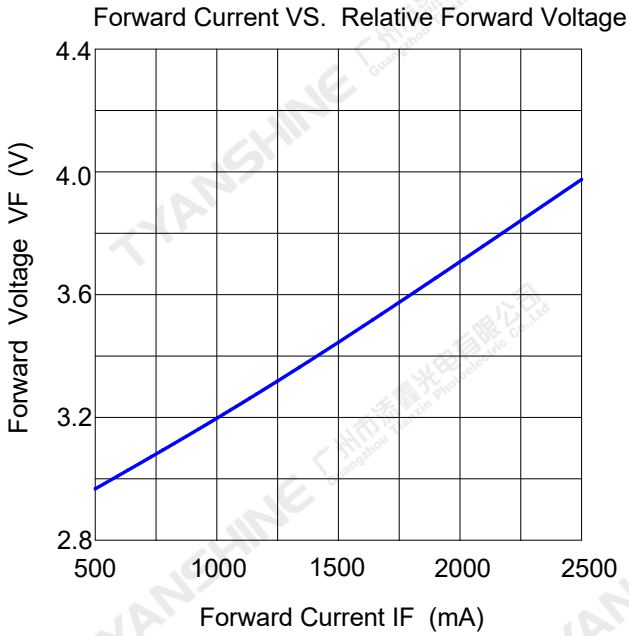
3.Luminous flux measurement tolerance:±10%.

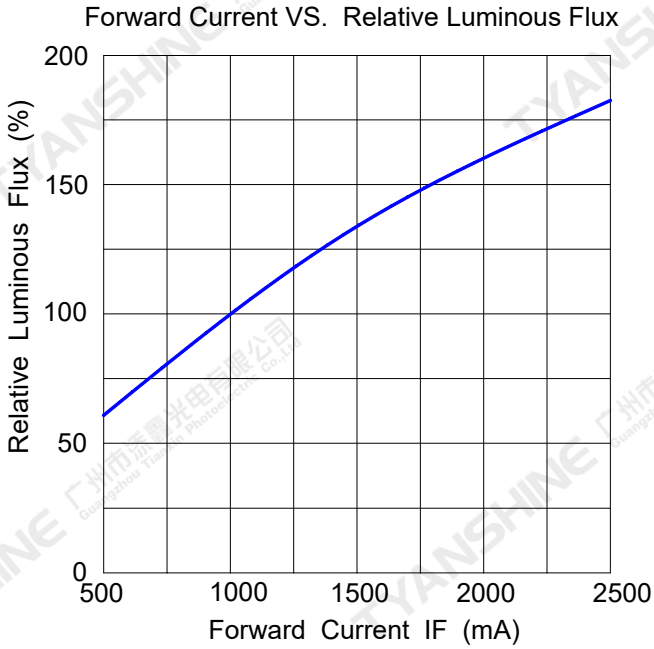
4.Forward voltage measurement tolerance:±0.3V.

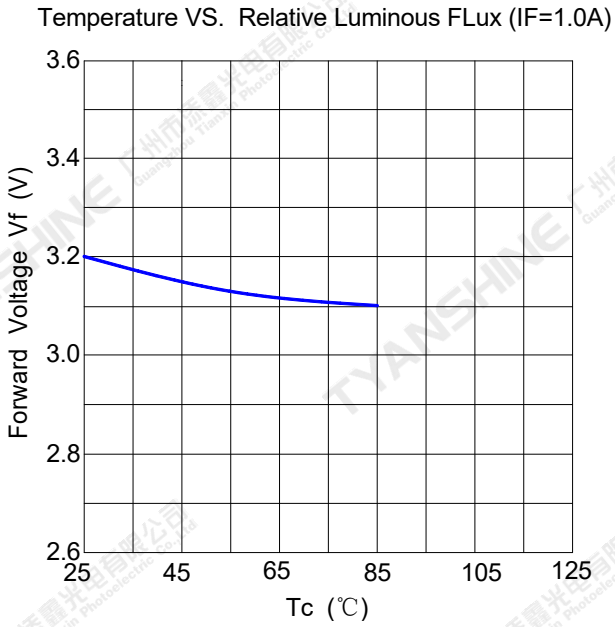
5.Ra measurement tolerance:±2.

