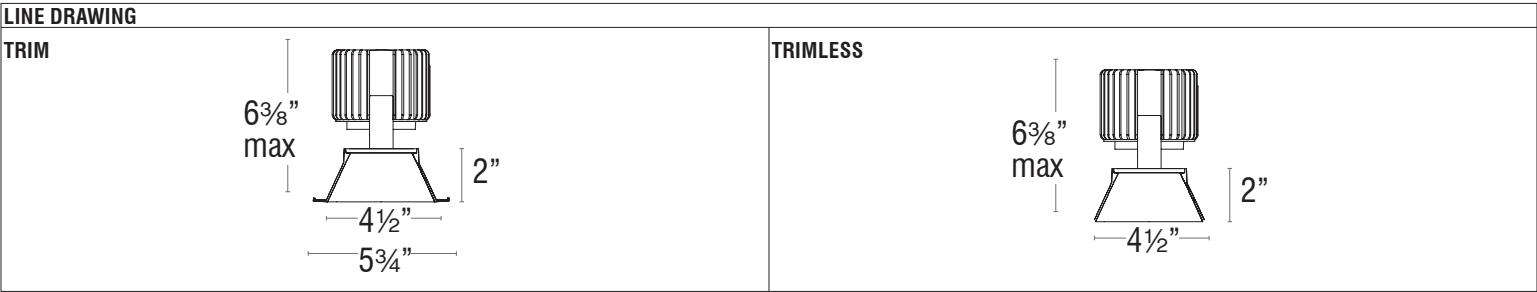


Volta  
Tunable White - 4.5" Downlight  
R4RD2T | R4RD2L | R4SD2T | R4SD2L

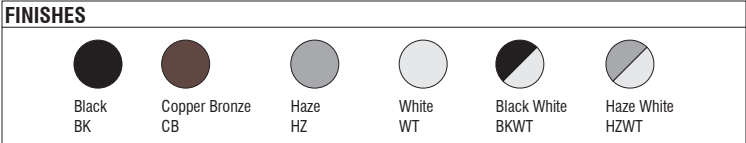
Fixture Type: \_\_\_\_\_  
Project: \_\_\_\_\_  
Catalog#: \_\_\_\_\_  
Location: \_\_\_\_\_



**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. A built-in field selectable light engine height allows for a cut-off angle adjustment of 30-34°.

| SPECIFICATIONS               |                                                                                                                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction:                | Durable die-cast self flanged aluminum construction                                                                                                                                                                                                     |
| Mounting:                    | Heavy gauge retention clips support trim firmly<br>Ceiling cut out (Round): Trim Ø 5 1/8" ○<br>Trimless Ø 5 1/8" ○<br>Ceiling cut out (Square): Trim 5 1/8" x 5 1/8" □<br>Trimless 5 1/8" x 5 1/8" □<br>Accommodates ceiling thickness of 1/2" - 1 1/2" |
| Light Source:                | High output 3-step Mac Adam Ellipse COB<br>Rated life of 50,000 hours at L70                                                                                                                                                                            |
| Input:                       | Universal 120-277V AC, 50/60 Hz                                                                                                                                                                                                                         |
| Dimming:                     | 2 Channel 0-10V: 100-0.1%<br>2 Channel DMX512-A with RDM: 100-0.1%<br>linear dimming. Channels for intensity and CCT tuning.                                                                                                                            |
| Maximum Delivered Intensity: | Up to 12,080 cd (Square Narrow Flood 25°, TWA 4000K, CRI 98)                                                                                                                                                                                            |
| Maximum Delivered Output:    | Up to 3,622 lm (Square Narrow Flood 25°, TWB 5000K, CRI 98)                                                                                                                                                                                             |
| Standards:                   | ETL & cETL Wet location listed, Title 24 JA8 Compliant                                                                                                                                                                                                  |
| Warranty:                    | 5 year WAC Lighting guaranteed warranty                                                                                                                                                                                                                 |



| Model                                        | Beam        | Lumens<br>Ref Output* | CBCP | Color Temp      | CRI |
|----------------------------------------------|-------------|-----------------------|------|-----------------|-----|
| R4RD2T Round Trim<br>R4RD2L Round Trimless   | N 25° Round | 2295                  | 6420 | TWA 1800K-4000K | 98  |
|                                              | Square      | 2445                  | 6835 |                 |     |
|                                              | F 45° Round | 2185                  | 3600 |                 |     |
|                                              | Square      | 2315                  | 3805 |                 |     |
|                                              | W 60° Round | 2215                  | 2460 |                 |     |
|                                              | Square      | 2345                  | 2600 |                 |     |
| R4SD2T Square Trim<br>R4SD2L Square Trimless | N 25° Round | 2520                  | 6915 | TWB 2700K-6500K | 98  |
|                                              | Square      | 2680                  | 7365 |                 |     |
|                                              | F 45° Round | 2495                  | 3990 |                 |     |
|                                              | Square      | 2640                  | 4220 |                 |     |
|                                              | W 60° Round | 2565                  | 2730 |                 |     |
|                                              | Square      | 2714                  | 2890 |                 |     |

Lumens and CBCP are reference values for **TWA/TWB** trim tuned to 3000K Color Temperature with **36** housing. Refer to Multiplier Table in Performance Data to determine other outputs.



