

Volta

Static White - 2" Shallow Regressed Downlight

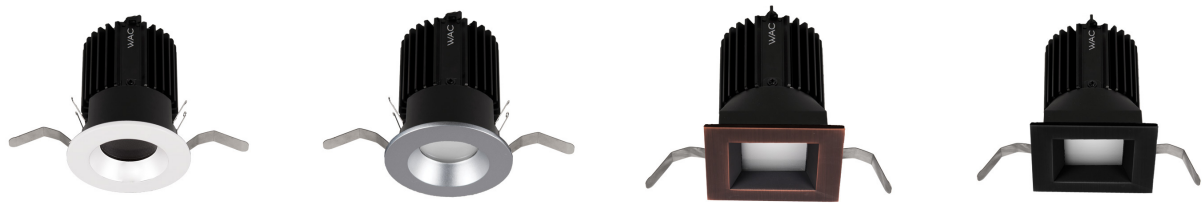
R2RD1T | R2SD1T

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

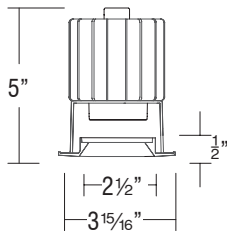
Project: \_\_\_\_\_

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

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



LINE DRAWING



PRODUCT DESCRIPTION

Volta LED downlight 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.

SPECIFICATIONS

|                              |                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction:                | Durable die-cast self flanged aluminum construction                                                                                                                                                                                                                                                                                                      |
| Mounting:                    | Heavy gauge retention clips support trim firmly<br>Ceiling cut out (Round): Trim $\varnothing$ $3\frac{9}{16}$ "<br>Trimless $\varnothing$ $4\frac{1}{4}$ "<br>Ceiling cut out (Square): Trim $3\frac{9}{16}$ " x $3\frac{9}{16}$ "<br>Trimless $4\frac{1}{4}$ " x $4\frac{1}{4}$ "<br>Accommodates $\frac{1}{2}$ " - $1\frac{1}{2}$ " ceiling thickness |
| 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:                     | 0-10V: 100-0%<br>Electronic Low Voltage (ELV): 100-5%                                                                                                                                                                                                                                                                                                    |
| Maximum Delivered Intensity: | Up to 6,575 cd (Round Narrow Flood 25°, 4000K, CRI 85)                                                                                                                                                                                                                                                                                                   |
| Maximum Delivered Output:    | Up to 1,584 lm (Square Flood 40°, 4000K, CRI 85)                                                                                                                                                                                                                                                                                                         |
| Standards:                   | ETL & cETL Wet location listed, Title 24 JA8 Compliant                                                                                                                                                                                                                                                                                                   |
| Warranty:                    | 5 year WAC Lighting guaranteed warranty                                                                                                                                                                                                                                                                                                                  |

BEAM ANGLES



FINISHES



| Model                         | Beam  | Lumens Ref Output* | CBCP | Color Temp  | CRI |
|-------------------------------|-------|--------------------|------|-------------|-----|
| R2RD1T Round<br>R2SD1T Square | S 12° | Round              | 395  | 827 - 2700K | 85  |
|                               |       | Square             | 420  |             |     |
|                               | N 25° | Round              | 1255 | 830 - 3000K | 85  |
|                               |       | Square             | 1460 |             |     |
|                               | F 40° | Round              | 1270 | 835 - 3500K | 85  |
|                               |       | Square             | 1480 |             |     |
|                               | W 60° | Round              | 905  | 840 - 4000K | 85  |
|                               |       | Square             | 1020 |             |     |
|                               |       |                    | 1075 | 927 - 2700K | 90  |
|                               |       |                    |      | 930 - 3000K | 90  |

Lumens and CBCP are reference values for 3000K Color Temperature and 85 CRI with 22 housing. Refer to Multiplier Table in Performance Data to determine other outputs.