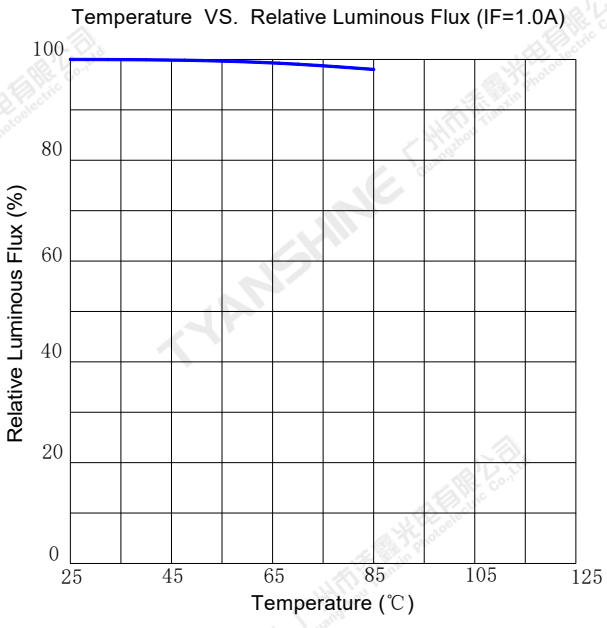
Typical Electrical/Optical Characteristics Curves

(25℃ Ambient Temperature Unless Otherwise Noted)

