

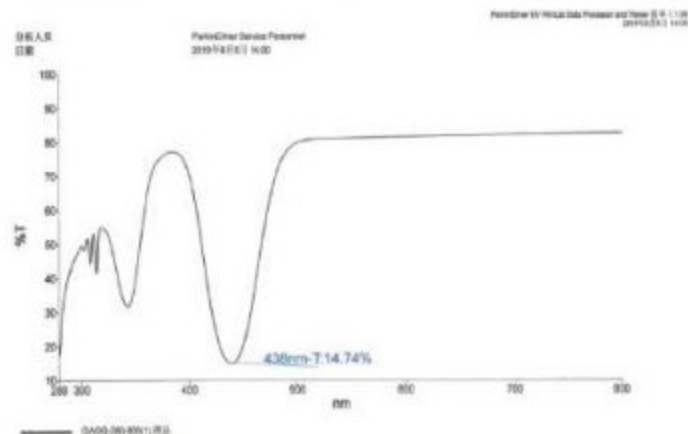
# 铈掺杂钆铝镓石榴石Ce:GAGG

## 简介 Introduction:

铈掺杂钆铝镓石榴石 (Ce:GAGG) 是一种相对较新的单晶闪烁体，具有许多性能，如光产量高，密度高，能量分辨率好，与硅传感器匹配良好的发射峰，低内在能量分辨率。此外，该材料是非吸湿性和非自辐射性的。它广泛应用于PET，PEM，SPECT，CT，X射线和γ射线检测等。

Ce: GAGG is a relatively new single crystal scintillator with many properties, such as high light yield, high density, good energy resolution, good emission peak matching with silicon sensor and low intrinsic energy resolution. In addition, the material is non-hygroscopic and non-self-radiative. which is widely used in PET, PEM, SPECT, CT, X and γ ray detection and so on.

## 透射曲线Transmission Curve:



## 主要优点:

- ◆ 高光输出高
- ◆ 能量分辨率高
- ◆ 密度大
- ◆ 无自辐射
- ◆ 无潮解

## Main Advantages:

- ◆ High output
- ◆ High energy resolution
- ◆ High density
- ◆ No self-radiation
- ◆ No moisture release

## 科瑞思创提供Crystro offers:

晶向Orientation Tolerance	<0.5°
厚度和直径公差 Thickness/Diameter Tolerance	±0.05 mm
平行度 Parallel	10''
垂直度 Perpendicular	5'
光洁度surface Quality	10/5
透光孔径Clear Aperture	>90%
倒角Chamfer	<0.2×45°
最大尺寸Maximum dimensions	MaxΦ60 mm

## 材料特性Material Properties:

分子式chemical Formula	Gd <sub>3</sub> Al <sub>2</sub> Ga <sub>3</sub> O <sub>12</sub>
原子数Atomic Number (Effective)	54.4
生长方法Growth Method	Czochralski
密度Density	6.63g/cm <sup>3</sup>
硬度Mohs Hardness	8
熔点Melting Point	1850°C
热膨胀系数Thermal Expansion Coeff.	TBA × 10 <sup>-6</sup>