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ORDERING INFORMATION

| CONFIGURATION TABLE            |                              |                         |                    |                   |
|--------------------------------|------------------------------|-------------------------|--------------------|-------------------|
| Model & Power                  | Beam                         | Color Temperature & CRI | Reflector Finish   | Trim Finish       |
| <b>R2RD1T</b><br><b>R2SD1T</b> | <b>S:</b> Spot - 12°         | <b>827</b> - 2700K - 85 | <b>BK</b> - BLACK  | <b>WT</b> - WHITE |
|                                | <b>N:</b> Narrow Flood - 25° | <b>830</b> - 3000K - 85 | <b>CB</b> - COPPER |                   |
|                                | <b>F:</b> Flood - 40°        | <b>835</b> - 3500K - 85 | <b>HZ</b> - HAZE   |                   |
|                                | <b>W:</b> Wide Flood - 60°   | <b>840</b> - 4000K - 85 | <b>WT</b> - WHITE  |                   |
|                                |                              | <b>927</b> - 2700K - 90 |                    |                   |
|                                |                              | <b>930</b> - 3000K - 90 |                    |                   |

R2RD1T-\_\_\_\_-\_\_      Example: R2RD1T-N840-WT

| HOUSINGS (Required)                            |                      |                          |           |            |            |               |                                  |                           |
|------------------------------------------------|----------------------|--------------------------|-----------|------------|------------|---------------|----------------------------------|---------------------------|
|                                                | Model                | Trim                     | Power     | S          | N,F,W      | Rating        | Driver                           | Emergency Backup          |
| New Construction<br>Airtight                   | <b>R2RN</b> (Round)  | <b>T</b> <i>Trim</i>     | <b>15</b> | <i>10W</i> | <i>15W</i> | <i>IC</i>     | <b>DEFAULT</b> <i>ELV, 0-10V</i> | <b>EM</b> <i>Optional</i> |
|                                                | <b>R2SN</b> (Square) | <b>L</b> <i>Trimless</i> | <b>22</b> | <i>15W</i> | <i>22W</i> | <i>IC</i>     |                                  |                           |
| New Construction<br>Airtight<br>Chicago Plenum | <b>R2RC</b> (Round)  | <b>T</b> <i>Trim</i>     | <b>15</b> | <i>10W</i> | <i>15W</i> | <i>IC</i>     | <b>DEFAULT</b> <i>ELV, 0-10V</i> | <b>EM</b> <i>Optional</i> |
|                                                | <b>R2SC</b> (Square) | <b>L</b> <i>Trimless</i> | <b>22</b> | <i>15W</i> | <i>22W</i> | <i>IC</i>     |                                  |                           |
| Remodel<br>Round or Square                     | <b>R2BR</b>          | <b>T</b> <i>Trim</i>     | <b>15</b> | <i>10W</i> | <i>15W</i> | <i>Non-IC</i> | <b>DEFAULT</b> <i>ELV, 0-10V</i> | <b>N/A</b>                |
|                                                |                      |                          | <b>22</b> | <i>15W</i> | <i>22W</i> | <i>Non-IC</i> |                                  |                           |
| Remodel                                        | <b>R2RR</b> (Round)  | <b>L</b> <i>Trimless</i> | <b>15</b> | <i>15W</i> | <i>15W</i> | <i>Non-IC</i> | <b>DEFAULT</b> <i>ELV, 0-10V</i> | <b>N/A</b>                |
|                                                | <b>R2SR</b> (Square) |                          | <b>22</b> | <i>22W</i> | <i>22W</i> | <i>Non-IC</i> |                                  |                           |

