



STANDARDS
MALAYSIA

Certificate of Accreditation

No: SAMM 086

Accredited since: 7 December 1995

This is to certify that

TESTING SERVICES DEPARTMENT
(EEST 1, EEST 2 & RFECMT)
SIRIM QAS INTERNATIONAL SDN. BHD.
SHAH ALAM, SELANGOR
MALAYSIA



Scan this QR Code or visit
www.ism.gov.my/cab-directories
for the current scope of accreditation

has been granted accreditation in respect of the scope of accreditation described in the schedule, subject to the terms and conditions governing the *Skim Akreditasi Makmal Malaysia* (SAMM), the Laboratory Accreditation Scheme of Malaysia.

Laboratories accredited under SAMM meet the requirements of MS ISO/IEC 17025. This Malaysian Standard is identical with ISO/IEC 17025 published by the International Organization for Standardization (ISO).



(DATUK FADILAH BAHARIN)
Director General
Department of Standards Malaysia

Date of issue: 8 December 2017



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

LABORATORY LOCATION:
(PERMANENT LABORATORY)



**TESTING SERVICES DEPARTMENT
(EEST1, EEST2 & RFEMCT)
SIRIM QAS INTERNATIONAL SDN BHD
BUILDING 8, SIRIM COMPLEX
1, PERSIARAN DATO' MENTERI
SECTION 2, P. O. BOX 7035
40700 SHAH ALAM
SELANGOR, MALAYSIA**

FIELDS OF TESTING:

**ELECTRICAL, ELECTROMAGNETIC COMPATIBILITY
(EMC) & RADIO FREQUENCY (RF)**

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

ELECTRICAL & ELECTRONICS 1 SECTION (EEST1)

WIRING ACCESSORIES I LABORATORY

SCOPE OF TESTING: ELECTRICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Rewirable and Non-rewirable 13A Plug	Full Type Test Except sub-clause 24.1 (for all standards)	MS 589:Part 1:1997 BS 1363-1:1995+A4:2012 BS 1363 Part 1:1995 +A1:1997 +A2:2003 +A3:2007 SS 145:Part 1:2010 SS 145:Part 1:1997
	Full Type Test Except sub-clause Annex G2 & Annex G3	MS 589-1:2018 BS 1363-1:2016+A1:2018 SASO 2203:2018 SS 145:Part 1:2019

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**WIRING ACCESSORIES I LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
2. Switches for household and similar fixed electrical installation	Full Type Test	MS IEC 60669-1:2017 MS IEC 60669-1:2012 MS IEC 60669-1:2004 IEC 60669-1 (ed4.0): 2017 IEC 60669-1 (ed3.2):2007 IEC 60669-1 (ed3.1):2000 IEC 60669-1 (ed2.0):1993 +A1:1994 +A2:1995 BS EN 60669-1: 2018 BS EN 60669-1:1999 +A2:2008 SS 227 Part 1:2010 SASO GSO IEC 60669-1:2014
3. 13A switched and unswitched socket outlet	Full Type Test Except sub-clause 24.1 (for all standards)	MS 589-2:2011 MS 589:Part 2:1997 BS 1363-2:1995 +A4:2012 BS 1363 Part 2:1995 +A1:1997 +A2:2003+A3:2007 SS 145:Part 2:2010 SS 145:Part 2:1997
	Full Type Test Except sub-clause Annex J2, Annex J3 & Annex J4	MS 589-2:2018
	Full Type Test Except sub-clause Annex I2, Annex I3 & Annex I4	BS 1363-2:2016+A1:2018 SS 145-2:2018 SASO 2203:2018
4. 13A Adaptors	Full Type Test Except sub-clause 24.1 (for all standards)	MS 589:Part 3:2012 MS 589:Part 3:1998 BS 1363-3:1995 +A4:2012 BS 1363 Part 3:1995
	Full Type Test Except sub-clause Annex H2, Annex H3 & Annex H4	MS 589-3:2018 BS 1363-3:2016+A1:2018 SS 145:Part 3:2020
5. Electrical accessories	Full Type Test Except sub-clause 25.1 (for all standards)	MS 1144:1998 MS 1144:2017 BS 5733: 2010 +A1:2014 BS 5733:2010 SS 241:1996 (2008)

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**WIRING ACCESSORIES I LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
6. Non-Rewirable 2.5A Two-Pole Plug	Full Type Test	MS 1578:2003 BS EN 50075:1991
7. Connecting Devices for Low Voltage Circuits: Screw Type	Full Type Test	MS IEC 60998-1:2005 MS IEC 60998-2-1:2005 IEC 60998-1 (ed2.0):2002 IEC 60998-2-1 (ed2.0):2002
8. Connecting Devices for Low Voltage Circuits: Connecting Box	Full Type Test	IEC 60998-1 (ed2.0):2002 IEC 60998-1 (ed1.0):1990 IEC 60998-2-5 (ed1.1):2000
9. Portable 2-pin Socket- Outlet	Full Type Test	MS 1579:2003 SS 488:2001
10. Appliances Couplers	Full Type Test	MS IEC 60320-1:2003 MS IEC 60320-1:2010 IEC 60320-1:2021 IEC 60320-1:2015 (ed3.0) IEC 60320-1:2015 +A1:2018 (ed3.1) IEC 60320-1 (ed2.0):2001+A1:2007
11. Connecting Devices As Separate Entities With Screwless-Type Clamping Units	Full Type Test	MS IEC 60998-1:2005 MS IEC 60998-2-2:2005 IEC 60998-1 (ed2.0):2002 IEC 60998-2-2 (ed2.0):2002
12. Electronic Switches	Full Type Test	MS IEC 60669-1:2012 MS IEC 60669-1:2004 IEC 60669-2-1:2021 IEC 60669-1 (ed 3.2):2007 IEC 60669-1 (ed 3.1):2000 IEC 60669-1 (ed2.0):1993+A1:1994+A2:1995 MS IEC 60669-2-1:2012 MS IEC 60669-2-1:2004 IEC 60669-2-1:2021 IEC 60669-2-1: (ed4.1):2009 IEC 60669-2-1: (ed4.0):2002

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**WIRING ACCESSORIES I LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
13. Cooker Control Unit	Full Type Test	BS 4177:1992+A1+A2+A3+A4
14. Portable Cable Reels	Full Type Test	MS 1141:2022 MS 1141:2006
15. 13 A fused connection units switches and un switched	Full Type Test	MS 589: PART 4: 1998 BS 1363-4: 2016+A1:2018 BS 1363-4: 1995 + A4: 2012
16. 15 A plugs and switched socket-outlets for domestic and similar purposes	Full Type Test	SS 472: 1999 (2012)+E1+A1:2020 SS 472: 1999 (2012) MS 1577:2022 MS 1577:2003

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**WIRING ACCESSORIES II LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations (MCB's)	Full Type Test Except; a) sub-clauses 9.12 and 9.16. Product limited to rated current of up to 63A.	MS IEC 60898:1998 MS IEC 60898-1:2007 IEC 60898 (ed2.0):1995 IEC 60898-1 (ed1.2):2003
2. Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCB's).	Full Type Test Except; a) sub-clauses 9.11 and 9.21. Product limited to rated current of up to 63A.	MS IEC 61008-1: 2012 IEC 61008-1: 2010 IEC 61008-1: 2003 IEC 61008-2-1 (ed1.0):1990 IEC 61008-2-2 (ed1.0):1990 MS IEC 61008-2-1:2003 MS IEC 61008-2-2:2003
3. Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)	Full Type Test Except; a) sub-clause 9.12 and 9.21	IEC 61009-1:2010 MS IEC 61009-1:2012 IEC 61009-2-1:1991 MS IEC 61009-2-1:2003 (CONFIRMED:2015) IEC 61009-2-2:1991 MS IEC 61009-2-2:2003 (CONFIRMED:2015)
4. Fuse Holder for Low Voltage Cylindrical Fuse Type B	Full Type Test Except clause 8.5	MS IEC 60269-1:2011 MS IEC 60269-3-1:2003 IEC 60269-1 (ed3.0):1998 IEC 60269-3-1 (ed1.2):2001 IEC 60269-3:1997
5. Compression and Mechanical connectors for power cables with copper or Aluminium conductors	Clause 6.3 Heat Cycle Test	IEC 61238-1:2003
6. Primary batteries	Full Type Test	MS IEC 60086-1:2010 IEC 60086-1 (ed11.0):2011 IEC 60086-1 (ed10.0):2006

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**WIRING ACCESSORIES II LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
7. Primary batteries	Full Type Test Except Clause 6.2.2.2	MS IEC 60086-2:2010 IEC 60086-2 (ed12.0):2011 IEC 60086-2 (ed11.0):2006
8. Primary batteries	Full Type Test	MS IEC 60086-5:2010 IEC 60086-5 (ed3.0):2011 IEC 60086-5 (ed2.0):2005
9. Secondary cells and batteries containing alkaline or other non- acid electrolytes	Full Type Test Except; a) sub-clause 7.2.2, 7.2.4, 7.3.4, 7.3.6, 8.3.5, 8.3.8	MS IEC 62133:2017
10. Lead-acid starter batteries for automobiles	Full Type test Except Clause 7.3.2	MS 45:2009
11. Lead-acid starter batteries	Full Type test Except Clause 7.3.2	IEC 60095-1 (ed7.0):2006
12. Overhead lines – (Requirements and tests for fittings)	Heat Cycle Test	IEC 61284:1997 Clause 13
13. Moulded Case Circuit Breakers (MCCBs)	Clause 8.3.3	IEC 60947-2:2016
14. Insulated Piercing Connector (IPC)	Full Type Test	NFC 33-020:2013 BS EN 50483-4:2009
15. Battery Charger	Full Type Test	IEC 60146-1-1:2009
16. Surge Protective Device	Full Type Test Except Clauses 8.3.5.2 & 8.3.8	IEC 61643-11:2011 MS IEC 61643-11:2012