Volta  
Tunable White - 4.5” Downlight  
R4RD2T | R4RD2L | R4SD2T | R4SD2L

Fixture Type: \_\_\_\_\_  
Project: \_\_\_\_\_  
Catalog#: \_\_\_\_\_  
Location: \_\_\_\_\_

ORDERING INFORMATION

| CONFIGURATION TABLE                  |                                                                |                                        |                                                      |             |
|--------------------------------------|----------------------------------------------------------------|----------------------------------------|------------------------------------------------------|-------------|
| Model & Power                        | Beam                                                           | Color Temperature & CRI                | Reflector Finish                                     | Trim Finish |
| R4RD2T<br>R4SD2T<br>R4RD2L<br>R4SD2L | N: Narrow Flood - 25°<br>F: Flood - 45°<br>W: Wide Flood - 60° | TWA - 1800K-4000K<br>TWB - 2700K-6500K | BK - BLACK<br>CB - COPPER<br>HZ - HAZE<br>WT - WHITE | WT - WHITE  |

R4RD2T-\_\_\_\_-\_\_\_\_ Example: R4RD2T-NTWA-WT

| HOUSINGS (Required)                            |                               |                      |       |     |        |                               |
|------------------------------------------------|-------------------------------|----------------------|-------|-----|--------|-------------------------------|
|                                                | Model                         | Trim                 | Power |     | Rating | Driver                        |
| New Construction<br>Airtight                   | R4RN (Round)<br>R4SN (Square) | T Trim<br>L Trimless | 15    | 20W | IC     | T-X DMX512-A<br>T-Z 2CH 0-10V |
|                                                |                               |                      | 25    | 29W | IC     |                               |
|                                                |                               |                      | 36    | 44W | Non-IC |                               |
|                                                |                               |                      |       |     |        |                               |
| New Construction<br>Airtight<br>Chicago Plenum | R4RC (Round)<br>R4SC(Square)  | T Trim<br>L Trimless | 15    | 20W | IC     | T-X DMX512-A<br>T-Z 2CH 0-10V |
|                                                |                               |                      | 25    | 29W | IC     |                               |
|                                                |                               |                      | 36    | 44W | Non-IC |                               |
|                                                |                               |                      |       |     |        |                               |
| Remodel<br>Round or Square                     | R4BR                          | T Trim               | 15    | 20W | Non-IC | T-X DMX512-A<br>T-Z 2CH 0-10V |
|                                                |                               |                      | 25    | 29W | Non-IC |                               |
|                                                |                               |                      | 36    | 44W | Non-IC |                               |
|                                                |                               |                      |       |     |        |                               |
| Remodel                                        | R4RR (Round)<br>R4SR (Square) | L Trimless           | 15    | 20W | Non-IC | T-X DMX512-A<br>T-Z 2CH 0-10V |
|                                                |                               |                      | 25    | 29W | Non-IC |                               |
|                                                |                               |                      | 36    | 44W | Non-IC |                               |
|                                                |                               |                      |       |     |        |                               |

| ACCESSORIES   |                  |             |                      |
|---------------|------------------|-------------|----------------------|
| LENS-73-HLD   | Accessory Holder | LENS-73-GRN | Green Lens           |
| LENS-73-HCM   | Honeycomb Louver | LENS-73-RED | Red Lens             |
| LENS-73-CRL   | Cross Louver     | LENS-73-FR  | Frosted Lens         |
| LENS-73-SNOOT | Snoot            | LENS-73-SPR | Spread Lens          |
| LENS-73-AMB   | Amber Lens       | LENS-73-BEL | Beam Elongating Lens |
| LENS-73-BLU   | Blue Lens        |             |                      |

| FIELD REPLACEABLE DRIVER (New Construction) |                          |
|---------------------------------------------|--------------------------|
| D-R4N-15T-X                                 | DMX512-A Driver for 20W  |
| D-R4N-25T-X                                 | DMX512-A Driver for 29W  |
| D-R4N-36T-X                                 | DMX512-A Driver for 44W  |
| D-R4N-15T-Z                                 | 2CH 0-10V Driver for 20W |
| D-R4N-25T-Z                                 | 2CH 0-10V Driver for 29W |
| D-R4N-36T-Z                                 | 2CH 0-10V Driver for 44W |

| INTERCHANGEABLE REFLECTORS |                   |
|----------------------------|-------------------|
| REF-R4-N                   | Narrow Flood Beam |
| REF-R4-F                   | Flood Beam        |
| REF-R4-W                   | Wide Beam         |

| ORDERING NOTES |                                                                                                             |
|----------------|-------------------------------------------------------------------------------------------------------------|
| 1.             | The “White” trim finish is only available with the reflector finishes “Black” and “Haze”.                   |
| 2.             | Trimless fixtures cannot be ordered with a trim finish.                                                     |
| 3.             | The “Narrow Flood - 25°”, “Flood - 45°”, “Wide Flood - 60°” beam angles are available in 20W, 29W, and 44W. |

