

S38 Tunable Lamp

The Ketra Difference:

High Def Palette—covers a wide range of 16.7 million colors, including pastels, saturated colors and high CRI whites spanning from 1,400K 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.



ORDERING GUIDE

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

S38

Product Line	Model	Lumens	Location	System/Beam Angle	Region /Voltage / Base	Housing Color
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Order code: _____

Product Line	Code	System/Beam Angle	Code	Region/ Voltage/ Base	Code
Commercial (Athena compatible)	CM-	KetraNet Wide Gamut, Tunable Spot (10°)	CTSP	North America, 120 V~ 60 Hz, E26	11E26
				North America, 120 V~ 60 Hz, GU24	11G24
Residential (HomeWorks compatible)	HW-	KetraNet Wide Gamut, Tunable Flood (25°)	BTFL	Housing Color	
				White	WH
S-Series Lamp	S38	KetraNet Wide Gamut, Tunable Wide Flood (40°)	BTWFL	Black	BK
				KetraNet Wide Gamut, Tunable Very Wide Flood (60°)	BTVFL
Lumens		CCX Wide Gamut, Tunable Spot (10°) ⁴	GTSP		
900 ¹	09				
1100 ¹	11	CCX Wide Gamut, Tunable Flood (25°) ⁴	GTFL		
900 High-Efficacy ^{2,3}	09H				
1100 High-Efficacy ^{2,3}	11H	CCX Wide Gamut, Tunable Wide Flood (40°) ⁴	GTWFL		
Location		CCX Wide Gamut, Tunable Very Wide Flood (60°) ⁴	GTVFL		
Indoor	I				
Outdoor/Patio ⁵	O				

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.

SPECIFICATIONS¹
Optical Performance

Lumen Output ²	900 lm/1100 lm
CRI (Ra) ³	>90 (R9 >90)
Lumen Maintenance ³	50,000 hours to L70 @ 25 °C TA
Color Point Maintenance ⁴	One-step MacAdam Ellipse over product lifetime
Color Point Range ⁴	1400 °K–10,000 °K, Fully Saturated, & Pastel
Equivalent Traditional Lamp	75W/ 100W halogen PAR38
Dimming Range	0.1-100%

Environmental

Operating Temperature	0 to 50 °C
Extended Operating Temperature ⁵	-25 to 0 °C
Storage Temperature	-20 to 80 °C
Humidity	0 - 95%, Non-condensing
Certification	UL, cUL, RoHS, FCC Class B
Location	UL Damp Location, IP20

Mechanical

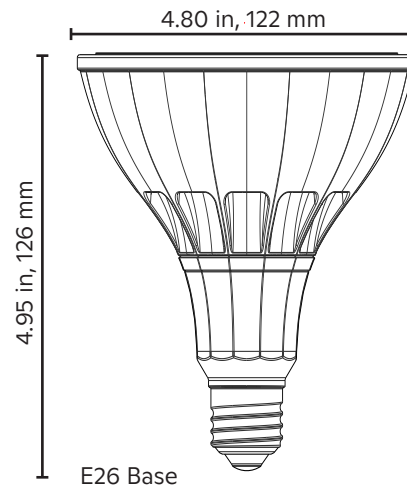
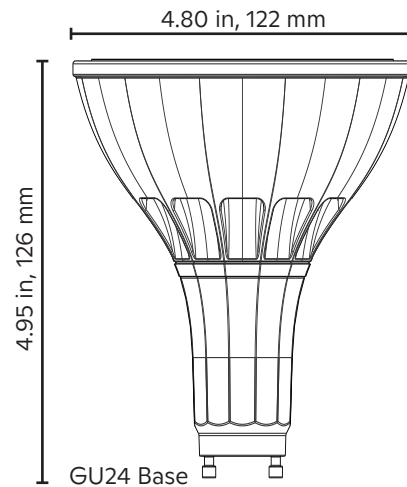
Weight	13.8 oz, 390 g
Housing Material	Powder Coated Aluminum, Polymer
Lens Material	Non-yellowing PMMA
Base Type	E26 GU24

Electrical

Power consumption	S38.09 11 W / S38.11 14 W S38.09 HE 9.6 W / S38.11 12.3 W
Power Factor	>0.9
Current	170 mA Max
Efficacy	S38.09 84 lm/W / S38.11 79 lm/W S38.09HE 94 lm/W / S38.11HE 89 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). 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.

Accessories

S38 Accessory Short Snoot	S38ASNT55 WH/BK
S38 Accessory Tall Snoot	S38ASNT30 WH/BK
S38 Accessory 45° Hex Louver Includes Short Snoot	S38ALUV45 WH/BK
S38 Accessory 15° Baffle Includes Tall Snoot	S38ABFL15 WH/BK



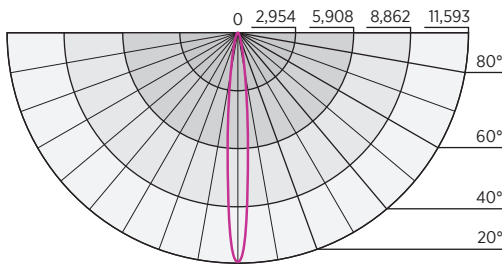
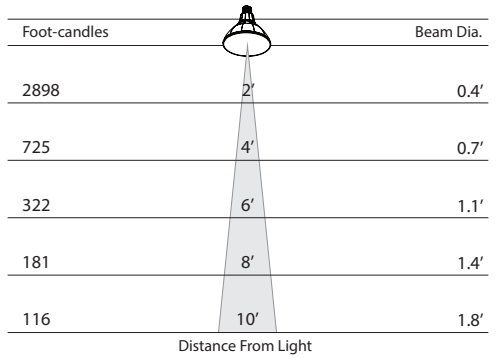
CAD files available upon request

- ¹ All performance measurements taken at 3000 K, 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.