WIRING ACCESSORIES II LABORATORY

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
17. Conduit	Full Type Test	MS IEC 61386-1:2010 BS EN 61386-1:2008 MS 61386-21:2010 BS EN 61386-21:2004 + A11:2010
18. Electronic cigarette device (electronic-liquid type)	Full Type Test Except Clauses 5.1.2.4, 5.1.2.5, 5.1.3, 5.1.4 & 5.1.5	MS 2716:2019
19. Cable trunking systems and cable ducting systems for electrical installations	Full Type Test	IEC 61084-1:1991 +A1:1993 IEC 61084-2-1:1996 MS IEC 61084-1:2006
20. Low-voltage switchgear and controlgear	Full Type Test	IEC 60947-1:2007 MS IEC 60947-1:2010
21. Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, witch-disconnectors and fuse-combination units	Full Type Test	IEC 60947-3:2008 MS IEC 60947-3:2010

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**CABLE LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. PVC Insulated Cables (Non-Armoured) for Electrical Power & Lighting	Full Type Test	MS 2112-3:2009, AMD.1:2015 MS 2112-3:2009 BS 6004:2000
2. Power Cables with Extruded Insulation and their accessories for rated voltage of 1kV and 3kV - Insulation : XLPE, PVC - Sheath : PVC, PE	Full Type Test Except clauses 17.5, 18.16, 18.18 & 18.22.3	IEC 60502-1 (ed3.0):2021
3. Power Cables with Extruded Insulation and their accessories for rated voltage of 6kV to 30kV - Insulation : XLPE, PVC - Sheath : PVC, PE	Full Type Test Except clauses 18.1.3, 18.1.4, 18.1.5, 18.1.6, 18.1.7, 18.1.8, 19.13, 19.14, 19.15 & 19.22 Full Type Test Except clauses 12.2.4, 18.2.5, 18.2.6, 18.2.7, 18.2.8, 18.2.9, 19.15, 19.16, 19.17 & 19.24	IEC 60502-2 (ed2.0):2005 IEC 60502-2 (ed3.0):2014
4. Aluminium Stranded Conductor	Full Type Test Except 4.3	BS 215 Part 1:1970
5. Aluminium Conductor Steel-cored	Full Type Test Except subclause 4.3.2	BS 215 Part 2:1970
6. Aluminium Alloy Stranded Conductor	Full Type Test Except 4.3.1 & 4.3.2	BS 3242:1970
7. PVC insulated for Flexible Cables	Full Type Test	MS 2112-5:2009, AMD.1:2017 MS 2112-5:2009 IEC60227-5 (ed2.2):2003 BS 6500:2000
8. Sheathed Cables for Fixed Wiring	Full Type Test	MS 2112-4:2009, AMD.1:2015 MS 2112-4:2009 IEC 60227-4 (ed2.0):1992+A1:1997
9. Polyvinyl chloride insulated cables of rated voltages up to and including 450/750V	Full type test	IEC 60227-3 (ed 2.0):1993 +A1:1997

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**CABLE LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
10. Rubber insulated cables – Rated voltages up to and including 450/750V	Full type test	IEC 60245-4:2011
11. Electric cables. Low voltage energy cables of rated voltages up to and including 450/750V (U0/U). Cables for general applications. Flexible cables with thermoplastic PVC insulation	Full type test	BS EN 50525-2-11:2011

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC II LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Household appliances	Safety, general requirement	MS IEC 60335-1:2015 MS IEC 60335-1:2013 MS IEC 60335-1:2005 MS IEC 60335-1:2003 MS IEC 60335-1:1995 IEC 60335-1 (ed.5.0):2010 +A1:2013 +A2:2016 IEC 60335-1 (ed4.0):2001 +A1:2004 +A2:2006 IEC 60335-1 (ed3.0):1991 +A1:1994 +A2:1999
2. Vacuum Cleaner and water suction cleaning appliances	Full Type Test	MS IEC 60335-2-2:2017 MS IEC 60335-2-2:2006 MS IEC 60335-2-2:1995 IEC 60335-2-2 (ed6.0):2009 IEC 60335-2-2 (ed6.0):2009 +A1:2012 IEC 60335-2-2 (ed5.0):2002 +A1:2004 +A2:2006 IEC 60335-2-2 (ed4.0):1993 +A1:1998 +A2:1999
3. Electric Iron	Full Type Test	MS IEC 60335-2-3:2006 MS IEC 60335-2-3:1995 MS 1597-2-3:2017 IEC 60335-2-3 (ed6.0):2012 IEC 60335-2-3 (ed6.0):2012 +A1: 2015 IEC 60335-2-3 (ed5.0):2002 +A1:2004 +A2:2008 IEC 60335-2-3 (ed4.0):1993 +A1:1999 +A2:1999



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

DOMESTIC II LABORATORY

SCOPE OF TESTING: ELECTRICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
4. Electric Oven, Toaster, Grills, Roaster and similar appliances (Appliances such as: - Bread maker - Bread toaster - Portable oven - Induction cooker - Grill, roaster - Sandwich maker - Waffle maker, as specific by standard)	Full Type Test	MS IEC 60335-2-9:2014 MS IEC 60335-2-9:2006 MS IEC 60335-2-9:2004 MS IEC 60335-2-9:1995 IEC 60335-2-9 (ed6.0):2008 IEC 60335-2-9 (ed5.0):2002 +A1:2004 +A2:2006 IEC 60335-2-9 (ed4.0):1993 +A1:1998 + A2:1999
5. Kitchen Machine (Kitchen machine are appliances such as: -Blender -Chopper -Food Processor -Juice Extractor -Grinder -Mixer, as specified by standard)	Full Type Test (except Clause 20.119)	MS IEC 60335-2-14:2014 MS IEC 60335-2-14:2003 MS IEC 60335-2-14:1996 IEC 60335-2-14 (ed6.0):2016 IEC 60335-2-14 (ed5.0):2006 +A1:2008 +A2:2012 IEC 60335-2-14 (ed4.0):2002 IEC 60335-2-14 (ed3.0):1994 +A1:1998 +A2:1999

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 12 of 64

DOMESTIC II LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
6. Appliances for Heating Liquid (including cordless) (Appliances for heating liquid such as; -Electric Rice Cooker -Coffee / Tea Maker -Food Steamer, -Egg boiler -Jug, Slow Cooker, - Steam Boat, -Kettle, Airpot, -Bottle warmer, -Sterilizer -Elec. Aroma Vaporiser as specified by standard)	Full Type Test	MS IEC 60335-2-15:2004 MS IEC 60335-2-15:1999 IEC 60335-2-15 (ed6.0):2012 IEC 60335-2-15 (ed6.0):2012 +A1:2016 IEC 60335-2-15 (ed5.0):2002 +A1:2005 +A2:2008 IEC 60335-2-15 (ed4.0):1995 +A1:1999 +A2:2000 IEC 60335-2-15 (ed3.0):1986 +A1:1988 +A2:1990 +A3:1992
7. Appliances for skin and hair care	Full Type Test	MS IEC 60335-2-23:2007 MS IEC 60335-2-23:2003 MS IEC 60335-2-23:1999 IEC 60335-2-23 (ed6.0):2016 IEC 60335-2-23 (ed5.0):2003 +A1:2008 + A2:2012 IEC 60335-2-23 (ed4.0):1996 +A1:2000

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC II LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
8. Vaporizers	Full Type Test	MS IEC 60335-2-101:2014 MS IEC 60335-2-101:2003 IEC 60335-2-101 (ed1.0): 2002 +A1:2008 + A2:2014
9. Electric Fans (Safety) (Electric Fans such as; - Moving-louvre fan, - Auto fan, - Pedestal fan, - Table fan, - Wall fan, - Exhaust fan - Ventilating fan, - Decorative fan, - Ceiling fan & applies to their separate regulators and with blade)	Full Type Test	MS 1219:Part 2:2002 MS 1597:Part 2-80:2019 MS 1597:Part 2-80:2010 MS 1597:Part 2-80:2007 IEC 60335-2-80 (ed3.0):2015 IEC 60335-2-80 (ed2.0):2002 +A1:2004 +A2:2008 IEC 60335-2-80 (ed1.0):1997
10. Specification for performance and construction of electric fans and regulators (Performance)	Full Type Test Except; a) Clause 6.6 of MS 1220:2001 b) Clause 6.6 of MS 1220:2010	MS 1220:2010 MS 1220:2001 MS 2574:2014 (MEPS ⁽¹⁾) for ST Energy Efficiency Program) IEC 60879 (ed1.0):1986 SS 360:1992

Note: ¹⁾ MEPS - Minimum Energy Performance Standards (MEPS)

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 14 of 64

DOMESTIC II LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
11. Stationary cooking ranges, cooking tables hobs, ovens and similar appliances (Exclude Pyrolytic Self-Cleaning Ovens)	Full Type Test	MS IEC 60335-2-6:2014 MS IEC 60335-2-6:2007 MS IEC 60335-2-6:1999 MS 1597:Part 2-6:2003 IEC 60335-2-6 (ed5.0):2002 +A1:2004 +A2:2008 IEC 60335-2-6 (ed4.0):1997 +A1:2000
12. Deep fat fryers, frying pans and similar appliances	Full Type Test	MS IEC 60335-2-13:2006 MS IEC 60335-2-13:1995 IEC 60335-2-13 (ed6.0):2009 IEC 60335-2-13 (ed5.0):2002 +A1:2004 +A2:2008 IEC 60335-2-13 (ed4.0):1993 +A1:1993 +A2:1998
13. Battery chargers	Full Type Test	MS IEC 60335-2-29:2014 MS IEC 60335-2-29:2005 MS IEC 60335-2-29:2003 MS IEC 60335-2-29:1996 IEC 60335-2-29 (ed4.0):2002 +A1:2004+A2:2009 IEC 60335-2-29 (ed3.0):1994