| ACCESSORIES |                         |            |                             |
|-------------|-------------------------|------------|-----------------------------|
| LENS-16-HLD | <i>Accessory Holder</i> | LENS-16RED | <i>Red Lens</i>             |
| LENS-16HCM  | <i>Honeycomb Louver</i> | LENS-16FR  | <i>Frosted Lens</i>         |
| LENS-16CRL  | <i>Cross Louver</i>     | LENS-16SPR | <i>Spread Lens</i>          |
| LENS-16AMB  | <i>Amber Lens</i>       | LENS-16BEL | <i>Beam Elongating Lens</i> |
| LENS-16BLU  | <i>Blue Lens</i>        |            |                             |
| LENS-16GRN  | <i>Green Lens</i>       |            |                             |

| CEILING ADAPTERS |                                             |
|------------------|---------------------------------------------|
| R2R-ADP1         | <i>Round - ½" to 1" ceiling thickness</i>   |
| R2R-ADP2         | <i>Round - 1" to 1½" ceiling thickness</i>  |
| R2S-ADP1         | <i>Square - ½" to 1" ceiling thickness</i>  |
| R2S-ADP2         | <i>Square - 1" to 1½" ceiling thickness</i> |

| INTERCHANGEABLE REFLECTORS |                          |
|----------------------------|--------------------------|
| REF-R2-N                   | <i>Narrow Flood Beam</i> |
| REF-R2-F                   | <i>Flood Beam</i>        |
| REF-R2-W                   | <i>Wide Beam</i>         |

| ORDERING NOTES |                                                                                                           |
|----------------|-----------------------------------------------------------------------------------------------------------|
| 1.             | The "White" trim finish is only available with the reflector finishes "Black" and "Haze".                 |
| 2.             | The "Spot - 12°" beam angle is available in 10W and 15W.                                                  |
| 3.             | The "Narrow Flood - 25°", "Flood - 40°", and "Wide Flood - 60°" beam angles are available in 15W and 22W. |

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FEATURES

|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Optics:</b> <ul style="list-style-type: none"><li>• 2" lens regress for superior glare control</li><li>• Field selectable light engine height for cut-off angle adjustment (30°-34°) and accessory use</li></ul>                                                                                                                                                                                                          | <b>Construction:</b> <ul style="list-style-type: none"><li>• Durable die-cast self flanged aluminum construction</li><li>• Heavy gauge retention clips support trim firmly</li></ul>                                                                        |
| <b>LED:</b> <ul style="list-style-type: none"><li>• High output COB LED with a 3-step Mac Adam ellipse</li><li>• Rated operational life of 50,000 hours at L70 (LED maintains 70% of its initial delivered lumens when brand new for 50,000 hours of use.)</li></ul>                                                                                                                                                         | <b>Trim and Reflector:</b> <ul style="list-style-type: none"><li>• Integral patterned tempered trim lens included standard with every fixture</li><li>• Dual finished fixtures are a single piece with no physical seams</li></ul>                          |
| <b>Electrical:</b> <ul style="list-style-type: none"><li>• Volta is compatible with 120-277 VAC, 50/60 Hz</li><li>• Housings are available in 10W and 15W if using a Spot Beam. If using a Narrow, Flood, or Wide beam, the housings are available in 15W and 22W.</li></ul>                                                                                                                                                 | <b>Installation:</b> <ul style="list-style-type: none"><li>• Requires housing for installation</li><li>• New Construction housings for Volta 2" Static White are IC rated.</li><li>• Remodel housings for Volta 2" Static White are non-IC rated.</li></ul> |
| <b>Dimming:</b> <ul style="list-style-type: none"><li>• Electronic Low Voltage (ELV) dimming is capable of a 100 - 5% range</li><li>• 0-10V dimming is capable of a 100 - 0% range</li></ul>                                                                                                                                                                                                                                 | <b>Warranty:</b> <ul style="list-style-type: none"><li>• WAC Architectural limited warranty up to 5 years</li><li>• Full warranty found at: <a href="http://waclighting.com/warranty">waclighting.com/warranty</a></li></ul>                                |
| <b>Notes:</b> <ul style="list-style-type: none"><li>• Trim and trimless fixtures of the same shape (Round/Square) have the same performance. Minor variations occur due to fixture shape.</li><li>• The White and Black finishes are powder coated while the Haze is enamel coated and the Copper Bronze is plated and brushed.</li><li>• The Volta product family is compatible with a wide range of accessories.</li></ul> |                                                                                                                                                                                                                                                             |

