



STREETLIGHT ACQUISITION AND CONVERSION PROJECT

DESIGN CONSIDERATIONS

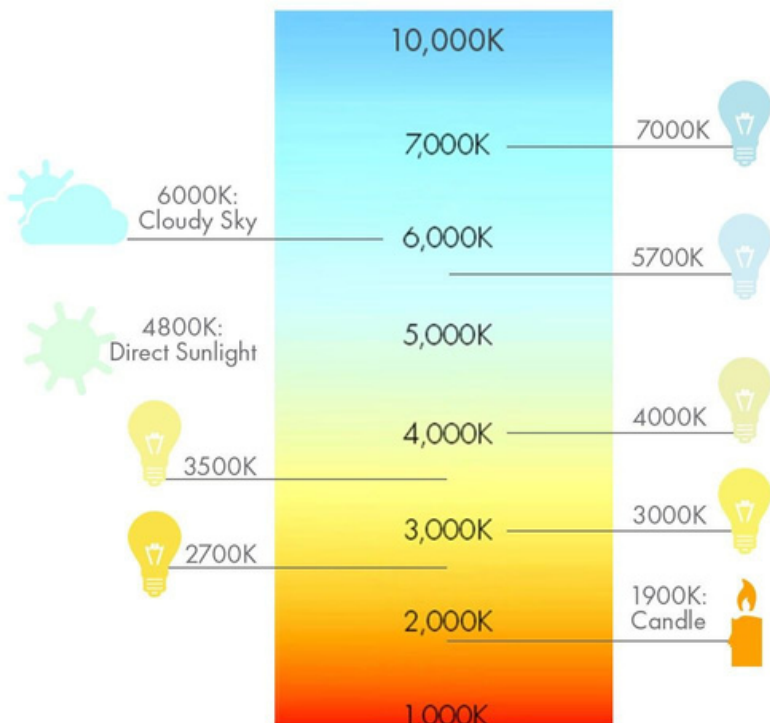
COLOR TEMPERATURE

The increased efficacy of 2700 kelvin (k) vs. warmer color temperatures is significant enough to alter the wattages required to provide safe lighting therefore making the operating costs of the proposed system less than that of an equivalent 2200k.

The visual acuity of 2700k fixtures vs. 2200k provides motorists greater ability to see small movements and details at lower light levels vs. warmer color temps.

Color also renders more accurately under 2700k, where lower color temps distort colors and are closer to the single spectrum lighting that is being replaced in this upgrade.

KELVIN COLOR TEMPERATURE SCALE CHART



TIME

Adaptive Dimming

Adaptive dimming is available after pedestrian and vehicle conflict is limited. The system can be dimmed to 50% output from around 11pm – 4am with most of the fixtures at a ~14W output during the late evening and early mornings. This can be evaluated on a periodic basis to account for Bath specific factors, such as BIW shift changes or seasonal hours of businesses.

BRIGHTNESS

Wattage

The lowest wattage fixture possible is being recommended for each location, limiting blue light scatter reflecting from the roadway which contributes to skyglow

Fixtures

All cobra heads fixtures provide zero uplight