Technical Construction File

Tcf No: Applicant:	CE-WZ25070801-SO-EMC Wenzhou Zhongzhe Electric Co., Ltd
Address:	No. 29, Huancheng East Road, Liushi Town, Yueqing City, Wenzhou City, Zhejiang Province
Manufacturer:	Wenzhou Zhongzhe Electric Co., Ltd
Address:	No. 29, Huancheng East Road, Liushi Town, Yueqing City, Wenzhou City, Zhejiang Province
Product:	Terminal blocks
Model:	KE-2155, KE-2166, KE-2166P, BEN-2166P, WSL-1000AVS, AVS20, VP-2166, VP-2166D, 0R-SD-P20, OR-SD-P12, LW-2166D, N-MT2626A1, UN1VEX-2155, TVPS-16C, N-MT2624B1, KE-V16P, DB2000, DVP-1426, FDD-KE-2155-120v, AVS-20, KE-2188, PS-21689P, HJ-2166B, FE-2166P, BC-DVP2201, JL-VPPB2000, DP-D7PV, TV~FRIDGE GUARD, TV~FRIDGE PROTECTOR, TV GUARD, FRIDGE GUARD
Test standard:	EN IEC 61000-6-4:2019 EN IEC 61000-6-2:2019
Conclusion:	The products meet the above standards.
Edit Date:	2025-07-08
Issue date:	2025-07-08

ASSESSMENT REPORT

TCF

Reference No. .....: No: CE-WZ25070801-SO-EMC

Tested by(+ signature).....: Project Engineer, Melody Melody

Reviewed by(+ signature).....: Manager, Tracy Tracy

Date of issue .....: 2025-07-08

Client

Name .....: Wenzhou Zhongzhe Electric Co., Ltd

Address .....: No. 29, Huancheng East Road, Liushi Town, Yueqing City, Wenzhou City, Zhejiang Province

Test specification

Standard .....: EN IEC 61000-6-2:2019, EN IEC 61000-6-4:2019

Test procedure .....: CE-EMC

Non-standard test method .....: N.A.

Test item description:

Manufacturer.....: Wenzhou Zhongzhe Electric Co., Ltd

Factory.....: Wenzhou Zhongzhe Electric Co., Ltd

Trademark .....: Refer to the nameplate

Model, Type reference .....: Refer to page 1

Rating(s) .....: refer to the nameplate.

General product information: The product is Terminal blocks.

Test Result: PASS.

The product meets the all the test requirements. The details are listed in the following documents.

Test Conditions

Environmental Conditions

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:		
Temperature	**Humidity**	**Atmospheric pressure**
15 °C – 35 °C	30 % - 60 %	860 hPa – 1060 hPa
If explicitly required in the basic standard or applied product standard the climatic values are recorded and documented separately in this test report.		

Performance Criteria

Clause 5		
Criteria	**During test**	**After test**
A	The apparatus shall continue to operate as intended during the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and from what the user may reasonable expect from the apparatus if used as intended.	
B	The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. During the test, degradation of performance is allowed, however no change of actual operating state or stored data is allowed to persist after test. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and from what the user may reasonable expect from the apparatus if used as intended.	
C	Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls, or by any operation specified in the instruction for use.	

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C	Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls, or by any operation specified in the instruction for use.	

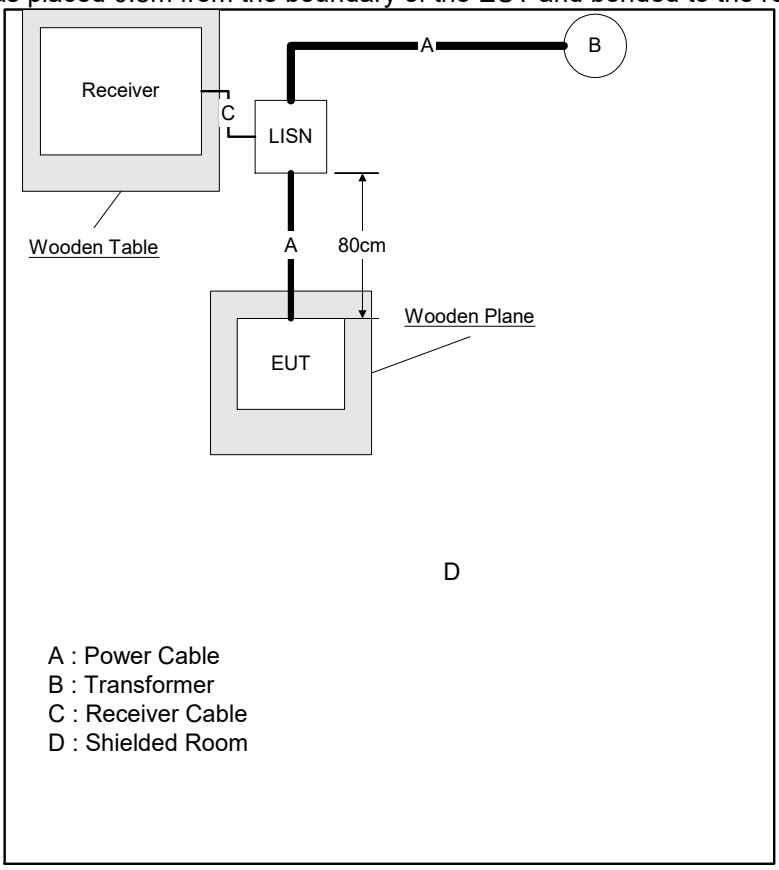
Test Details

Conducted Disturbance

Test Method

The EUT was placed on a 0.8 m non-conductive table for table-top equipment and on a 0.12 m insulated support for floor standing equipment above a ground reference plane all within a test laboratory.

All power was connected to the EUT through an Artificial Mains Network (AMN). Conducted disturbance voltage measurements on mains lines were made at the output of the AMN. The AMN was placed 0.8m from the boundary of the EUT and bonded to the reference ground plane.



Specification Limits

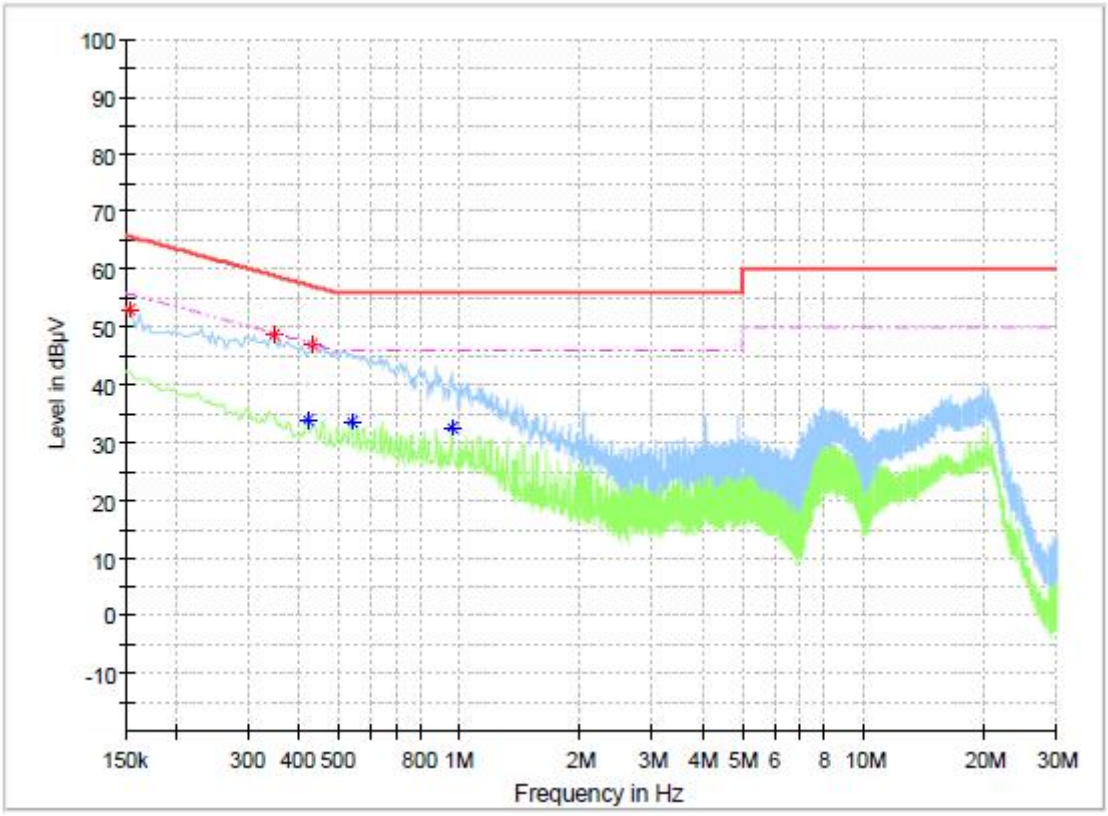
Disturbance voltage limits for class B equipment for AC power input port		
Frequency range	AC mains port dB(μV)	
MHz	Quasi-peak	Average
0.15 to 0.5	66 decreasing linearly with logarithm of frequency to 56	56 decreasing linearly with logarithm of frequency to 46
0.5 to 5	56	46
5 to 30	60	50

