



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EUROFINS PRODUCT SERVICE (THAILAND) CO., LTD.

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ELECTRICAL

Valid To: December 31, 2027

Certificate Number: 2402.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory at the location listed above, *as well as two satellite locations listed below*, to perform the following electromagnetic compatibility, energy efficiency, acoustics, and product safety tests:

| <u>Test Technology:</u>                                 | <u>Test Method(s)<sup>1,2</sup>:</u>                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EMC</b>                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Unintentional Emissions Radiated &amp; Conducted</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>U.S. (FCC)</b>                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Unintentional Emissions                                 | 47 CFR, FCC Part 15, Subpart B (using ANSI C63.4-2014); ANSI C63.4-2014                                                                                                                                                                                                                                                                                                                                                               |
| Consumer ISM                                            | 47 CFR, FCC Part 18 (using MP-5:1986); MP-5:1986                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>International</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Unintentional Emissions                                 | CISPR 11; EN 55011; EN IEC 55011; AS CISPR 11; J55011 (H27);<br>CISPR 13; EN 55013; J55013 (H22);<br>CISPR 14-1:2016; CISPR 14-1; AS/NZS CISPR 14.1; AS CISPR 14.1; EN 55014-1; EN IEC 55014-1; TCVN 7492-1; J55014-1(H27);<br>GSO CISPR 14-1;<br>CISPR 15; AS/NZS CISPR 15; AS CISPR 15; EN 55015; EN IEC 55015; J55015 (H20);<br>CISPR 22; AS/NZS CISPR 22; EN 55022; J55022 (H22); CISPR 32; EN 55032; AS/NZS CISPR 32, EN 50561-1 |
| <b>Emissions</b>                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Current Harmonics                                       | IEC 61000-3-2; EN 61000-3-2; EN IEC 61000-3-2; AS/NZS 61000.3.2; GSO IEC 61000-3-2; EN 61000-3-12; IEC 61000-3-12                                                                                                                                                                                                                                                                                                                     |
| Voltage Fluctuations & Flicker                          | IEC 61000-3-3; EN 61000-3-3; AS/NZS 61000.3.3; GSO IEC 61000-3-3; EN 61000-3-11; EN IEC 61000-3-11; IEC 61000-3-11                                                                                                                                                                                                                                                                                                                    |

| <b><u>Test Technology:</u></b>                                               | <b><u>Test Method(s)<sup>1,2:</sup></u></b>                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Immunity</b>                                                              |                                                                                                                                                                                                                                                                    |
| Product Specific Immunity                                                    | CISPR 14-2:2015; CISPR 14-2; EN IEC 55014-2; EN 55014-2; AS/NZS CISPR 14.2; TCVN 7492-2; CISPR 24; EN 55024; IEC 61547; EN 61547; EN IEC 61547; CISPR 35; EN 55035                                                                                                 |
| Electrostatic Discharge (ESD)                                                | EN 61000-4-2; IEC 61000-4-2; EN IEC 61000-4-2; GSO IEC 61000-4-2; IEC 61000-4-2:2008; ISO 10605:2008; ISO 10605:2023                                                                                                                                               |
| Radiated Immunity                                                            | EN 61000-4-3; IEC 61000-4-3; EN IEC 61000-4-3; GSO IEC 61000-4-3; IEC 61000-4-3:2006; IEC 61000-4-20; EN 61000-4-20; EN IEC 61000-4-20; IEC 61000-4-20:2010                                                                                                        |
| Electrical Fast Transient / Burst                                            | EN 61000-4-4; IEC 61000-4-4; GSO IEC 61000-4-4; IEC 61000-4-4:2012                                                                                                                                                                                                 |
| Surge Immunity                                                               | EN 61000-4-5; IEC 61000-4-5; GSO IEC 61000-4-5; IEC 61000-4-5:2014                                                                                                                                                                                                 |
| Conducted Immunity                                                           | EN 61000-4-6; IEC 61000-4-6; EN IEC 61000-4-6; GSO IEC 61000-4-6; IEC 61000-4-6:2013                                                                                                                                                                               |
| Power Frequency Magnetic Field Immunity                                      | EN 61000-4-8; IEC 61000-4-8; GSO IEC 61000-4-8; IEC 61000-4-8:2009                                                                                                                                                                                                 |
| Voltage Dips, Interruptions, and Line Voltage Variations                     | EN 61000-4-11; IEC 61000-4-11; EN IEC 61000-4-11; GSO IEC 61000-4-11; IEC 61000-4-11:2004; EN 61000-4-34; IEC 61000-4-34; IEC 61000-4-34:2005                                                                                                                      |
| Harmonics and Interharmonics                                                 | EN 61000-4-13; IEC 61000-4-13; IEC 61000-4-13:2002                                                                                                                                                                                                                 |
| <b>Generic/Product Family Standards and Industry Standards</b>               |                                                                                                                                                                                                                                                                    |
| Generic Standards                                                            | IEC 61000-6-1; EN 61000-6-1; EN IEC 61000-6-1; AS/NZS 61000.6.1; IEC 61000-6-2; EN 61000-6-2; EN IEC 61000-6-2; AS/NZS 61000.6.2; IEC 61000-6-3; EN 61000-6-3; EN IEC 61000-6-3; AS/NZS 61000.6.3; IEC 61000-6-4; EN 61000-6-4; EN IEC 61000-6-4; AS/NZS 61000.6.4 |
| Emission and Immunity Testing in Transverse Electromagnetic (TEM) Waveguides | EN 61000-4-20; IEC 61000-4-20; EN IEC 61000-4-20; IEC 61000-4-20:2010                                                                                                                                                                                              |
| Electrical equipment for measurement, control, and laboratory use            | IEC 61326-1; EN 61326-1; EN IEC 61326-1; IEC 61326-2-2; EN 61326-2-2; EN IEC 61326-2-2                                                                                                                                                                             |
| EMC – Medical Equipment <sup>1</sup>                                         | IEC 60601-1-2; EN 60601-1-2                                                                                                                                                                                                                                        |
| Electromagnetic Fields<br>(1 Hz to 10 MHz)                                   | IEC 62233; EN 62233; EN 50366; IEC 62493; EN 62493; IEC 62311; EN 62311; EN IEC 62311                                                                                                                                                                              |