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC II LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
14. Portable heating tools and similar appliances	Full Type Test	MS IEC 60335-2-45:2003 MS IEC 60335-2-45:2002 IEC 60335-2-45 (ed3.0):2002 +A1:2008 IEC 60335-2-45 (ed2.0):1996
15. Air Cleaning Appliances	Full Type Test Except; a) sub clause 8.1.4, 16.102 & 32 of MS IEC/ IEC 60335-2-65	MS IEC 60335-2-65:2014 MS IEC 60335-2-65:2006 MS IEC 60335-2-65:1999 IEC 60335-2-65 (ed2.0):2002 IEC 60335-2-65 (ed2.0):2002 +A1:2008 IEC 60335-2-65 (ed1.0):1993
16. Insect Killer & Similar Appliances	Full Type Test Except; a) clause, 16.101, & 32 of IEC 60335-2-59:1997, IEC 60335-2-59: 2002 +A1:2006	MS IEC 60335-2-59:2006 MS IEC 60335-2-59:2000 IEC 60335-2-59 (ed3.0):2002 +A1:2006 IEC 60335-2-59 (ed2.0):1997
17. Sewing Machine	Full Type Test	MS IEC 60335-2-28:2003 MS IEC 60335-2-28:2017 IEC 60335-2-28 (ed4.0):2002 +A1 :2008 IEC 60335-2-28 (ed4.0):2002

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC II LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
18. Range Hoods	Full Type Test	MS IEC 60335-2-31:2014 MS IEC 60335-2-31:2003 IEC 60335-2-31 (ed4.0) +A1:2006 +A2:2008
19. Household microwave ovens	Performance measurement Standby Power	IEC 60705 (ed4.0):2010 Clause 8 & 9 IEC 60705 (ed4.1):2014 Clause 8 & 9, 15 MS IEC 62301:2012
20. Electric Rice Cooker for Household Use (Performance)	Full Type Test	MS 2024:2020
21. Shavers, hair clippers and similar appliances	Full Type Test	IEC 60335-2-8:2022

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 17 of 64

DOMESTIC III LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Household appliances	Safety, general requirement	MS IEC 60335-1:2015 MS IEC 60335-1:2013 MS IEC 60335-1:2005 MS IEC 60335-1:2003 MS IEC 60335-1:1995 IEC 60335-1 (ed.5.0):2010+A1:2013+A2:2016 IEC 60335-1 (ed4.0):2001 +A1:2004 +A2:2006 IEC 60335-1 (ed3.0):1991 +A1:1994 +A2:1999
2. Spin Extractor	Full Type Test	MS IEC 60335-2-4:2007 MS IEC 60335-2-4:2005 MS IEC 60335-2-4:1995 IEC 60335-2-4 (ed6.0):2008 +A1:2012 IEC 60335-2-4 (ed5.0):2002 +A1:2004 +A2:2006 IEC 60335-2-4 (ed4.0):1993 +A1:1997 +A2:1999
3. Washing Machine	Full Type Test	MS IEC 60335-2-7:1995 MS 1597:Part 2-7:2005 IEC 60335-2-7 (ed7.0):2008 +A1:2011 +A2:2016 IEC 60335-2-7 (ed7.0):2008 +A1:2011 IEC 60335-2-7 (ed6.0):2002 +A1:2004 +A2:2006 IEC 60335-2-7 (ed5.0):2000 IEC 60335-2-7 (ed4.0):1993 +A1:1998 +A2:1999 IEC 60335-2-7 (ed3.0):1984 +A1:1988 +A2:1990

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC III LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
4. Storage Water Heater	Full Type Test	MS 1597-2-21:2019 MS 1597-2-21:2015 MS 1597-2-21:2011 MS IEC 60335-2-21:2005 MS IEC 60335-2-21:2000 IEC 60335-2-21 (ed6.0):2012 +A1:2018 IEC 60335-2-21 (6.0):2012 IEC 60335-2-21 (ed5.0):2002 +A1:2004 +A2:2008 IEC 60335-2-21 (ed5.0):2002 +A1:2004 IEC 60335-2-21 (ed4.0):1997 +A1:1999 IEC 60335-2-21 (ed3.0):1989 +A1:1990 +A2:1990 +A3:1992 SS 146:Part 1:1994 SS 146:Part 2:8:1999

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC III LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
5. Instantaneous Water Heater	Full Type Test	MS 1597-2-35:2019 MS 1597-2-35:2010 MS 1597:Part 2-35:2003 IEC 60335-2-35:2012 (ed5.0) +A1:2016+A2:2020 IEC 60335-2-35 (ed5.0):2012 IEC 60335-2-35 (ed4.0):2002 +A1:2006 +A2:2009 IEC 60335-2-35 (ed4.0):2002 +A1:2006 IEC 60335-2-35 (ed3.0):1997 +A1:1999 IEC 60335-2-35 (ed2.0):1991 SS 146:art 1:2004 SS 146:Part 1:1994 SS 146:Part 2:5:2007 SS 146:Part 2:5:1999

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 20 of 64

DOMESTIC III LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
6. Refrigerators and food freezers (Appliances such as; - Refrigerator - Freezer - Minibar as specified by standard)	Full Type Test Except; a) sub-clause 21.101 MS IEC 60335-2-24:2002 & MS IEC 60335-2-24	MS 1597:Part 2-24:2005 MS IEC 60335-2-24:2002 IEC 60335-2-24 (ed7.0):2010 +A1:2012 +A2:2017 IEC 60335-2-24 (ed7.0):2010 +A1:2012 IEC 60335-2-24 (ed7.0):2010 IEC 60335-2-24 (ed6.0):2002 +A1:2005 +A2:2007 IEC 60335-2-24 (ed5.0):2000 IEC 60335-2-24 (ed4.0):1997 +A1:1998 +A2:1999 IEC 60335-2-24 (ed3.0):1992
7. Cloth Dryer and Towel Rail	Full Type Test	MS 1597:Part 2-43:2003 IEC 60335-2-43 (ed3.0):2002 +A1:2005 IEC 60335-2-43 (ed2.0):1995

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC III LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
8. Commercial dispensing appliances and vending machines	Full Type Test	MS 1597:Part 2-75:2003 IEC 60335-2-75 (ed2.0):2002 +A1:2004 IEC 60335-2-75 (ed1.0):1995 +A1:1998
9. Electrical heat pumps, air-conditioners and dehumidifiers	Full Type Test	MS 1597-2-40:2005 IEC 60335-2-40 (ed5.0):2013 IEC 60335-2-40 (ed4.2):2005
10. Pumps	Full Type Test	MS IEC 60335-2-41:2005 IEC 60335-2-41 (ed4.0):2012 IEC 60335-2-41 (ed3.1):2004

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 22 of 64

DOMESTIC III LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
11. Tumble Dryers	Full Type Test	MS IEC 60335-2-11:2014 IEC 60335-2-11 (ed7.0):2008+A1:2012+A2:2015 IEC 60335-2-11 (ed7.0):2008+A1:2012
12. Particular requirements for dishwasher	Full Type Test	IEC 60335-2-5 (ed6.0):2012 MS 1597-2-5:2014
13. Drills and impact drills	Full Type Test	MS IEC 60745-1:2010 MS IEC 60745-1:2005 IEC 60745-1 (ed4.0):2006 IEC 60745-1 (ed3.0):2001 +A1:2002 +A2:2003 MS IEC 60745-2-1:2011 IEC 60745-2-1 (ed2.0):2003+A1:2008 IEC 60745-2-1 (ed2.0):2003

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**DOMESTIC III LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
14. Grinders, polishers and disk-type sanders	Full Type Test Except clauses 19 & 20 of IEC 60745-1:2001 and IEC 60745-2-3:2006	MS IEC 60745-1:2010 MS IEC 60745-1:2005 IEC 60745-1 (ed4.0):2006 IEC 60745-1 (ed3.0):2001 +A1:2002 +A2:2003 IEC 60745-1 (ed1.0):1982 MS IEC 60745-2-3:2010 IEC 60745-2-3 (ed2.0):2006 IEC 60745-2-3 (ed1.0):1984 +A1:1995
15. Sanders and Polishers, other than disk-type	Full Type Test	MS IEC 60745-1:2010 MS IEC 60745-1:2005 MS IEC 60745-2-4:2011 MS IEC 60745-2-4:2005 IEC 60745-1 (ed4.0):2006 IEC 60745-1 (ed3.0):2001 +A1:2002 +A2:2003 IEC 60745-1 (ed1.0):1982 IEC 60745-2-4 (ed2.0):2002+A1:2008 IEC 60745-2-4 (ed2.0):2002 IEC 60745-2-4 (ed1.0):1983 +A1:1992 +A2:1996
16. Clothes washing machine for household use	Water and energy consumption Program time	MS IEC 60456:2012 Clause 8.6 IEC 60456:2010 Clause 8.6
	Full Type Test Water efficiency performance and related testing method	SPAN TS 3006:2021

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 24 of 64

ENERGY EFFICIENCY LABORATORY (DOMESTIC)**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Household refrigerating appliances	Full Type Test Except Clause 9, 10, 11, 12, 14, 16, 17, 18	MS IEC 62552:2011 IEC 62552 (ed1.0):2007
	Full Type Test	IEC 62552-1 (ed.1):2015+A1:2020 IEC 62552-3 (ed.1):2015+A1:2020 MS IEC 62552-1:2016 MS IEC 62552-3:2016 Guide on Minimum Energy Performance Standard (MEPS) Requirements for Refrigerator (1 March 2018)
2. Non-ducted air conditioners and heat pumps	Full Type Test	MS ISO 5151:2012 ISO 5151:2017 ISO 5151:2010 ISO 16358-1:2013+Amd 1:2019 ISO 16358-2:2013 Guide on Minimum Energy Performance Standard Requirements for Air Conditioner with Cooling Capacity \leq 7.1kW (1 March 2018) UAE-S ISO 5151:2017 AS/NZS 3823.1.1:2012 TCVN 6576:2013
3. Electric Oven	Performance measurement Energy efficiency	IEC 60350-1:2016 Full type test except Clauses 7.5, 7.6, 8, 9, 10, 11, 12
4. Electric Rice Cooker for Household Use	Full Type Test Performance measurement	MS 2024:2020