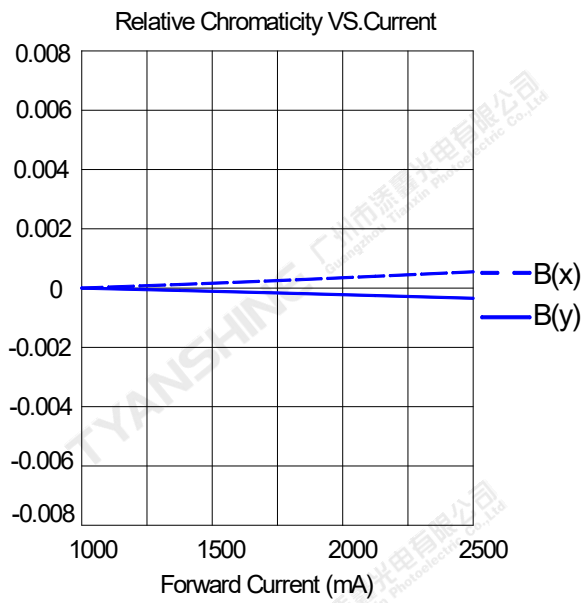


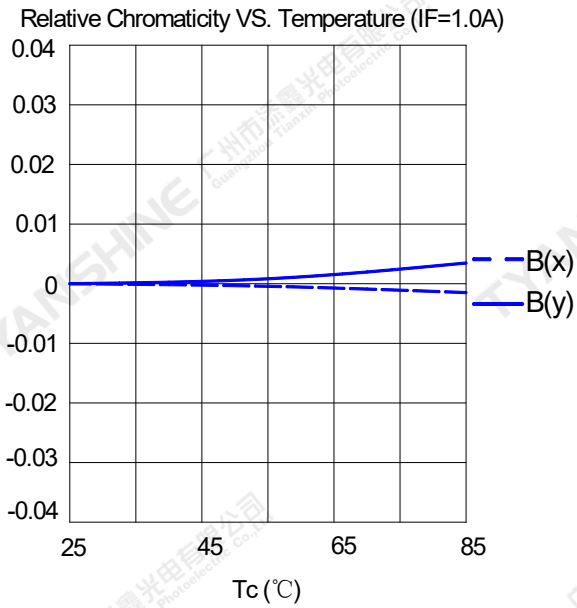


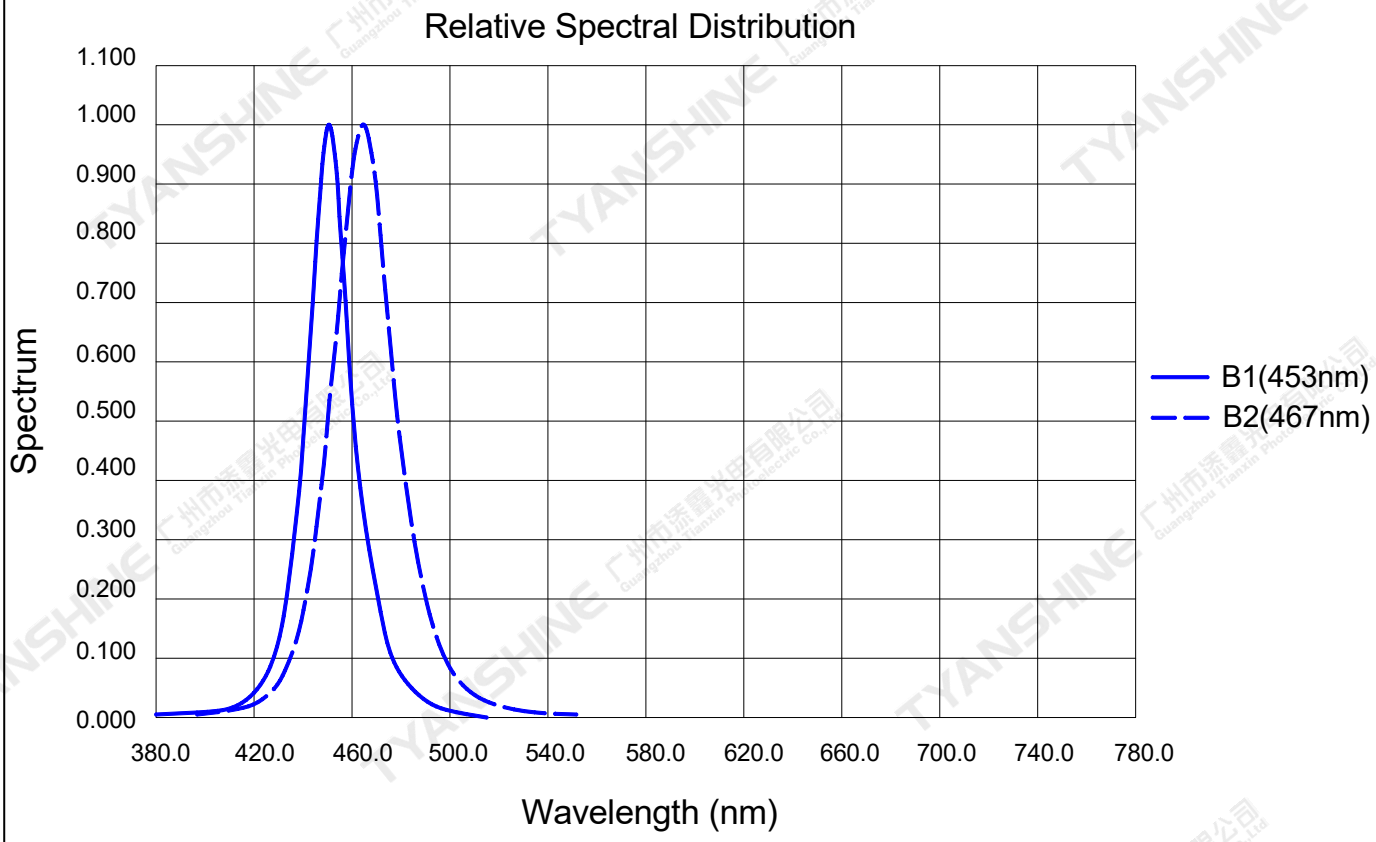




Notes: Blue（B）;







Notes: Blue（B）;

Notes:

1. 2θ 1/2 is the off axis angle from lamp centerline where the luminous intensity is 1/2 of the peak value.
2. View angle tolerance is ± 5°.

