

EMC Test Report

Prepared for: Washroom Wizard Limited
Product Name: ECO Breeze Air fragrance / filtration unit
Model Number: None stated
Test Standards: EN 55014-1:2006 + A1:2009 + A2:2011
EN 55014-2:1997 + A1:2001 + A2:2008
EN 61000-3-2:2006 + A1:2009 + A2:2009
EN 61000-3-3:2008



2667

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Test Report Issue Date: 26 February 2016

Tested by:

Approved by:

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Contents

Section 1: Overview

- Section 1.1: General
- Section 1.2: Customer Details
- Section 1.3: Equipment Under Test (EUT)

Section 2: Details relating to the Equipment Under Test

- Section 2.1: Equipment Under Test (EUT)
- Section 2.2: Auxiliary Equipment (AE)
- Section 2.3: Configuration Diagram/Photograph of EUT

Section 3: Test Results Summary

- Section 3.1: Test Results Summary Table
- Section 3.2: Measurement Uncertainty

Section 4: Formal Test Results

- Section 4.1: Mains Port Conducted Emissions
- Section 4.2: Discontinuous Conducted Emissions
- Section 4.3: Disturbance Power Emissions
- Section 4.4: Radiated Emissions
- Section 4.5: Mains Harmonics
- Section 4.6: Voltage Fluctuations
- Section 4.7: Electrostatic Discharge
- Section 4.8: EFT/Bursts
- Section 4.9: Surge Immunity
- Section 4.10: Conducted RF Immunity
- Section 4.11: Dips & Interruptions

Section 5: Performance Criteria

Section 6: List of Abbreviations

Annex A: Graphical Results

- Graph 1: Mains Port Conducted Emissions - Live Terminal
- Graph 2: Mains Port Conducted Emissions - Neutral Terminal
- Graph 3: Disturbance Power Emissions - Mains Cable

Annex B: Tabular Results

- Table 1: Mains Harmonics Results

Annex C: Photographs

- Photograph 1: Mains Port Conducted Emissions Setup
- Photograph 2: Disturbance Power Emissions Setup
- Photograph 3: Electrostatic Discharge Setup
- Photograph 4: EFT / Bursts Setup
- Photograph 5: Surge Immunity Setup
- Photograph 6: Conducted RF Immunity Setup
- Photograph 7: Dips & Interruptions Setup

Section 1: Overview

Section 1.1: General

This test report contains details of testing carried out on sample(s) submitted to Kiwa Blackwood Compliance Laboratories for an assessment against Electromagnetic Compatibility (EMC) standards in accordance with an agreed Test Plan.

This test report relates only to the specific items detailed in Section 1.3 and Section 2 as Equipment Under Test (EUT). The results given in this report relate only to the tests, configurations, operation modes and arrangements of the EUT as defined within this report.

The results contained in this test report do not relate to any Auxiliary Equipment (AE) which has been used to exercise, monitor and/or provide suitable loading for the EUT. AE, where applicable, is also detailed in Section 2.

Deviations from, additions to, or exclusions from the standard test method and, where applicable, information on specific test conditions, or where tests are not covered by our UKAS Accreditation schedule, are stated in the Results Summary Table in Section 3.1.

Fully testing to a harmonised standards as listed in the Official Journal is the equivalent of the *EMC Assessment* and this gives a *presumption of conformity* to the EMC Directive 2004/108/EC. The customer is advised to keep up to date with changes to standards in the Official Journal which may affect the compliance of the product.

Opinions and interpretations where given in this test report are outside of the scope of our UKAS Accreditation.

Section 1.2: Customer Details

This test report was prepared for:

Washroom Wizard Limited
6B Park Way
Porterswood
St Albans
AL3 6PA

Section 1.3: Equipment Under Test (EUT)

The equipment under test was an air fragrance and filtration unit for use in commercial washrooms and toilets.

Section 2: Details relating to the Equipment Under Test

Test Start Date: 01 December 2015
Test Completed Date: 01 December 2015

Section 2.1: Equipment Under Test (EUT)

| | |
|-------------------|---------------------------------|
| Product Name: | ECO Breeze |
| Manufacturer: | Washroom Wizard Limited |
| Description: | Air fragrance / filtration unit |
| Model No: | None stated |
| Part No: | None stated |
| Serial No: | None stated |
| Build State: | Pre-production sample |
| Condition: | Good / working |
| Software Version: | None stated |

Section 2.2: Auxiliary Equipment (AE)

No auxiliary equipment was used when testing the EUT.

