

A20 Lamp

PRODUCT DESCRIPTION

Ketra full-spectrum light source that delivers omni-directional or semi-directional beam patterns.

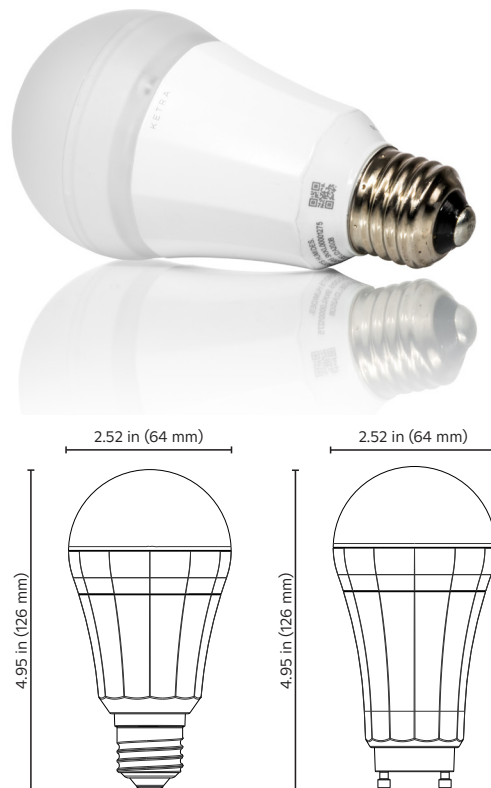
FEATURES

High Def Palette—covers a wide range of 16.7 million colors, including pastels, saturated colors and high CRI whites spanning from 1400K to 10,000K.

Dynamic Spectrum—precisely tunes the amount of energy across the visible spectrum to produce Natural Light, Natural Dimming and Vibrancy.

TruBeam—produces uniform color across any available beam angle.

Color Lock—maintains your desired color point at a one-step MacAdam Ellipse across all Ketra product families and over each product's lifetime.



SPECIFICATIONS¹

Optical Performance

Lumen Output ²	600 lm 800 lm
CRI (Ra) ³	>90 (R9 >90)
Lumen Maintenance ³	50,000 hours to L70 @ 25 °C Ambient
Color Point Maintenance ⁴	One-step MacAdam Ellipse over product lifetime
Color Point Range ⁴	1400K - 10,000K, Fully Saturated, & Pastel
Equivalent Traditional Lamp	40 W / 60 W Incandescent lamp
Dimming Range ⁴	0.1-100%

Environmental

Ambient Temperature	32 to 122 °F (0 to 50 °C)
Extended Ambient Temperature ⁵	-13 to 32 °F (-25 to 0 °C)
Storage Temperature	-4 to 176 °F (-20 to 80 °C)
Humidity	0-95%, Non-condensing
Certification	UL, cUL, RoHS, FCC Class B
Location	UL Damp Location, IP20

Mechanical

Weight	8.39 oz (234 g)
Housing Material	Powder Coated Aluminum, Polymer
Lens Material	Non-yellowing PMMA
Base Type	E26 GU24

Electrical

Power consumption	A20.06 – 8.2 W (638 lm) A20.08 – 8.9 W (829 lm) A20.08 HE – 8.8 W (853 lm)
Power Factor	>0.9
Current	100 mA Max
Efficacy	A20.06 – 77.5 lm/W A20.08 – 93.1 lm/W A20.08 HE – 96.7 lm/W
Emergency Lighting	Evaluated by UL® for use in emergency lighting systems in accordance with standard UL®924 and CSA C22.2 No. 141 when paired with the LVS™ model LUT-SHUNT-A-TD (UL® file E206507). ⁶

¹ All performance measurements taken at 3000K, 25 °C ambient, 100% power input, unless otherwise stated.

² Lumen measurement complies with IES LM-79-08 testing procedures.

³ Lumen maintenance values calculated in accordance to TM-21 procedures based on LM-80 compliant measurement data.

⁴ Intensity and color point control requires compatible system.

⁵ Color accuracy not guaranteed while operating in Extended Operating Temperature range.

⁶ See Lutron Application Note 106 (P/N 048106) at www.lutron.com for wiring details. This is only applicable to CCX fixtures used in an Athena system.

ORDERING GUIDE

Please download this PDF to use the interactive drop down features of the ordering guide.

