

Side note based on anecdotal evidence

The reason that 4000K is so popular is marketing. When manufacturers started making LED's they had a choice of what to manufacture. They picked the middle of the range of fluorescent light, typically also 3000K, 400K and 5000K. And they made billions of 4000K LED's and a smaller number of other CCT's. Salesmen dutifully sold what was commonly available and because 4000K was manufactured in such large quantities, they had the lowest cost... another reason that salesmen pushed 4000K. In the early days of LED lighting, a fixture head might cost a thousand dollars. So anything a salesman could do to reduce costs led to increased sales. Now the mold was set and the manufacturers are still trying to dump 4000K inventory that very few cities want.

Options for fluorescent lighting

Fluorescent lights come in a variety of CCT's:

[Note, the spectrum is much different for fluorescent lights. It has a very narrow blue spike and a lot of other spikes as the various electron shells of mercury gas arc in the tubes producing different spectrum. Fluorescent lamps also use phosphors to adjust color temperature.

3076K CCT, CRI 89.4
Warm white fluorescent lamp

3871K CCT, CRI 58.7
Cool White fluorescent lamp

As you can see, spectral distribution, being dependent on mercury arcing (high intensity discharge) is not like LED lighting so comparing CCT's is a lot like comparing apples and oranges.

Nancy Hathaway

Surry

LD 1934

Important

This testimony is also from president, Nancy Hathaway of Dark Sky Maine