

CTM1C FAMILY ROUND LED COLOR TUNING LIGHT ENGINES

 Spectral Quality of Daylight 90+ CRI	 Broad Tuning Range 1650-8000 K	 Color Access Pastels to Saturates	 Halogen Dimming 3050 K (100%) – 1800 K (1%)	 LED Dimming 100% – 1%	 Color Consistency Over Life Less than 2 SDCM
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Araya® CTM1C light engines mix five colors of LEDs across a tunable color range of 1650–8000 K or a warm dim range of 1800–3050 K. The light can be dimmed from 100–1%. The light engines 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.

CTM1C simplifies fixture control integration and reduces cost by packaging Bluetooth LE (for commissioning), 0–10 V and DMX512-A-RDM on board the light engines. Lutron® EcoSystem or DALI Type 8 compatibility is achieved by using the ERP Digital Control Adapter. DALI Type 8 can also be packaged on board the light engines. Legrand® Wattstopper® DLM compatibility is achieved via an external adapter.

COMMISSION AND CONTROL EFFORTLESSLY

CONTROL SYSTEM / PROTOCOL	CTM1C (TUNABLE WHITE & TUNABLE COLOR CONTROL)				DDM1C (WARM-DIM)	NOTES
	1 DIMMING	2 CCT	3 SATURATION	4 HUE		
DMX512-A-RDM ¹	1%	1650–8000 K	Yes	Yes	1% (1800–3050 K) ²	1. Refer to the separate DMX Lookup Values table for specific programming values and information. 2. Factory setting or RDM command.
0-10 V	~1% ³	1650–8000 K	*	*	~1% (1800–3050 K) ⁴	3. 1-10 V signal dims light engine to approximately 1%. In-line power relay required to achieve 0% output. 4. Factory setting.
LUTRON ECOSYSTEM ^{5,6}	1%	1650–8000 K	N/A	N/A	1% (1800–3050 K) ⁷	5. Refer to the separate Lutron EcoSystem Lookup Values table for specific programming values and information. 6. Requires external Digital Control Adapter. 7. Factory setting.
DALI TYPE 8 ⁸	1%	1650–8000 K	N/A	N/A	1% (1800–3050 K) ⁹	8. Available either on board the light engine or via external Digital Control Adapter. 9. Factory setting.
WATTSTOPPER DLM ¹⁰	1%	1650–8000 K	N/A	N/A	1% (1800–3050 K) ¹¹	10. Requires external adapter by Wattstopper. 11. Factory setting.

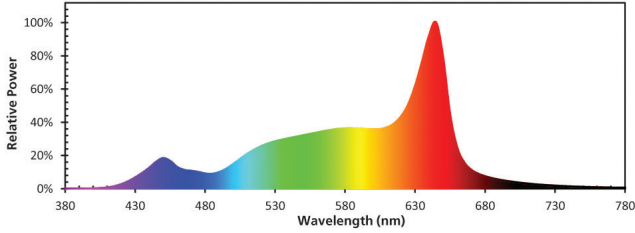
¹Two 0–10 V lines can be used to control Dimming and CCT independently, or program Scenes—in any combination of Dimming, CCT, Saturation and Hue—and recall them with five 0–10 V presets or the Araya Tunable Color iOS App.

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

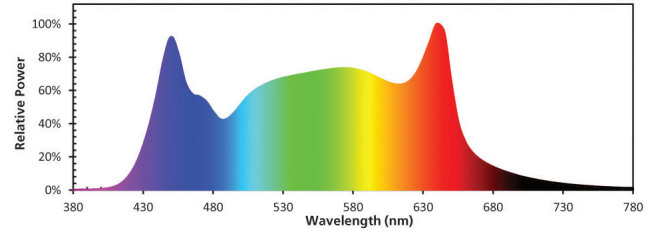
THE CTM1C DATA TELLS THE STORY

TYPICAL SPECTRAL POWER DISTRIBUTION (SPD) CURVES

CTM1C 19; 35 W
SPD at 3000 K



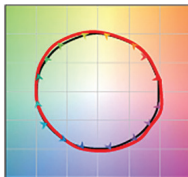
CTM1C 19; 35 W
SPD at 5000K



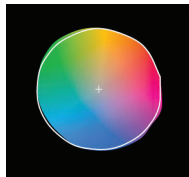
TYPICAL TM-30 DATA

CTM1C 19; 35 W
3000 K

Color Vector Graphic



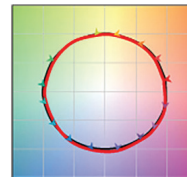
Color Saturation Graphic



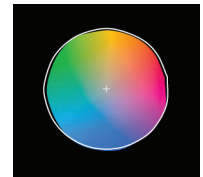
$R_f = 92$; $R_g = 106$; CRI $R_a = 93$

CTM1C 19; 35 W
5000 K

Color Vector Graphic



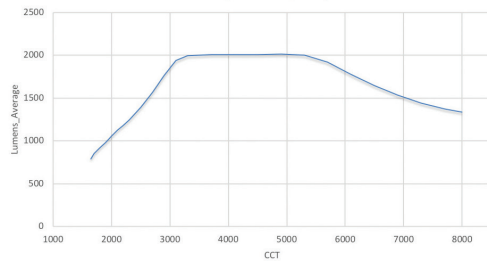
Color Saturation Graphic



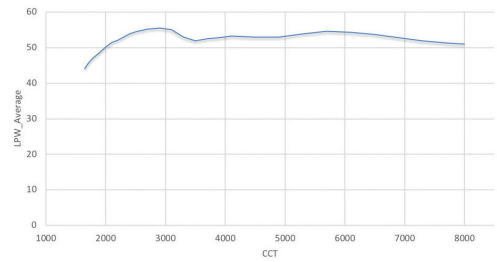
$R_f = 91$; $R_g = 99$; CRI $R_a = 95$

TYPICAL PERFORMANCE GRAPHS

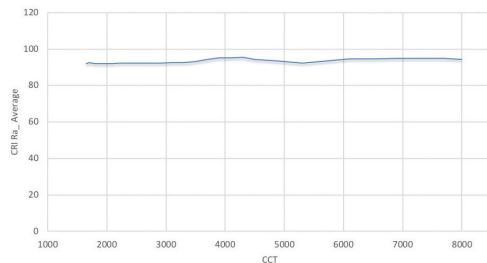
CTM1C 19; 35 W
Average Lumens over CCT



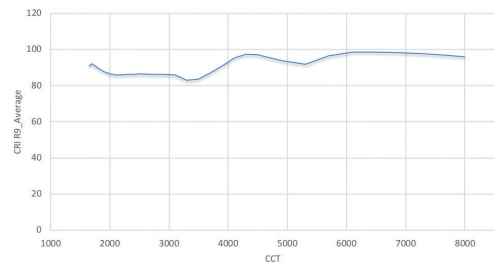
CTM1C 19; 35 W
Average Efficacy (Lumens/Watt) over CCT



CTM1C 19; 35 W
Average CRI Ra over CCT



CTM1C 19; 35 W
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.