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**IP AND MATERIAL TEST LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Insulating material (General)	Ball pressure test	IEC 60695-10-2 (ed3.0):2014
2. Insulating material (General)	Tracking test	IEC 60112 (ed5.0):2020 IEC 60112 (ed4.1):2009 IEC 60112 (ed4.0):2003 IEC 60112 (ed3.0):1979
3. Insulating material (for TV back cover)	Burning test	MS IEC 60065:2003
4. General electrical products	IP Tests	MS IEC 60529:2005 MS IEC 60529:2002 IEC 60529 (ed2.2):2013 (except Clause 14.2.9) IEC 60529 (ed2.1):2001 IEC 60529 (ed2.0):1989
5. Insulating material (General)	Glow Wire test	IEC 60695-2-10 (ed3.0):2021 IEC 60695-2-10 (ed2.0):2013 IEC 60695-2-11 (ed3.0):2021 IEC 60695-2-11 (ed2.0):2014 IEC 60695-2-1 (ed2.0):1991 AS/NZS 60695.2.10:2001 AS/NZS 60695.2.11:2001
6. Insulating material (General)	Needle Flame test	IEC 60695-2-2 (ed2.0):1991 IEC 60695-11-5 (ed2.0):2016 IEC 60695-11-5 (ed1.0):2004
7. Insulating material (General)	Glow Wire Flammability Index (GWFI)	IEC 60695-2-10 (ed3.0):2021 IEC 60695-2-10 (ed2.0):2013 IEC 60695-2-12 (ed3.0):2021 IEC 60695-2-12 (ed2.1):2014 IEC 60695-2-12 (ed1.0):2000
8. Insulating material (General)	Glow Wire Ignitability Test (GWIT)	IEC 60695-2-10 (ed3.0):2021 IEC 60695-2-10 (ed2.0):2013 IEC 60695-2-13 (ed3.0):2021 IEC 60695-2-13 (ed2.1):2014 IEC 60695-2-13 (ed1.0):2000
9. Solid electrical insulating material	Hot-wire coil ignitability test	IEC 60695-2-20: 1995

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**ELECTRICAL & ELECTRONICS 2 SECTION (EEST2)****LAMP AND ACCESSORIES LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Fixed General Purpose Luminaires	Full Type Test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-2-1:1997 (Confirmed 2015) MS IEC 60598-2-1:1997 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003 +A1:2006 IEC 60598-2-1 (ed2.0):2020 IEC 60598-2-1 (ed1.0):1979 + A1:1987
2. Recessed Luminaires	Full Type Test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-2-2:2019 MS IEC 60598-2-2:1998 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003 +A1:2006 IEC 60598-2-2 (ed2.1):1997 IEC 60598-2-2 (ed2.0):1996 +A1:1997 IEC 60598-2-2 (ed3.0):2011 IEC 60598-2-2 (ed1.0):1979 +A1:1987 +A2:1991
3. Luminaires for Road and Street Lighting	Full Type test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-2-3:2019 MS IEC 60598-2-3:2006 MS IEC 60598-2-3:1997 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003 +A1:2006

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**LAMP AND ACCESSORIES LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Luminaires for Road and Street Lighting (<i>continue</i>)		IEC 60598-2-3 (ed3.1):2011 IEC 60598-2-3 (ed3.0):2002 IEC 60598-2-3 (ed2.1):1997 IEC 60598-2-3 (ed2.0):1993 +A1:1997
4. Portable General Purpose Luminaires	Full Type Test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-2-4:2003 MS IEC 60598-2-4:1997 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003 +A1:2006 IEC 60598-2-4 (ed3.0):2017 IEC 60598-2-4 (ed2.0):1997
5. Ballast For Tubular Fluorescent Lamps	Full Type Test	MS IEC 61347-1:2012 MS IEC 61347-1:2003 MS IEC 61347-2-8:2014 MS IEC 61347-2-8:2003 MS IEC 60921:2013 MS 141:2014 MS 141:Part 2:1993 +A1:1997 IEC 61347-1 (ed2.0):2007 +A1:2010 IEC 61347-1 (ed2.0):2007 IEC 61347-1 (ed1.0):2000 +A1:2003 IEC 61347-2-8 (ed1.0):2000 +A1:2006 IEC 61347-2-8 (ed1.0):2000 IEC 60921 (ed. 2.0):2004 +A1:2006 IEC 60921 (ed. 1.0):1988 +A1:1990 +A2:1994

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**LAMP AND ACCESSORIES LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
6. Ballast for Discharge lamp	Full type test	MS IEC 61347-1:2012 MS IEC 61347-1:2003 MS IEC 61347-2-9:2003 MS IEC 60923:2008 IEC 61347-1 (ed2.0):2007 +A1:2010 IEC 61347-1 (ed2.0):2007 IEC 61347-1 (ed1.0):2000 +A1:2003 IEC 61347-2-9 (ed1.0):2000 +A1:2003 +A2:2006 IEC 61347-2-9 (ed1.0):2000 IEC 60923 (ed3.1):2006
7. Electronic Ballast for Fluorescent lamp	Full type test Except clauses 9, 10, 12 & 14 of MS IEC 90929:1995	MS IEC 61347-1:2012 MS IEC 61347-1:2003 MS IEC 61347-2-3:2003 MS IEC 60929:2008 MS IEC 60929:1995 IEC 61347-1 (ed2.0):2007+A1:2010 IEC 61347-1 (ed2.0):2007 IEC 61347-1 (ed1.0):2000+A1:2003 IEC 61347-2-3 (ed1.0):2000+1:2004 +A2:2006 IEC 61347-2-3 (ed1.0):2000 IEC 60929 (ed1.0):1990+ A1:1994+ A2:1996
8. Emergency Lighting	Full type test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-1:2003 MS IEC 60598-1:1997 MS 619-2-22:2005 (Confirmed:2013) MS 619:Part 102:Sect 102.22:1985 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003+A1:2006 IEC 60598-2-22 (ed3.0):1997 +A1:2002

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**LAMP AND ACCESSORIES LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
9. "KELUAR' Sign	Full type test except sub-clause 3.4 of MS 983:2004	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-1:2003 MS IEC 60598-1:1997 MS 983:2004 MS 619-2-22:2005 (Confirmed:2013) MS 619:Part 102:Sect 102.22:1985 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003+ A1:2006 IEC 60598-2-22 (ed3.0):1997+ A1:2002
10. Starting device other than glow-starter- (Ignitor)	Full type test	MS IEC 61347-1:2012 MS IEC 61347-1:2003 MS IEC 61347-2-1:2003 IEC 61347-1 (ed2.0):2007+A1:2010 IEC 61347-1 (ed2.0):2007 IEC 61347-1 (ed1.0):2000+A1:2003 IEC 61347-2-1 (ed1.0):2000 +A1:2005 IEC 61347-2-1 (ed1.0):2000 MS IEC 60927:2019 IEC 60927 (ed3.0):2007+A1:2013 IEC 60927 (ed2.0):1996+A1:1999

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**LAMP AND ACCESSORIES LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
11. Glow-starter for fluorescent lamp	Full type test	MS IEC 60155:1996 IEC 60155 (ed4.0):1993+A1:1995 +A2:2006 IEC 60155 (ed4.0):1993
12. Lampholder & starterholder for fluorescent lamp	Full type test Except Clauses 13 & 18 (for all standards)	MS IEC 60400:2006 MS IEC 60400:1999 IEC 60400 (ed7.0):2008+A1:2011 IEC 60400 (ed6.2):2004 IEC 60400 (ed6.0):1999+A1:2002 +A2:2004 IEC 60400 (ed5.0):1996+A1:1997
13. LED modules for general lighting	Full type test	MS IEC 62031:2011 IEC 62031 (ed2.0):2018 IEC 62031 (ed1.0):2008
14. Self-ballasted LED – lamps for general lighting services by voltage > 50V	Full type test	MS IEC 62560:2012 IEC 62560 (ed1.1):2015 IEC 62560 (ed1.0):2011+A1:2015 IEC 62560 (ed1.0):2011
15. Self-ballasted lamps for general lighting services	Full type test	MS IEC 60968:2006 IEC 60968 (ed1.2):1999
16. Luminaires – Floodlights	Full type test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-1:2006 MS IEC 60598-2-5:2006 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-1 (ed6.0):2003+A1:2006 IEC 60598-2-5 (ed3.0):2015 IEC 60598-2-5 (ed2.0):1998

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**LAMP AND ACCESSORIES LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
17. Double-capped LED lamps designed to retrofit linear fluorescent lamps	Full type test	IEC 62776 (ed1.0):2014
18. Luminaires for Mains Socket-Outlet Mounted Nightlights	Full type test	MS IEC 60598-1:2021 MS IEC 60598-1:2012 MS IEC 60598-2-12:2010 IEC 60598-1 (ed9.0):2020 IEC 60598-1 (ed8.1):2017 IEC 60598-1 (ed8.0):2014+A1:2017 IEC 60598-1 (ed7.0):2008 IEC 60598-2-12 (ed1.0):2006
19. Edison screw lampholders	Full type test	MS IEC 60238:2008 IEC 60238 (ed8.0):2004
20. Lamp caps and holders together with gauges for the control of interchangeability and safety	Lamp cap dimension	MS IEC 60061-1:2005 IEC 60061-1 (ed3.35):2005
21. DC or AC supplied electronic control gear for LED modules	Full type test	IEC 62384 (ed1.1):2011 (IEC 62384 (ed1.0):2006 +A1:2009)

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**ENERGY EFFICIENCY LABORATORY (LAMP)****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Self-ballasted lamps for general lighting services – Performance requirements	Full type test	MS IEC 60969:2006 (CONFIRMED:2015) MS IEC 60969:2006 IEC 60969:2016/COR1:2017 IEC 60969 (ed1.2):2001
2. Self-ballasted LED-lamps for general lighting services – Performance requirements	Full type test	MS IEC 62612:2015 IEC 62612 (ed1.0):2013 +A1:2015 +A2:2018
3. Lighting Products i. Lamps ii. Luminaires	Full type test	IES LM 79:2019 IES LM 79:2008 CIE 121:1996
4. Photobiological safety of lamps and lamps systems	Full type test	MS IEC 62471:2011 IEC 62471 (ed1.0):2006
5. Photobiological safety of lamps and lamp systems – Part 2: Guidance on manufacturing requirements relating to non-laser optical radiation safety	Full type test	MS 62471-2:2014 IEC/TR 62471-2 (ed1.0):2009
6. Luminaire performance – LED luminaires	Full type test	IEC 62722-1 (ed1.0):2014 IEC 62722-2-1 (ed1.0):2014
7. LED modules for generating lighting – Performance requirements	Full type test	MS IEC 62717:2017 IEC 62717 (ed1.0):2014+A1:2015