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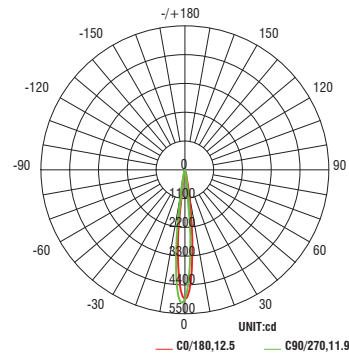
PERFORMANCE DATA

**Polar Candela Distribution Charts**

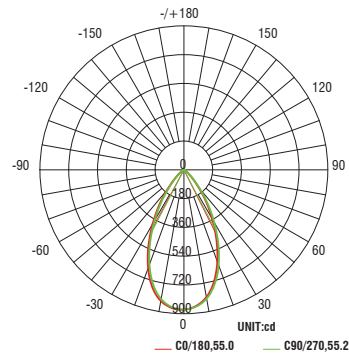
Samples shown with a 22W fixture set to 3000K and 90 CRI.

ROUND

Spot Beam: 12° Beam

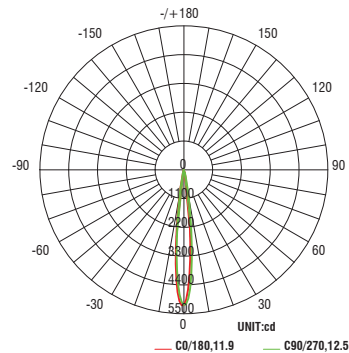


Wide Flood Beam: 60° Beam

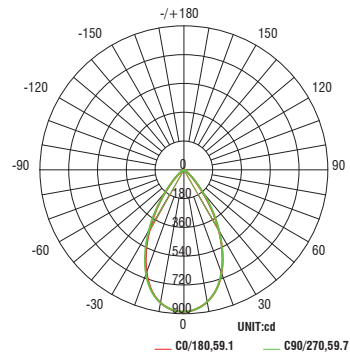


SQUARE

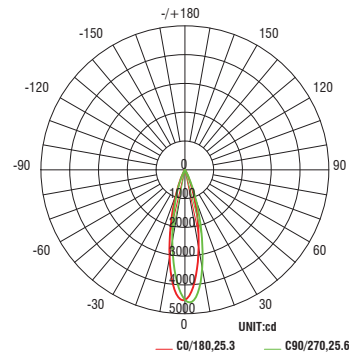
Spot Beam: 12° Beam



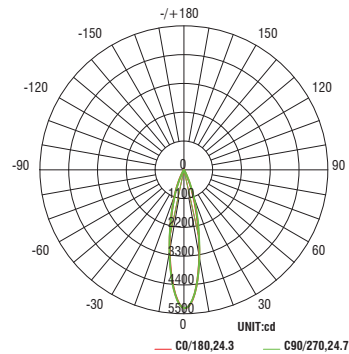
Wide Flood Beam: 60° Beam



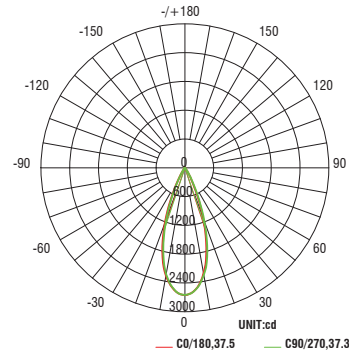
Narrow Flood Beam: 25° Beam



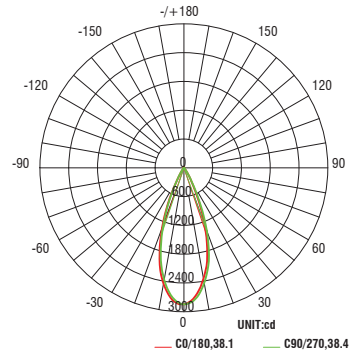
Narrow Flood Beam: 25° Beam



Flood Beam: 40° Beam



Flood Beam: 40° Beam



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Project:

Catalog#:

Location:

PERFORMANCE DATA

Unified Glare Rating (UGR) Table

UGR values shown are calculated at 3000K and 90 CRI. General performance of beam angles shown below.

| Round Fixture | Angle | UGR Range | Square Fixture | Angle | UGR Range |
|---------------|-------|-----------|----------------|-------|-----------|
| Spot          | 12°   | ≤5        | Spot           | 12°   | ≤5        |
| Narrow Flood  | 25°   | ≤3        | Narrow Flood   | 25°   | ≤3        |
| Flood         | 40°   | ≤6        | Flood          | 40°   | ≤6        |
| Wide Flood    | 60°   | ≤15       | Wide Flood     | 60°   | ≤16       |

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.

| Multiplier |    | TRIM |      |      |      |      |      |
|------------|----|------|------|------|------|------|------|
|            |    | 827  | 927  | 830  | 930  | 835  | 840  |
| HOUSING    | 22 | 0.95 | 0.81 | 1.00 | 0.86 | 1.05 | 1.07 |
|            | 15 | 0.66 | 0.56 | 0.69 | 0.59 | 0.72 | 0.74 |

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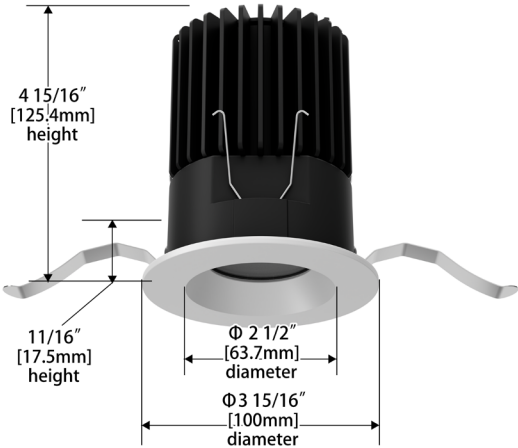
Project: \_\_\_\_\_

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

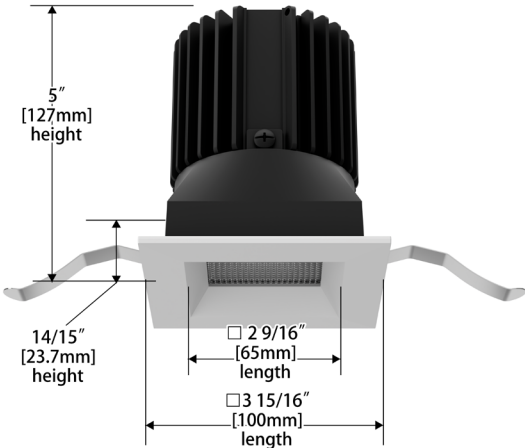
Location: \_\_\_\_\_

DIMENSIONAL DIAGRAMS

Round Trim (R2RD1T)



Square Trim (R2SD1T)