| <b>Test Technology:</b>                                           | <b>Test Method(s)<sup>1,2</sup>:</b>                                                                                                          |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Electrical Product Safety</b>                                  |                                                                                                                                               |
| <b>HOUS (Household and similar electrical appliances)</b>         |                                                                                                                                               |
| General Requirements                                              | IEC 60335-1; EN 60335-1; EN IEC 60335-1; UL 60335-1; IEC 60335-1 Ed. 5.2; IEC 60335-1:2001; PNS IEC 60335-1:2011; ISO 10472-1; AS/NZS 60335.1 |
| Vacuum cleaners and water-suction cleaning appliance              | IEC 60335-2-2; EN 60335-2-2; EN IEC 60335-2-2                                                                                                 |
| Electric irons                                                    | IEC 60335-2-3; EN 60335-2-3                                                                                                                   |
| Spin extractors                                                   | IEC 60335-2-4; EN 60335-2-4; EN IEC 60335-2-4; UL 2157; IEC 60335-2-4:2003; PNS IEC 60335-2-4:2018; AS/NZS 60335.2.4                          |
| Dishwashers                                                       | IEC 60335-2-5; EN 60335-2-5                                                                                                                   |
| Stationary cooking ranges, hobs, ovens, and similar appliances    | IEC 60335-2-6; EN 60335-2-6                                                                                                                   |
| Washing machines                                                  | IEC 60335-2-7; EN 60335-2-7; EN IEC 60335-2-7; UL 2157; IEC 60335-2-7:2002; PNS IEC 60335-2-7:2021; ISO 10472-2; AS/NZS 60335.2.7             |
| Shavers, hair clippers, and similar appliances                    | IEC 60335-2-8; EN 60335-2-8                                                                                                                   |
| Grills, toasters, and similar portable cooking appliances         | IEC 60335-2-9; EN 60335-2-9; EN IEC 60335-2-9                                                                                                 |
| Tumble dryers                                                     | IEC 60335-2-11; EN 60335-2-11; EN IEC 60335-2-11; ISO 10472-4; AS/NZS 60335.2.11                                                              |
| Warming plates and similar appliances                             | IEC 60335-2-12; EN 60335-2-12                                                                                                                 |
| Deep fat fryers, frying pans, and similar appliances              | IEC 60335-2-13; EN 60335-2-13                                                                                                                 |
| Kitchen machines                                                  | IEC 60335-2-14; EN 60335-2-14; EN IEC 60335-2-14                                                                                              |
| Appliances for heating liquids                                    | IEC 60335-2-15; EN 60335-2-15                                                                                                                 |
| Blankets, pads, clothing, and similar flexible heating appliances | IEC 60335-2-17; EN 60335-2-17                                                                                                                 |
| Storage water heaters                                             | IEC 60335-2-21; EN 60335-2-21                                                                                                                 |
| Appliances for skin or hair care                                  | IEC 60335-2-23; EN 60335-2-23; EN IEC 60335-2-23;                                                                                             |
| Refrigerating appliances, ice-cream appliances, and icemakers     | IEC 60335-2-24; EN 60335-2-24; EN IEC 60335-2-24; UL 60335-2-24; IEC 60335-2-24:2002; PNS IEC 60335-2-24:2018; AS/NZS 60335.2.24              |
| Clocks                                                            | IEC 60335-2-26; EN 60335-2-26                                                                                                                 |
| Battery chargers                                                  | IEC 60335-2-29; EN 60335-2-29                                                                                                                 |
| Room heaters                                                      | IEC 60335-2-30; EN 60335-2-30                                                                                                                 |
| Range hoods                                                       | IEC 60335-2-31; EN 60335-2-31                                                                                                                 |
| Massage appliances                                                | IEC 60335-2-32; EN 60335-2-32; EN IEC 60335-2-32                                                                                              |
| Motor-compressors                                                 | IEC 60335-2-34; EN 60335-2-34; EN IEC 60335-2-34                                                                                              |
| Instantaneous water heaters                                       | IEC 60335-2-35; EN 60335-2-35                                                                                                                 |
| Electrical heat pumps, air-conditioners, and dehumidifiers        | IEC 60335-2-40; EN 60335-2-40; EN IEC 60335-2-40                                                                                              |

