

# R4RAL, R4SAL

## 4.5" Volta Tunable White - Adjustable Trimless

WAC



Fixture Type:

Catalog Number:

Project:

Location:

### PRODUCT DESCRIPTION

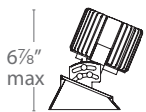
Volta 4.5" Tunable White recessed series represents an innovation in design and technology for architectural lighting. This high lumen and adaptable family of fixtures with a comprehensive set of round and square fittings, affords a sustainable solution for commercial, corporate, and upscale residential applications.

### FEATURES

- Natural and vivid precision LED CCT Tuning
- 0-45° vertical and 365° horizontal lockable hot aiming
- Indexed vertical scaling for precise and accurate alignment
- Integral patterned tempered trim lens included standard
- Compatible with a wide range of accessories
- 5 year WAC Lighting product warranty

### SPECIFICATIONS

- Construction:** Durable die-cast self flanged aluminum construction
- Input:** Universal 120-277V AC 50/60 Hz
- Dimming:** 2 Channel 0-10V: 100-0.1%  
2 Channel DMX512-A, with RDM: 100-0.1%  
Linear Dimming. 1<sup>st</sup> input channel is intensity changing.  
2<sup>nd</sup> input channel is CCT changing.
- Light Source:** High output 3-step Mac Adam Ellipse COB  
Rated life of 50,000 hours at L70
- Mounting:** Heavy gauge retention clips support trim firmly.  
Safety cabling standard.  
Ceiling cut out (Round):  $\phi 5\frac{1}{8}"$   
Ceiling cut out (Square):  $5\frac{1}{8}" \times 5\frac{1}{8}"$   
Accommodates  $\frac{1}{2}" - 1"$  ceiling thickness up to 45°,  $1\frac{1}{2}"$  up to 35°  
Remodel Trimless:  $\frac{1}{2}" - 1"$  ceiling thickness
- Finish:** Electrostatically powder coated White, Black.  
Enamel coated Haze. Plated and brushed copper Bronze.
- Standards:** ETL & cETL Wet location listed, Title 24 JA8 Compliant

TRIM	Model	Beam	Lumens	CBCP	Ref Output*	Color Temp	CRI	Finishes	Reflector/Trim
	<b>R4RAL</b> Round	<b>N</b> 25° Round Square	1930	6745	1615	5645	<b>TWA</b> 1800K-4000K 98	<b>BK</b> <b>CB</b> <b>HZ</b> <b>WT</b>	Black Copper Bronze Haze White
		<b>F</b> 45° Round Square	1750	3410	1485	2890			
	<b>R4SAL</b> Square	<b>N</b> 25° Round Square	1920	7025	1605	5880	<b>TWB</b> 2700K-6500K 98		
		<b>F</b> 45° Round Square	1775	3455	1505	2930			

Example: **R4SAL-NTWA-WT**

\*Reference output shows TWA/TWB trim tuned to 3000K with **36** housing. Use multiplier table below to determine the output for other combinations

Lumens & CBCP Multiplier		Color Temperature					
<b>TWA</b> (1800K-4000K)	Housing Power Level	1800K	2200K	2700K	3000K	3500K	4000K
	<b>36</b> (44W)	0.68	0.82	0.94	1.00	1.07	1.11
	<b>25</b> (29W)	0.48	0.57	0.66	0.70	0.75	0.78
	<b>15</b> (20W)	0.33	0.39	0.45	0.48	0.51	0.53
<b>TWB</b> (2700K-6500K)	Housing Power Level	2700K	3000K	3500K	4000K	5000K	6500K
	<b>36</b> (44W)	0.96	1.00	1.06	1.09	1.12	1.11
	<b>25</b> (29W)	0.67	0.70	0.74	0.76	0.78	0.78
	<b>15</b> (20W)	0.46	0.48	0.51	0.52	0.54	0.53

Example: **R4SAL-NTWA-WT** tuned to 4000K with **36** housing: 1615 lm (Reference Output) x 1.11 (Multiplier) = 1793 lm  
5645 CBCP (Reference Output) x 1.11 (Multiplier) = 6266 CBCP

Please see next page for housing, power supply and tool units (required)

