

## 1 DESCRIPTION & KEY FEATURES

2016 IES PROGRESS REPORT SELECTION • 2016 LFI INNOVATION AWARDS CATEGORY WINNER • 2016 LUX AWARDS HIGHLY COMMENDED • 2016 EDISON REPORT TOP TEN MUST SEE LIST



araya<sup>5</sup> Tunable Color Linear LED Arrays



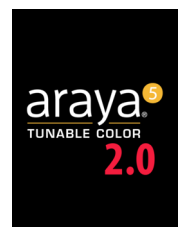
araya<sup>5</sup> Logic Modules

### Description

araya<sup>5</sup> Logic Modules (ALM) connect to tunable color mid-power linear LED arrays that mix five colors of LEDs to deliver tunable and dimmable white light at 90+ CRI\* with color consistency of <2 MacAdam ellipse across a tuning range of 1650 - 8000K. The ALM is connected to one or more LED arrays via low-cost ribbon cables, and features on-board driver electronics and the araya<sup>5</sup> control logic for precise control of LED light output while tuning and dimming. On board closed loop thermal feedback compensates each color channel for thermally induced variations in light output due to dimming or changes in ambient temperatures. On-board closed loop optical feedback measures the lumen depreciation of each channel and re-balances the color model to ensure color consistency over the 50,000 hour life of the LED array. A patented in-line manufacturing process captures and stores the spectral characteristics of each LED on the array, rapidly generating a unique color model for each array. Delivered light can be dimmed from 100 - 1% in increments of 1% at constant CCT. Gradients of saturated colors from 1 - 100% can be added to color points within the tuning range. The Zhaga-compliant LED arrays are compatible with traditional 0 - 10V wired controls, feature on-board Bluetooth Low Energy (BLE), and can access DMX512-A-RDM or Lutron<sup>®</sup> EcoSystem inputs via an optional accessory board that connects to an electrically isolated expansion port within the ALM. For simple deployment, SceneSet<sup>™</sup> allows up to five scenes to be pre-programmed into the LED array during production and recalled at the venue using a 0 - 10V recommended dimmer or via Bluetooth. Commissioning of the LED array and the re-programming of Sceneset is done via the wireless araya<sup>5</sup> Tunable Color 2.0 iOS app that connects to the embedded Bluetooth radio.

### Key Features

- Tunable range: 1650 - 8000K
- 90+ CRI\*
- Dimmable from 100 - 1% at constant CCT
- Color gamut control: gradients of saturated colors from 1 - 100% can be added to color points
- Integrated driver electronics and araya<sup>5</sup> logic
- On board thermal and optical feedback for color consistency <2 MacAdam ellipse over 50,000 hour life
- In-line spectral capture and storage creates unique color model for each Zhaga-compliant LED array, resulting in consistent CRI and CCT across all arrays
- On-board thermal turndown
- Compatible with 0 - 10V wired controls
- DMX512-A-RDM or Lutron EcoSystem control accessibility via optional accessory board that connects to an electrically isolated compartment within the ALM
- On-board Bluetooth Low Energy (BLE)
- Copy and Paste for exact fixture to fixture matching
- SceneSet enables up to five scenes to be preprogrammed and recalled using a 0 - 10V recommended dimmer or via Bluetooth
- DMX slots set by RDM or via wireless araya<sup>5</sup> Tunable Color 2.0 iOS app



araya<sup>5</sup> Tunable Color 2.0 iOS App

## 2 ORDERING INFORMATION

### Photometrics and Ordering Codes (Linear LED Array Kits)<sup>1</sup>

	Tunable Range	Typical Peak Lumens	Length <sup>3</sup>	Nominal Wattage (±10%)	Ordering Code <sup>4</sup>
Specifications <sup>2</sup>	1650 - 8000K	8000	2240 mm (Nominal 8 ft.)	80W	80.001.097.01
		7000	1960 mm (Nominal 7 ft.)	70W	80.001.096.01
		6000	1680 mm (Nominal 6 ft.)	60W	80.001.095.01
		5000	1400 mm (Nominal 5 ft.)	50W	80.001.094.01
		4000	1120 mm (Nominal 4 ft.)	40W	80.001.093.01
		3000	840 mm (Nominal 3 ft.)	30W	80.001.092.01
		2000	560 mm (Nominal 2 ft.)	20W	80.001.091.01
		1000	280 mm (Nominal 1 ft.)	10W	80.001.090.01
CRI (Ra) Across Tuning Range	>90*				
Dimming	100% to 1% in increments of 1%				
Nominal Color Consistency	<2 MacAdam ellipse (±0.002 Duv from ANSI C78.377-2008 curve)				
Color Consistency Over Life	Calibration maintains original color points over life				
Lumen Maintenance	L70 (70% of initial lumens) at 50,000 hours				

1. Kit includes linear LED array and araya<sup>5</sup> Logic Module, as a factory pre-matched set which must be kept that way during installation for proper operation and control. The kit does not include ribbon cables, power cable assembly, control cable assembly, reflector end caps or DMX/Lutron accessory boards (see below for required accessory ordering specifications).

2. Specifications are within +/- 10% of the nominal value. Peak efficacy is not necessarily at typical peak lumens.

3. Please contact your Lumenetix representative for other lengths (available upon request).

4. Linear arrays are provided with downward-facing connector on the bottom as standard. Arrays with upward-facing connector on the top (LED) side are available upon request. Ordering codes provided are for the kits with on-board 0-10V and Bluetooth LE only, and do not include DMX512-A-RDM or Lutron<sup>®</sup> EcoSystem accessory boards / compatibility.

\* From 2000 - 6000K.

### Required Accessories (Ordered Separately)

Quantity	Description	Part Number
1	8" long flat ribbon cable (16-pin Tyco connectors at each end) (for connecting 1 ft. linear boards to each other)	28.031.001.04
1	24" long flat ribbon cable (16-pin Tyco connectors at each end) (for connecting ALM to one linear boards)	28.030.002.02
1	32" long flat ribbon cable (16-pin Tyco connectors at 0", 24" and 32") (for connecting ALM to two linear boards)	28.031.001.01
1	44" long flat ribbon cable (16-pin Tyco connectors at -20", -12", 0", and 24") (for connecting ALM to three linear boards)	28.031.001.02
1	68" long flat ribbon cable (16-pin Tyco connectors at -34", -26", 0", 26" and 34") (for connecting ALM to four linear boards)	28.031.001.03
1	24" long 2-wire ALM power cable assembly	28.030.001.01
1	24" long 7-wire ALM control cable assembly	28.002.002.01
1	DMX512-A-RDM Accessory Board	80.003.001.01
1	Lutron Accessory Board	80.003.002.02
Set of 2	Reflector end caps	45.001.011.01