| <b><u>Test Technology:</u></b>                                                                    | <b><u>Test Method(s)<sup>1,2:</sup></u></b>                         |
|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Pumps                                                                                             | IEC 60335-2-41; EN 60335-2-41; EN IEC 60335-2-41; AS/NZS 60335.2.41 |
| Ironers                                                                                           | IEC 60335-2-44; EN 60335-2-44; ISO 10472-5                          |
| Oral hygiene appliances                                                                           | IEC 60335-2-52; EN 60335-2-52                                       |
| Surface-cleaning appliances for household use employing liquids or steam                          | IEC 60335-2-54; EN 60335-2-54                                       |
| Insect killers                                                                                    | IEC 60335-2-59; EN 60335-2-59                                       |
| Air-cleaning appliances                                                                           | IEC 60335-2-65; EN 60335-2-65                                       |
| Portable immersion heaters                                                                        | IEC 60335-2-74; EN 60335-2-74                                       |
| Commercial dispensing appliances and vending machines                                             | IEC 60335-2-75; EN 60335-2-75; EN IEC 60335-2-75                    |
| Outdoor barbecues                                                                                 | IEC 60335-2-78; EN 60335-2-78                                       |
| Fans                                                                                              | IEC 60335-2-80; EN 60335-2-80; EN IEC 60335-2-80                    |
| Foot warmers and heating mats                                                                     | IEC 60335-2-81; EN 60335-2-81; EN IEC 60335-2-81                    |
| Toilets                                                                                           | IEC 60335-2-84; EN 60335-2-84; EN IEC 60335-2-84                    |
| Humidifiers intended for use with heating, ventilation, or air-conditioning systems               | IEC 60335-2-88; EN 60335-2-88                                       |
| Commercial refrigerating appliances with an incorporated or remote refrigerant unit or compressor | IEC 60335-2-89; EN 60335-2-89; EN IEC 60335-2-89; UL 60335-2-89     |
| Humidifiers                                                                                       | IEC 60335-2-98; EN 60335-2-98                                       |
| Vaporizers                                                                                        | IEC 60335-2-101; EN 60335-2-101                                     |
| Furniture with electrically motorized parts                                                       | IEC 60335-2-116; EN IEC 60335-2-116; AS/NZS 60335.2.116             |
| <b>LITE (Luminaries)</b>                                                                          |                                                                     |
| General requirements                                                                              | IEC 60598-1; EN 60598-1; EN IEC 60598-1; IEC 60598-1 Ed. 8.1        |
| Fixed general purpose luminaries                                                                  | IEC 60598-2-1; EN 60598-2-1; EN IEC 60598-2-1                       |
| Recessed luminaires                                                                               | IEC 60598-2-2; EN 60598-2-2; EN IEC 60598-2-2                       |
| Luminaires for road and street lighting                                                           | IEC 60598-2-3; EN 60598-2-3                                         |
| Portable general-purpose luminaries                                                               | IEC 60598-2-4; EN 60598-2-4                                         |
| Floodlights                                                                                       | IEC 60598-2-5; EN 60598-2-5                                         |
| Portable luminaries for garden use                                                                | IEC 60598-2-7                                                       |
| Hand lamps                                                                                        | IEC 60598-2-8; EN 60598-2-8                                         |
| Portable luminaries for children                                                                  | IEC 60598-2-10; EN 60598-2-10                                       |
| Luminaries for stage lighting, television film and photographic studios (outdoor and indoor)      | IEC 60598-2-17; EN 60598-2-17; EN IEC 60598-2-17                    |
| Lighting chains                                                                                   | IEC 60598-2-20; EN 60598-2-20; EN IEC 60598-2-20                    |
| Luminaries for emergency lighting                                                                 | IEC 60598-2-22; EN 60598-2-22; EN IEC 60598-2-22                    |

