

## Selecting light bulbs for your outdoor Dark Sky lighting Fixtures

In selecting a bulb for outdoor lighting, you will find a huge number of types and options. For the purpose of dark sky lighting there are a number of considerations:

### Compatibility with your fixture:

- Is the bulb compatible with your fixture (same screw or pin size)?
- Does the bulb fit entirely inside the shielded fixture (not too long or wide)?
- Other considerations are: dimmable vs non-dimmable, outdoor or damp rating, enclosed vs open fixture, compatibility with a smart home system.

### Brightness (lumens): Higher lumens = brighter light

- Use the minimum brightness that meets your needs to save on energy and minimize light pollution.
- Some recommended light levels are: porch and deck lights; 200-800 lumens, path lights; 100-200 lumens.

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### Correlated Color Temperature (CCT):

- Lower numbers (< 3000 °K) are more yellow while higher numbers are blue/white daylight. Lower CCT is better for dark skies and
- Use bulbs with a CCT < 3000 °K (aka. Soft or warm white). This is considered a maximum with lower CCT having less impact on nocturnal wildlife, human health and the night sky..
- Yellow, CCT = 1800-2200 °K bug lights are available that are reported to attract fewer insects which makes them ideal for porches and decks.
- Red colored bulbs will also preserve your night vision.

### Some good options:

- The most common household bulb type has an E26 screw base and A19 bulb shape. These are suitable for fully shielded fixtures.
- PAR bulbs with focused beams can be suitable for unshielded or partially shielded fixtures if pointed down. The focused beam allows more specific targeting of the light.
- A number of bulbs offer variable light color often ranging from 2700-6500 °K. Control may be with a switch on the bulb, a smart phone app or a smart home system.



Mission: Preserve, enhance and promote dark skies in the Methow Valley.

Find more lighting resources at:  
<https://www.methowdarksky.org/light-solutions>

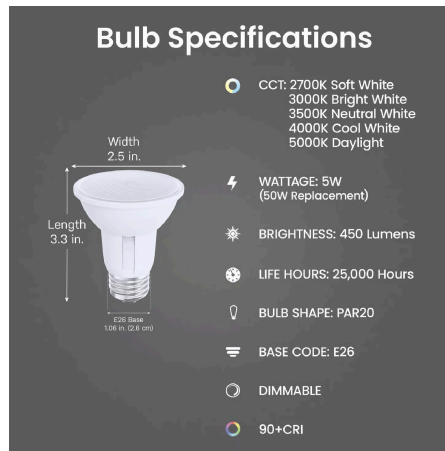


A large number of dark sky friendly bulbs are available. Three examples available at ACE hardware are shown below.



FEIT Electric LED Yellow Bug Light, A19 shape, E26 base, 400 lumens, damp rated, dimmable. Ace Item # 3011631, Mfr # A19/BUG/LED/BX

The yellow color and relatively low brightness make this bulb a good choice for shielded fixtures.



This bulb is a good choice for shielded and downward pointing fixtures. Dark sky features include an adjustable CCT and beam angle (30, 60 or 100 degrees). Recommended settings are a CCT of 2700 K and a narrower (30-60 degree) beam angle. Ace Item # 3018685, Mfr # PAR20/ADJ/6WYCA



If you want one bulb that will do it all, this might be it. Feit Smart Home A19 E26 (Medium) Smart-Enabled LED Bulb Color Changing 60 Watt Equivalence (800 lumen). Adjustable CCT: 2700-6500 K. Dimmable. Ace Item # 3914363, Mfr # OM60/RGBW/CA/AG

Since the light beam is not directed this is best used in shielded fixtures.