



**National  
Atomic Research Institute**

## **Certificate of Irradiation**

**For**

**Paragon Semiconductor Lighting Technology Co., Ltd.  
ParagonLED TTL Radiation Hardened Lighting  
Equipments**

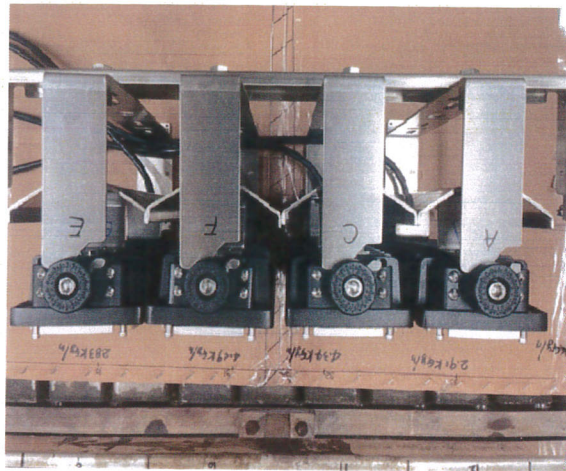
**Gamma Irradiation Facility ,  
Department of Isotope Application Research**

**On**

**18-Jun-25**

# Certificate of Irradiation

Grand total Irradiation hours	79 hrs	79 hrs	79 hrs	70 hrs
Grand total Irradiation dose	252.75 kGy	283.22 kGy	287.75 kGy	236.43 kGy



Grand total Irradiation dose	260.43 kGy	298.45 kGy	305.85 kGy	270.87 kGy
Grand total Irradiation hours	79 hrs	79 hrs	79 hrs	79 hrs

**Conclusion: After 70 and 79 hours of radiation exposure, ParagonLED TTL Radiation Hardened Lighting Equipments are still work.**

- 1 Irradiation Sources : Co-60 Gamma Rays · 30,000 Ci (Mar 01, 2025)
- 2 Customer: Paragon Semiconductor Lighting Technology Co., Ltd.
- 3 Product & Description : ParagonLED TTL Radiation Hardened Lighting Equipments
- 4 Irradiation Hours : 70 Hours (Sample A), 79Hours(Sample B to Sample H)
- 5 Irradiation period : 2025.04.21~2025.05.19
- 6 Dose and Analyzer : Alanine pellets (02/20) Bruker EPR Analyzer (NARI)
- 7 Measurement expansion uncertainty  $\leq \pm 3\%$ , reliability 95%
- 8 Measurement Date : 2025.04.24~2025.05.26
- 9 Irradiation Facility : Co-60 Gamma Irradiation Facility , NARI



Quality Control by : Wang, Kuo-An Certified by: Su, Min-Chang  
 06/18/2025 06.18.2025