



# RBC Solactive Equal Weight US Semi Conductor Select AR Index Autocallable Barrier Accelerator Securities (USD), **Series 5** **Non-Principal Protected Security**

3.5 year  
term

Solactive Equal Weight  
US Semi Conductor  
Select AR Index

80% protection  
barrier level

Callable on maturity at  
100% of Initial Index  
Level starting on April  
24, 2026

| Fundserv | Subscriptions Close     | Issue Date  | Maturity Date    |
|----------|-------------------------|-------------|------------------|
| RBC12853 | on or about May 7, 2025 | May 8, 2025 | November 7, 2028 |

## KEY TERMS

**Issuer:** Royal Bank of Canada

**Issuer Credit Ratings:** Moody's: Aa1; S&P: AA-; DBRS: AA

**Currency:** USD

**Minimum Investment:** 50 Securities or US\$5,000.

**Term:** Approximately 3.5 years

**Principal at Risk:** The Securities are not principal protected.

**Underlying Index:** The return on the Securities is linked to the performance of the Solactive Equal Weight US Semi Conductor Select AR Index (the "**Underlying Index**"). The Underlying Index is an adjusted return index that aims to track the gross total return performance of the Solactive Equal Weight US Semi Conductor Select GTR Index (the "**Target Index**"), subject to a reduction of a synthetic dividend of 2.00% per annum (the "**Adjusted Return Factor**"). **For the avoidance of doubt, the return on the Securities is linked to the Underlying Index and is not linked to the Target Index.** The Closing Level on April 23, 2025 was 19,031.52. For the calculation of the level of the Target Index, any dividends or other distributions paid on the constituent securities of the Target Index are assumed to be reinvested across all of the constituent securities of the Target Index. As of April 23, 2025, the annual dividend yield on the Target Index was 1.341%, representing an aggregate dividend yield of approximately 4.773% compounded annually over the term of the Securities, on the assumption that the dividend yield remains constant.

**Issue Date:** May 8, 2025.

**Initial Index Level:** The Closing Level as published by the Index Sponsor on the Initial Valuation Date.

**Initial Valuation Date:** April 24, 2025.

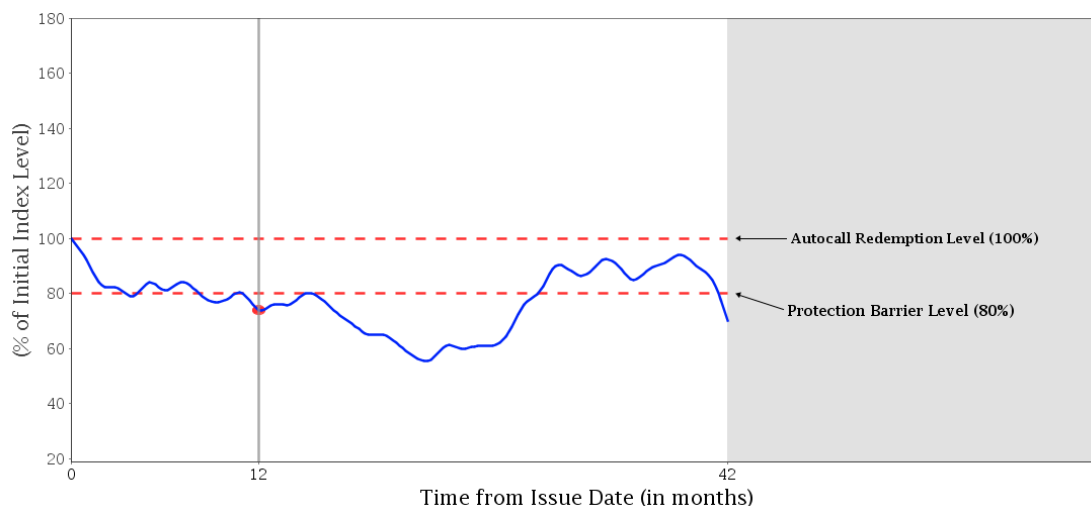
A final base shelf prospectus containing important information relating to the securities described in this document has been filed with the securities regulatory authorities in each of the provinces and territories of Canada. The final base shelf prospectus, any applicable shelf prospectus supplement, the Pricing Supplement and any amendment to such documents are accessible through SEDAR+ at [www.sedarplus.com](http://www.sedarplus.com). Copies of the documents may also be obtained from [www.rbcnotes.com](http://www.rbcnotes.com). This document does not provide full disclosure of all material facts relating to the securities offered. Investors should read the final base shelf prospectus, any applicable shelf prospectus supplement, the Pricing Supplement and any amendment to such documents for disclosure of those facts, especially risk factors relating to the securities offered, before making an investment decision.