| <b>Test Technology:</b>                                                                       | <b>Test Method(s)<sup>1,2</sup>:</b>             |
|-----------------------------------------------------------------------------------------------|--------------------------------------------------|
| Extra low-voltage lighting systems for filament lamps                                         | IEC 60598-2-23; EN 60598-2-23; EN IEC 60598-2-23 |
| Luminaries with limited surface temperatures                                                  | IEC 60598-2-24; EN 60598-2-24; EN IEC 60598-2-24 |
| LED modules for general lighting                                                              | IEC 62031; EN 62031; EN IEC 62031                |
| Single-capped fluorescent lamps                                                               | IEC 61199; EN 61199                              |
| Lamp Control gear:<br>General requirements                                                    | IEC 61347-1; EN 61347-1; EN IEC 61347-1          |
| Starting devices<br>(other than glow starters)                                                | IEC 61347-2-1; EN 61347-2-1; EN IEC 61347-2-1    |
| A.C. and/or D.C. supplied electronic control gear for fluorescent lamps                       | IEC 61347-2-3; EN 61347-2-3; EN IEC 61347-2-3    |
| D.C. or A.C. supplied electronic control gear for LED modules                                 | IEC 61347-2-13; EN 61347-2-13; EN IEC 61347-2-13 |
| Tungsten filament lamps for domestic and similar general lighting purposes                    | IEC 60432-1; EN 60432-1                          |
| Tungsten halogen lamps for domestic and similar general lighting purposes                     | IEC 60432-2; EN 60432-2                          |
| Tungsten-halogen lamps (non-vehicle)                                                          | IEC 60432-3; EN 60432-3                          |
| Self-ballasted LED-lamps for general lighting services                                        | IEC 62560; EN 62560                              |
| Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications | IEC 62776; EN 62776; EN IEC 62776                |
| <b>TRON (Audio, video, and similar electronic apparatus)</b>                                  |                                                  |
| General requirements                                                                          | IEC 60065; EN 60065                              |
| <b>OFF (Information technology equipment)</b>                                                 |                                                  |
| General requirements                                                                          | IEC 60950-1; EN 60950-1                          |
| <b>ITAV (Audio/video, information, and communication technology equipment)</b>                |                                                  |
| General requirements                                                                          | IEC 62368-1; EN IEC 62368-1; UL 62368-1          |
| <b>SAFE (Transformers)</b>                                                                    |                                                  |
| General requirements                                                                          | IEC 61558-1; EN 61558-1; EN IEC 61558-1          |
| Separating transformers for general use                                                       | IEC 61558-2-1; EN 61558-2-1; EN IEC 61558-2-1    |
| Control transformers                                                                          | IEC 61558-2-2; EN 61558-2-2; EN IEC 61558-2-2    |
| Isolating transformers for general use                                                        | IEC 61558-2-4; EN 61558-2-4; EN IEC 61558-2-4    |
| Safety isolating transformers for general use                                                 | IEC 61558-2-6; EN 61558-2-6; EN IEC 61558-2-6    |
| Bell and chime transformers                                                                   | IEC 61558-2-8; EN 61558-2-8; EN IEC 61558-2-8    |
| Transformers for class III hand lamps for tungsten filament lamps                             | IEC 61558-2-9; EN 61558-2-9; EN IEC 61558-2-9    |
| Constant voltage transformers                                                                 | IEC 61558-2-12; EN 61558-2-12; EN IEC 61558-2-12 |