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 33 of 64

ENERGY EFFICIENCY LABORATORY (LAMP)**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
8. Minimum energy performance standards (MEPS) for lamps	Full type test based on MS 2598:2014	MS IEC 60081:2003 (CONFIRMED:2015) IEC 60081(ed5.0):1997 +A1:2000 +A2:2003 MS IEC 60969:2006 (CONFIRMED:2015) IEC 60969 (ed1.2):2001 MS IEC 60901:2003 (CONFIRMED:2015) IEC 60901 (ed2.0):1996 MS IEC 62612:2015 IEC 62612 (ed1.0):2013 MS IEC 60064:2006 (CONFIRMED:2015) IEC 60064 (ed6.0):1993 +A1:2000 +A2:2002 +A3:2005
9. Lighting of Obstacles	ASD 404:2007 Clause 4.1 Photometric test & Clause 4.2 Flash rate and Duration	IES LM 79:2019 IES LM 79:2008 CIE 121:1996
10. LED Lamp and Luminaire	In-Situ Temperature Measurement Testing (ISTMT) for Lumen Maintenance Projection.	IES LM 84-14 (Annex A) with IES TM-21-11
11. LED Lamp and luminaire	Full Type Test	CIE S 025/E:2015

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**AUDIO/VIDEO AND ELECTRONICS LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Mains Operated Electronics and Related Apparatus for Household and Similar General Use	Full type test	MS IEC 60065:1997 IEC 60065 (ed5.0):1985+ A1:1987+ A2:1989+A3:1992 TIS 1195-2536(1993) PNS 256:1999+A1:2003
2. Audio, Video and Similar Electronics Apparatus	Full type test	MS IEC 60065:2007 IEC 60065 (ed8.0):2014 IEC 60065 (ed7.1):2005 IEC 60065 (ed7.0):2001+ A1:2005+ A2:2010 IEC 60065 (ed7.0):2001+ A1:2005 IEC 60065 (ed7.0):2001 IEC 60065 (ed6.0):1998 PNS IEC 60065:2007 SNI 04-6253-2003
	Full type test except Clause 10.3 & 10.6	IEC 62368-1 (ed3.0): 2018 IEC 62368-1 (ed2.0):2014
3. Information Technology Equipment	Full type Test	MS IEC 60950-1:2007 IEC 60950-1 (ed2.0):2005+A1:2009+ A2:2013 IEC 60950-1 (ed2.0):2005+ A1:2009 IEC 60950-1 (ed2.0):2005 IEC 60950-1 (ed1.0):2001 IEC 60950 (ed3.0):1999
	Full type test Except Clause 10.3 & 10.6	IEC 62368-1 (ed3.0): 2018 IEC 62368-1 (ed2.0):2014
4. Fire Detection and Fire Alarm Systems; Control and indicating Equipment	Full type test except Clauses 15.11 to 15.12	MS 1745:Part 2:2004 EN 54-2:1997 BS EN 54-2:1997

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 35 of 64

AUDIO/VIDEO AND ELECTRONICS LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
5. Fire Detection and Fire Alarm Systems: Fire Alarm Devices-Sounders	Full type test except Clauses 5.11 and 5.16	MS 1745:Part 3:2004 EN 54-3:2001 BS EN 54-3:2001
6. Fire Detection and Fire Alarm Systems: Manual Call Points	Full Type Test Except Clauses 5.13, 5.15 and 5.18	MS 1745:Part 11:2004 EN 54-11:2001
7. Medical electrical equipment, general requirements for safety	Full type test except Clause 9.4.2.4 and 15.3.5	MS IEC 60601-1:2006 IEC 60601-1 (ed3.1):2012 IEC 60601-1 (ed3.0):2005
8. Electrical Equipment for Measurement, Control and Laboratory Use	Full type test except: a) Sub-clauses 8.1.1, 11.7, 12.5.2, 13.2.4, 15 & 16 of IEC 61010-1:2001 b) Sub-clauses 8.1, 11.7, 12.5.2, 15 & 16 of IEC 61010-1 (ed1.0):1990+A1:1992 +A2:1995	IEC 61010-1 (ed2.0):2001 IEC 61010-1 (ed1.0):1990+A1:1992 +A2:1995 IEC 61010-1 (ed3.0):2010
9. Laboratory Equipment for the Heating of Material	Full type test except sub-clause 8.1, 11.7, 12.5.2, 15 & 16 of IEC 61010-1 (ed1.0):1990+A1:1992+A2:1995	IEC 61010-2-010 (ed1.0):1992+A1:1996
10. Washer Disinfectors used in Medical Pharmaceutical, Veterinary and Laboratory Fields	Full type test except sub-clause 8.1.1, 11.7, 12.5.2, 15 & 16 of IEC 61010-1 (ed1.0):1990+A1:1992+A2:1995	IEC 61010-2-045 (ed1.0):2000
11. Laboratory Equipment for Mixing and Stirring	Full Type Test except sub-clause 8.1.1, 11.7, 12.5.2, 13.2.4, 15 & 16 of IEC 61010-1 (ed1.0):1990+A1:1992+A2:1995	IEC 61010-2-051 (ed2.0):2003

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 36 of 64

AUDIO/VIDEO AND ELECTRONICS LABORATORY**SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
12. Shaver transformer and shaver supply unit	Full type test except clause 14.3.2 of IEC 61558-1:2009	MS IEC 61558-1:2005 MS IEC 61558-2-5:2005 IEC 61558-1 (ed2.0):2005+A1:2009 IEC 61558-1 (ed1.0):1997+A1:1998 IEC 61558-2-5 (ed2.0):2010 IEC 61558-2-5 (ed1.0):1997
13. Safety isolating transformer for general use	Full type test except clause 14.3.2 of IEC 61558-1:2009	MS IEC 61558-1:2005 MS IEC 61558-2-6:2005 IEC 61558-1 (ed2.0):2005+A1:2009 IEC 61558-1 (ed1.0):1997+A1:1998 IEC 61558-2-6 (ed2.0):2009 IEC 61558-2-6 (ed1.0):1997
14. Household Electrical Appliances – Measurement of Standby Power	Full type test	MS IEC 62301:2007 MS IEC 62301:2012 IEC 62301 (ed2.0):2011 IEC 62301 (ed1.0):2005
15. Measurement of Power Consumption for audio/Video and Equipment	Full type test	IEC 62087 (ed3.0):2011 IEC 62087 (ed2.0):2008 MS IEC 62087-1:2017 IEC 62087-1 (ed1.0):2015 MS IEC 62087-2:2017 IEC 62087-2 (ed1.0):2015 MS IEC 62087-3:2017 IEC 62087-3 (ed1.0):2015

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**AUDIO/VIDEO AND ELECTRONICS LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
16. Lamp controlgear – electronic controlgear for LED modules	Full type test	MS IEC 61347-1:2012 MS IEC 61347-1:2003 MS IEC 61347-2-13:2012 IEC 61347-1(ed3.1): 2017 IEC 61347-1 (ed2.0):2007+A1:2010 IEC 61347-1 (ed2.0):2007 IEC 61347-1 (ed1.0):2000+A1:2003 IEC 61347-1 (ed1.0):2000 IEC 61347-2-13 (ed2.1):2016 IEC 61347-2-13:2006
17. Minimum Energy Performance Standards (MEPS) for Television	Full type test	MS 2576:2014
18. Transformers and Power Supply Units for Bells and Chimes	Full type test	MS IEC 61558-1:2005 MS IEC 61558-2-8:2007 IEC 61558-1 (ed2.1):2009 IEC 61558-1 (ed2.0):2005 IEC 61558-1 (ed1.0):1997+A1:1998 IEC 61558-2-8 (ed2.0):2010 IEC 61558-2-8 (ed1.0):1998
19. Switch Mode Power Supply Units and Transformer for Switch Mode Power Supply Units	Full type test	MS IEC 61558-1:2005 MS IEC 61558-2-17:2007 IEC 61558-1 (ed2.1):2009 IEC 61558-1 (ed2.0):2005 IEC 61558-1 (ed1.0):1997+A1:1998 IEC 61558-2-17 (ed1.0):1997 IEC 61558-2-16 (ed1.0):2009+A1:2013

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**PHOTOVOLTAIC LABORATORY****SCOPE OF TESTING: ELECTRICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Photovoltaic (PV) modules – Crystalline Silicon	Full Type Test	IEC 61215-1 (ed2.0):2021 IEC 61215-1 (ed1.0):2016 IEC 61215-1-1 (ed2.0):2021 IEC 61215-1-1 (ed1.0):2016 IEC 61215-2 (ed2.0):2021 IEC 61215-2 (ed1.0):2016
2. Photovoltaic (PV) modules – Thin-film Cadmium Teluride (CdTe)	Full Type Test	IEC 61215-1 (ed2.0):2021 IEC 61215-1 (ed1.0):2016 IEC 61215-1-2 (ed2.0):2021 IEC 61215-1-2 (ed1.0):2016 IEC 61215-2 (ed2.0):2021 IEC 61215-2 (ed1.0):2016
3. Photovoltaic (PV) modules – Crystalline Silicon	Full Type Test	IEC 61215 (ed2.0):2005 MS IEC 61215:2006 (Confirmed:2015)
4. Photovoltaic (PV) modules	Full Type Test Full Type Test except MST 23 *MST 23 will be subcontracted	IEC 61730-1 (ed1.0):2004 MS IEC 61370-1:2010 IEC 61730-2 (ed1.0):2004 MS IEC 61730-2:2010
	Full Type Test Full Type Test except MST 23 & 24 *MST 23 & 24 will be subcontracted	IEC 61730-1 (ed2.0):2016 IEC 61730-2 (ed2.0):2016
5. Photovoltaic (PV) modules – Crystalline Silicon	Potential-induced degradation (PID) Stress Test	IEC TS 62804-1 (ed1.0):2015