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                     |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>Protection Barrier Level:</b>      | 80.00% of the Initial Index Level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                     |
| <b>Final Index Level:</b>             | The Closing Level as published by the Index Sponsor on the Final Valuation Date.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                     |
| <b>Final Valuation Date:</b>          | October 24, 2028.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                     |
| <b>Closing Level:</b>                 | The official closing level of the Underlying Index as announced by the Index Sponsor for the relevant date, as determined by the Calculation Agent.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                     |
| <b>Maturity Date:</b>                 | November 7, 2028.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                     |
| <b>Autocall Observation Date:</b>     | April 24, 2026.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                     |
| <b>Autocall Redemption Date:</b>      | April 29, 2026.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                     |
| <b>Autocall Redemption Event:</b>     | <p>If the Closing Level on the Autocall Observation Date is greater than or equal to 100.00% of the Initial Index Level (the “<b>Autocall Redemption Level</b>”), an Autocall Redemption Event will occur.</p> <p>Following the occurrence of an Autocall Redemption Event, the Securities will be redeemed for an amount equal to the Principal Amount thereof (the “<b>Autocall Redemption Amount</b>”) on the Autocall Redemption Date. In addition to the Autocall Redemption Amount, an Interest Payment will be paid on the Autocall Redemption Date.</p>                                                                                                                                                                                                                                                                                                                                                                                   |                                                     |
| <b>Interest Payment:</b>              | <p>If an Autocall Redemption Event occurs, in addition to the Autocall Redemption Amount, an interest payment (the “<b>Interest Payment</b>”) on the Securities will be payable on the Autocall Redemption Date. The Interest Payment payable per Security will be equal to the sum of (i) US\$22.00 and (ii) if the Index Return exceeds US\$22.00, <math>5.00\% \times (\text{Index Return} - \text{US\\$22.00})</math>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                     |
| <b>Participation Rate:</b>            | 120.00%, applied only if the Index Return is positive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                     |
| <b>Payment at Maturity:</b>           | <p>If the Autocall Redemption Event has not previously occurred, the amount payable on the Maturity Date (the “<b>Final Redemption Amount</b>”) for each Security will be determined as follows:</p> <p>(a) if the Final Index Level is greater than the Initial Index Level, <math>\text{US\\$100.00} + (\text{Participation Rate} \times \text{Index Return})</math>; or</p> <p>(b) if the Final Index Level is greater than or equal to the Protection Barrier Level but less than the Initial Index Level, US\$100.00; or</p> <p>(c) if the Final Index Level is less than the Protection Barrier Level, an amount equal to the Index Return, but in any event not less than US\$1.00.</p> <p>As a result, the Final Redemption Amount will not be determinable before the Final Valuation Date.</p> <p>For greater certainty, there will be no duplication in calculating an Autocall Redemption Amount and the Final Redemption Amount.</p> |                                                     |
| <b>Index Return:</b>                  | <p>(i) For the purpose of calculating the Final Redemption Amount, <math>\text{US\\$100.00} \times (X_f / X_i)</math>, and (ii) for all other purposes, <math>((X_f / X_i) - 1) \times \text{US\\$100.00}</math>,<br/> where:<br/> “<math>X_f</math>” means the Final Index Level, and<br/> “<math>X_i</math>” means the Initial Index Level.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                     |
| <b>Secondary Market:</b>              | <p>Fundserv, RBC12853</p> <p>Generally, to be effective on a Business Day, a redemption request will need to be initiated by 2:00 p.m. (Toronto time) on that Business Day (or such other time as may be established by Fundserv). Any request received after such time will be deemed to be a request sent and received on the next following Business Day.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                     |
| <b>Early Trading Charge Schedule:</b> | <b>If Sold Within the Following No. of Days from Issue Date</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Early Trading Charge (% of Principal Amount)</b> |
|                                       | 1 - 30 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.00%                                               |
|                                       | 31 - 60 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.25%                                               |
|                                       | 61 - 90 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1.50%                                               |
|                                       | 91 - 120 days                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.75%                                               |
|                                       | Thereafter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Nil                                                 |

## SAMPLE CALCULATIONS

The following examples show how the return on the Securities would be calculated under different scenarios. These examples are included for illustration purposes only. The performance of the Underlying Index used in the examples is not an estimate or forecast of the performance of the Underlying Index or the Securities. The actual performance of the Underlying Index and the Securities will be different from these examples and the differences may be material. All examples below assume that a holder of the Securities has purchased Securities with an aggregate Principal Amount of US\$100.00 and that no Extraordinary Event has occurred. For convenience, each vertical line in the charts below represents both a hypothetical Autocall Observation Date and the Autocall Redemption Date. Where applicable, dollar amounts shown below are rounded to the nearest whole cent for ease of reading, but the amount(s) payable to an investor per Security may reflect more decimal places.