Usage Precautions

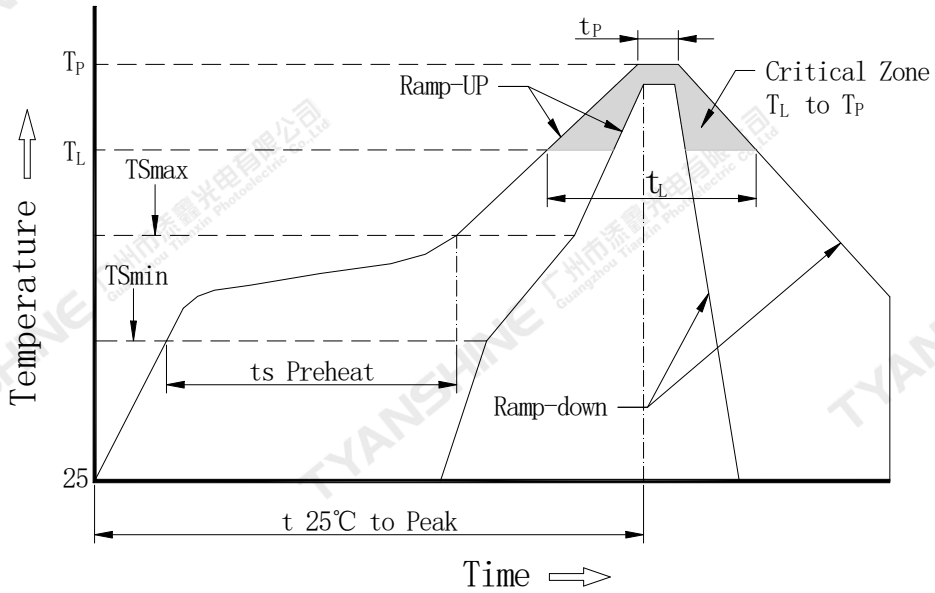
Storage Environment Condition

Temperature: 5℃ ~ 30℃ (41℉ ~ 86℉)

Humidity: 60% RH Max.

Soldering Condition

Use the conditions shown to the under figure.



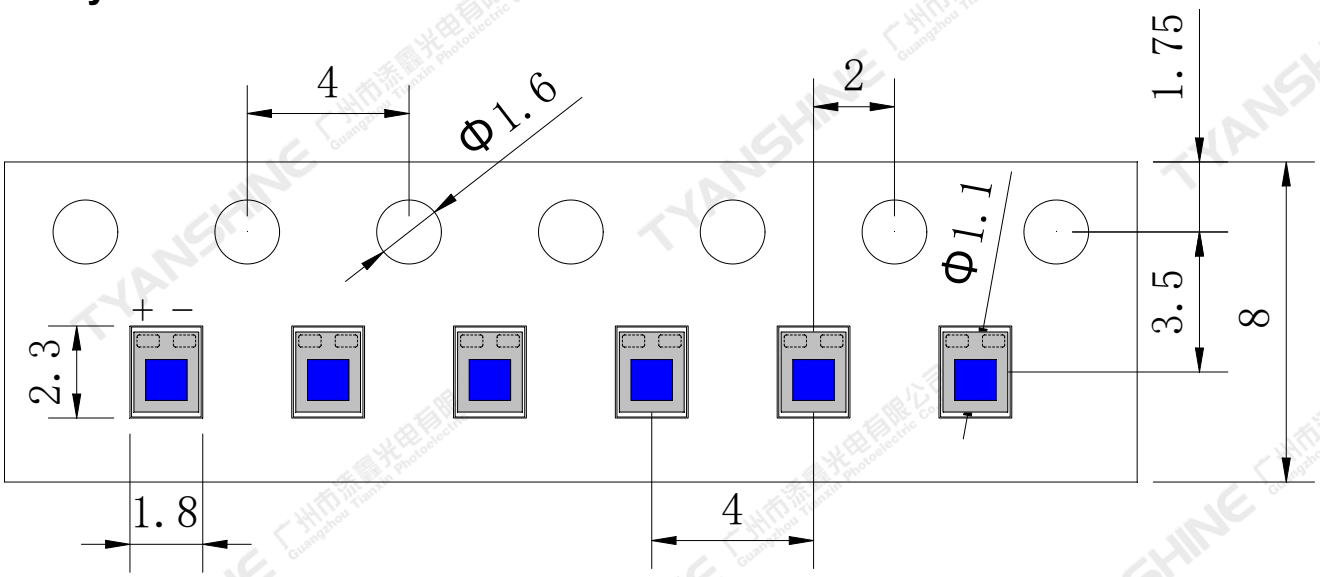
Profile Feature	Pb-Free Solderr(SnBi35Ag0.3)
Average Ramp-Up Rate (Ts_{max} to T_p)	3℃/second max.
Preheat: Temperature Min (Ts_{min})	130℃
Preheat: Temperature Max (Ts_{max})	190℃
Preheat: Time (Ts_{min} to Ts_{max})	120-180 seconds
Time Maintained Above: Temperature (T_L)	230℃
Time Maintained Above: Time (T_L)	60-150 seconds
Peak/Classification Temperature (T_P)	255℃
Time Within 5℃ of Actual Peak Temperature (T_P)	10-35 seconds
Ramp-Down Rate	5℃/second max.
Time 25℃ to Peak Temperature	7 minutes max.

