

## Testing Services

- Electrostatic Discharge (ESD) Test
- Radiated Emissions Test
- RF Radiated Immunity Test
- Magnetic field Immunity Test
- Power Interference Test
- Conducted Immunity Test
- Surge Immunity Test
- Voltage Dips/ Interruption Test
- Electrical Fast Transient/ Burst (EFT/B) Test
- Harmonics Emission/ Voltage/ Fluctuation/Flicker Test
- Test system to perform conducted Emission Measurement
- Discontinuous Interference Analysis (DIA) Test



SHIELDED ROOM



CONTROL ROOM



10 m SEMI ANACHOIC CHAMBER

## Products Covered and Standards

### ● Electrical and Electronic Equipment (Household Appliance)

- Air Conditioner, Refrigerator, Washing Machine, Thermal pots and etc.  
*EN 55014-1:2006 (CISPR14-1:2005), EN 55014-2:1997(CISPR14-2:2001+A2:2008)*

### ● Information Technology Equipment (ITE)

*EN 55022:2006 (CISPR22:2006), TIS 1956-2548*

### ● Lighting Equipment and Accessories

- Luminaries, Compact fluorescent, Dimmer, Electronic Ballast, Magnetic Ballast and etc.  
*EN 55015:2006 (CISPR15:2002), TIS 1955-2542*

### ● Industrial, Scientific and medical (ISM) - Microwave oven and etc.

*EN 55011:2007 (CISPR11:2004+A1:2004+A2:2006)*

### ● Uninterruptible Power Supply (UPS)

*EN 50091-2: 1996*

### GENERIC STANDARDS

*EN: 50081-1:1992, 50081-2:1993, 50082-4:1997, 61000-6-2:2005*

### BASIC STANDARDS

*EN : 61000-3-2:2006, 61000-3-3:1995, 61000-3-11:2001, 61000-3-12:2005, 61000-4-2:1995, 61000-4-3:2006+A1: 2008, 61000-4-4:2004, 61000-4-5:2006, 61000-4-6:2007, 61000-4-8:1994, 61000-4-9:1994+A1, 61000-4-10:1994, 61000-4-11:2004, 61000-4-12:1996, 61000-4-13:2002, 55012:2002, 55013:2001, 55020:2007, 55024:1998, 55025:2003*

*IEC: 61000-3-2:2005+A1:2008, 61000-3-3:2008, 61000-3-11:2000, 61000-3-12:2004, 61000-4-1:2000, 61000-4-2:2001, 61000-4-3:2006, 61000-4-4:2004, 61000-4-5:2005, 61000-4-6:2006, 61000-4-7:2002+A1:2008, 61000-4-8:2001, 61000-4-9:2001, 61000-4-10:2001, 61000-4-11:2004, 61000-4-12:2006, 61000-4-13:2002, 61000-4-14:2002, 61000-4-15:2003, 61000-4-16:2002, 61000-4-17:2002, 61000-4-18:2006, 61000-4-20:2003, 61000-4-21:2003, 61000-4-23:2000, 61000-4-28:2002, 62040-2:2005*

*TIS: 1441:2540, 1442:2540, 1443:2540, 1444:2540, 1445:2540, 1446:2540, 1447:2540, 1448:2540, 1449:2540, 1450:2540, 1451:2540, 1452:2540, 1453:2540, 1454:2540, 1455:2540, 1456:2540, 1457:2540, 1458:2540, 1459:2540, 1460:2540, 1461:2540, 1506:2541*

*CISPR: 12:2007, 13:2006, 16-1-1:2006+A2:2007, 16-1-2:2004, 16-1-3:2004, 16-1-4:2007+A1:2007, 16-1-5:2003, 16-2-1:2008, 16-2-2:2008, 16-2-3:2006, 16-2-4:2003, 16-2-5:2008, 16-3:2003+A1:2005+A2:2006, 16-4-1:2005+A1:2004+A2:2007, 16-4-2:2003, 16-4-3:2004, 16-4-4:2007, 16-4-5:2006, 17:1981, 20:2006, 24:1997, 25:2008, 28:1997, 29:2004, 30:2001, 31:2003*

*ANSI C63.4:2003, ANSI C63.5:2006*

*IEEE C62.41:1991*

## Testing of Electromagnetic Compatibility (EMC)

## Test Facilities

**FCC Filing Registration Number : 99359**  
**VCCI Filing Registration Number : R-1251**

### 10 m SEMI ANACHOIC CHAMBER

Dimension : 12/18.5/7.5 m  
 Entrance Size : W:1/H:2 m & W:4/H:204 m  
 Turn Table Diameter : 4 m  
 Weight Cap. : 1,000 kg/sq.m.



10 m SEMI ANACHOIC CHAMBER

### SHIELDED ROOM

Dimension : 3.5/7.5/2.5 m  
 Entrance Size : W:1/H: 2 m



CDC CHAMBER

### COMPACT DIAGNOSTIC CHAMBER

Dimension : 3.5/7.5/3 m  
 Entrance Size : W:1/H: 2 m



MAGNETIC FIELD ANTENNA  
 (Large Loop Antenna)

### POWER SUPPLY

Single phase 0 ~ 270 V  
 3 phase 167 ~ 528 V  
 45 - 65 Hz 45 KVA Max.



BI-LOG ANTENNA

## Measuring Equipment

EMC Analyzer	Agilent E7450A	10 Hz – 26.5 GHz
Spectrum Analyze	Advantest R3132	9 kHz – 3 GHz
Measuring Receiver	R&S FSMR3	9 kHz – 3 GHz
EMI Receiver	Schaffner SCR3511	9 kHz – 1 GHz
	SCR3502	9 kHz – 2.75 GHz
Pre. Amplifier	HP 8447D	0.1 – 1,300 MHz
Bi-log antenna	CHASE CBL6111B	30 – 1,000 MHz
Active Loop Antenna	EMCO 6502	9 kHz – 30 MHz
Active Rod Antenna	EMCO 3301B	30 Hz – 50 MHz
Double Ridge-guide Horn Antenna	EMCO 3115	1 – 18 GHz
LISN (AMN)	1φ EMCO 3825/2,	
	3φ SCHAFFNER NNB42	
EMI Clamp	F-201-32 mm	
EFT/Burst Generator	1φ & 3φ Schaffner	Modula6000
SURGE Generator	1φ & 3φ Schaffner	Modula6000
Power Line Generator	1φ & 3φ Schaffner	Modula6000
Harmonics/Flicker Analyzer	1φ California Instrument	PACS-1 16A
	3φ Schaffner	Proflin2100 75A
Surge Generator	EMTest	VCS 500-M 10 kV(1.2/50μs), 5kA(8/20μs)
ESD Generator	Schaffner	NSG 438 30kV



Schaffner Prod Line 2100

## Testing of Electromagnetic Compatibility (EMC)