| <b><u>Test Technology:</u></b>              | <b><u>Test Method(s)<sup>1,2:</sup></u></b>                                                                                                                                                   |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Auto-transformers for general use           | IEC 61558-2-13; EN 61558-2-13; EN IEC 61558-2-13                                                                                                                                              |
| Transformers for switch mode power supplies | IEC 61558-2-16; EN 61558-2-16; EN IEC 61558-2-16                                                                                                                                              |
| <b>Energy Efficiency</b>                    |                                                                                                                                                                                               |
| <b>Refrigerating appliances</b>             |                                                                                                                                                                                               |
| Characteristics and test methods            | ISO 15502; EN 153; ES 3794;<br>IEC 62552; EN 62552; SASO IEC 62552/2007;<br>JIS C 9801; JIS C 9607; JS 1749;<br>SANS 62552; SANS 1691; IS 15750; PNS IEC 62552                                |
| General requirements                        | IEC 62552-1; EN 62552-1; GSO IEC 62552-1;<br>MS IEC 62552-1; AS/NZS IEC 62552.1; KS IEC 62552-1;<br>PNS IEC 62552-1; IS 17550-1; OS GSO IEC 62552-1;<br>GS IEC 62552-1; UAE.S GSO IEC 62552-1 |
| Performance requirements                    | IEC 62552-2; EN 62552-2; GSO IEC 62552-2;<br>MS IEC 62552-2; AS/NZS IEC 62552.2; KS IEC 62552-2;<br>PNS IEC 62552-2; IS 17550-2; OS GSO IEC 62552-2;<br>GS IEC 62552-2; UAE.S GSO IEC 62552-2 |
| Energy consumption and volume               | IEC 62552-3; EN 62552-3; GSO IEC 62552-3;<br>MS IEC 62552-3; AS/NZS IEC 62552.3; KS IEC 62552-3;<br>PNS IEC 62552-3; IS 17550-3; OS GSO IEC 62552-3;<br>GS IEC 62552-3; UAE.S GSO IEC 62552-3 |
| <b><u>Country specific requirements</u></b> |                                                                                                                                                                                               |
| Saudi Arabia                                | SASO 2664/2007; SASO 2664/2013; SASO 2892/2018                                                                                                                                                |
| Oman                                        | OS 1653/2022                                                                                                                                                                                  |
| Kuwait                                      | KWS 1900:2023                                                                                                                                                                                 |
| Australia / New Zealand                     | AS/NZS 4474; AS/NZS 4474.1; AS/NZS 4474.2                                                                                                                                                     |
| Singapore                                   | IEC 62552-1:2015+A1:2020; IEC 62552-3:2015+A1:2020                                                                                                                                            |
| Philippines                                 | PNS 396-2:1997; PNS 396-2:2013                                                                                                                                                                |
| Kenya                                       | KS 2464-2                                                                                                                                                                                     |
| Taiwan                                      | CNS 2062                                                                                                                                                                                      |
| UAE                                         | UAE.S IEC 62552; UAE.S.5010-3                                                                                                                                                                 |
| Jordan                                      | JS 2101; JS 2102                                                                                                                                                                              |
| Ghana                                       | L.I. 2441:2022                                                                                                                                                                                |
| US                                          | 10 CFR 430, Subpart B, Appendix A; AHAM HRF-1-2019                                                                                                                                            |
| <b>Washing machines</b>                     |                                                                                                                                                                                               |
| General requirements                        | IEC 60456; EN 60456; ES 4100;<br>SASO 2683/2007; JIS C 9811; JIS C 9606;<br>IS 14155; MS IEC 60456; PNS IEC 60456:2013                                                                        |
| <b><u>Country specific requirements</u></b> |                                                                                                                                                                                               |
| Saudi Arabia                                | SASO 2692/2007; SASO 2692/2013; SASO 2693/2007;<br>SASO 2885/2018; SASO 2772/2009;<br>SASO 2772/2016; SASO 2883/2017                                                                          |
| Oman                                        | OS 1651/2022                                                                                                                                                                                  |
| Kuwait                                      | KWS 1899:2023                                                                                                                                                                                 |

| <b><u>Test Technology:</u></b>              | <b><u>Test Method(s)<sup>1,2:</sup></u></b>                         |
|---------------------------------------------|---------------------------------------------------------------------|
| Philippines                                 | PNS 396-3:2013                                                      |
| Malaysia                                    | SPAN TS 3006:2021                                                   |
| Australia                                   | AS/NZS 2040.1; AS/NZS 2040.2                                        |
| UAE                                         | UAE.S.5010-2; UAE.S IEC 60456                                       |
| Jordan                                      | JS 1717 (2006); JS 1888 (2012); JS 2103; JS 2104                    |
| US                                          | 10 CFR 430, Subpart B, Appendix J; AHAM HLW-1-2010; AHAM HLW-2-2020 |
| <b>Dryers</b>                               |                                                                     |
| General requirements                        | IEC 61121:2005; IEC 61121; EN 61121; UAE.S IEC 61121                |
| Electric clothes washer/dryers              | IEC 62512; EN IEC 62512; UAE.S IEC 62512; EN 50229                  |
| <b><u>Country specific requirements</u></b> |                                                                     |
| Australia                                   | AS/NZS 2442.1; AS/NZS 2442.2                                        |
| Singapore                                   | IEC 61121:2012                                                      |
| <b>Audio / Video appliances</b>             |                                                                     |
| General requirements                        | IEC 60107-1; EN 60107-1                                             |
| <b>Household appliances</b>                 |                                                                     |
| Microwaves                                  | IEC 60705; EN 60705; EN IEC 60705                                   |
| Fans                                        | IEC 60879; EN 60879                                                 |
| <b>Standby power / Power consumption</b>    |                                                                     |
| Standby power                               | IEC 62301; EN 62301                                                 |
| Power consumption                           | EN 62087; EN 50564                                                  |



Accreditation is granted to this laboratory at the location listed above as well as the satellite laboratory location(s) listed below:

#### SATELLITE LOCATION

**98/2 Moo 19, Tumbol Takhli  
Takhli District, Nakhonsawan 60140, Thailand**

| <b>Test Technology:</b>                | <b>Test Method(s)<sup>1,2</sup>:</b>                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Unintentional Emission Radiated</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>U.S. (FCC)</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Unintentional Emissions                | 47 CFR, FCC Part 15, Subpart B (using ANSI C63.4-2014); ANSI C63.4-2014                                                                                                                                                                                                                                                                                                                                                                  |
| Consumer ISM                           | 47 CFR, FCC Part 18 (using MP-5:1986); MP-5:1986                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>International</b>                   |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Unintentional Emissions                | CISPR 11; EN 55011; EN IEC 55011; AS CISPR 11; J55011 (H27);<br>CISPR 13; EN 55013; J55013 (H22);<br>CISPR 14-1:2016; CISPR 14-1; AS/NZS CISPR 14.1; AS CISPR 14.1; EN 55014-1; EN IEC 55014-1; TCVN 7492-1; J55014-1(H27);<br>GSO CISPR 14-1;<br>CISPR 15; AS/NZS CISPR 15; AS CISPR 15; EN 55015; EN IEC 55015; J55015 (H20);<br>CISPR 22; AS/NZS CISPR 22; EN 55022; J55022 (H22);<br>CISPR 32; EN 55032; AS/NZS CISPR 32, EN 50561-1 |

#### SATELLITE LOCATION

**249/14, Moo 13, Rachathewa,  
Bang Phli, Samut Prakan 10540, Thailand**

| <b>Test Technology:</b>                                  | <b>Test Method(s)<sup>1,2</sup>:</b>                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EMC</b>                                               |                                                                                                                                                                                                                                                                                                                                   |
| <b>Unintentional Emissions Conducted</b>                 |                                                                                                                                                                                                                                                                                                                                   |
| <b>U.S. (FCC)</b>                                        |                                                                                                                                                                                                                                                                                                                                   |
| Unintentional Emissions                                  | 47 CFR, FCC Part 15, Subpart B (using ANSI C63.4-2014); ANSI C63.4-2014                                                                                                                                                                                                                                                           |
| Consumer ISM                                             | 47 CFR, FCC Part 18 (using MP-5:1986); MP-5:1986                                                                                                                                                                                                                                                                                  |
| <b>International</b>                                     |                                                                                                                                                                                                                                                                                                                                   |
| Unintentional Emissions<br>(including Power Disturbance) | CISPR 11; EN 55011; EN IEC 55011; AS CISPR 11; J55011 (H27);<br>CISPR 14-1:2016; CISPR 14-1; AS/NZS CISPR 14.1; AS CISPR 14.1; EN 55014-1; EN IEC 55014-1; TCVN 7492-1; J55014-1(H27);<br>GSO CISPR 14-1;<br>CISPR 15; AS/NZS CISPR 15; AS CISPR 15; EN 55015; EN IEC 55015; J55015 (H20);<br>CISPR 32; EN 55032; AS/NZS CISPR 32 |
| <b>Emissions</b>                                         |                                                                                                                                                                                                                                                                                                                                   |
| Current Harmonics                                        | IEC 61000-3-2; EN 61000-3-2; EN IEC 61000-3-2;                                                                                                                                                                                                                                                                                    |



