## A20 Lamp

#### **PRODUCT DESCRIPTION**

Ketra full-spectrum light source that delivers omnidirectional 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.

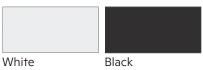
**TruBeam**—produces uniform color across any available beam angle.

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

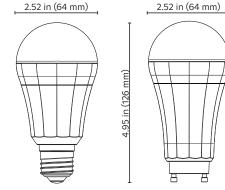
# onees and <u>2.52 in (64 mm)</u> <u>2.52 in</u>

4.95 in (126 mm)

#### Finish









GU24 Base

A20 LAMP

#### SPECIFICATIONS<sup>1</sup>

#### **Optical Performance**

Delivered Lumens <sup>2</sup>	600 lm (omni-directional) 800 lm (semi-directional)
CRI (Ra)³	>90 (R9 >90)
Lumen Maintenance <sup>3</sup>	50,000 hours to L70 @ 25 °C Ambient
Color Point Maintenance <sup>4</sup>	One-step MacAdam Ellipse over product lifetime
Color Point Range <sup>4</sup>	1400K - 10,000K, Fully Saturated, & Pastel
Equivalent Traditional Lamp	40 W / 60 W Incandescent lamp
Dimming Protocol	Wireless RF / CCX (Lutron Clear Connect-Type X)
Dimming Range <sup>4</sup>	0.1-100%

#### **Environmental**

Ambient Temperature	32 to 122 °F (0 to 50 °C)
Extended Ambient Temperature⁵	-13 to 32 °F (-25 to 0 °C)
Humidity	0-95%, Non-condensing
Certification	UL, cUL, RoHS, FCC Class B
Location	UL Damp Location, IP20
Outdoor / Indoor <sup>5</sup>	Outdoor use available for residential enclosed/covered patio applications only
Warranty	5 year fixture, LED, and dimming warranty

#### 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 - 7.6 W (648 lm) A20.08 - 8.8 W (853 lm) A20.08 HE - 8.8 W (853 lm)
Power Factor	>0.9
Current	100 mA Max
Efficacy	A20.06 - 85.3 lm/W A20.08 - 96.7 lm/W A20.08 HE - 96.7 lm/W
Emergency Lighting	Evaluated by UL₀ for use in emergency lighting systems in accordance with standard UL₀924 and CSA C22.2 No. 141 when paired with the LVS™ model LUT-SHUNT-A-TD (UL₀ file E206507). <sup>6</sup>

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

<sup>2</sup> Lumen measurement complies with IES LM-79-08 testing procedures.

<sup>3</sup> 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.

<sup>5</sup> Color accuracy not guaranteed in Extended Ambient Temperature range in outdoor applications.

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.

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#### ORDERING GUIDE

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

A20			GT			11		
Product Line Model	Lumens	Location	System	Beam Ar	ngle	Region/Voltage	Base	Housing Finish
Order code:					_			
Product Line	Code	Location			Code	Base		Code
Commercial	CM-	Indoor			I	E26		E26
Athena compatible)		Outdoor (HomeWo	rks resi produo	cts only)4	0	GU24		G24
Residential (HomeWorks compatible)	HW-	System				_ Housing Finish		
Model		CCX 5			GT	White		WH
A-Series Lamp	A20	Beam Angle				Black		ВК
		Omni-Directional			OD	-		
Lumens		Semi-Directional			SD			
600 (Omni-Directional only) <sup>1</sup>	06							
800 (Semi-Directional only)1	08	Region/Voltage				-		
800 (Semi-Directional only) High-Efficacy <sup>2, 3</sup>	08H	North America, 12	0 V $\sim$ 60 Hz		11			

<sup>1</sup> This option is not available for sale in California.

4 For residential enclosed/covered patio outdoor applications only. More details are available in the Environmental section of the Specifications page.

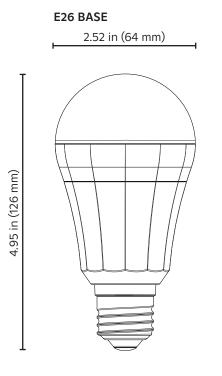
<sup>5</sup> CCX stands for Clear Connect-Type X.

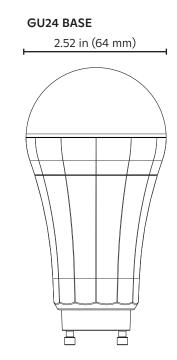
<sup>&</sup>lt;sup>2</sup> High-efficacy light sources are Title 20 and Title 24 JA8 complaint.

<sup>&</sup>lt;sup>3</sup> High-efficacy only available for design with Clear Connect-Type X systems.

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#### **PRODUCT DIMENSIONS**

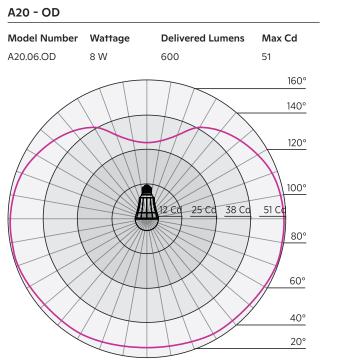




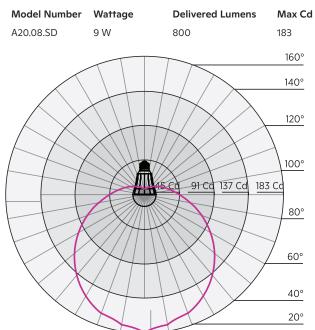
4.95 in (126 mm)

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#### PHOTOMETRIC DATA: 2700 - 5000K VALUES ONLY



#### A20 - SD

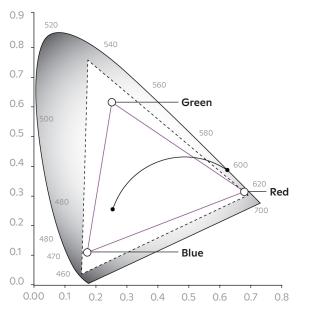


A20 LAMP

#### P/N 3662386 Rev K Specifications are subject to change without notice

#### 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 lock not guaranteed such that each product produces the most saturated color of which it is capable.

#### **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-Die Emitter Design:** Employ a single source multi-die emitter consisting of both monochromatic and phosphor converted blue LED die.

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

**Diagnostic Reporting Capability** <sup>2</sup>: Clear Connect-Type X (CCX) light sources provide diagnostics and built-in technology to check input voltage and wireless connectivity

**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).

All other product names, logos, and brands are property of their respective owners.

<sup>&</sup>lt;sup>1</sup> Color point maintenance not guaranteed in the expanded gamut or while operating at ambient temperatures between -13 to 32 °F (-25 to 0 °C).

For diagnostics support or more information, please contact Lighting Technical Support at lightingsupport@lutron.com or 1.844.LUTRON1 (1.844.588.7661). Clear Connect, Athena, HomeWorks, the Ketra logo, Ketra, TruBeam, and Color Lock are trademarks or registered trademarks of Lutron Electronics Co., Inc. in the US and/or other countries.