Section 2.3: Configuration Diagram/Photograph of EUT



Section 3: Test Results Summary

Section 3.1: Test Results Summary Table

| Test: | Standard: | Test Level/Frequency Range: | Mod.: | Result: |
|-----------------------------------|---------------------------------------|-------------------------------------------|-------|---------|
| Mains Port Conducted Emissions | EN 55014-1:2006 + A1:2009 + A2:2011 | Household and similar products | 0 | Pass |
| Discontinuous Conducted Emissions | EN 55014-1:2006 + A1:2009 + A2:2011 | Household and similar products | 0 | Pass |
| Disturbance Power Emissions | EN 55014-1:2006 + A1:2009 + A2:2011 | Household and similar products | 0 | Pass |
| Radiated Emissions | EN 55014-1:2006 + A1:2009 + A2:2011 | Household and similar products | N/A | N/A |
| Mains Harmonics | EN 61000-3-2:2006 + A1:2009 + A2:2009 | Class A | 0 | Pass |
| Voltage Fluctuations | EN 61000-3-3:2008 | Pst/dc(%)/dmax(%)/d(t) | 0 | Pass |
| Electrostatic Discharge | EN 55014-2:1997 + A1:2001 + A2:2008 | ±4.0kV Contact/±8.0kV Air | 0 | Pass |
| EFT/Bursts | EN 55014-2:1997 + A1:2001 + A2:2008 | ±1.0kV, Live, Neutral and Earth | 0 | Pass |
| Surge Immunity | EN 55014-2:1997 + A1:2001 + A2:2008 | ±1.0kV Line to Line, ±2.0kV Line to Earth | 0 | Pass |
| Conducted RF Immunity | EN 55014-2:1997 + A1:2001 + A2:2008 | 150kHz to 230MHz, 3V 80% AM 1kHz | 0 | Pass |
| Dips & Interruptions | EN 55014-2:1997 + A1:2001 + A2:2008 | >95%/60%/30% | 0 | Pass |

All of the above tests are included on the Kiwa Blackwood UKAS accreditation schedule (No. 2667).

Mod. (modification status):

- 0 The EUT was tested as received, i.e. without any modifications.

Section 3.2: Measurement Uncertainty

ISO/IEC 17025:2005 “General requirements for the competence of testing and calibration laboratories” requires measurement uncertainty to be estimated for all testing done.

Measurements Uncertainty for conducted and radiated emissions has been calculated and applied in accordance with CISPR 16-4-2:2003. Measurement Uncertainty has been calculated for all other tests in accordance with UKAS document LAB 34 Edition 1:2002.

With regard to emissions testing Ulab meets Ucispr meaning that a simple pass or fail is reported.

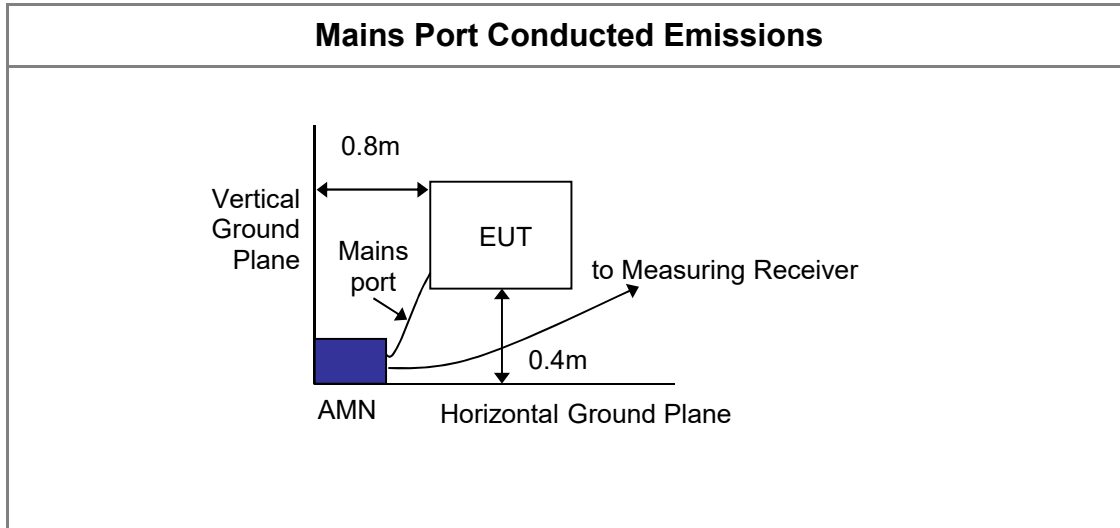
With regard to Radiated Field Immunity and Conducted RF Immunity testing the test level generation uncertainty has not been added to the test level. This is in line with current Cenelec interpretation sheets on the two basic standards EN 61000-4-3 and EN 61000-4-6.