| <b>Test Technology:</b>                                                            | <b>Test Method(s)<sup>1,2:</sup></b>                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    | AS/NZS 61000.3.2; GSO IEC 61000-3-2; EN 61000-3-12; IEC 61000-3-12                                                                                                                                                                                                 |
| Voltage Fluctuations & Flicker                                                     | IEC 61000-3-3; EN 61000-3-3; AS/NZS 61000.3.3; GSO IEC 61000-3-3; EN 61000-3-11; EN IEC 61000-3-11; IEC 61000-3-11                                                                                                                                                 |
| <b>Immunity</b>                                                                    |                                                                                                                                                                                                                                                                    |
| Product Specific Immunity                                                          | CISPR 14-2:2015; CISPR 14-2; EN IEC 55014-2; EN 55014-2; AS/NZS CISPR 14.2; TCVN 7492-2; IEC 61547; EN 61547; EN IEC 61547; CISPR 35; EN 55035;                                                                                                                    |
| Electrostatic Discharge (ESD)                                                      | EN 61000-4-2; IEC 61000-4-2; EN IEC 61000-4-2; GSO IEC 61000-4-2; IEC 61000-4-2:2008; ISO 10605:2008; ISO 10605:2023                                                                                                                                               |
| Electrical Fast Transient / Burst                                                  | EN 61000-4-4; IEC 61000-4-4; GSO IEC 61000-4-4; IEC 61000-4-4:2012                                                                                                                                                                                                 |
| Surge Immunity                                                                     | EN 61000-4-5; IEC 61000-4-5; GSO IEC 61000-4-5; IEC 61000-4-5:2014                                                                                                                                                                                                 |
| Conducted Immunity                                                                 | EN 61000-4-6; IEC 61000-4-6; EN IEC 61000-4-6; GSO IEC 61000-4-6; IEC 61000-4-6:2013                                                                                                                                                                               |
| Power Frequency Magnetic Field Immunity                                            | EN 61000-4-8; IEC 61000-4-8; GSO IEC 61000-4-8; IEC 61000-4-8:2009                                                                                                                                                                                                 |
| Voltage Dips, Interruptions, and Line Voltage Variations                           | EN 61000-4-11; IEC 61000-4-11; EN IEC 61000-4-11; GSO IEC 61000-4-11; IEC 61000-4-11:2004; EN 61000-4-34; IEC 61000-4-34; IEC 61000-4-34:2005                                                                                                                      |
| Harmonics and Interharmonics                                                       | EN 61000-4-13; IEC 61000-4-13; IEC 61000-4-13:2002                                                                                                                                                                                                                 |
| <b>Generic/Product Family Standards and Industry Standards</b>                     |                                                                                                                                                                                                                                                                    |
| Generic Standards                                                                  | IEC 61000-6-1; EN 61000-6-1; EN IEC 61000-6-1; AS/NZS 61000.6.1; IEC 61000-6-2; EN 61000-6-2; EN IEC 61000-6-2; AS/NZS 61000.6.2; IEC 61000-6-3; EN 61000-6-3; EN IEC 61000-6-3; AS/NZS 61000.6.3; IEC 61000-6-4; EN 61000-6-4; EN IEC 61000-6-4; AS/NZS 61000.6.4 |
| Electrical equipment for measurement, control, and laboratory use                  | IEC 61326-1; EN 61326-1; EN IEC 61326-1; IEC 61326-2-2; EN 61326-2-2; EN IEC 61326-2-2                                                                                                                                                                             |
| EMC – Medical Equipment <sup>1</sup><br>(excluding Close Proximity Field Immunity) | IEC 60601-1-2; EN 60601-1-2                                                                                                                                                                                                                                        |
| <b>Energy Efficiency</b>                                                           |                                                                                                                                                                                                                                                                    |
| <b>Refrigerating appliances</b>                                                    |                                                                                                                                                                                                                                                                    |
| Characteristics and test methods                                                   | ISO 15502; EN 153; ES 3794; IEC 62552; EN 62552; SASO IEC 62552/2007; JIS C 9801; JIS C 9607; JS 1749; SANS 62552; SANS 1691; IS 15750; PNS IEC 62552                                                                                                              |
| General requirements                                                               | IEC 62552-1; EN 62552-1; GSO IEC 62552-1; MS IEC 62552-1; AS/NZS IEC 62552.1; KS IEC 62552-1; PNS IEC 62552-1; IS 17550-1; OS GSO IEC 62552-1; GS IEC 62552-1; UAE.S GSO IEC 62552-1                                                                               |

