



# TEST REPORT

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**Report Number:** 3956-25002 **Project No.:** 45444

**Report Issued:** March 27, 2025

**Report To:** Foshan Tianhaixin Supply Chain Management Co.,Ltd.  
c/o ASSE International  
41 Watton Street  
Werribee, Australia 3030

**Source of Samples:** The units were shipped to IAPMO R&T Lab from Foshan Tianhaixin and were received in good condition on February 13<sup>th</sup>, 2025.

**Location of Testing:** IAPMO R&T Lab, 5001 East Philadelphia Street, Ontario CA 91761

**Dates of Evaluation:** March 11<sup>th</sup> to March 19<sup>th</sup> 2025

**Product Description:** Water Filter (H2O) – Plumbed-in

**Primary Standard:** NSF/ANSI 42-2022 – 7.3.3

**Scope of Evaluation:** Samples were evaluated for Free Available Chlorine Reduction to NSF/ANSI 42 - 2022– 7.3.3

**Conclusion:** The samples described in the “Product Description” were evaluated according to the reference standard and were found **IN COMPLIANCE**.

**Report Status:** **IN COMPLIANCE.**

Tested By,

Reviewed By,

Craig Schaeffer – Product Analyst

Jaime Young – Director, Water Filtration

*This report replaces 3956-25001. Changes made correct a typographical error on page 1.*

*All testing and sample preparation for this report was performed under the continuous, direct supervision of IAPMO R&T Lab, unless otherwise stated. The statement of compliance is based on the test results compared to the standard specifications without considering measurement uncertainty. The observations, test results and conclusions in this report apply only to the specific samples tested and are not indicative of the quality or performance of similar or identical products. Only the Client shown above is authorized to copy or distribute the report, and then only in its entirety. If presented with a copy of a Test Report without the IAPMO R&T Lab watermark background, contact IAPMO R&T Lab for verification. Any use of the IAPMO R&T Lab name for the sale or advertisement of the tested material, product or service is*

**Requirements for Compliance:**

Systems must reduce an average FAC challenge of 1.8-2.2 mg/L by a minimum of 50% at 90% of the sample points. The capacity determining sample must reduce the influent challenge by 50%.

**Table 1-** Specifications of testing

|                        |                                             |
|------------------------|---------------------------------------------|
| <b>Number of Units</b> | TWO                                         |
| <b>Cycle</b>           | 50/50                                       |
| <b>Rated Capacity</b>  | 3000 L (793 Gallons)                        |
| <b>Conditioning</b>    | Flush for 5min at 2 LPM (0.53 gpm)          |
| <b>Prefilter</b>       | NA                                          |
| <b>Flowrate</b>        | The flowrate was set to 2 LPM (0.53 gpm)    |
| <b>Sampling</b>        | Per Table 3 Below                           |
| <b>Testing Notes</b>   | Per customers request bypassed RO membrane. |

Influent water was prepared per the specifications in NSF/ANSI 42 Section 7.3.3.6.1 Those specifications are shown below.

**Table 2-** Water Specification

|                               |              |
|-------------------------------|--------------|
| Source Water                  | RO / DI      |
| pH                            | 7.5 ± 0.5    |
| Temperature                   | 20 ± 3 ° C   |
| Free Available Chlorine (FAC) | 1.8-2.2 mg/L |
| Total dissolved solids        | 200-500 mg/L |
| Total organic carbon TOC      | ≥ 1.0 mg/L   |
| Turbidity                     | < 1 NTU      |

Samples were set up according to manufacturer's instructions.

**Findings:****Table 3 –** FAC Concentrations

| Sample Point (gallons) | Influent (mg/L) | E1 (mg/L) | E2 (mg/L) | Flowrate E1 (gpm) | Flowrate E2 (gpm) | % Reduction E1 | % Reduction E2 |
|------------------------|-----------------|-----------|-----------|-------------------|-------------------|----------------|----------------|
| 10 UV                  | 1.95            | <RL       | <RL       | 0.53              | 0.53              | 97.44%         | 97.44%         |
| 79.3                   | 1.97            | <RL       | <RL       | 0.53              | 0.53              | 97.46%         | 97.46%         |
| 158.6                  | 1.97            | <RL       | <RL       | 0.53              | 0.53              | 97.46%         | 97.46%         |
| 237.9                  | 2.01            | <RL       | <RL       | 0.53              | 0.53              | 97.51%         | 97.51%         |
| 317.2                  | 2.04            | <RL       | <RL       | 0.53              | 0.53              | 97.55%         | 97.55%         |
| 396.5                  | 1.96            | <RL       | <RL       | 0.53              | 0.53              | 97.45%         | 97.45%         |
| 475.8                  | 2.00            | <RL       | <RL       | 0.53              | 0.53              | 97.50%         | 97.50%         |
| 555.1                  | 2.00            | <RL       | <RL       | 0.53              | 0.53              | 97.50%         | 97.50%         |
| 634.4                  | 2.01            | <RL       | <RL       | 0.53              | 0.53              | 97.51%         | 97.51%         |
| 713.7                  | 1.91            | <RL       | <RL       | 0.53              | 0.53              | 97.38%         | 97.38%         |
| 793                    | 1.91            | <RL       | <RL       | 0.53              | 0.53              | 97.38%         | 97.38%         |
| AVERAGE                | 1.98            | <RL       | <RL       |                   |                   | 97.47%         | 97.47%         |

RL (REPORTING LIMIT=0.05 mg/L for Chlorine) Any bolded effluents are higher than the max allowable effluent outlined by the standard

**Figure 1-** Picture of Units Tested

