

Why Light Quality Matters More Than Brightness At Home

Table 1: Understanding Light Quality



Section Title	Description	Key Insights
Why Light Quality Matters	Light quality influences how well a room functions and impacts comfort, safety, and color accuracy more than brightness alone.	Optimal temperatures include 3500K–4000K for tasks like cooking, and 2700K–3000K for cozy spaces. High CRI (90+) ensures true color representation.
Color Temperature for Different Rooms	Color temperature ranges in Kelvin define how light appears, from warm amber tones to crisp white light.	Bedrooms and living rooms benefit from 2700K for warmth. Kitchens and bathrooms require 3500K–4000K for precision and visibility.
Why High CRI Matters	CRI (Color Rendering Index) measures how accurately a light source reveals true colors compared to daylight.	A CRI of 90 or higher maintains color quality, crucial for tasks like applying makeup, cooking, and creating a visually pleasant space.
Choosing Fixture Technology	Fixture technology affects the evenness and comfort of lighting, especially in visible or reflective areas.	COB LEDs provide smooth, glare-free light with better heat dissipation, while standard LEDs may suffice for recessed or shielded fixtures.
Lighting Strategies for Aging	Good lighting supports safety, independence, and comfort as eyesight changes with age.	Bright, high-CRI task lighting aids visibility during the day. Warm, dim lights guide safe movement at night without disturbing sleep patterns.

Table 2: **By-The Room Light Quality**

Room Or Need	Recommended Color Temperature	Recommended CRI	Best Fixture Technology
Bedrooms and living rooms	2700K	80+ (90+ preferred)	Standard LED, warm-dimming fixtures
General kitchens and living spaces	3000K	90+	COB or high-density tape near visible fixtures
Kitchen task areas, closets, workrooms, bathrooms	3500K–4000K	90+	COB or high-density tape for under-cabinet and vanity lighting
Aging-in-place task areas (countertops, mirrors, stairs)	3500K–4000K	90+	Bright, high-CRI task fixtures
Aging-in-place nighttime pathways	2700K, dimmed	80+	Night-lights, voice-activated smart lighting