A20						
Product Line	Model	Lumens	Location	System/Beam Angle	Region/Voltage/Base	Housing Finish

Order code: _____

Product Line	Code	Location	Code	Region/Voltage/Base	Code
Commercial (Athena compatible)	CM-	Indoor	I	North America, 120 V~ 60 Hz, E26	11E26
Residential (HomeWorks compatible)	HW-	Outdoor/Patio ⁵	O	North America, 120 V~ 60 Hz, GU24	11G24
Model		System/Beam Angle		Housing Finish	
A-Series Lamp	A20	CCX Omni-Directional ⁴	GTOD	White	WH
		CCX Semi-Directional ⁴	GTSD	Black	BK
Lumens					
600 (Omni-Directional only) ¹	06				
800 (Semi-Directional only) ¹	08				
800 (Semi-Directional only) High-Efficacy ^{2, 3}	08H				

¹ This option is not available for sale in California.

² High-efficacy light sources are Title 20 and Title 24 JA8 complaint.

³ High-efficacy only available for design with Clear Connect-Type X systems.

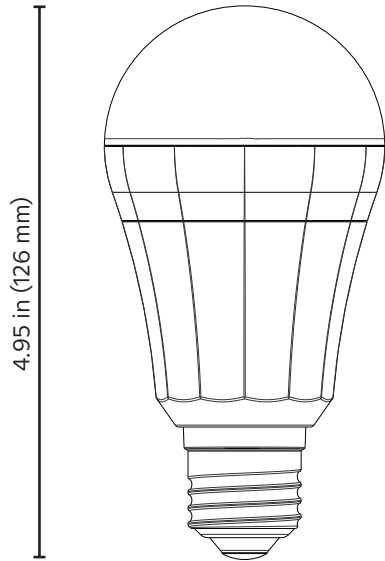
⁴ CCX stands for Clear Connect-Type X.

⁵ For use in protected outdoor applications only. In wet locations the lamp must be installed in a wet location rated fixture.

PRODUCT DIMENSIONS

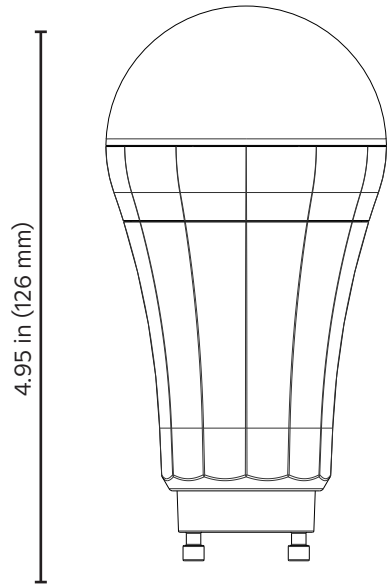
E26 BASE

2.52 in (64 mm)



GU24 BASE

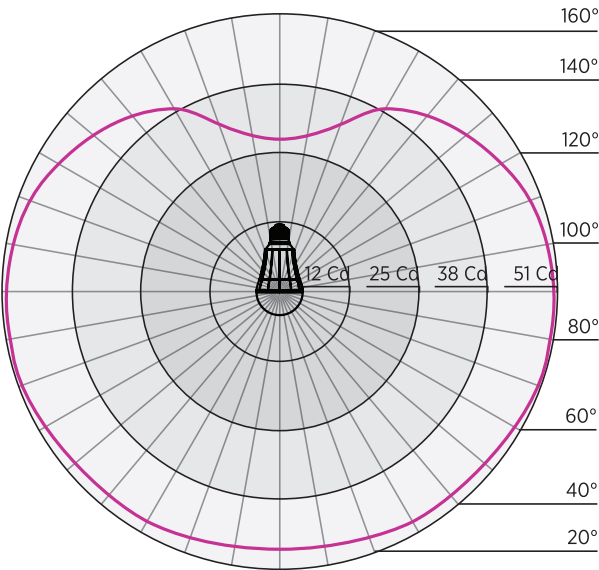
2.52 in (64 mm)