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R2RD1T | R2SD1T

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

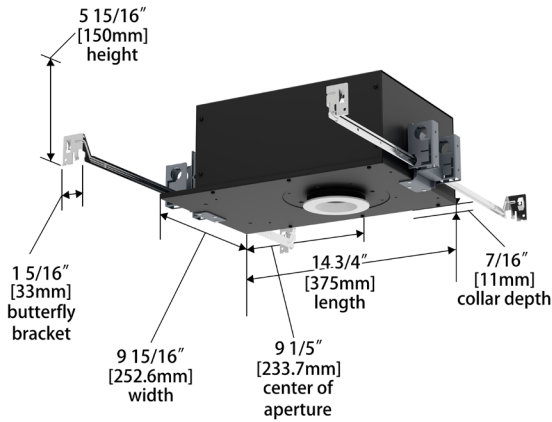
Project: \_\_\_\_\_

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

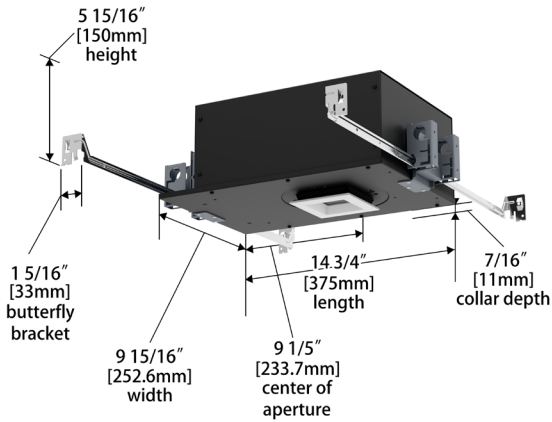
Location: \_\_\_\_\_

DIMENSIONAL DIAGRAMS

New Construction - Round Trim



New Construction - Square Trim



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

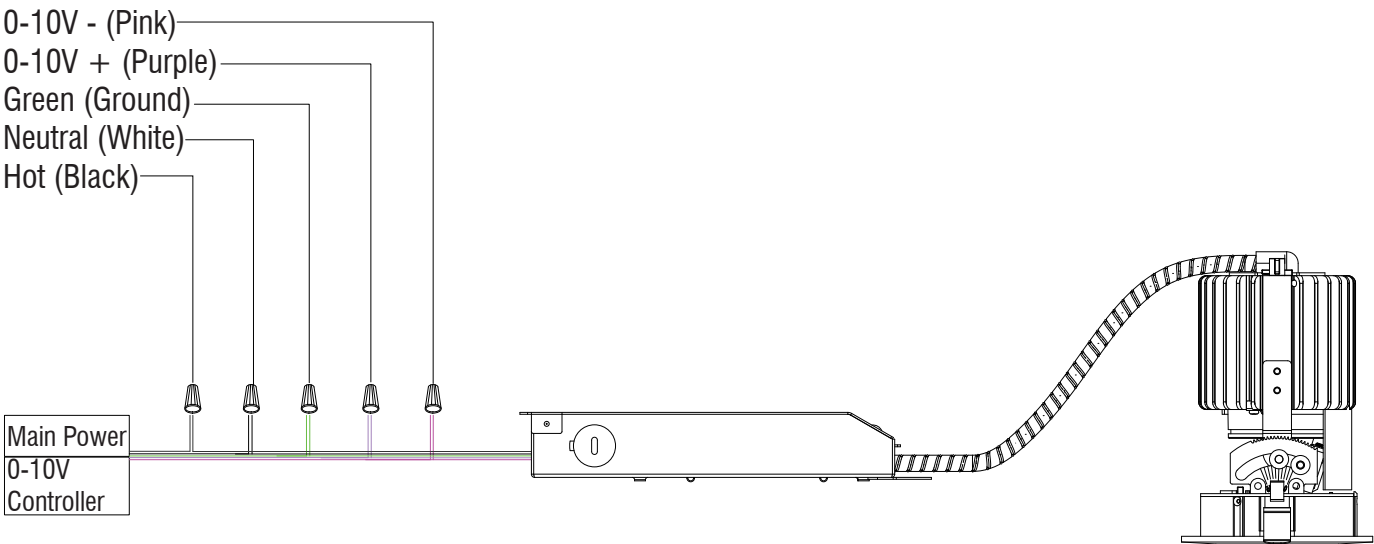
Project: \_\_\_\_\_

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

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

WIRING DIAGRAMS

Remodel Installation



New Construction Installation

