







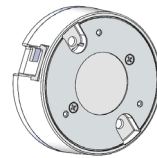
lumenetix - araya™ TUNABLE COLOR

CTM 1C HD FAMILY ROUND LED COLOR TUNING MODULES

 Spectral Quality of Daylight 90+ CRI	 Saturated Green Option Expanded Gamut	 Broad Tuning Range 1650-8000K	 Color Access Pastels to Saturates	 LED Dimming 100% - 0.1%*	 Color Consistency Over Life Less than 2 SDCM
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CTM1C 19 HD
CTM1C 19 HD E



CTM1C+ 19 HD (2000/1500 lm)
CTM1C+ 19 HD E (1700 lm)

CTM 1C HD modules mix five colors of LEDs—or six colors with the Saturated Green ‘Entertainment’ (E) option—across a tunable color range of 1650 - 8000K. eFlicker-Free / Hybrid LED dimming is achieved from 100 - 0.1%*. The modules deliver up to 2000 lm of light at 90+ CRI. Proprietary thermal and optical technologies ensure color consistency of <2 SDCM over the 50,000-hour rated life.

CTM 1C HD packages Bluetooth LE (for commissioning), 0-10 V and DMX512-A-RDM on board the modules. Lutron® EcoSystem or DALI Type 8 compatibility is achieved by using the Lumenetix Digital Control Adapter. DALI Type 8 can also be packaged on board the modules. Legrand® Wattstopper® DLM compatibility is achieved via an external adapter.

COMMISSION AND CONTROL EFFORTLESSLY

CONTROL SYSTEM / PROTOCOL	CTM 1C HD (TUNABLE WHITE & TUNABLE COLOR CONTROL)				NOTES
	1 DIMMING*	2 CCT	3 SATURATION	4 HUE	
DMX512-A-RDM ¹	0.1%	1650 - 8000K	Yes	Yes	1. Refer to the separate DMX Lookup Values table for specific programming values and information.
0-10 V	~1% ²	1650 - 8000K	**	**	2. 1-10 V signal dims module to approximately 1%. In-line power relay required to achieve 0% output.
LUTRON ECOSYSTEM ^{3,4}	0.1%	1650 - 8000K	N/A	N/A	3. Refer to the separate Lutron EcoSystem Lookup Values table for specific programming values and information. 4. Requires external Digital Control Adapter.
DALI TYPE 8 ⁵	0.1%	1650 - 8000K	N/A	N/A	5. Available either on board the module or via external Digital Control Adapter.
WATTSTOPPER DLM ⁶	0.1%	1650 - 8000K	N/A	N/A	6. Requires external adapter by Wattstopper.

*100 - 0.1% eFlicker-Free LED dimming is available for specific modules/arrays when connected to 0.1% dimming-capable digital controls.

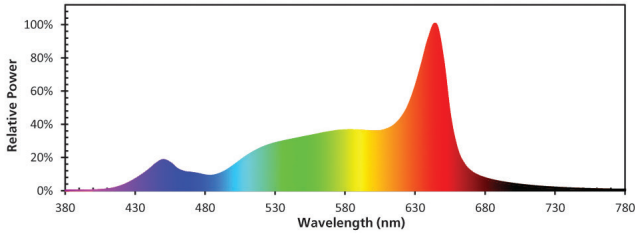
**Two 0-10 V lines can be used to control Dimming and CCT independently, or program Scenes — in any combination of Dimming, CCT, Saturation and Hue — and recall them with five 0-10 V presets or the Lumenetix-araya iOS App.

Individual product specifications may vary; please refer to technical product data sheets. Bluetooth LE is provided on board for commissioning purposes only.

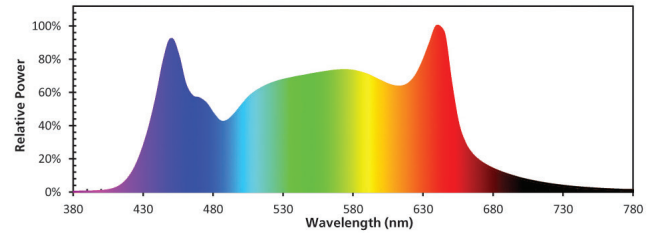
THE CTM 1C HD DATA TELLS THE STORY

TYPICAL SPECTRAL POWER DISTRIBUTION (SPD) CURVES

CTM1C 19 HD; 35W
SPD at 3000K



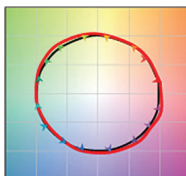
CTM1C 19 HD; 35W
SPD at 5000K



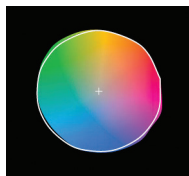
TYPICAL TM-30 DATA

CTM1C 19 HD; 35W
3000K

Color Vector Graphic



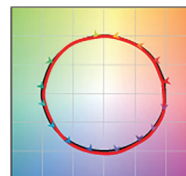
Color Saturation Graphic



Rf = 92; Rg = 106; CRI Ra = 93

CTM1C 19 HD; 35W
5000K

Color Vector Graphic



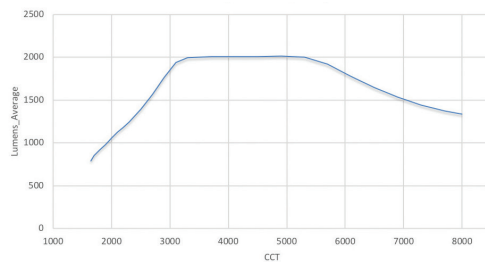
Color Saturation Graphic



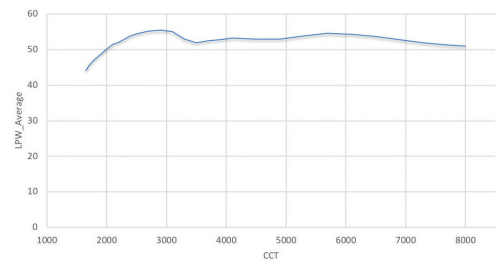
Rf = 91; Rg = 99; CRI Ra = 95

TYPICAL PERFORMANCE GRAPHS

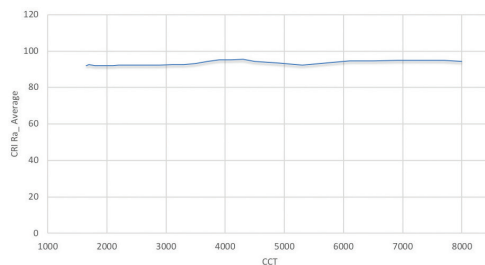
CTM1C 19 HD; 35W
Average Lumens over CCT



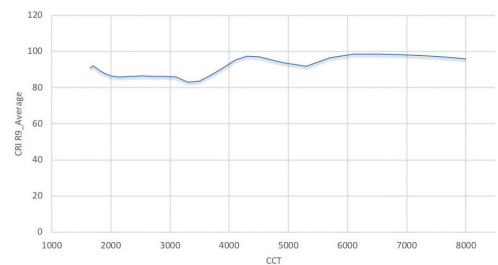
CTM1C 19 HD; 35W
Average Efficacy (Lumens/Watt) over CCT



CTM1C 19 HD; 35W
Average CRI Ra over CCT



CTM1C 19 HD; 35W
Average CRI R9 over CCT



For additional color and performance data, please refer to www.erp-power.com. Specifications may be subject to change without notice.