PHOTOMETRIC DATA: 2700 - 5000K VALUES ONLY

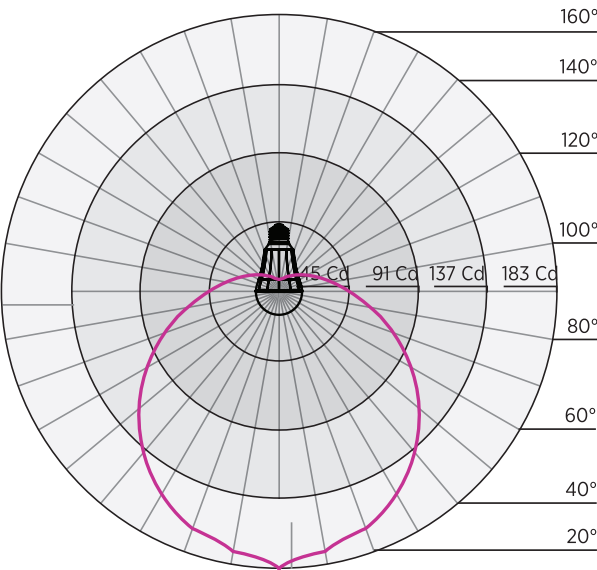
A20 - OD

Product Code	Wattage	Lumens	Max Cd
A20.06.OD	8 W	600	51



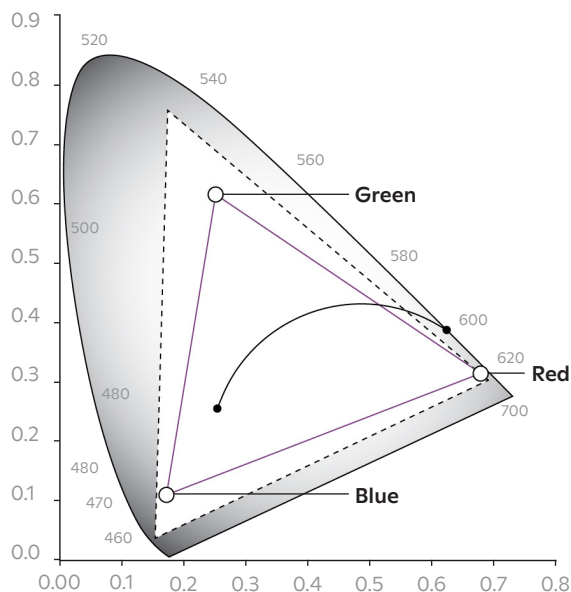
A20 - SD

Product Code	Wattage	Lumens	Max Cd
A20.08.SD	9 W	800	183



WIDE GAMUT

CIE 1931 Color Chart



Ketra's A20 tunable lamp can easily be commissioned into Lutron HomeWorks or Athena systems. The product can reproduce any color point within the triangle shaped gamut indicated in the chart to the left. With Ketra's Color Lock tool, the color point is maintained to an accuracy of one-step MacAdam Ellipse over the lifetime of the product and across operating temperature range.

— **Color Lock**—Color point is maintained to an accuracy of one-step MacAdam Ellipse over the lifetime of the product and across operating temperature range.

----- **Expanded Gamut**—Color calibration is relaxed such that each product produces the most saturated color it is capable of.

A20 General Specifications

Color Point Maintenance¹: Employ closed loop optical and thermal feedback capable of maintaining color point accuracy at a one-step MacAdam ellipse over product lifetime.

Wireless Capability: LED light source shall have an integrated wireless control on board.

Color Rendering Index (CRI): Capable of CRI greater than 90 at any point along the Black Body Curve from 2,700K to 5,000K.

Single Source Multi-Dye Emitter Design: Employ a single source multi-dye emitter consisting of both monochromatic and phosphor converted blue LED dye.

LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

Warranty: Ketra's light source is warrantied to be free from material defects in material and workmanship for five (5) years or 25,000 hours from date of shipment, whichever is less.

Lighting System Capable of the Following Dimming Functionality:

1. Automatically mimicking natural daylight by shifting Correlated Color Temperature (CCT) and intensity based on time-of-day.
2. Shifting from high CCT at high intensity to low CCT at low intensity, mimicking dimming curve of an incandescent lamp.
3. Changing intensity while maintaining full color spectrum or CCT.
4. Changing full color spectrum or CCT while maintaining intensity.

Spectral Power Distribution Manipulation: Light system capable of manipulating the Spectral Power Distribution (SPD) by automatically adjusting distributions of color intensity while maintaining the same Correlated Color Temperature (CCT).

Dimming Range: Dimmable from 100 to 0.1 percent measured luminous flux.

Color Point Range: Single light source capable of producing 16.7 million colors and white from 1400K to 10,000K Correlated Color Temperature (CCT).

¹ Color point maintenance not guaranteed while operating at ambient temperatures between -13 to 32 °F (-25 to 0 °C).