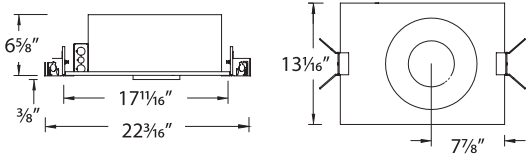
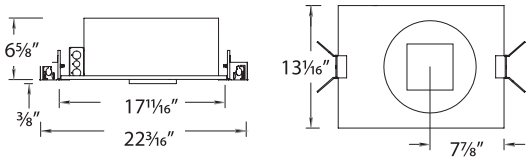
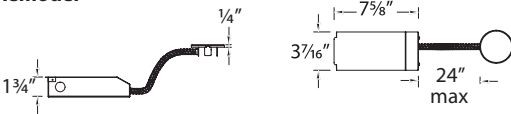
wacighting.com Phone (800) 526.2588 Fax (800) 526.2585	Headquarters, East Manufacturing Facility 44 Harbor Park Drive Port Washington, NY 11050	South East Manufacturing Facility 1600 Distribution Ct Lithia Springs, GA 30122	Central Manufacturing Facility 1700 South J Elmer Freeway, Ste 100 Cedar Hill, TX 75104	West Manufacturing Facility 1750 S Archibald Ave Ontario, CA 91761
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## 4.5" Volta Tunable White - Adjustable Trimless

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Housing (Required)	Model	Power	Rating	Driver
<b>Round New Construction</b> 	<b>R4RNL</b> <i>Airtight</i>	<b>15</b> 20W <b>25</b> 29W <b>36</b> 44W	<i>IC rated</i> <i>IC rated</i> <i>Non-IC</i>	<b>T-X</b> DMX512-A <b>T-Z</b> 2CH 0-10V
<b>Square New Construction</b> 	<b>R4SNL</b> <i>Airtight</i>	<b>15</b> 20W <b>25</b> 29W <b>36</b> 44W	<i>IC rated</i> <i>IC rated</i> <i>Non-IC</i>	<b>T-X</b> DMX512-A <b>T-Z</b> 2CH 0-10V
<b>Remodel</b> 	<b>R4RRL</b> <i>Round Trimless</i> <b>R4SRL</b> <i>Square Trimless</i>	<b>15</b> 20W <b>25</b> 29W <b>36</b> 44W	<i>Non-IC</i> <i>Non-IC</i> <i>Non-IC</i>	<b>T-X</b> DMX512-A <b>T-Z</b> 2CH 0-10V

### Example: R4RNL-15T-X

Trimless housings come included with die-cast spackle frame.

### Field Replaceable Driver

**D-R4N-15T-X** DMX512-A Driver for 20W New Const. Housing  
**D-R4N-25T-X** DMX512-A Driver for 29W New Const. Housing  
**D-R4N-36T-X** DMX512-A Driver for 44W New Const. Housing

**D-R4N-15T-Z** 2CH 0-10V Driver for 20W New Const. Housing  
**D-R4N-25T-Z** 2CH 0-10V Driver for 29W New Const. Housing  
**D-R4N-36T-Z** 2CH 0-10V Driver for 44W New Const. Housing

### FIELD CHANGEABLE GLARE CONTROL AND OPTIC SYSTEM

**Note:** Maximum 35° vertical adjustment with accessory use.

**Accessory holder**  
 Holds up to two lenses or  
 One lens and one glare control



**Optical cartridge**  
 Allows tool-less exchange of reflectors

**Light engine**

**Reflector**  
 For narrow flood and flood

### Accessory holder

**LENS-73-HLD** Required to hold lens and glare control accessories

### Glare control accessories

**LENS-73-HCL** Honeycomb Louver  
**LENS-73-CRL** Cross Louver

### Lens

**LENS-73-AMB** Amber lens  
**LENS-73 RED** Red lens  
**LENS-73 FR** Frosted lens  
**LENS-73 SPR** Spread lens  
**LENS-73 BEL** Beam Elongating