| <b><u>Test Technology:</u></b>              | <b><u>Test Method(s)<sup>1,2:</sup></u></b>                                                                                                                                          |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance requirements                    | IEC 62552-2; EN 62552-2; GSO IEC 62552-2; MS IEC 62552-2; AS/NZS IEC 62552.2; KS IEC 62552-2; PNS IEC 62552-2; IS 17550-2; OS GSO IEC 62552-2; GS IEC 62552-2; UAE.S GSO IEC 62552-2 |
| Energy consumption and volume               | IEC 62552-3; EN 62552-3; GSO IEC 62552-3; MS IEC 62552-3; AS/NZS IEC 62552.3; KS IEC 62552-3; PNS IEC 62552-3; IS 17550-3; OS GSO IEC 62552-3; GS IEC 62552-3; UAE.S GSO IEC 62552-3 |
| <b><u>Country specific requirements</u></b> |                                                                                                                                                                                      |
| Saudi Arabia                                | SASO 2664/2007; SASO 2664/2013; SASO 2892/2018                                                                                                                                       |
| Oman                                        | OS 1653/2022                                                                                                                                                                         |
| Kuwait                                      | KWS 1900:2023                                                                                                                                                                        |
| Australia / New Zealand                     | AS/NZS 4474; AS/NZS 4474.1; AS/NZS 4474.2                                                                                                                                            |
| Singapore                                   | IEC 62552-1:2015+A1:2020; IEC 62552-3:2015+A1:2020                                                                                                                                   |
| Philippines                                 | PNS 396-2:1997; PNS 396-2:2013                                                                                                                                                       |
| Kenya                                       | KS 2464-2                                                                                                                                                                            |
| Taiwan                                      | CNS 2062                                                                                                                                                                             |
| UAE                                         | UAE.S IEC 62552; UAE.S.5010-3                                                                                                                                                        |
| Jordan                                      | JS 2101; JS 2102                                                                                                                                                                     |
| Ghana                                       | L.I. 2441:2022                                                                                                                                                                       |
| US                                          | 10 CFR 430, Subpart B, Appendix A; AHAM HRF-1-2019                                                                                                                                   |
| <b>Washing machines</b>                     |                                                                                                                                                                                      |
| General requirements                        | IEC 60456; EN 60456; ES 4100; SASO 2683/2007; JIS C 9811; JIS C 9606; IS 14155; MS IEC 60456; PNS IEC 60456:2013                                                                     |
| <b><u>Country specific requirements</u></b> |                                                                                                                                                                                      |
| Saudi Arabia                                | SASO 2692/2007; SASO 2692/2013; SASO 2693/2007; SASO 2885/2018; SASO 2772/2009; SASO 2772/2016; SASO 2883/2017                                                                       |
| Oman                                        | OS 1651/2022                                                                                                                                                                         |
| Kuwait                                      | KWS 1899:2023                                                                                                                                                                        |
| Philippines                                 | PNS 396-3:2013                                                                                                                                                                       |
| Malaysia                                    | SPAN TS 3006:2021                                                                                                                                                                    |
| Australia                                   | AS/NZS 2040.1; AS/NZS 2040.2                                                                                                                                                         |
| UAE                                         | UAE.S.5010-2; UAE.S IEC 60456                                                                                                                                                        |
| Jordan                                      | JS 1717 (2006); JS 1888 (2012); JS 2103; JS 2104                                                                                                                                     |
| US                                          | 10 CFR 430, Subpart B, Appendix J; AHAM HLW-1-2010; AHAM HLW-2-2020                                                                                                                  |
| <b>Dryers</b>                               |                                                                                                                                                                                      |
| General requirements                        | IEC 61121:2005; IEC 61121; EN 61121; UAE.S IEC 61121                                                                                                                                 |
| Electric clothes washer/dryers              | IEC 62512; EN IEC 62512; UAE.S IEC 62512; EN 50229                                                                                                                                   |
| <b><u>Country specific requirements</u></b> |                                                                                                                                                                                      |
| Australia                                   | AS/NZS 2442.1; AS/NZS 2442.2                                                                                                                                                         |

|                                          |                                      |
|------------------------------------------|--------------------------------------|
| <b>Test Technology:</b>                  | <b>Test Method(s)<sup>1,2</sup>:</b> |
| Singapore                                | IEC 61121:2012                       |
| <b>Audio / Video appliances</b>          |                                      |
| General requirements                     | IEC 60107-1; EN 60107-1              |
| <b>Household appliances</b>              |                                      |
| Microwaves                               | IEC 60705; EN 60705; EN IEC 60705    |
| Fans                                     | IEC 60879; EN 60879                  |
| <b>Standby power / Power consumption</b> |                                      |
| Standby power                            | IEC 62301; EN 62301                  |
| Power consumption                        | EN 62087; EN 50564                   |

<sup>1</sup> The laboratory is only accredited for testing activities outlined within the test methods listed above. Reference to any other activity within these standards, such as risk management or risk assessment, does not fall within the laboratory's accredited capabilities.

<sup>2</sup>When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard test method, per Annex A, Part C of A2LA R101 - *General Requirements: Accreditation of Conformity Assessment Bodies*.

| Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1                                                                                           |                        |                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------|
| <b>Rule Subpart/Technology:</b>                                                                                                                                                                                                                    | <b>Test Method(s):</b> | <b>Maximum Frequency (MHz)</b> |
| <u>Unintentional Radiators</u>                                                                                                                                                                                                                     |                        |                                |
| Part 15B                                                                                                                                                                                                                                           | ANSI C63.4:2014        | 18000                          |
| <u>Industrial, Scientific, and Medical Equipment</u>                                                                                                                                                                                               |                        |                                |
| Part 18                                                                                                                                                                                                                                            | FCC MP-5:1986          | 8000                           |
| Note: Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website ( <a href="https://apps.fcc.gov/oetcf/eas/">https://apps.fcc.gov/oetcf/eas/</a> ) for a listing of FCC approved laboratories. |                        |                                |



## Accredited Laboratory

A2LA has accredited

**EUROFINS PRODUCT SERVICE (THAILAND) CO., LTD.**

*Bangkok, Thailand*

for technical competence in the field of

**Electrical Testing**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 23<sup>rd</sup> day of June 2026.

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff Vice President, Accreditation Services  
For the Accreditation Council  
Certificate Number 2402.01  
Valid to December 31, 2027

*For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.*