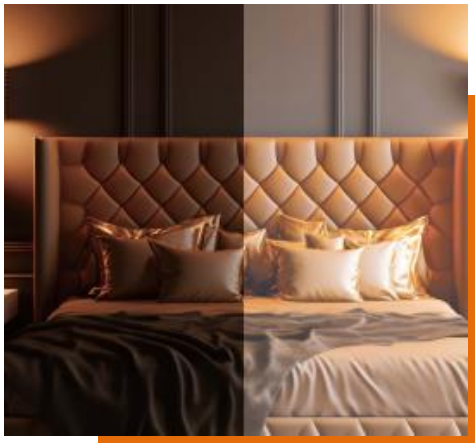


# Tunable White COB

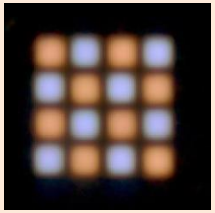
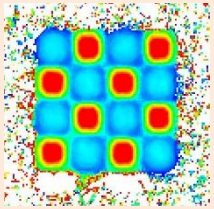
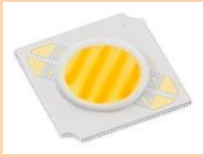
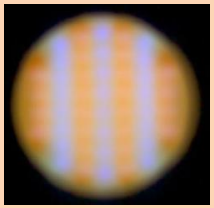
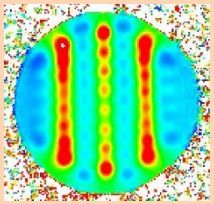
## CITILED CLUD Series

# CITILED Tunable White COB

- Target to be a solution for **Narrow angle fixtures** requiring **Good color mixing in a low wattage range.**
- **Tunable CCT range： Warm 2700K – Cool 6500K**

- Package Lineup：2type
  - *CLUD22-024AE1 Outline：13.5x13.5mm / LES Size： (Φ6.8mm)
  - *CLUD32-048BE1 Outline：19.0x19.0mm / LES Size： (Φ10.06mm)

*Based on CITIZEN COB platform.
*Better color mixing characteristic compared with CSP/SMD.

| | | COB | | COB + Lens |
|---|---|---|---|---|
| | | Lighting conditions | Color distribution | Irradiation surface |
| CSP |  LES Φ10.9mm |  |  |  |
| Tunable White |  LES Φ10.06mm |  |  |  |