Test Location

This test was carried out in shielded room.

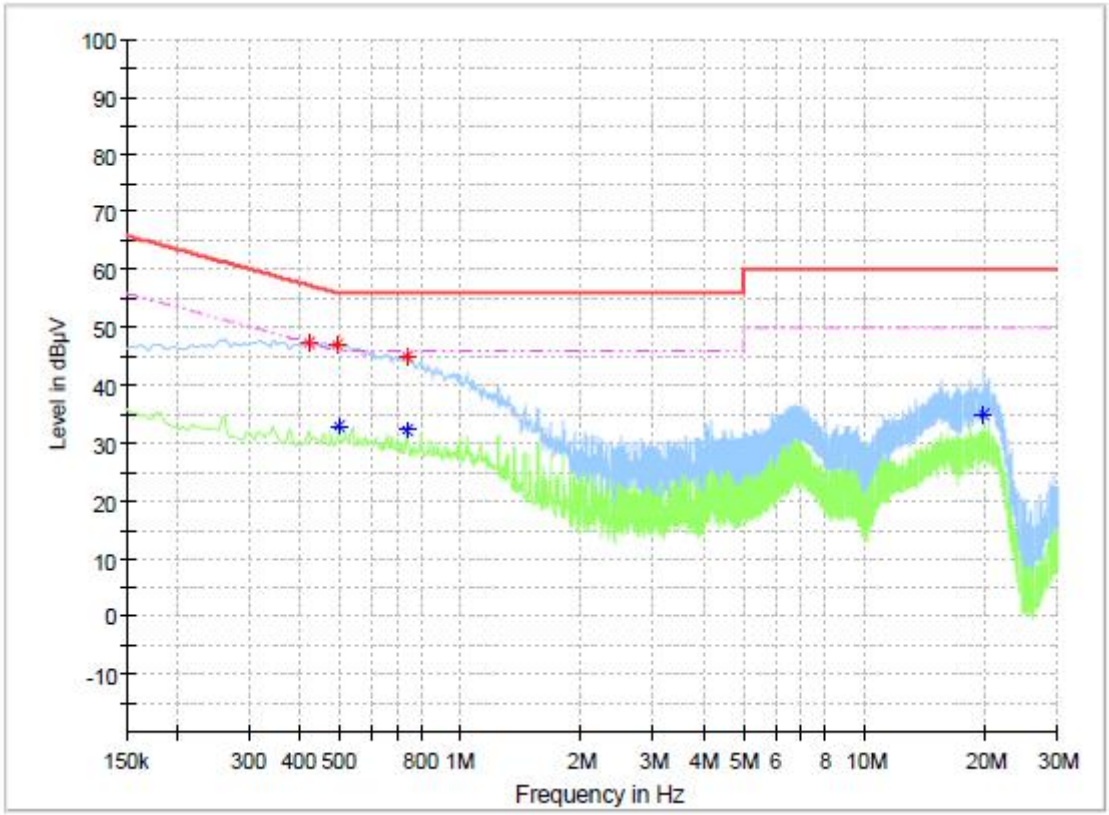
Test Results

Remark : L1



No significant emission was detected within 6 dB to limit.

Remark : N



No significant emission was detected within 6 dB to limit.

Radiated Disturbance

Test Method

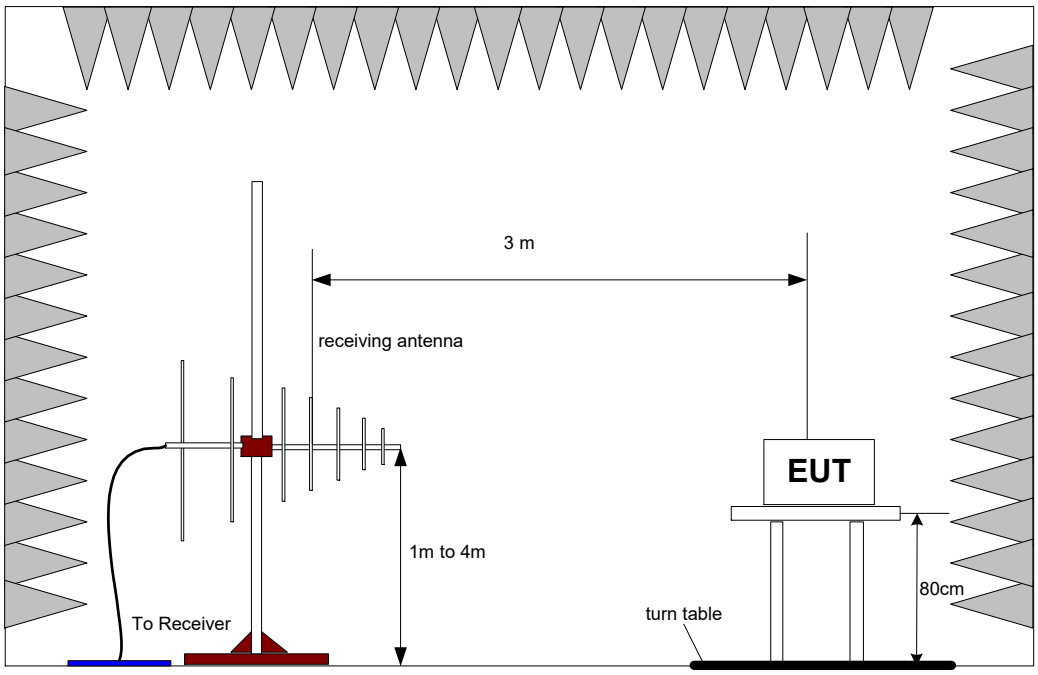
The EUT was set up in a semi-anechoic chamber on a remotely controlled turntable and placed on a non-conductive. Guidance on how to arrange the EUT during the measurements can be found in 5.3.4.3.

Table-top EUT shall be placed at (0,8 ± 0,05) m above the reference plane of the test site
selected for measurement.

Floor standing EUT shall be placed at (0,12 ± 0,04) m above the reference plane of the test
site selected for measurement.

Where the EUT comprises multiple parts, these shall be arranged to minimise, as far as it is
reasonably practical, the test volume. A minimum distance of 0,1 m shall be maintained
between these parts.

A prescan of the EUT emissions profile was made while varying the antenna-to-EUT azimuth and antenna-to-EUT polarization using a peak detector; measurements were taken at a 3m or 10m distance. Using the prescan list of the highest emissions detected, their bearing and associated antenna polarization, the EUT was then formally measured using a Quasi-Peak detector. The readings were maximized by adjusting the antenna height, polarization and turntable azimuth, in accordance with the specification.