### Example #1 — Loss Scenario with Payment on the Maturity Date at Less Than the Principal Amount



- Indicates the Autocall Observation Date.
- Solactive Equal Weight US Semi Conductor Select AR Index

In this scenario, the Closing Level is below the Autocall Redemption Level on the Autocall Observation Date, so the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Index Level is below the Protection Barrier Level.

#### (i) Interest Payment

No Autocall Redemption Event occurs because the Closing Level on the Autocall Observation Date is below the Autocall Redemption Level. Therefore, no Autocall Redemption Amount or Interest Payment would be payable on the Autocall Redemption Date.

#### (ii) Final Redemption Amount

In this example, the Initial Index Level ( $X_i$ ) is 19,031.52 and the Final Index Level ( $X_f$ ) is 11,418.91. Therefore, the Final Redemption Amount is as follows:

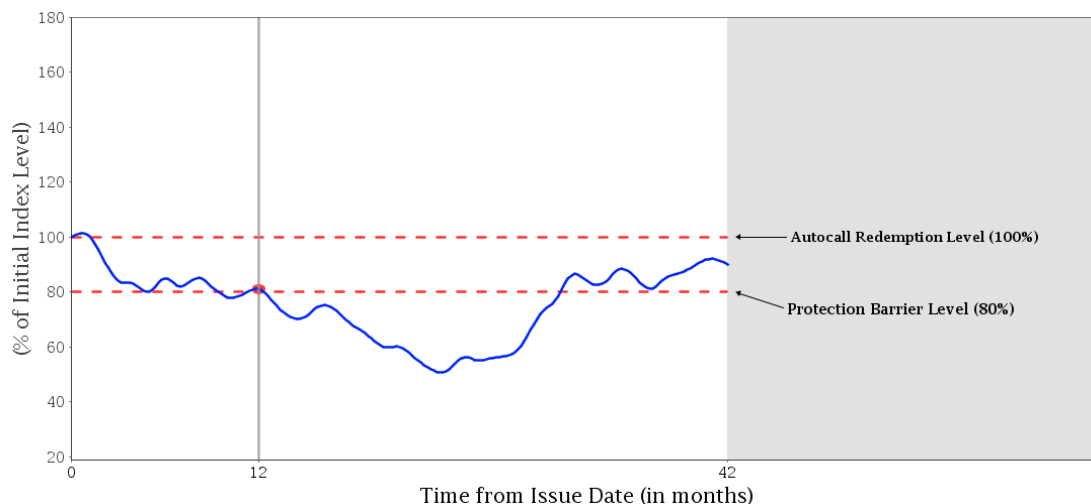
$$\begin{aligned} & \text{US\$100.00} \times (X_f / X_i) \\ & \text{US\$100.00} \times (11,418.91 / 19,031.52) = \text{US\$60.00} \end{aligned}$$

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

- (a) Interest Payment: US\$0.00
- (b) Final Redemption Amount: US\$60.00
- (c) Total amount paid over the term of the Securities: US\$60.00

The equivalent annually compounded rate of return in this example is -13.58%.

### Example #2 — Scenario with Payment on the Maturity Date at the Principal Amount



- Indicates the Autocall Observation Date.
- Solactive Equal Weight US Semi Conductor Select AR Index

In this scenario, the Closing Level is below the Autocall Redemption Level on the Autocall Observation Date, so the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Index Level is at or above the Protection Barrier Level but is below the Autocall Redemption Level.

#### (i) Interest Payment

No Autocall Redemption Event occurs because the Closing Level on the Autocall Observation Date is below the Autocall Redemption Level. Therefore, no Autocall Redemption Amount or Interest Payment would be payable on the Autocall Redemption Date.