Volta

Tunable White - 4.5" Downlight

R4RD2T | R4RD2L | R4SD2T | R4SD2L

Fixture Type: \_\_\_\_\_

Project: \_\_\_\_\_

Catalog#: \_\_\_\_\_

Location: \_\_\_\_\_

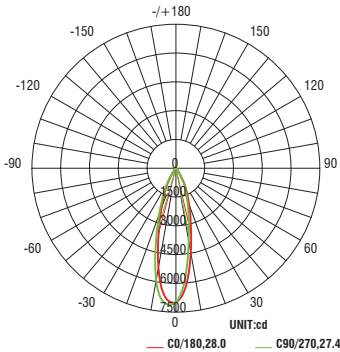
PERFORMANCE DATA

**Polar Candela Distribution Charts**

Samples shown with a 44W fixture set to 4000K and 98 CRI.

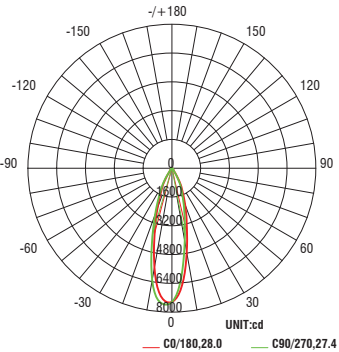
ROUND

Narrow Flood Beam: 25° Beam

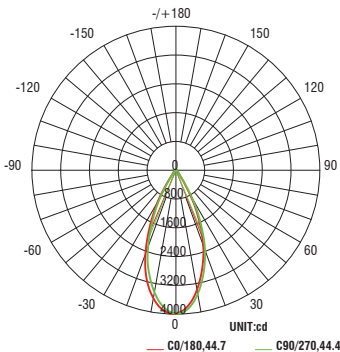


SQUARE

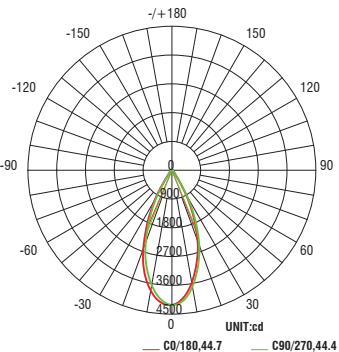
Narrow Flood Beam: 25° Beam



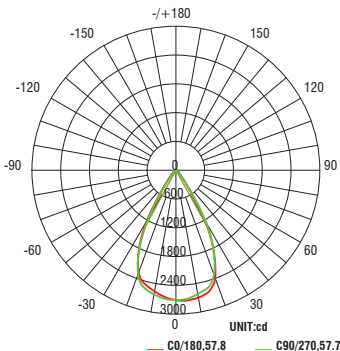
Flood Beam: 45° Beam



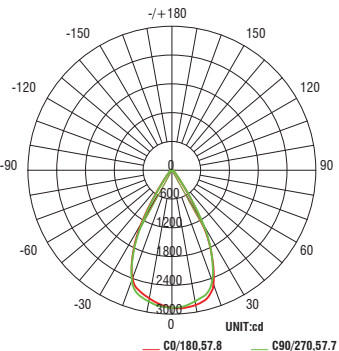
Flood Beam: 45° Beam



Wide Flood Beam: 60° Beam



Wide Flood Beam: 60° Beam



Volta  
Tunable White - 4.5" Downlight  
R4RD2T | R4RD2L | R4SD2T | R4SD2L

Fixture Type:

Project:

Catalog#:

Location:

PERFORMANCE DATA

Unified Glare Rating (UGR) Table  
UGR values shown are calculated at 3000K and 90 CRI.

| Round Fixture | Angle | UGR Range | Square Fixture | Angle | UGR Range |
|---------------|-------|-----------|----------------|-------|-----------|
| Narrow Flood  | 25°   | ≤ 12      | Narrow Flood   | 25°   | ≤ 12      |
| Flood         | 45°   | ≤ 12      | Flood          | 45°   | ≤ 12      |
| Wide Flood    | 60°   | ≤ 13      | Wide Flood     | 60°   | ≤ 13      |

Lumens and CBCP Multiplier Table  
Use the below table to determine lumens and CBCP values for the combinations of power, color temperature, and CRI values.

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

Volta

Tunable White - 4.5" Downlight

R4RD2T | R4RD2L | R4SD2T | R4SD2L

Fixture Type:

Project:

Catalog#:

Location:

PERFORMANCE DATA

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, the Volta Tunable White fixture may be tuned to 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<br>BYTE VALUES AT FULL INTENSITY       |                    |              | TWB DMX<br>BYTE VALUES AT FULL INTENSITY |                    |              |
| CCT (K)                                        | CH 1:<br>INTENSITY | CH 2:<br>CCT | CCT (K)                                  | CH 1:<br>INTENSITY | CH 2:<br>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            |