### Interchangeable reflector

**REF-R4-N** Narrow Flood beam reflector  
**REF-R4-F** Flood beam reflector

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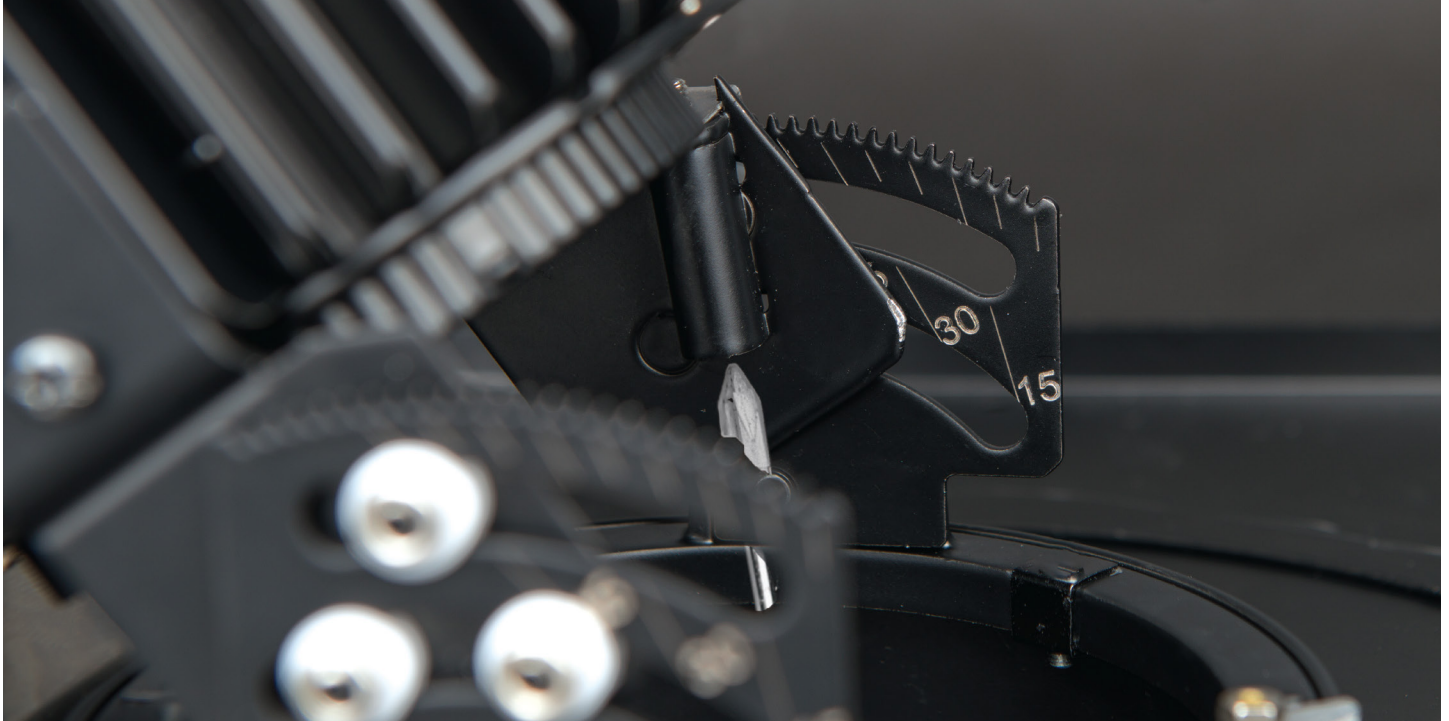


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## FIELD CHANGEABLE AIMING



0 - 45° vertical lockable hot aiming



365° horizontal lockable hot aiming

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### NATURAL TUNABLE WHITE CCT TUNING:

The CCT of the Volta Tunable White fixture may be adjusted.

Using the DMX byte values in the adjacent table mapped to CH1 and CH2 of the desired output, increments of 100K (Kelvin) from 1800K to 4000K for TWA and 2700K to 6500K for TWB, at full intensity.

**Note:** Through compatible RDM tool, fixture channels can be reassigned to desired consecutive channels. Factory default is DMX channel 1 and 2.

### VOLTA 4.5" TUNABLE WHITE DMX BYTE VALUE VS CCT

TWA DMX BYTE VALUES AT FULL INTENSITY			TWB DMX BYTE VALUES AT FULL INTENSITY		
CCT (K)	CH1: Intensity	CH2: CCT	CCT (K)	CH1: Intensity	CH2: CCT
4000	255	255	6500	255	252
3900	255	250	6400	255	249
3800	255	240	6300	255	245
3700	255	230	6200	255	243
3600	255	219	6100	255	241
3500	255	207	6000	255	237
3400	255	196	5900	255	234
3300	255	186	5800	255	230
3200	255	176	5700	255	226
3100	255	163	5600	255	222
3000	255	153	5500	255	218
2900	255	140	5400	255	214
2800	255	130	5300	255	210
2700	255	117	5200	255	205
2600	255	105	5100	255	200
2500	255	92	5000	255	195
2400	255	79	4900	255	190
2300	255	66	4800	255	185
2200	255	51	4700	255	180
2100	255	38	4600	255	175
2000	255	23	4500	255	170
1900	255	10	4400	255	164
1800	255	0	4300	255	158
			4200	255	151
			4100	255	143
			4000	255	134
			3900	255	125
			3800	255	119
			3700	255	110
			3600	255	101
			3500	255	92
			3400	255	83
			3300	255	74
			3200	255	64
			3100	255	53
			3000	255	41
			2900	255	29
			2800	255	15
			2700	255	0

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