#### (ii) Final Redemption Amount

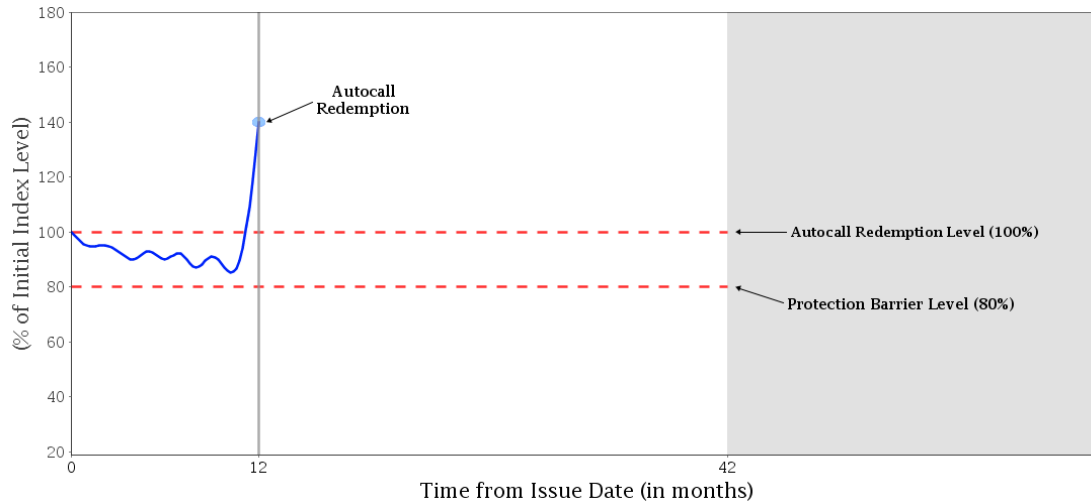
In this example, the Final Index Level is greater than or equal to the Protection Barrier Level. Therefore, the Final Redemption Amount is US\$100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

- (a) Interest Payment: US\$0.00
- (b) Final Redemption Amount: US\$100.00
- (c) Total amount paid over the term of the Securities: US\$100.00

The equivalent annually compounded rate of return in this example is 0.00%.

### Example #3 — Gain Scenario with Autocall Redemption Event



- Indicates the Autocall Observation Date.
- Solactive Equal Weight US Semi Conductor Select AR Index

In this scenario, the Closing Level is at or above the Autocall Redemption Level on the Autocall Observation Date. This would constitute an Autocall Redemption Event and the Bank would redeem the Securities on the Autocall Redemption Date. The Interest Payment would be payable on the Autocall Redemption Date.

#### (i) Interest Payment

In this example, the Initial Index Level ( $X_i$ ) is 19,031.52 and the Closing Level on the Autocall Observation Date ( $X_f$ ) is 26,644.13; therefore, there is an Autocall Redemption Event on the Autocall Observation Date. Therefore, the Interest Payment payable on the Autocall Redemption Date would be calculated as follows:

The Index Return is calculated as follows:

$$\begin{aligned} & ((X_f / X_i) - 1) \times \text{US\$}100.00 \\ & ((26,644.13 / 19,031.52) - 1) \times \text{US\$}100.00 = \text{US\$}40.00 \end{aligned}$$

Since the Index Return is greater than US\$22.00, the Interest Payment is:

$$\begin{aligned} & \text{US\$}22.00 + [5.00\% \times (\text{Index Return} - \text{US\$}22.00)] \\ & \text{US\$}22.00 + [5.00\% \times (\text{US\$}40.00 - \text{US\$}22.00)] = \text{US\$}22.90 \end{aligned}$$