Specification Limits

Radiated disturbance limits in the frequency range 30MHz to 1000MHz at a measuring distance of 3 m	
Frequency range MHz	Quasi-peak limits dB(μV, m)
30 to 230	40
230 to 1000	47

Radiated disturbance limits in the frequency range 30MHz to 1000MHz at a measuring distance of 10 m	
Frequency range MHz	Quasi-peak limits dB(μV, m)
30 to 230	30
230 to 1000	37

Radiated disturbance limits in the frequency range 1000MHz to 6000MHz at a measuring distance of 3 m		
Frequency range MHz	Quasi-peak limits dB(μV, m)	Average
1000 to 3000	70	50
3000 to 6000	74	54

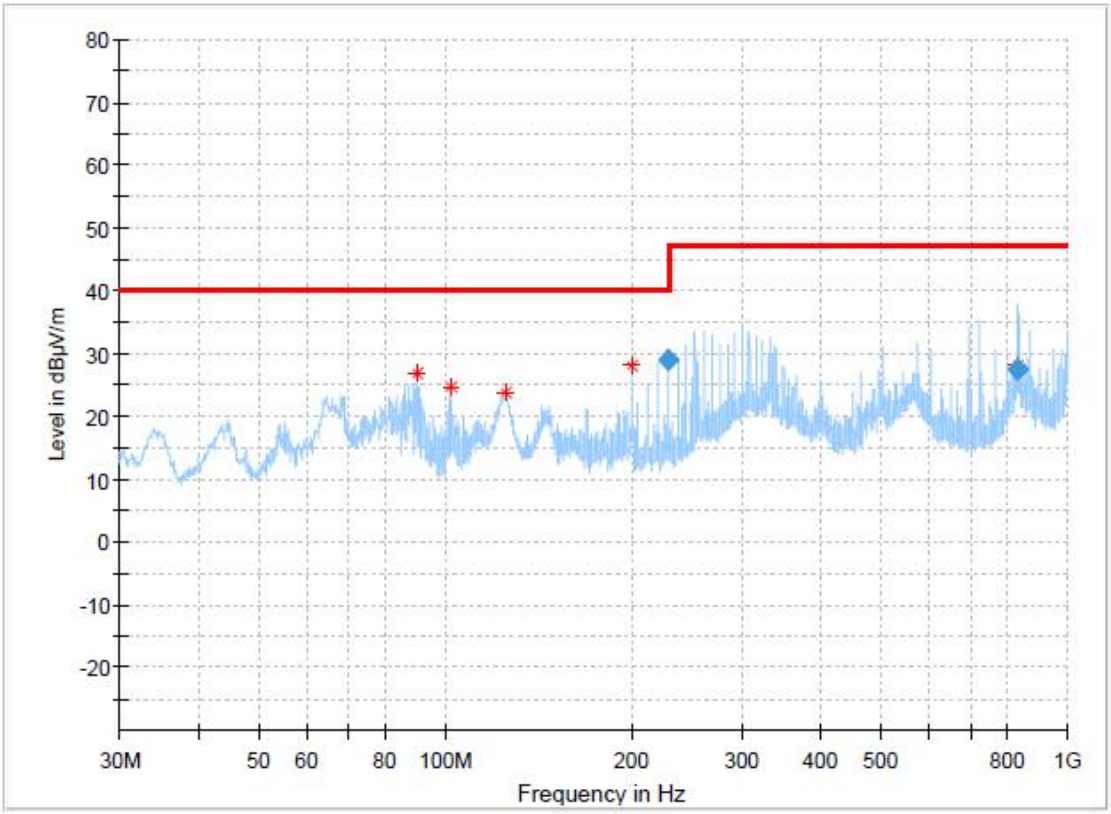
Remark :
Level=Reading Level + Correction Factor
Correction Factor=Antenna Factor + Cable Loss
(The Reading Level is recorded by software which is not shown in the sheet)

Test Location

This test was carried out in 3m SAC Test Location.