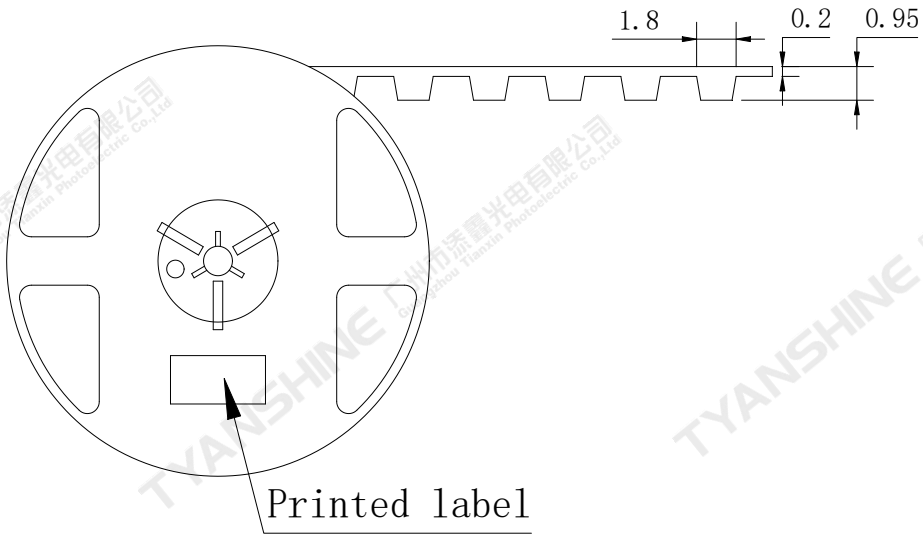
Note:

All temperatures refer to topside of the package, measured on the package body surface.

Dimensions For Cannulation And Packaging

Quantity: 3000PCS





Notes:

1. All dimensions are in millimeters.
2. Tolerances are ±2.0 mm unless otherwise noted.
3. The products are packaged together with silica gel, Transport, not to the weight of welding LED light-emitting area, As a result of the weight of LED light-emitting zone in the quality of, Irresponsible of the Company.

产品规格书变更履历表

版本	变更内容描述		生效日期
	变更前内容	变更后内容	
1.1	-	增加Ceramic side temperature(notes4)	2023.11.28
1.1	-	主波长、光通量、编带图变动修改	2023.11.28