#### (ii) Autocall Redemption Amount

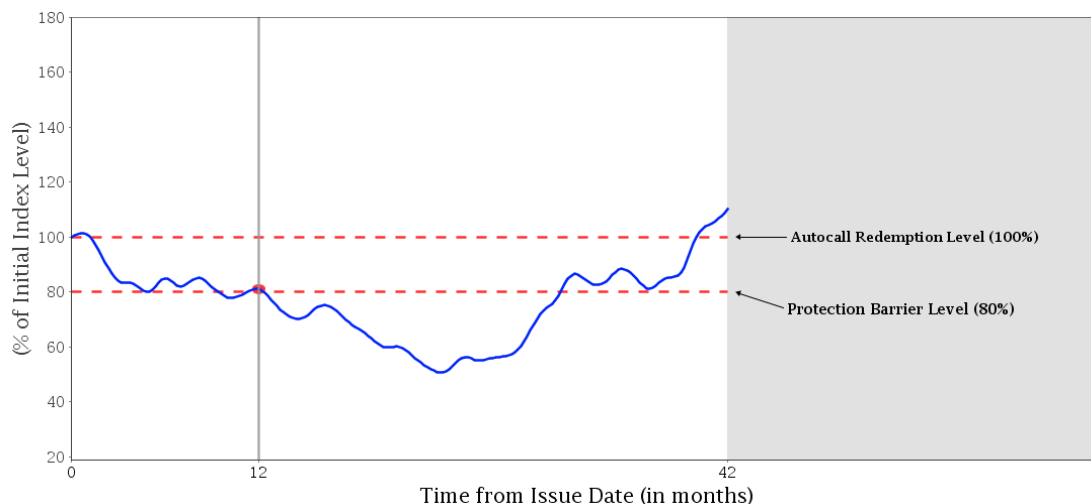
The Autocall Redemption Amount per Security is equal to US\$100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Autocall Redemption Date are:

- (a) Interest Payment: US\$22.90
- (b) Autocall Redemption Amount: US\$100.00
- (c) Total amount paid over the term of the Securities: US\$122.90

The equivalent annually compounded rate of return in this example is 22.90%.

#### Example #4 — Gain Scenario with Payment on the Maturity Date at More Than the Principal Amount



- Indicates the Autocall Observation Date.
- Solactive Equal Weight US Semi Conductor Select AR Index

In this scenario, the Closing Level is below the Autocall Redemption Level on the Autocall Observation Date, so the Securities would not be redeemed prior to maturity and no Autocall Redemption Amount or Interest Payment would be payable.

In this example, the Initial Index Level ( $X_i$ ) is 19,031.52 and the Closing Level on the Autocall Observation Date ( $X_f$ ) is 20,934.67; therefore, the Final Redemption Amount would be calculated as follows:

The Index Return is calculated as follows:

$$\begin{aligned} & ((X_f / X_i) - 1) \times \text{US\$}100.00 \\ & ((20,934.67 / 19,031.52) - 1) \times \text{US\$}100.00 = \text{US\$}10.00 \end{aligned}$$

Since the Index Return is positive, the Final Redemption Amount is:

$$\begin{aligned} & \text{US\$}100.00 + (\text{Participation Rate} \times \text{Index Return}) \\ & \text{US\$}100.00 + (120.00\% \times \text{US\$}10.00) = \text{US\$}112.00 \end{aligned}$$

The equivalent annually compounded rate of return in this example is 3.29%.

The Underlying Index is calculated and published by Solactive AG ("**Solactive**"), and the name "**Solactive**" is a registered trademark of Solactive. The Underlying Index has been licensed for use by the Bank in connection with the Securities. The Securities are not sponsored, promoted, sold or supported in any other manner by Solactive and Solactive makes no representation or warranty, express or implied, regarding the advisability of investing in securities generally or the Securities in particular. Solactive does not guarantee the accuracy or completeness of the Underlying Index or the Target Index, any data included therein, or any data from which it is derived, nor has any liability for any errors, omissions, or interruptions therein.

All capitalized terms unless otherwise defined have the meanings ascribed to them in the Pricing Supplement.

Clients should evaluate the financial, market, legal, regulatory, credit, tax and accounting risks and consequences of the proposal before entering into any transaction, or purchasing any instrument. Clients should evaluate such risks and consequences independently of Royal Bank of Canada and the Dealers, RBC Dominion Securities Inc. ("**RBC DS**") and Wellington-Altus Private Wealth Inc., respectively. RBC DS is a wholly-owned subsidiary of the Bank. Consequently, the Bank is a related and connected issuer of RBC DS within the meaning of applicable securities legislation.

The Securities will not constitute deposits insured under the *Canada Deposit Insurance Corporation Act* or any other deposit insurance regime. The Securities are not fixed income securities and are not designed to be alternatives to fixed income or money market instruments.

An investment in the Securities involves risks. None of Royal Bank of Canada, the Dealers or any of their respective affiliates, associates, or any other person or entity guarantees that holders of Securities will receive an amount equal to their original investment in the Securities or guarantees that any return will be paid on the Securities (subject to the minimum amount payable at maturity of US\$1.00 per Security) at or prior to maturity of the Securities. See "Risk Factors" in the base shelf prospectus and "Risk Factors" in the Pricing Supplement. Since the Securities are not principal protected and the Principal Amount will be at risk, you could lose substantially all of your investment.

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