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

RADIO FREQUENCY & ELECTROMAGNETIC COMPATIBILITY SECTION (RFEMCT)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electric / Electronic Product	1. Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4: Radio disturbance and immunity measuring apparatus - Antennas and test sites for radiated disturbance measurements	CISPR 16-1-4:2019+AMD 1:2020 CISPR 16-1-4:2019
	2. Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-1: Methods of measurement of disturbances and immunity - Conducted disturbance measurements	CISPR 16-2-1:2014+AMD1:2017
	3. Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-3: Methods of measurement of disturbances and immunity - Radiated disturbance measurements	CISPR 16-2-3:2016+AMD1:2019
	4. Specification for radio disturbance and immunity measuring apparatus and methods - Part 2-4: Methods of measurement of disturbances and immunity - Immunity measurements	CISPR 16-2-4:2003
	5. Uninterruptible power systems (UPS) - Part 2: Electromagnetic compatibility (EMC) requirements	IEC 62040-2:2016
	6. Radio Disturbance Characteristics- Limits and Method of Measurements Maximum Frequency: 40GHz	FCC Part 15 Subpart B:2021 ANSI C63.4:2014 ICES-003 ISSUE 7:2020 Refer to Appendix A

Note:

- 1. CISPR : Comité Internationale Spécial des Perturbations Radioelectrotechnique (International Special Committee on Radio Interference)
- 2. EN : European Standards
- 3. ANSI : American National Standards Institute
- 4. AS/NZS : Australia & New Zealand Standards
- 5. IEC : International Electrotechnical Commission

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 40 of 64

ELECTROMAGNETIC COMPATIBILITY LAB**SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical/ Electronic Products (continue)	7. Electrostatic Discharge Immunity	IEC 61000-4-2:2008
	8. Radiated, Radio Frequency, Electromagnetic Field Immunity	IEC 61000-4-3:2020 IEC 61000-4-3:2010 (IEC 61000-4-3:2006+A1:2007 +A2:2010)
	9. Electrical Fast Transient Immunity	IEC 61000-4-4:2012
	10. Surge Immunity	IEC 61000-4-5:2017 (IEC 61000-4-5:2014+AMD1:2017)
	11. Immunity to Conduct Disturbances, Induced by Radio Frequency Fields	IEC 61000-4-6:2013
	12. Power Frequency Magnetic Field Immunity	IEC 61000-4-8:2009
	13. Voltage Dips, Short Interruptions and Voltage Variations Immunity	IEC 61000-4-11:2020
	14. Ring Wave Immunity	IEC 61000-4-12:2017
	15. Damp Oscillatory Wave	IEC 61000-4-18:2019
	16. Harmonic Current Emission	IEC 61000-3-2:2018 + A1:2020 IEC 61000-3-12:2011+AMD1:2021 IEC 61000-3-12:2011
	17. Voltage Changes, Voltage Fluctuations and Flicker in Public Low Voltage Supply Systems	IEC 61000-3-3:2013 +AMD1:2017+AMD2:2021 IEC 61000-3-3:2013+A1:2017 IEC 61000-3-11:2017
	18. Electromagnetic Compatibility (EMC) – Part 17: Testing and measurement techniques – Ripple on D.C. input power port immunity test	IEC 61000-4-17:2009 (IEC 61000-4-17:1999+A1:2001 +A2:2008)
	19. Electromagnetic compatibility (EMC) – Part 29: Testing and measurement techniques – Voltage dips, short interruption and voltage variations on D.C. input power	IEC 61000-4-29:2000

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 41 of 64

ELECTROMAGNETIC COMPATIBILITY LAB**SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical/ Electronic Products (continue)	20. Pulse Magnetic Field Immunity	IEC 61000-4-9:2016
	21. Safety of household and similar electrical appliances Part 1 : General Requirement	IEC 60335-1:2020 IEC 60335-1:2010+A2:2016 Clause: 19.11.4.1 to 19.11.4.6
	22. Switches for household and similar fixed electrical installation. Part 2-1: Particular requirement – electric switches	IEC 60669-2-1:2002+A2:2015 Clause:26 IEC 60669-2-1:2021 Clause:26
	23. Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 2-6: Particular requirements - In vitro diagnostic (IVD) medical equipment	IEC 61326-2-6:2020
	24. Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules	IEC 61008-1:2012 (Clause 9.24)
	25. Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) - Part 1: General rules (Second revision	MS IEC 61008-1:2012 (Clause 9.24)
	26. Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules	MS IEC 61008-1:2012 Clause:8.17 IEC 61008-1:2010 Clause:8.17
	27. Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) – Part 1: General rules	MS IEC 61009-1:2012 Clause:8.17 IEC 61009-1:2010 Clause:8.17
	28. Fire detection and alarm systems: Part 2: Control and indicating equipment	MS 1745 – Part 2:2004 Clause: 15.8 to 15.12

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical/ Electronic Products (continue)	29. Fire detection and alarm systems: Part 3: Audible fire alarm devices	MS 1745 – Part 3:2004 Clause: 5.16(a) to 5.16(e)
	30. Fire detection and alarm systems: Part 11: Manual call points	MS 1745 – Part 11:2004 Clause: 5.18(a) to 5.18(e)
	31. Alarm systems Electromagnetic compatibility. Product family standard: Immunity requirements for components of fire, intruder, hold up, CCTV, access control and social alarm systems	BS EN 50130-4:2011+A1:2014
	32. Electrical equipment for measurement, control and laboratory use – EMC requirements: Part 1: General Requirement	IEC 61326 -1 : 2020 IEC 61326 -1 : 2012
	33. Measuring relays and protection equipment – Part 26 : Electromagnetic compatibility requirement	IEC 60255 – 26:2023 IEC 60255 – 26:2013
	34. Traffic control equipment performance of signal heads	BS EN 50293:2012 MS 2478:2012 Clause: 5.2
	35. Residual current-operated protective devices (RCDs) for household and similar use – electromagnetic compatibility	IEC 61543:1995+A1:2014+A2:2005
	36. General requirements, tests and test conditions – Part 11: Metering equipment	IEC 62052-11:2020 (Clause 9.3) Except Clause 9.3.8
	37. Electrical equipment for measurement, control and laboratory use. EMC requirements. Part 3-1: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - General industrial applications	BS EN 61326-3-1:2017

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical/ Electronic Products (continue)	38. Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 3-2: Immunity requirements for safety-related systems and for equipment intended to perform safety-related functions (functional safety) - Industrial applications with specified electromagnetic environment	IEC 61326-3-2:2017
	39. Electromagnetic compatibility (EMC) - Part 4-16: Testing and measurement techniques - Test for immunity to conducted, common mode disturbances in the frequency range 0 Hz to 150 kHz	IEC 61000-4-16:2015
	40. Electromagnetic compatibility (EMC) - Part 4-34: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests for equipment with mains current more than 16 A per phase	IEC 61000-4-34:2009
	41. Electromagnetic compatibility – Product family standard for lifts, escalators and moving walks - Emission	BS EN 12015:2020
	42. Electromagnetic compatibility – Product family standard for lifts, escalators and moving walks - Immunity	BS EN 12016:2013
	43. Photovoltaic power generating systems – EMC requirements and test methods for power conversion equipment	IEC 62920:2017

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**ELECTROMAGNETIC COMPATIBILITY LAB****SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical/ Electronic Products (continue)	44. Voltage sag Immunity	SEMI F-47 – 0706 (Reapproved 0812)
2. Industrial, scientific and medical (ISM) radio frequency equipment	Radio disturbance characteristics – Limits and method of measurement Maximum Frequency: 40GHz	CISPR 11:2015+A1:2016+A2:2019 ANSI C63.4:2014 FCC Part 18:2021 FCC MP-5:1986 AS/NZS CISPR 11:2011 BS EN 55011:2016+A2:2020 Refer to Appendix A
3. Sound and television broadcast receivers and associated equipment	1. Radio disturbance characteristics –Limits and methods of measurement Maximum Frequency: 40GHz 2. Immunity characteristics – Limits and methods of measurement	CISPR 13:2015 (CISPR 13:2009 +A1:2015) FCC Part 15 Subpart B:2021 Refer to Appendix A ANSI C63.4:2014 AS/NZS CISPR 13:2012 CISPR 20:2006 EN 55020:2007+A11 AS/NZS CISPR 20:2009
4. Household appliances, electric tools and similar apparatus	1. Part 1: Emission Maximum Frequency: 40GHz 2. Part 2: Immunity 3. Measurement methods for electromagnetic fields of	CISPR 14-1:2020 CISPR 14-1:2016 CISPR 14-1:2005+A1:2008+A2:2011 FCC Part 15 Subpart B:2021 ANSI C63.4:2014 AS/NZS CISPR 14.1:2021 AS/NZS CISPR 14.1:2013 BS EN 55014-1:2017 BS EN 55014-1:2006+A2:2011 Refer to Appendix A CISPR 14-2:2020 CISPR 14-2:2015 AS/NZS CISPR 14.2:2021 AS/NZS CISPR 14.2:2015 BS EN 55014-2:2015 EN 62233:2008



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

	household appliances and similar apparatus with regards to human exposure	
--	---	--

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
5. Electric lighting and similar equipment	1. Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment Maximum Frequency: 40GHz 2. EMC Immunity requirements 3. Assessment of lighting equipment related to human exposure to electromagnetic fields	CISPR 15:2018 FCC Part 15:Subpart B:2021 ANSI C63.4:2014 AS/NZS CISPR 15:2011 BS EN 55015:2013+A1:2015 Refer to Appendix A IEC 61547:2020 IEC 62493:2015
6. Information Technology Equipment	1. Radio disturbance characteristics – Limits and methods of measurement Maximum Frequency: 40GHz 2. Immunity characteristics – Limits and methods of measurement	CISPR 22:2008 FCC Part 15 Subpart B:2021 ANSI C63.4:2014 ICES-003 ISSUE 7:2020 AS/NZS CISPR 22:2009, Amd 1:2013 Refer to Appendix A CISPR 24:2010 AS/NZS CISPR 24:2009