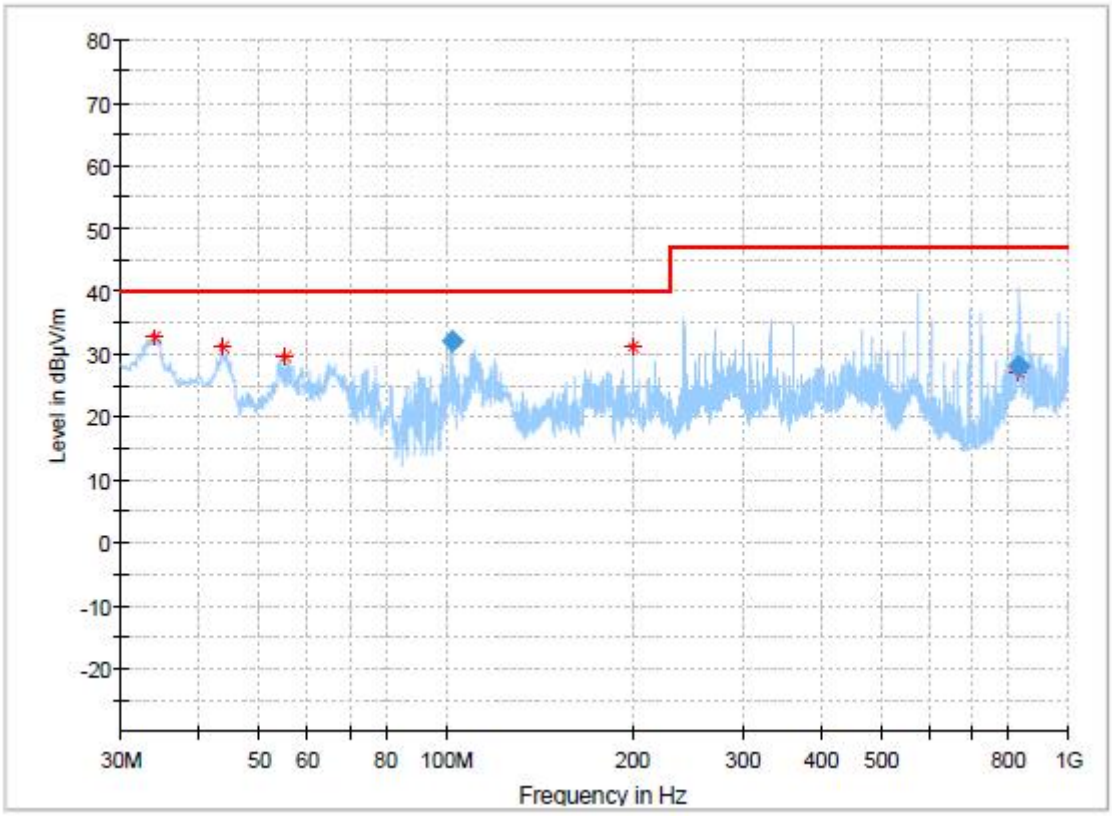
Test Results

Polarity : Horizontal



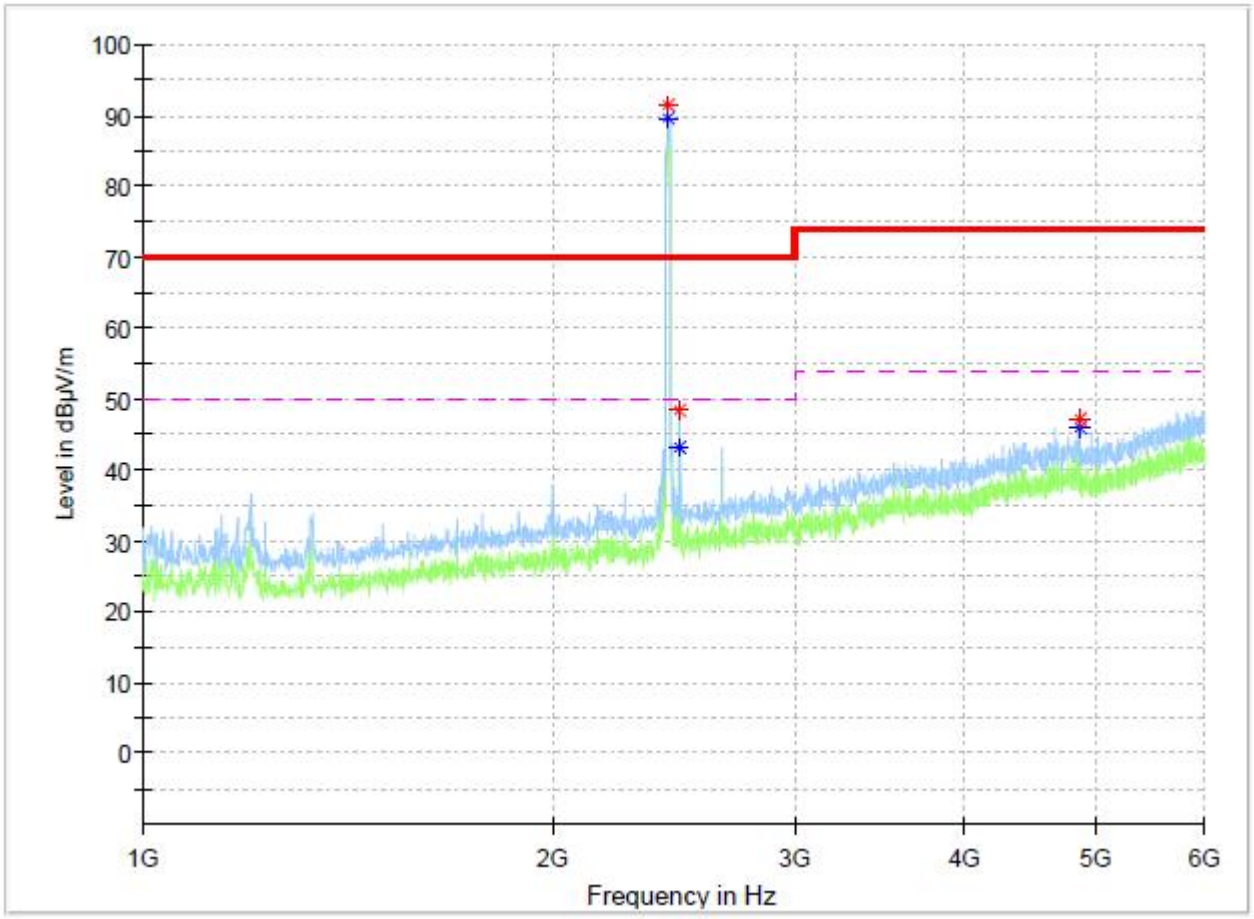
No significant emission was detected within 6 dB to limit.

Polarity : Vertical



No significant emission was detected within 6 dB to limit.

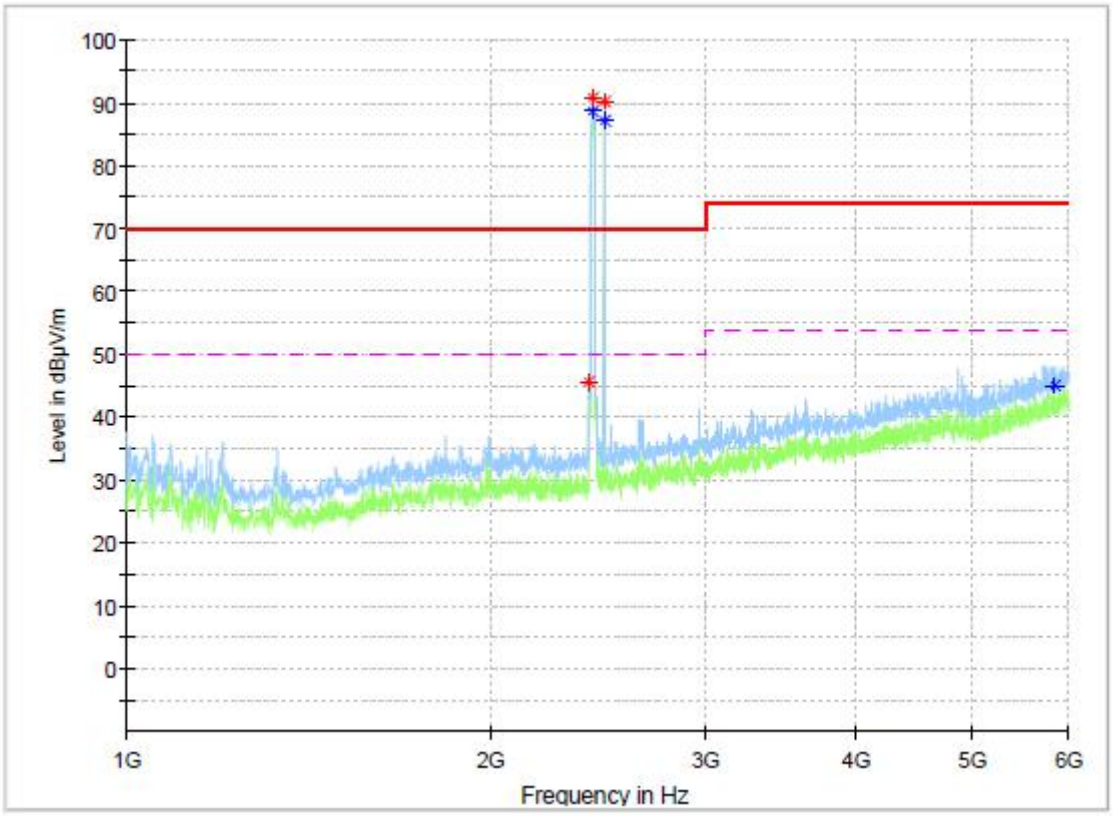
Polarity : Horizontal



No significant emission was detected within 6 dB to limit

Frequency (MHz)	MaxPeak (dBµV, m)	Average (dBµV, m)	Limit (dBµV, m)	Margin (dB)	Pol
2430.000000	---	89.48	50.00	-39.48	H
2430.000000	91.44	---	70.00	-21.44	H
2477.500000	48.46	---	70.00	21.54	H
2477.500000	---	43.11	50.00	6.89	H

Polarity : Vertical



No significant emission was detected within 6 dB to limit

Frequency (MHz)	MaxPeak (dBµV, m)	Average (dBµV, m)	Limit (dBµV, m)	Margin (dB)	Pol
2407.500000	45.64	---	70.00	24.36	V
2426.250000	90.65	---	70.00	-20.65	V
2426.250000	---	88.68	50.00	-38.68	V
2480.000000	90.24	---	70.00	-20.24	V
2480.000000	---	87.14	50.00	-37.14	V