1600K  10000K

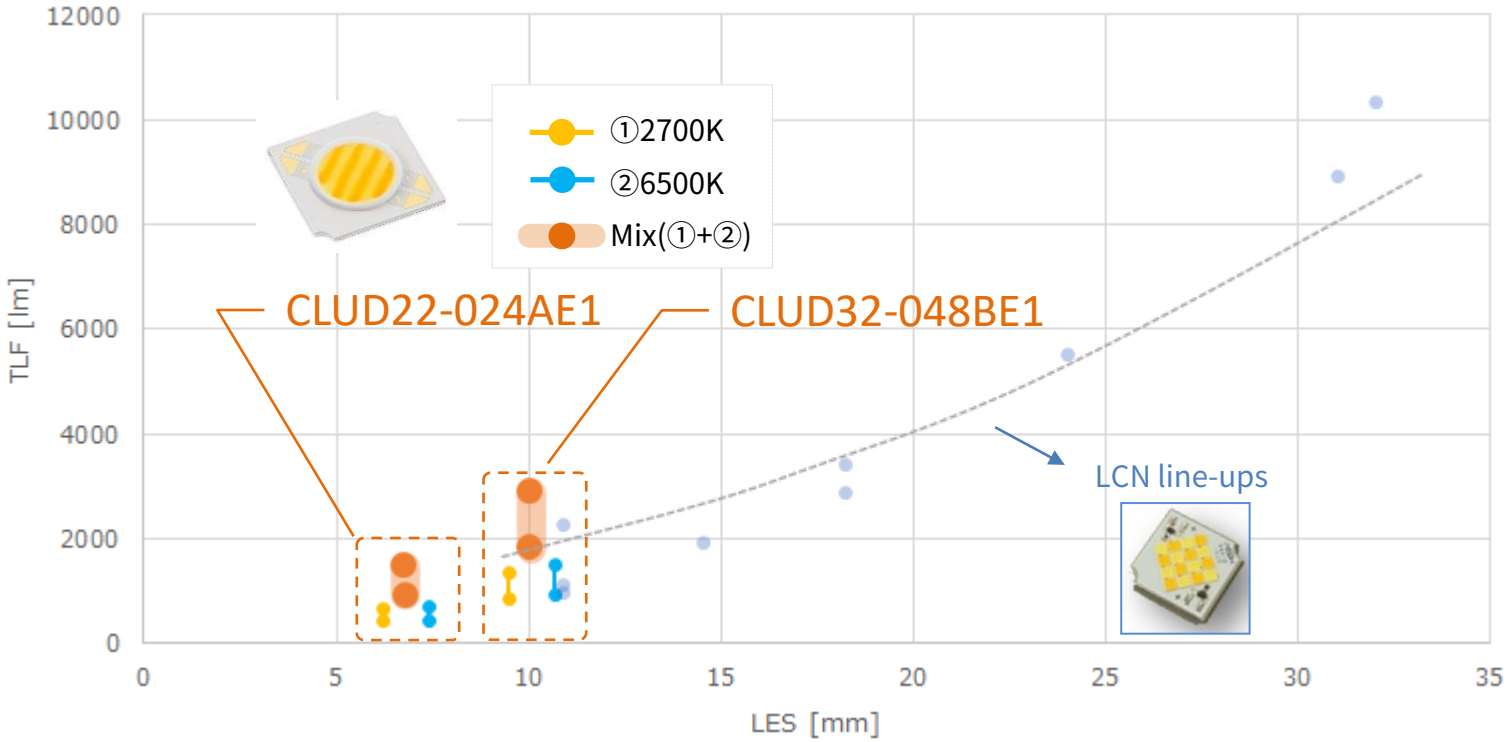


**Under Development**

# CITILED Tunable White COB

**- Luminous flux coverage range during color @ Tc25C**

*CLUD22-024AE1 : 454 – 1443 lm
*CLUD32-048BE1 : 906 – 2882 lm




**Tc25C** as intermediate color (reference value)

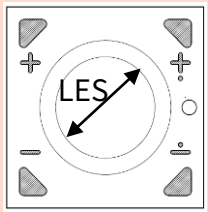
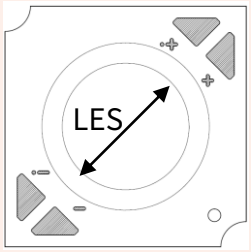
*Specifications are subject to change without notice due to product under development.



Under Development

# CITILED Tunable White COB

TC=25

| Package | Product code | Electro-optical Characteristics | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | CRI | Forward Current (mA) | Forward Votage (V) | Input power Typ. (W) | CCT | Luminous Flux Typ. (lm) | Efficacy Typ. (lm/W) | Thermal Resistance Rj-c(C/W) |
|  Outline ：13.5x13.5mm LES Size：(Φ6.8mm) | CLUD22 -024AE1 | 90Min. | 90 (90 each) | 34.8 | 3.1 | ①2700K | 435 | 139 | 3.4 |
| | | | | | | ②6500K | 472 | 151 | |
| | | | | | | mix(①+②) | 907 | 145 | |
| | | | 150 (150 each) | 36.7 | 5.5 | ①2700K | 691 | 125 | |
| | | | | | | ②6500K | 752 | 137 | |
| | | | | | | mix(①+②) | 1443 | 131 | |
|  Outline ：19.0x19.0mm LES Size：(Φ10.06mm) | CLUD32 -048BE1 | 90Min. | 180 (180 each) | 34.8 | 6.3 | ①2700K | 869 | 139 | 1.9 |
| | | | | | | ②6500K | 943 | 151 | |
| | | | | | | mix(①+②) | 1812 | 145 | |
| | | | 300 (300 each) | 36.7 | 11.0 | ①2700K | 1380 | 125 | |
| | | | | | | ②6500K | 1502 | 136 | |
| | | | | | | mix(①+②) | 2882 | 131 | |

*The reliability test is not finished.
*The drive condition for LM80 is not same as above.
*Specifications are subject to change without notice due to product under development.



Under Development

# Schedules

| | |
|---|---|
| Engineering Samples | : March 2025 |
| Mass Production | : May 2025 |
| UL Certification | : Scheduled to be obtained in June 2025 |
| ENEC Certification | : Scheduled to be obtained in June 2025 |
| LM80 report | : Please contact our sales team |