

# KETRA

## A20 TUNABLE LAMP

Type: \_\_\_\_\_  
 Project: \_\_\_\_\_  
 Comments: \_\_\_\_\_  
 Prepared By: \_\_\_\_\_



Fully tunable spectrum single point source produces wide range of white, pastels and saturated colors

Closed-loop color point maintenance to <1 MacAdam ellipse over lifetime and temperature

Integrated temperature protection maintains product within safe operating conditions

Wirelessly dimmable to 0.1%

Integrated wireless control for seamless connection with Ketra's predefined light content

Ketra's technology ensures consistent appearance and guaranteed compatibility as LED technology evolves

### HARDWARE ORDERING GUIDE

Product Line	Model	Lumens	Platform/ Control	Beam Angle	Region/ Voltage/ Base	Housing Color
Order Code:						
Product Line			Code	Beam Angle		
Commercial			<b>CM-</b>	Omni-Directional (600lm only)	<b>OD</b>	
Residential (Homeworks compatible)			<b>HW-</b>	Semi-Directional (800lm only)	<b>SD</b>	
Model			Code	Region/ Voltage/ Base		
A Series Lamp			<b>A20</b>	North America, 120VAC 60Hz, E26	<b>11E26</b>	
				North America, 120VAC 60Hz, GU24	<b>11G24</b>	
Lumens			Code	Housing Color		
600 (Omni-Directional only) <sup>1</sup>			<b>06</b>	White	<b>WH</b>	
800 (Semi-Directional only)			<b>08</b>	Black	<b>BK</b>	
Platform/ Control (see page 3 color chart)			Code			
Wide Gamut, Tunable			<b>BT</b>			

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

<sup>2</sup> For Title 24 and Title 20 compliant model numbers or for more information, please contact Customer Service at sales@ketra.com or 512-872-4349.

## SPECIFICATIONS<sup>1</sup>

### OPTICAL & ELECTRICAL PERFORMANCE

Lumen Output <sup>2</sup>	600 lm/ 800 lm
CRI (Ra) <sup>3</sup>	>90
Lumen Maintenance <sup>3</sup>	50,000 hours to L70 @ 25°C Ambient
Color Spatial Uniformity	<2 MacAdam ellipses across field angle
Color Point Maintenance <sup>4</sup>	<1 MacAdam ellipse over product lifetime
Color Point Range <sup>4</sup>	1400°K-10,000°K, Fully Saturated, & Pastel
Equivalent Traditional Lamp	40W/ 60W Incandescent lamp
Dimming Range <sup>4</sup>	0.1-100% lm

### ENVIRONMENTAL

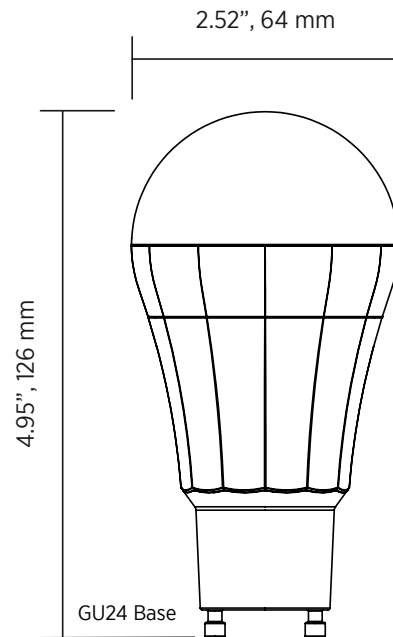
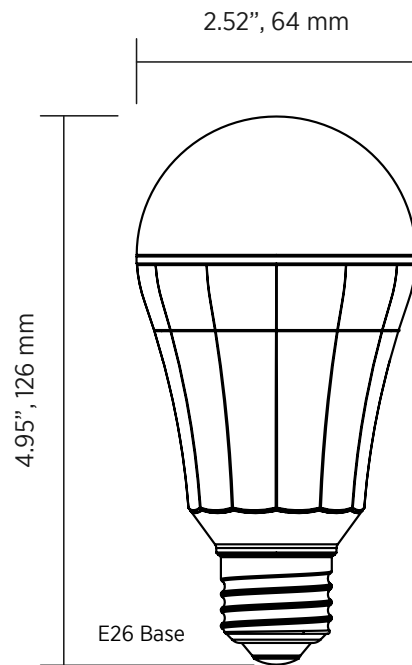
Operating Temperature <sup>5</sup>	0 to 50°C
Storage Temperature	-20 - 80°C
Humidity	0 - 95%, Non-condensing
Certification	UL, cUL, RoHS, FCC Class B
Location	UL Damp Location, IP20, Suitable for use in fully enclosed luminaires

### 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 10W/ A20.08 11W
Power Factor	>0.9
Current	100 mA Max
Efficacy	>60 lm/W



<sup>1</sup> 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.