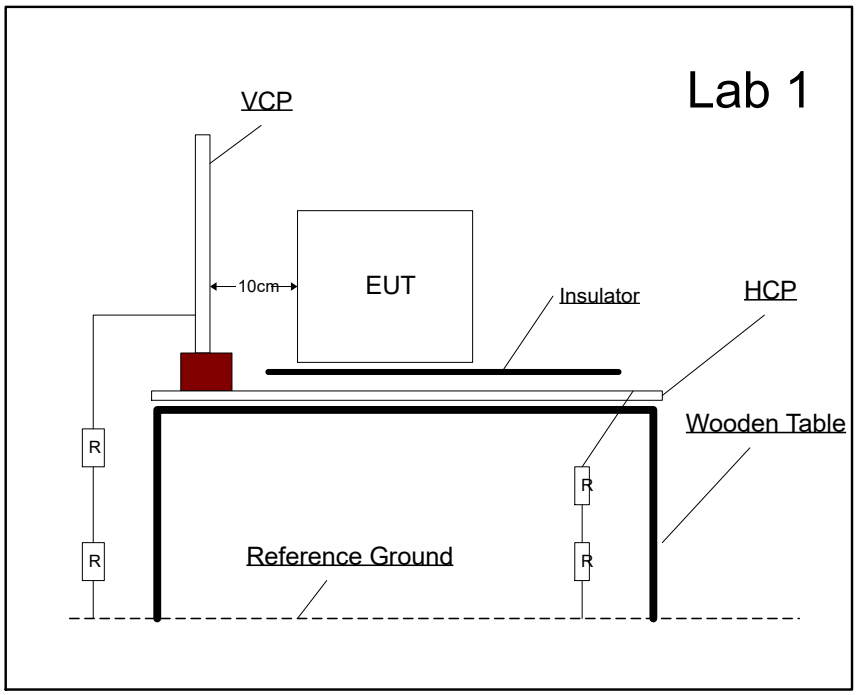
Electrostatic discharge immunity test

Test Method

The equipment under test including associated cabling was configured on but insulated from, using a 0.5mm isolator, a horizontal coupling plane fitted to the top of a 0.8m non-conductive table for table-top equipment; and on a 0.1m insulated support for floor standing equipment; above a ground reference plane all within a test laboratory.

Using the air discharge method for non-metallic parts, contact discharge method for metallic parts with both vertical and horizontal couple plane discharge methods for the sides of the equipment under test, the required electrostatic discharge voltage levels in both voltage polarities were applied at the detailed pulse repartition rate.

During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Required Test Levels				Performance Criteria
Discharge type	Discharge Level (kV)		Number of discharges per location (each polarity)	
	Positive	Negative		
Air – Direct	8	8	10	B
Contact – Direct	4	4	10	B
Contact –	4	4	10	B

Indirect				

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Test Point	Discharge	Results: Met Performance Criteria									
		2kV		4kV		6kV		8kV		15kV	
		+	-	+	-	+	-	+	-	+	-
HCP	Contact	N, A	N, A	A	A	A	A	N, A	N, A	N, A	N, A
VCP	Contact	N, A	N, A	A	A	A	A	N, A	N, A	N, A	N, A
Each conductive location touchable by hand	Contact	N, A	N, A	A	A	A	A	N, A	N, A	N, A	N, A
Each nonconductive location touchable by hand	Air	N, A	N, A	N, A	N, A	N, A	N, A	A	A	N, A	N, A
N, A	Not Appliance										

Remark: No observable change.

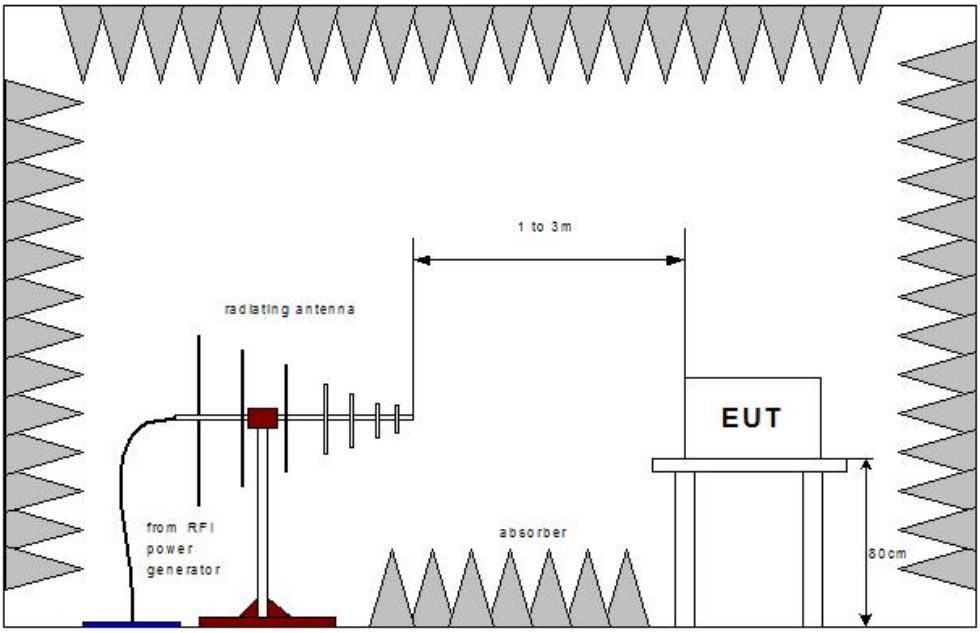
Radiated, radio-frequency, electromagnetic field immunity test

Test Method

The equipment under test including associated cabling was configured, on a 0.8 m non-conductive table for table-top equipment and on a 0.12 m insulated support for floor standing equipment; with a pre-calibrated semi anechoic chamber.

All four side of the equipment under test were subjected to the required RF field strength, modulated as described, swept over the frequency range of test with the antenna positioned in both horizontal and vertical polarizations.

During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Required Test Levels					Performance Criteria
Frequency Range (MHz)	Level (V, m)	Modulation	Step Size (%)	Dwell (s)	
80 to 6000	3	AM (80 %,1 kHz, sine wave)	1	1	A
Note 1. EUT powered at one of the Nominal input voltages and frequencies					

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Tabulated Results for RF Electromagnetic Field 80 - 2700 MHz					
Side of the equipment under test	Antenna polarization	Test Level	Dwell Time	Measuring distance	Results
Front, Left, Right, Back sides	Horizontal	3 V, m 80 to 6000MHz	1 s	3 m	A
Front, Left, Right, Back sides	Vertical	3 V, m 80 to 6000MHz	1 s	3 m	A

Remark: No observable change

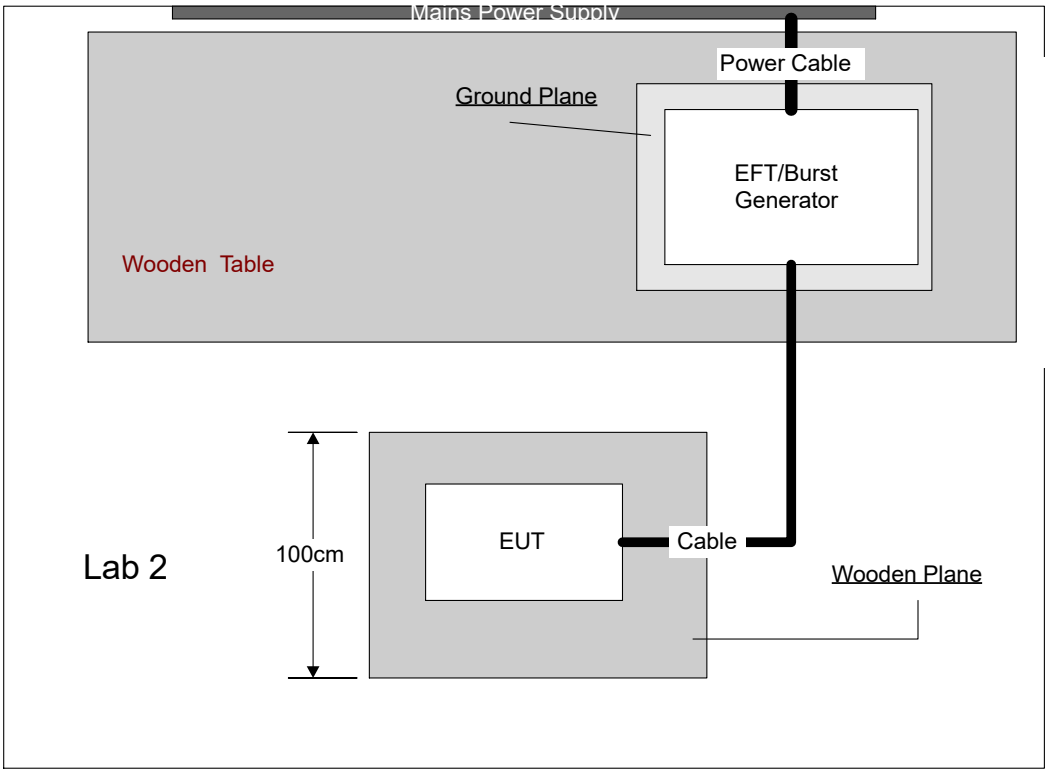
Electrical fast transient , burst immunity test

Test Method

The equipment under test including associated cabling was configured on but insulated from, using a 0.1 m isolator, a horizontal coupling plane fitted to the top of a 0.8 m non-conductive table for table-top equipment; and on a 0.1 m insulated support for floor standing equipment; above a ground reference plane all within a test laboratory.

