

Why 2700K LED chips are not suitable for netball court lighting

1. Reduced ball visibility and tracking

- A netball is relatively small and moves quickly through the air.
 - Under **2700K (warm yellow light)**:
 - The ball blends more into the background.
 - Edges appear softer.
 - Visibility & colour rendering is greatly reduced.
 - Under cooler light (4000K–5700K), the ball appears **crisper and easier to track**, especially during long passes and shots.
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2. Poor line and court marking definition

- Netball relies heavily on **clear court markings** (circles, thirds, shooting areas).
 - Warm light reduces contrast between:
 - White/yellow lines and the playing surface.
 - And players.
 - Cooler light improves **visual separation**, helping players judge position and footwork accurately.
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3. Impact on player reaction and passing accuracy

- Netball is a **fast decision-making sport** (3-second rule, quick interceptions).
- 2700K lighting:
 - Reduces visual sharpness.
 - Can delay reaction time.
- Cooler colour temperatures support:
 - **Better depth perception.**
 - **Faster visual processing.**
 - **More accurate passing and catching.**

4. Lower perceived brightness on outdoor courts

- Many netball courts are **outdoor or semi-outdoor**.
 - 2700K light appears **dimmer and less “clean”**, especially against darker surroundings.
 - 4000K+ lighting provides a **brighter, more daylight-like environment**, improving overall playability.
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5. Not aligned with sports lighting standards

- Standards such as **EN 12193 (sports lighting)** typically recommend:
 - **≥4000K** for outdoor courts.
 - Higher CCT for competition levels.
 - 2700K would **fail to meet recommended practice** for training & competitive netball.
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6. Spectator and umpire visibility

- Umpires need to clearly see:
 - Foot placement (contact/stepping).
 - Distance (defending).
 - Spectators benefit from a clearer, more vibrant view of play.
 - Warm lighting reduces **clarity and perceived sharpness** for both groups.
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7. Camera / recording considerations (increasingly relevant)

- Even at amateur level, games are often recorded or streamed.
 - 2700K lighting creates:
 - Yellow/orange colour cast
 - Poor colour accuracy for kits
 - 5000K+ lighting delivers **clean, broadcast-friendly visuals**.
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Recommended colour temperature for netball courts

- **Training / recreational:** ~4000K
- **Club / competitive:** 4000K–5000K
- **High-level / broadcast:** 5000K–5700K

Simple summary:

- **2700K = too warm, soft, and low-contrast for fast ball sports like netball**
- **4000K+ = sharper, brighter, and better for performance and officiating**

As a specialist sports lighting contractor, we do not consider the use of 2700K colour temperature suitable for netball court lighting, particularly where player safety and performance are key considerations.

The warmer colour temperature reduces visual clarity, contrast, and ball tracking ability, which are critical in a fast-paced sport such as netball— we have the fittings mounted at 8 meters for added help to reduce spill, fittings will be fitted with visors / cowls.

For these reasons, we would strongly advise against the use of 2700K lighting and instead recommend a minimum of 4000K to ensure appropriate visibility, player safety, and overall lighting performance.