ISO FOOTCANDLE CHARTS: 2700 - 5000K VALUES ONLY

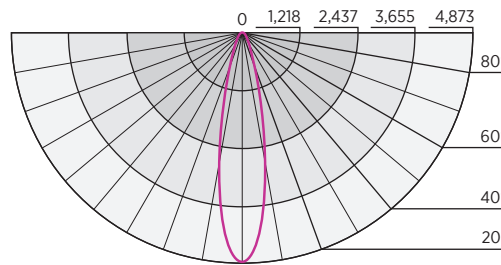
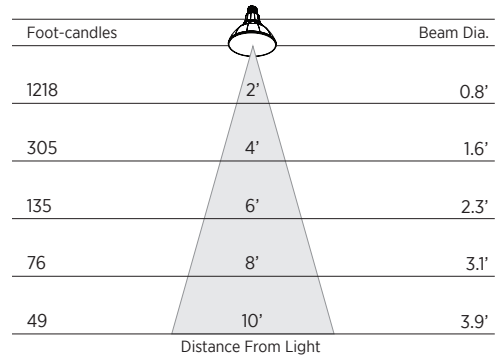
Beam Angle: 10° Spot (SP)

Product Code ¹	Wattage	Lumens	CBCP
S3811CTSP11E26WH	18 W	1100	11,593



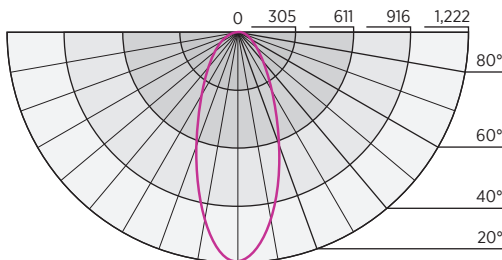
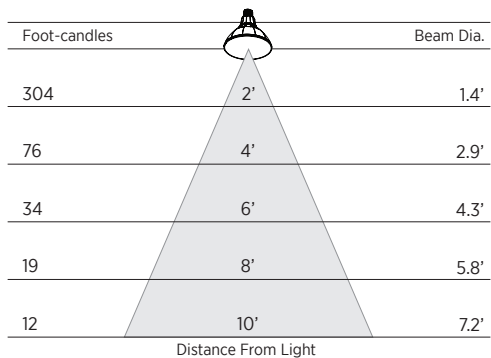
Beam Angle: 25° Flood (FL)

Product Code ¹	Wattage	Lumens	CBCP
S3811BTFL11E26WH	18 W	1100	4873



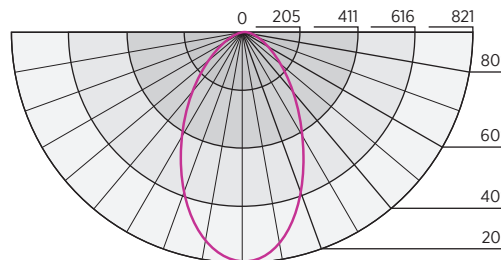
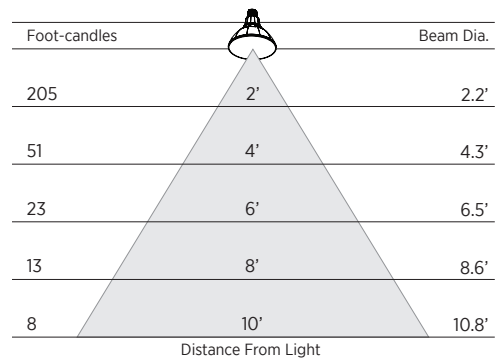
Beam Angle: 40° Wide Flood (WFL)

Product Code ¹	Wattage	Lumens	CBCP
S3811BTWFL11E26WH	18 W	1046	4198



Beam Angle: 60° Very Wide Flood (VFL)

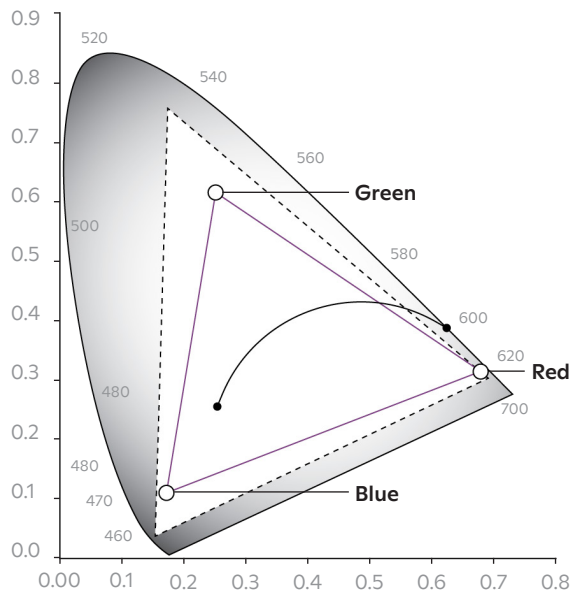
Product Code ¹	Wattage	Lumens	CBCP
S3811BTVFL11E26WH	18 W	1100	818



¹ Performance data applies to all base types and housing colors.

WIDE GAMUT

CIE 1931 Color Chart



Ketra's Tunable LED S38 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 innovative optical and thermal feedback system, 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.

S38 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.

Warranty: Ketra's light source is warranted 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 1,400K to 10,000K Correlated Color Temperature (CCT).

¹ Color point maintenance not guaranteed while operating at ambient temperatures between -25 °C and 0 °C.