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
7. Road vehicles	<ol style="list-style-type: none"> 1. Electrical disturbance from conduction and coupling Part 2: Electrical transient conduction along supply lines only 2. Electrical disturbance from conduction and coupling Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines 3. Component test method for electrical disturbances from narrowband radiated electromagnetic energy Part 4: Harness excitation methods 4. Test methods for electrical disturbances from electrostatic discharge 5. Vehicles test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 2: Off-vehicle radiation sources 6. Component test methods for electrical disturbances from narrowband radiated electromagnetic energy – Part 2: Absorber-lined shielded Enclosure 7. General Specification of Environment Test On Automotive Electronic Device 	<p>ISO 7637-2 3rd Edition 2011-03-01</p> <p>ISO 7637-3:2016</p> <p>ISO 11452-4:2020</p> <p>ISO 10605:2008+AMD1:2014 ISO 10605 2nd Edition 2008-07-15</p> <p>ISO 11451-2:2015</p> <p>ISO 11452-2 Third Edition 2019-01</p> <p>PES-6022:2010</p>

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Road vehicles (Continue)	8. Electric vehicle conductive charging system – Part 21-2: Electric vehicle requirements for conductive connection to an AC/DC supply – EMC requirements for off board electric vehicle charging systems 9. Electric vehicle conductive charging system – Part 23: DC electric vehicle charging station 10. Electric vehicle conductive charging system – Part 21-1 Electric vehicle on-board charger EMC requirements for conductive connection to AC/DC supply	IEC 61851-21-2:2018 IEC 61851-23:2014 IEC 61851-21-1:2017
8. Vehicles, boats and internal combustion engines	1. Radio disturbance characteristics – Limits and methods of measurements for the protection off-board receivers 2. Radio disturbance characteristics – Limits and method of measurement for the protection on-board receivers.	CISPR 12:2009 (CISPR 12:2007+A1:2009) CISPR 25:2021 CISPR 25:2016
9. ITE and Multimedia Equipment	1. Electromagnetic compatibility of multimedia equipment – Emission requirements 2. Electromagnetic compatibility of multimedia equipment – Immunity requirements	CISPR 32:2015+AMD1:2019 CISPR 32:2015 AS/NZS CISPR 32:2015 BS EN 55032:2015+A1:2020 BS EN 55032:2015 CISPR 35:2016

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)**ELECTROMAGNETIC COMPATIBILITY LAB****SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
10. Railway Applications	1. Part 4 – Emission and immunity of the signaling and telecommunications apparatus 2. Part 3-2: Rolling Stock – Apparatus 3. Railway applications. Electromagnetic compatibility. Emission and immunity of fixed power supply installations and apparatus	BS EN 50121-4:2016+A1:2019 BS EN 50121-3-2:2016+A1:2019 BS EN 50121-5:2017+A1:2019
11. Electric Motorcycle	1. Radio Disturbance Characteristic- Limit and methods of measurement for the protection off-board receivers 2. Vehicles test method for the electrical disturbances from narrowband radiated electromagnetic energy- Part 2: Off-vehicle radiations sources	MS 2413-1:2015 MS 2413-1:2011 CISPR 12:2009 (CISPR 12:2007+A1:2009) MS 2413:2022 MS 2413:2011 ISO 11451-2:2015
12. Electrical/ Electronic Products for Industrial Environments	1. Emission standard 2. Immunity standard	IEC 61000-6-4:2018 IEC 61000-6-3:2020 IEC 61000-6-3:2011 (IEC 61000-6-3:2006+A1:2010) IEC 61000-6-1:2016 IEC 61000-6-2:2016 IEC 61000-6-5:2015



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
13. Medical Electrical Equipment	1. EMC – Requirement & Test	IEC 60601-1-2:2014+AMD1:2020 Except Clause 8.11 IEC 60601-1-2:2014
	2. Medical electrical equipment — Part 1-11: General requirements for basic safety and essential performance — Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment	IEC 60601-1-11:2015+AMD1:2020 (Clause 12) IEC 60601-1-11:2015 (Clause 12)
14. RF and Telecommunication Products	1. Electromagnetic compatibility and radio spectrum matters (ERM): Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirement 2. Electromagnetic compatibility and radio spectrum matters (ERM): Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 7: Specification condition 3. Specification for asymmetric digital subscriber line (ADSL) transceivers	ETSI EN 301 489-1 V2.2.3 (2019-11) ETSI EN 301 489-1:2017 ETSI EN 301 489-7:2017 MCMC MTSFB TC T010:2014

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
14. RF and Telecommunication Products (continue)	4. Specification for terminal equipment connecting to the public switch telephone network (PSTN)	SKMM MTSFB TC T001 (2013)
	5. Technical specification for GSM Mobile Terminal	SKMM WTS GSM-MT (rev 1.01:2007)
	6. Specification for Land Mobile Radio Equipment	MCMC MTSFB TC T012 (2015)
	7. Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents – basic recommendation	ITU-T K.21:2022 ITU-T K.21:2019
	8. Resistibility tests for telecommunications equipment exposed to overvoltages and overcurrents – basic recommendation	ITU-T K.44:2019
	9. Electromagnetic compatibility and Radio spectrum Matters (ERM); Elettromagnetic Compatibility (EMC) standard for radio equipment; Part 17: Specific conditions for Broadband Data Transmission Systems	ETSI EN 301 489-17:2012
	10. Electromagnetic compatibility and Radio spectrum Matters (ERM); (EMC) standard for radio equipment and services; Part 24: Specific conditions for MT-2000 CDMA Direct Spread (UTRA and E-UTRA) for Mobile and portable (UE) radio and ancillary equipment	ETSI EN 301 489-24:2010

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 51 of 64

ELECTROMAGNETIC COMPATIBILITY LAB**SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
14. RF and Telecommunication Products (continue)	11. Electromagnetic compatibility and Radio spectrum Matters (ERM); Electro Magnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Sort- Range Device (SRD) operating on frequencies between 9 kHz and 40 GHz	ETSI EN 301 489-3:2023 ETSI EN 301 489-3:2013
15. Transmission Efficiency	Minimum operational performance standards for nose- mounted radomes	RTCA DO-213A Change 1: June 21, 2018 (Clause 2.2.1 & 2.4.3.1)
16. Electromagnetic shielding enclosures	Measuring the effectiveness of Electromagnetic Shielding Enclosures	IEEE Std 299:2006
	Shield attenuation measurement (up to 20 GHz)	BS EN 50147-1:1997

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

SITE: CATEGORY I

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical and Electronics Products	1. Generic Standards – Immunity for residential, commercial and light industrial environments 2. Generic Standards – Immunity for Industrial environments 3. Generic Standards – Emission Standard for residential, commercial and light industrial environments 4. Generic Standards – Emission standard for industrial environments 5. Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) 6. Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage supply systems, for equipment with rated current ≤16 A per phase and not subject to conditional connection 7. Electromagnetic compatibility (EMC) – Part 3-12: Limits – Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current >16A and ≤75 A per phase	IEC 61000-6-1:2016 IEC 61000-6-2:2016 IEC 61000-6-3:2020 IEC 61000-6-3:2011 (IEC 61000-6-3:2006+A1:2010) IEC 61000-6-4:2018 IEC 61000-3-2:2018+A1:2020 IEC 61000-3-3:2013+AMD1:2017 +AMD2:2021 IEC 61000-3-3:2013+A1:2017 IEC 61000-3-12:2011+AMD1:2021 IEC 61000-3-12:2011

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 53 of 64

ELECTROMAGNETIC COMPATIBILITY LAB**SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)****SITE: CATEGORY I**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electromagnetic shielding enclosures	Measuring the effectiveness of Electromagnetic Shielding Enclosures	IEEE Std 299:2006
	Shield attenuation measurement (up to 20 GHz)	BS EN 50147-1:1997

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

SITE: CATEGORY I

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Electrical and Electronics Products (continue)	8. Electromagnetic compatibility (EMC) – Part 3-11: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems – Equipment with rated current ≤ 75 A and subject to conditional connection 9. Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement 10. Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement 11. Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure	IEC 61000-3-11:2017 CISPR 22: 2008 CISPR 11:2015+A1:2016+A2:2019 IEC 62233:2008

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

ELECTROMAGNETIC COMPATIBILITY LAB

SCOPE OF TESTING: ELECTROMAGNETIC COMPATIBILITY (EMC)

SITE: CATEGORY I

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
2. Railway Applications	1. Part 4 – Emission and immunity of the signalling and telecommunications apparatus 2. Railway applications. Electromagnetic compatibility. Rolling stock. Train and complete vehicle 3. Railway applications. Electromagnetic compatibility. Rolling stock. Apparatus 4. Railway applications. Electromagnetic compatibility. Emission and immunity of fixed power supply installations and apparatus 5. Part 2: Emissions of the whole railway system to the outside world	BS EN 50121-4:2016+A1:2019 BS EN 50121-3-1:2017+A1:2019 BS EN 50121-3-2:2016+A1:2019 BS EN 50121-5:2017+A1:2019 BS EN 50121-2:2017

Scan this QR Code or visit www.ism.gov.my/cab-directories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 56 of 64

RADIO FREQUENCY LAB**SCOPE OF TESTING: RADIO FREQUENCY (RF)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Hand portable, mobile station, base station and/or repeater station operating in the allocated VHF/UHF bands: 1. V.H.F. Mobile 2. V.H.F. Mobile (Trunk) 3. V.H.F. Walkie-Talkie 4. V.H.F. Walkie-Talkie (Trunk) 5. V.H.F. Base Station 6. V.H.F. Repeater 7. U.H.F. Mobile 8. U.H.F. Mobile/Fixed 9. U.H.F. Mobile (Trunk) 10. U.H.F. Walkie-Talkie 11. U.H.F. Walkie-Talkie (Trunk) 12. U.H.F. Base Station 13. U.H.F. Repeater	Full type test except extreme test condition Maximum Frequency: 40GHz	ETSI EN 300 086-1 V1.4.1 (2010-06) ETSI EN 300 086-2 V1.3.1 (2010-06) ETSI EN 300 086 V2.1.2 (2016-08) ETSI EN 300 296-1 V1.4.1 (2013-08) ETSI EN 300 296-2 V1.4.1 (2013-08) ETSI EN 300 296 V2.1.1 (2016-03) ANSI/TIA-603-E-2016 MCMC MTSFB TC T012:2015

Note:

1. ETSI : European Telecommunications Standards Institute

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 57 of 64

RADIO FREQUENCY LAB**SCOPE OF TESTING: RADIO FREQUENCY (RF)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Short Range Devices (SRD)	Full type test	MCMC MTSFB TC T007:2020
1. Security Device 2. Short Range Communication 3. Industrial, Scientific and Medical (ISM) 4. Radio Frequency Identification Device (RFID) 5. Remote Control Device 6. Wireless Microphone Device 7. Wireless Closed Circuit TV (CCTV) 8. Wireless Access Device 9. Wireless CCTV Access 10. SRC Device (RLAN) 11. Inductive Device 12. Cordless Telephone 13. Ultra Wide Band (UWB) Communication Device 14. Automotive Radar	Max Field Strength/ RF Power Output (9kHz to 40 GHz) Transmitter & Receiver Spurious Emissions (9kHz to 40 GHz) Exclude extreme environment	MS 300 330-1:2008 ETSI EN 300 330-1 V.1.8.1 (2015-03) ETSI EN 300 330 V2.1.1 (2017-02) ETSI EN 302 195 V2.1.1 (2016-06) ETSI EN 302 195-1 V1.1.1 (2004-03) MS 300 220-1:2008 ETSI EN 300 220-1 V2.4.1 (2017-02) FCC Part 15 Subpart C:2021 KDB Publication 558074 FCC Part 15 Subpart E:2021 KDB Publication 905462 ANSI C63.10.2013 ETSI EN 301 839 V2.1.1 (2016-04) ETSI EN 301 839-1 V1.3.1 (2009-10) ETSI EN 300 176-1 V2.3.1 (2018-01) MS 300 440-1:2008 ETSI EN 300 440 V2.2.1 (2018-07) ETSI EN 300 440 V2.1.1 (2017-03) MS 300 328-1:2008 MS 301 893:2008 ETSI EN 301 893 V2.1.1 (2017-05) ETSI EN 301 893 V1.8.1 (2015-03)

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

Note:

1. SKMM : Suruhanjaya Komunikasi Multimedia Malaysia
2. MS : Malaysian Standards
3. FCC : Federal Communications Commission
4. MCMC : Malaysian Communications & Multimedia Commission
5. MTSFB : Malaysian Technical Standards Forum Berhad

NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

RADIO FREQUENCY LAB

SCOPE OF TESTING: RADIO FREQUENCY (RF)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
<p>Short Range Devices (SRD)</p> <ol style="list-style-type: none"> 1. Security Device 2. Short Range Communication (SRC) Device 3. Industrial, Scientific and Medical (ISM) 4. Radio Frequency Identification Device (RFID) 	<p>Full type test</p> <ol style="list-style-type: none"> 1. Short Range Devices (SRD), Radio equipment in the frequency range 9kHz to 25MHz and inductive loop systems in the frequency range 9kHz to 30MHz; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU 2. Electromagnetic compatibility and Radio Spectrum Matters (ERM); Short Range Devices (SRD); Close Range Inductive Data Communication equipment operating at 13.56MHz; Part 1: Technical characteristics and test methods. 3. Wideband transmission systems: Data transmission equipment operating in the 2.4 GHz band; Harmonised Standard for access to radio spectrum 	<p>ETSI EN 300 330 V2.1.1 (2017-02) ETSI EN 300 330-1 V1.8.1 (2015-03)</p> <p>ETSI EN 302 291-1 V1.1.1 (2005-07)</p> <p>ETSI EN 300 328 V2.2.2 (2019-07)</p>

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 59 of 64

RADIO FREQUENCY LAB**SCOPE OF TESTING: RADIO FREQUENCY (RF)****SITE: CATEGORY I**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Land Mobile Radio Equipment	1. Radio Equipment and Systems Land Mobile Services, Technical Characteristics and Test Conditions for radio equipment with an internal or external RF connector intended primarily for analogue speech 2. Electromagnetic compatibility and Radio Spectrum Matters (ERM); Land Mobile Service; Radio equipment using integral antennas intended primarily for analogue speech; Part 1: Technical characteristics and method of measurement Maximum Frequency: 40GHz	ETSI EN 300 086-1 V1.4.1 (2010-06) ETSI EN 300 086-2 V1.3.1 (2010-06) ETSI EN 300 296-1 V1.4.1 (2013-08) ETSI EN 300 296-2 V1.4.1 (2013-08) ANSI/TIA-603-E-2016

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 60 of 64

RADIO FREQUENCY LAB**SCOPE OF TESTING: RADIO FREQUENCY (RF)****SITE: CATEGORY I**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
2.EMF	For Limiting Exposure to Time-Varying Electric and Magnetic Fields (9kHz – 100kHz)	ICNIRP GUIDELINES:2010
	For Limiting Exposure to Electromagnetic Fields (100kHz to 6GHz)	ICNIRP GUIDELINES:2020
	Prediction and Measurement of RF EMF Exposure from Base Station	MCMC MTFSB TC G032:2021

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

TELEPHONY LAB

SCOPE OF TESTING: RADIO FREQUENCY (RF)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. Facsimile 2. Multifunction Printer 3. Single Line Telephone 4. Digital Enhanced Codeless Telephone (DECT) Phone 5. Point of Sale (POS) Terminal 6. Modem 7. Foreign eXchange Office (FXO) 8. Alarm System 9. Cordless Telephone	Ringing Signal and Service Tone Power Fail Condition Insulation Resistance Impedance Limits (Unlooped and Looped) Impedance Unbalance About Earth Signal Frequencies and Sending Levels Calling Functions Dual Tone Multi Frequency Signalling Decadic Pulse Keypad Dialling Automatic Dialling Automatic Answering Sending Loudness Rating (SLR) Receiving Loudness Rating (RLR) Sidetone	SKMM MTFSB TC T001:2013 SKMM MTSFB TC T002:2013 MCMC MTSFB TC T003:2019 ETSI ES 203 021-1 V2.1.1 (2005-08) ETSI ES 203 021-2 V2.1.2 (2006-01) ETSI ES 203 021-3 V2.1.2 (2006-01) ETSI ES 203 038-2 V1.21 (2013-05)
10. Analogue Calling Line Identity Presentation (A-CLIP)	Received Data Signal Parameters Data Message Format Single Data Message Format (SDMF) Multiple Data Message Format (MDMF) Content of Message Error Detection	SKMM MTSFB TC T001:2013 SKMM MTSFB TC T002:2013 MCMC MTSFB TC T003:2019 ETSI ES 203 021-1 V2.1.1 (2005-08) ETSI ES 203 021-2 V2.1.2 (2006-01) ETSI ES 203 021-3 V2.1.2 (2006-01) ETSI ES 203 038 V1.2.1 (2013-05)

Scan this QR Code or visit www.ism.gov.my/cab-df/rectories for the current scope of accreditation



NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement of SAMM 086 dated 15 March 2024)

TELEPHONY LAB

SCOPE OF TESTING: RADIO FREQUENCY (RF)

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
11. Private Automatic Branch Exchange (PABX) System	Extension Telephones & Exchange Lines Tones, Cadences Ringing Current	SKMM MTSFB TCT001:2013
		SKMM MTSFB TC T002:2013
		MCMC MTSFB TC T003:2019
		ETSI ES 203 021-1 V2.1.1 (2005-08)
		ETSI ES 203 021-2 V2.1.2 (2006-01)
		ETSI ES 203 021-3 V2.1.2 (2006-01)
12. Cordless Telephone Systems	Full Type Test	SKMM WTS CTS Rev 1.01:2007
	Transmission power, EIRP	ETSI EN 300 175-1 V2.9.1 (2022-03) ETSI EN 300 175-1 V2.6.1 (2015-07)
	Authorised Frequency Band	ETSI EN 300 175-2 V2.9.1 (2022-03) ETSI EN 300 175-2 V2.6.1 (2015-07)
	Radio Frequency Channel Spacing	ETSI EN 300 176-1 V2.3.1(2018-01) ETSI EN 300 176-1 V2.4.1(2022-11)
	Number of Speech Channels	ETSI EN 301 406 V2.2.2 (2016-09) ETSI EN 301 406 V3.1.1 (2022-10)
	Carrier Frequency stability/ tolerance	
	Spurious Emissions	

Note:

- 1. MTSFB : Malaysian Technical Standards Forum Berhad
- 2. TC : Technical Code
- 3. ETSI : ETSI Standard

Scan this QR Code or visit www.ism.gov.my/cab-direktories for the current scope of accreditation

NO: SAMM 086

(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 63 of 64

DIGITAL TERRESTRIAL TELEVISION (DTTV) LAB**SCOPE OF TESTING: RADIO FREQUENCY (RF)**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
1. IDTV (Integrated Digital Television)	Full type test	SKMM MTSFB TC T004:2013
2. Set Top Box		MCMC MTSFB TC T011:2020

Scan this QR Code or visit www.ism.gov.my/cab-df/rectories for the current scope of accreditation

NO: SAMM 086(Issue 3, 5 Jul 2024 replacement
of SAMM 086 dated 15 March 2024)

Page: 64 of 64

Appendix A**Scopes of Accreditation for testing performed in support of FCC Certification approval procedures**

FCC Accredited Laboratory Scope	Test Method(s)	Supporting FCC Guidance
Unintentional Radiators (FCC Part 15, Subpart B)	ANSI C63.4-2014	
Industrial, Scientific, and Medical Equipment (FCC part 18) Consumer ISM equipment	FCC MP-5 (February 1986)	
Intentional Radiators (FCC Part 15 Subpart C)	ANSI C63.10-2013	KDB Publication 558074 KDB Publication 905462
U-NII without DFS Intentional Radiators (FCC Part 15, Subpart E) Unlicensed National Information Infrastructure Devices (U-NII without DFS)	ANSI C63.10-2013	KDB Publication 789033 KDB Publication 987594[4]
U-NII with DFS Intentional Radiators (FCC Part 15 Subpart E) Unlicensed National Information Infrastructure U-NII) Devices with Dynamic Frequency Selection (DFS)	ANSI C63.10-2013 FCC KDB Publication 905462 D02 U-NII DFS Compliance Procedures New Rules v02 (April 8,2016)	KDB Publication 789033 KDB Publication 987594[4]

Scan this QR Code or visit www.ism.gov.my/cab-df/rectories for the current scope of accreditation