Using a CDN for power ports, capacitive coupling clamp for signal and control ports and a 33nF coupling capacitor for earth ports, the required fast transient burst voltage levels in both voltage polarities were applied at the detailed pulse repartition rate and duration of test.

During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Required Test Levels Input and output a.c. power ports					
Line Under Test	Level (kV)	Repetition Rate (kHz)	Test Duration	Coupling Method	Performance Criteria
Input and output a.c. power ports	± 2.0	5 kHz	2 min per polarity	Direct	B
For extra low voltage a.c. ports and output a.c. ports, this testing is only applicable to ports interfacing with cables whose total length may exceed 3 m according to the manufacturer's functional specification.					

Required Test Levels ports for network and signal, control lines					
Line Under Test	Level (kV)	Repetition Rate (kHz)	Test Duration	Coupling Method	Performance Criteria
Signal and control lines	± 1.0	5 kHz	2 min per polarity	Clamp	B
Applicable only to ports interfacing with cables whose total length can exceed 3m according to the manufacturer’s function specification.					

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Tabulated Results for Fast Transient Burst Immunity					
Line under test	Test Level (kV)	Repetition Rate	Test Duration	Coupling Method	Result
Input a.c. power ports	± 2.0 kV	5 kHz	2 min	Direct	A

Remark: During the test of the network port, the signal interrupts. After the test, it can automatically return to normal status.

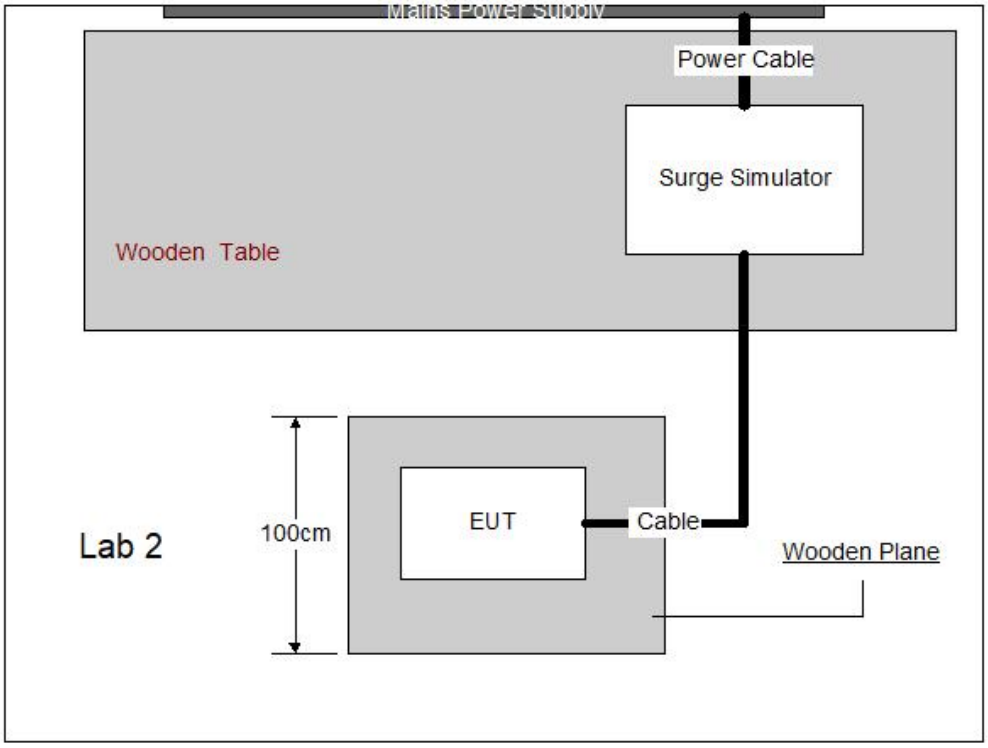
Surge immunity test

Test Method

The equipment under test including associated cabling was configured, on a 0.8 m non-conductive table for table-top equipment and on a 0.1 m insulated support for floor standing equipment above a ground reference plane all within a test laboratory.

Using CDNs for power ports and appropriate coupling methods for applicable signal and control ports, the required number of surges was applied for each surge voltage level using both positive and negative surge voltage polarities. Surges were applied at the power line frequency phase angles and repartition rates detailed.

During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Required Test Levels a.c.Input and CPT ports			Performance Criteria
Line Under Test	Characteristics	Test Levels	
line to line with line to earth with	Wave-shape data 2Ω impedance 12Ω impedance	1.2, 50 μs ± 1.0 kV ±2.0 kV	B
Note in addition to the specified test level, all lower levels as detailed in IEC 61000-4-5 should also be satisfied. For CPT ports: Applicable only to ports interfacing with cables whose total length according to the manufacturer's functional specification is greater than 30 m.			

Required Test Levels Ports for network and signal, control lines			Performance Criteria
Line Under Test	Characteristics	Test Levels	
line to earth with	Wave-shape data 42Ω impedance	1.2, 50 μs ± 1.0 kV	B
Applicable only to ports interfacing with long distance lines(>30m). Where the normal functioning cannot be achieved because of the impact of the coupling, decoupling network (CDN) on the EUT, the test shall be done with the reduced functionality. A rationale shall be given in the test report for doing so. After the test and the removal of the CDN, the normal function shall not be affected.			

Test Location

This test was carried out in EMS Test Location.

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Tabulated Results for Surge Immunity (a.c.Power Ports)							
Line Name	Coupling	Level	Polarity	Phase Angle	No of Pulses	Repetition Rate	Result
Power line	Live to Neutral	1.0, 2.0kV	NEGATIVE	0, 90, 180,270	5	60 sec	A
Power line	Live to Neutral	1.0, 2.0kV	POSITIVE	0, 90, 180,270	5	60 sec	A
Power line	Live to Earth	2.0, 4.0kV	NEGATIVE	0, 90, 180,270	5	60 sec	A
Power line	Live to Earth	2.0, 4.0kV	POSITIVE	0, 90, 180,270	5	60 sec	A
Power line	Neutral to Earth	2.0, 4.0kV	NEGATIVE	0, 90, 180,270	5	60 sec	A
Power line	Neutral to Earth	2.0, 4.0kV	POSITIVE	0, 90, 180,270	5	60 sec	A