<sup>4</sup> Intensity and color point controlled via Ketra's wireless network

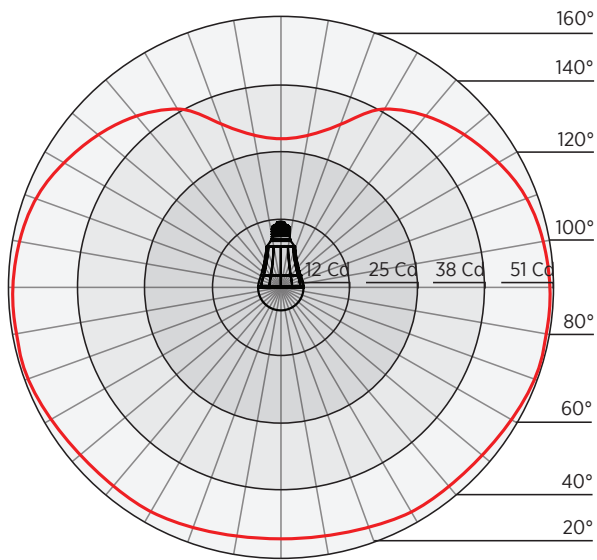
<sup>5</sup> Suitable for use in fully enclosed luminaires.

## ISO FOOTCANDLE CHARTS: 2700 - 5000K VALUES ONLY

LM-79 compliant IES files available upon request.

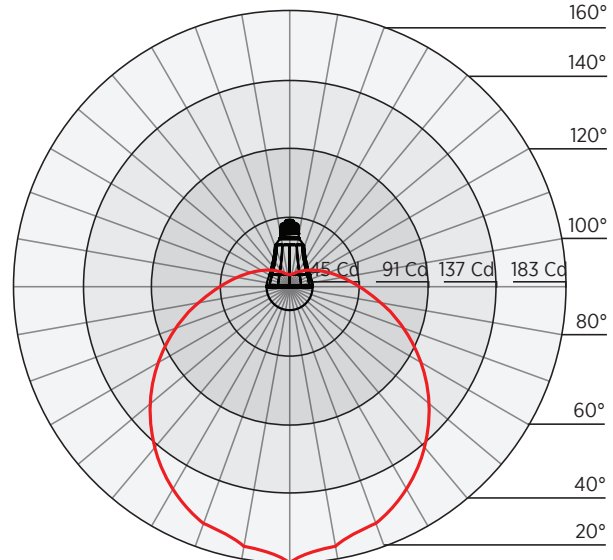
### A20 - OD

Product Code	Wattage	Lumens	Max Cd
A20.06.OD	10W	600	51



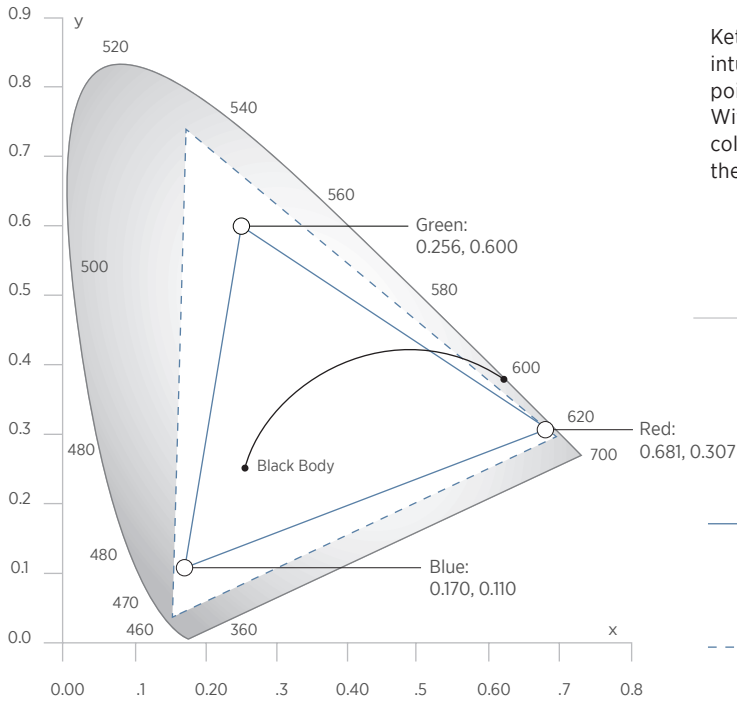
### A20 - SD

Product Code	Wattage	Lumens	Max Cd
A20.06.SD	11W	800	183



## WIDE GAMUT

CIE 1931 Color Chart



Ketra's A20 Tunable Lamp can easily be configured via Ketra's intuitive Design Studio software. The product can reproduce any color point within the triangle shaped gamut indicated in the chart below. With Ketra's innovative optical and thermal feedback system, the color point is maintained to an accuracy of <1 MacAdam ellipse over the lifetime of the product and across operating temperature range.

- Calibrated Gamut:** Color point is maintained to an accuracy of <1 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.

## GENERAL SPECIFICATIONS

Lamp shall employ closed loop optical and thermal feedback capable of maintaining color point accuracy of <1 MacAdam ellipse.

Lamp shall have color spatial uniformity of <2 MacAdam ellipses over full field angle.

Lamp shall have an integrated wireless control onboard.

Lamp shall be capable of a CRI >90 at any point along the Black Body Curve from 2700 - 5000K.

Lamp shall be a single source multi-die emitter consisting of both monochromatic and phosphor converted blue LED dye.

Lamp shall be sealed, meeting UL damp location (and UL Wet Location with Wet Location Trim) requirements.

Lamp shall be dimmable to 0.1% of measured luminous flux with wireless dimming.

Lamp shall be UL listed and RoHS compliant.

Lamp shall be capable of in situ firmware and software upgrades.

Ketra Lamp are 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.

Lamp shall be # \_\_\_\_\_