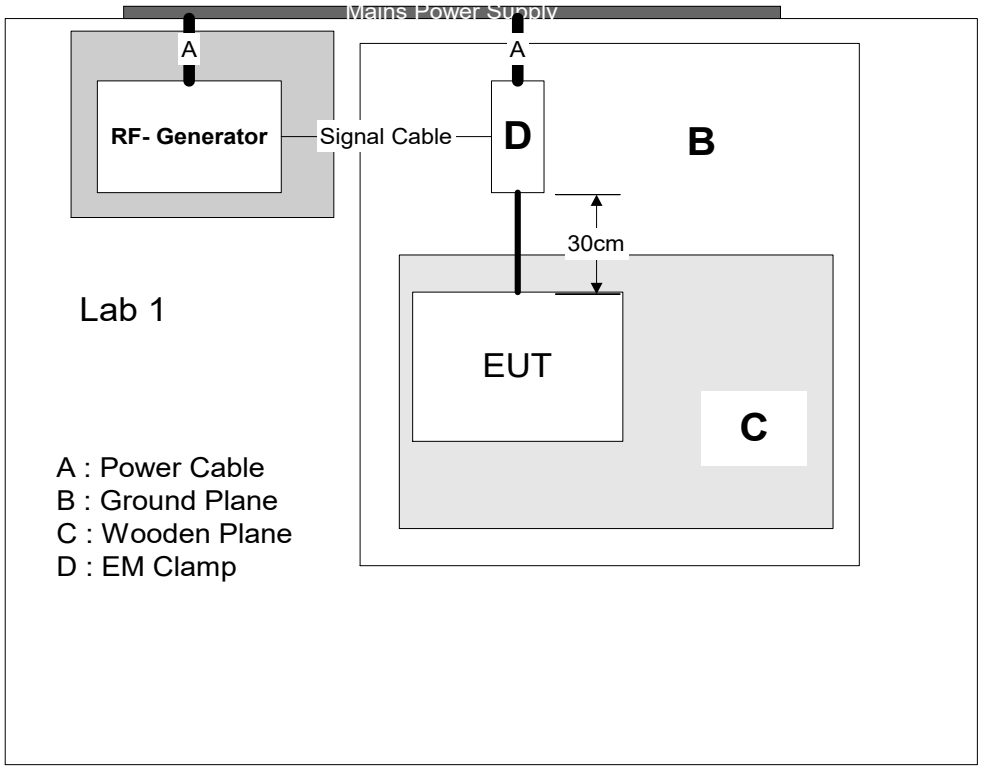
Immunity to conducted disturbances, induced by radio-frequency fields

Test Method

The equipment under test was configured, on but insulated from, using a 0.1 m isolator, a horizontal coupling plane fitted to the top of a 0.1 m non-conductive table for table-top equipment, above a ground reference plane all within a test laboratory.

All associated cabling was configured, on but insulated from, using a 50 mm isolator, the same horizontal coupling plane as the equipment under test.

Using CDNs, EM Clamps or current clamps as appropriate, the power ports and applicable signal and control ports were subjected to the required, pre calibrated RF injected signal strength, modulated as described, swept over the frequency range of test.
During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Required Test Levels Input and output a.c. power ports						
Line Under Test	Frequency Range (MHz)	Level (V)	Modulation	Step Size (%)	Dwell (s)	Performance Criteria
Input and output a.c. power ports	0.15 to 80	3	AM (80 %,1 kHz, sine wave)	1	1	A
For extra low voltage a.c ports and output a.c. ports, this testing is only applicable to ports interfacing with cables whose total length may exceed 3 m according to the manufacturer's functional specification.						

Required Test Levels Ports for network and signal, control lines						
Line Under Test	Frequency Range (MHz)	Level (V)	Modulation	Step Size (%)	Dwell (s)	Performance Criteria
Signal and control port	0.15 to 80	3	AM (80 %,1 kHz, sine wave)	1	1	A
Applicable only to ports interfacing with cables whose total length may exceed 3m according to the manufacturer’s function specification.						

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Tabulated Results for Injected current, a.c. power ports						
Line and sensitive frequency under test	Test Level	Step	Dwell Time	Coupling Method	Modulation	Result
Power line	3V	1%	1s	CDN	1kHz, 80%	A

Remark: No observable change.

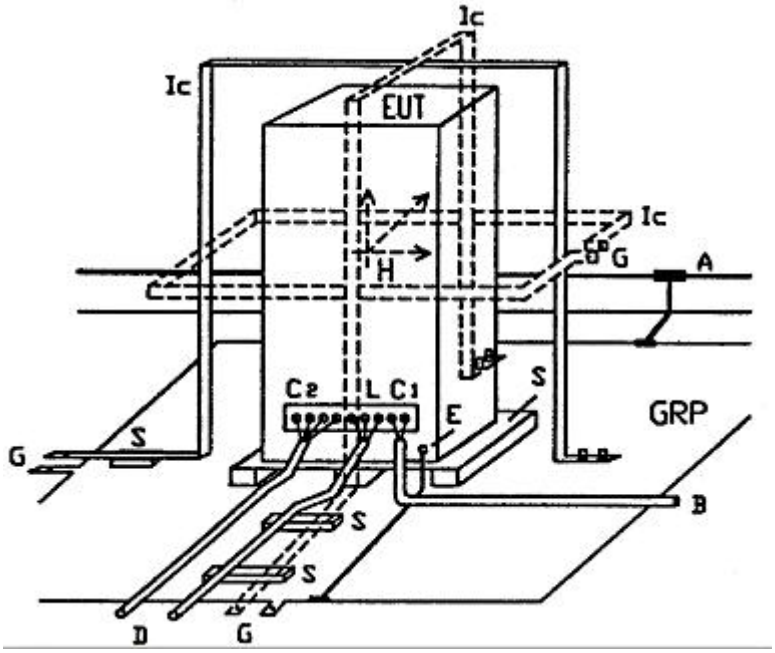
Power-frequency magnetic field immunity test

Test Method

The equipment under test including associated cabling was configured on a non-conductive support at the volumetric center of the immunity coils. A pre calibrated input level was then applied to magnetic immunity coils at the detailed frequency and level for the required test period.

The EUT was retested with the magnetic field applied in all 3 orthogonal planes of the EUT.

During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Required Test Levels			Performance Criteria
Application	Level (A, m)	Duration	
Continuous Field	30(for systems ≤32A)	dependent on EUT operating cycle	A
Supplementary information: Note 1. EUT powered at one of the Nominal input voltages and frequencies			

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Tabulated Results for Power Frequency Magnetic Immunity

Tabulated Results for Power Frequency Magnetic Immunity					
Orientation	Operating Frequency	Test Frequency	Test Level	Duration	Result
X axis	50 Hz	50 Hz	30A, m	3 min	A
Y axis	50 Hz	50 Hz	30A, m	3 min	A
Z axis	50 Hz	50 Hz	30A, m	3 min	A
X axis	60 Hz	60 Hz	30A, m	3 min	A
Y axis	50 Hz	50 Hz	30A, m	3 min	A
Z axis	60 Hz	60 Hz	30A, m	3 min	A

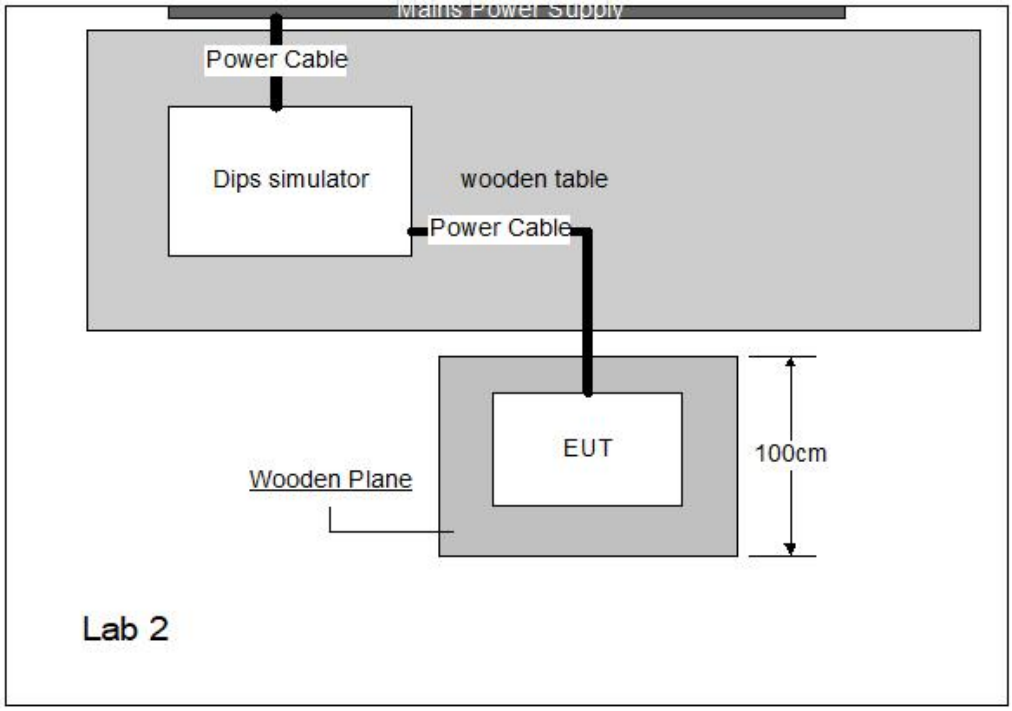
Remark: No observable change.

Voltage dips, short interruptions and voltage variations immunity tests

Test Method

The equipment under test including associated cabling was configured, on a 0.8 m non-conductive table for table-top equipment and on a 0.1 m insulated support for floor standing equipment above a ground reference plane all within a test laboratory.

Using a programmable power supply the equipment under test was subjected to the detailed supply voltage dips and interruptions. The required supply phase synchronization and test repetition rate, detailed, was controlled by the programmable power supply.
During this testing any anomalies in the equipment under tests performance was recorded.



Specification Limits

Voltage Dips and short interruptions				
Voltage Dips in % UT	Test level in % UT	Duration		Performance Criteria
		50Hz	60Hz	
100	0	1 cycle	1 cycle	B
60	40	10 cycles	12 cycles	B
30	70	25 cycles	30 cycles	B
100	0	250 cycles	300 cycles	C
UT is the rated voltage of the Equipment Under Test				

Test Results

Performance assessment of the EUT made during this test: Pass

Detailed results are shown below.

Tabulated Results for Voltage Dip and Short Interruption					
Line under test	Vnom	Operating Frequency	Test Level	Duration	Result
Power line	230 V~	50 Hz	0% of Vnom	1 cycle	A
Power line	230 V~	50 Hz	40% of Vnom	10 cycles	A
Power line	230 V~	50 Hz	70% of Vnom	25 cycles	A
Power line	230 V~	50 Hz	0% of Vnom	250 cycles	B

Remark: During 25, 30 cycles interruption test, the EUT stopped working. After the test, it can automatically return to normal status.

Test Equipment Information

General Test Equipment Used

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Receiver (9K-3GHz)	Rohde & Schwarz	ESCI	100727
LISN	Rohde & Schwarz	ENV216	3506.6550.05
LISN	SCHWARZBECK	NSLK8163	05018
LISN	SCHWARZBECK	NNLK-8140	00136
LISN	SCHWARZBECK	NNLK-8140	00137
LISN	SCHWARZBECK	NNLK-8140	00138
LISN	SCHWARZBECK	NNLK-8140	00139
ISN	Rohde & Schwarz	ENY81	100389
ISN	Rohde & Schwarz	ENY81-CA6	101887
RF Switch Box	Compliance Direction Systems Inc.	RSU-M314-N	08042801

Radiated Emission Test（SAC-3 area）

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
EMI Test Receiver	Rohde & Schwarz	ESR 26	101702
Trilog Super Broadband Test Antenna	Schwarzbeck	VULB 9162	00341
Horn Antenna	Schwarzbeck	BBHA 9120D	02152
Loop Antenna	Schwarzbeck	FMZB 1519	1519-013
Pre-amplifier	Rohde & Schwarz	SCU08F1	101016
Pre-amplifier	Rohde & Schwarz	SCU 18	100759
3m Semi-anechoic chamber	TDK	SAC-3	----

Harmonic Test , Flicker Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
3-phase analyzer for Harmonics and Flicker	EMTEST	DPA 503N	P2003237205
Multifunctional threephase voltage source	EMTEST	NetWave 67.3-400	P2009239095
3-phase Flicker impedance	EMTEST	AIF 503N63.1	P2009239213

Electrostatic Discharge Test(ESD area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
ESD Generator	EMTEST	ESD NX30	23124

Radiated Immunity Test (SAC-3 area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Signal Generator	Rohde & Schwarz	SMB100B	101903
Power Amplifier	Rohde & Schwarz	BBA150-BC 500	104061
Power Amplifier	Rohde & Schwarz	BBA150-D1 10E100	104048
Microwave Log-Periodic Antenna	Schwarzbeck	STLP9129 SET	3074
Average Power Sensor	Rohde & Schwarz	NRP6AN	101424
Average Power Sensor	Rohde & Schwarz	NRP6AN	101425

3m FAC Chamber	TDK	CAC-3	--

Electrical Fast Transients Test(EMS area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Compact Simulator	EMTEST	UCS 500N7.7	P1949235471
3-phase coupling, decoupling network	EMTEST	CNI 503B9.4	P1740204286
Capacitive Coupling Clamp	EMTEST	CCI	P2009239178

Surges Test(EMS area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Compact Simulator	EMTEST	UCS 500N7.7	P1949235471
3-phase coupling, decoupling network	EMTEST	CNI 503B9.4	P1740204286
Telecom Surge Module	EMTEST	Tsurge 7	P1908227146
Coupling, decoupling network for signal, datalinescoupling, decoupling network	EMTEST	CNV 504 N1	P1949235473
coupling, decoupling network for unshielded symmetrical lines	EMTEST	CNV 508T5	P2004237741
Railway coupler	EMTEST	PCN 7-R s-1	P2012240055

Conducted Immunity Test(EMS area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Compact immunity test systemr	TESEQ	NSG 4070C-110	56172
6dB Attenuator	TESEQ	ATN 6150	20011501
Coupling, Decoupling Network	EM TEST	CDN M016S	56466
Coupling, Decoupling Network	EMTEST	CDN M5-100-750 VS	54984
Current injection probe	EMTEST	CIP 9136A	56220
EM Clamp	TESE Q	KEMA 801A	56676

Variation of power frequency Test (EMS area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Multifunctional threephase voltage source	EMTEST	NetWave 67.3-400	P2009239095
3-phase Flicker impedance	EMTEST	AIF 503N63.1	P2009239213

Power-frequency magnetic field Test(EMS area)

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.
Multifunctional threephase voltage source	EMTEST	NetWave 67.3-400	P2009239095
Helmholtz Coils	Schwarzbec k	HHS 5215-100	HHS 5215-100 #111

Measurement Uncertainty

For a 95% confidence level, the measurement uncertainties for defined systems are:

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty for Conducted Emission in shielding room 150kHz-30MHz (for test using AMN ENV216 or ENV4200 or NSLK8163)	±3.22dB
Uncertainty for Radiated Emission in 3m chamber 30MHz-1000MHz	Horizontal: ±5.13dB; Vertical: ±5.20dB;
Uncertainty for Radiated Emission in 3m chamber 1000MHz-18000MHz	Horizontal: ±5.02dB; Vertical: ±5.02dB;
Uncertainty for Harmonic test	3.16%
Uncertainty for Flicker test	4.69%
Uncertainty for RS test	49%, K=2
Uncertainty for CS test	28%(CDN); 45%(EM Clamp) K=2
Uncertainty for ESD test	The immunity measurement system uncertainty is within standard requirement and is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.
Uncertainty for EFT test	
Uncertainty for Surges test	
Uncertainty for PMF test	
Uncertainty for Voltage Dips, Voltage Variations and Short Interruptions Test	

Remark:
Measurement Uncertainty Decision Rule
Determination of conformity with the specification limits is based on the decision rule according to IEC Guide 115: 2007, clause 4.4.3 and 4.5.1.

Photo of Product


SURGE PROTECTOR
TV~FRIDGE
GUARD
OFF
WAIT
ON
TV~FRIDGE
PROTECTOR
OFF
WAIT
ON