With regard to other Immunity tests the calibration parameters of the test equipment meet the basic standard requirement for tolerances even when extended by the calibration uncertainty.

Section 4: Formal Test Results

Section 4.1: Mains Port Conducted Emissions

Test Standard: EN 55014-1:2006 + A1:2009 + A2:2011
 Frequency Range: 150 kHz to 30 MHz
 Operation Mode: The fan was operating during the test.



Test Equipment Used:

8501 EMCO 3825/2 Line Impedance Stabilisation Network
 8627 Telegartner J01006A0836 10dB Attenuator
 8761 10m BNC cable
 8659 50Ω Termination
 8513 HP8566B Spectrum Analyser System
 8636 HP Conducted Emissions Software
 8525 Ladybird Nightlight
 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

Below are the top recorded worst case mains port conducted emissions:

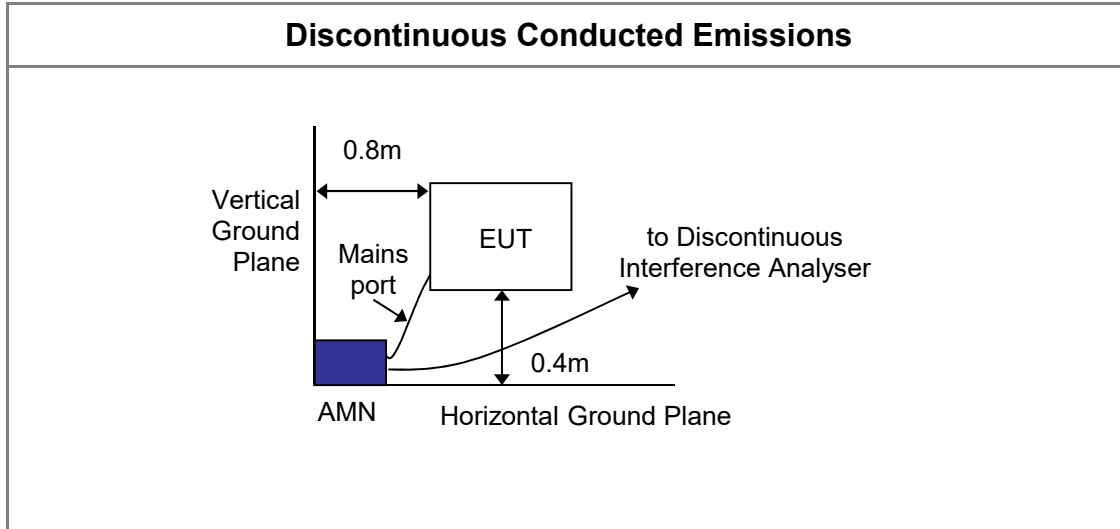
| Mains Voltage (Vac): | Terminal: | Detector: | Frequency (MHz): | Level (dB(μV)): | Limit (dB(μV)): | Margin (dB): | Result: |
|----------------------|-----------|-----------|------------------|-----------------|-----------------|--------------|---------|
| 230 | N | PK | 0.15 - 30 | --- | QP | >-10 | Pass |
| 230 | L | PK | 0.15 - 30 | --- | QP | >-10 | Pass |
| 230 | N | AV | 0.5846 | 25.3 | 46.0 | -20.7 | Pass |
| 230 | N | AV | 0.5176 | 25 | 46.0 | -21 | Pass |
| 230 | N | AV | 0.5041 | 24.3 | 46.0 | -21.7 | Pass |
| 230 | N | AV | 0.4935 | 23.7 | 46.1 | -22.4 | Pass |
| 230 | N | AV | 0.6035 | 23.3 | 46.0 | -22.7 | Pass |
| 230 | L | AV | 0.5846 | 22.5 | 46.0 | -23.5 | Pass |

Additional Comments:

None

Section 4.2: Discontinuous Conducted Emissions

Test Standard: EN 55014-1:2006 + A1:2009 + A2:2011
 Frequency Range: 150 kHz to 30 MHz
 Operation Mode: The fan was turned on and off, and was operating during the test.



Test Equipment Used:

- 8501 EMCO 3825/2 Line Impedance Stabilisation Network
- 8627 Telegartner J01006A0836 10dB Attenuator
- 8761 10m BNC cable
- 8659 50Ω Termination
- 8513 HP8566B Spectrum Analyser System
- 8636 HP Conducted Emissions Software
- 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

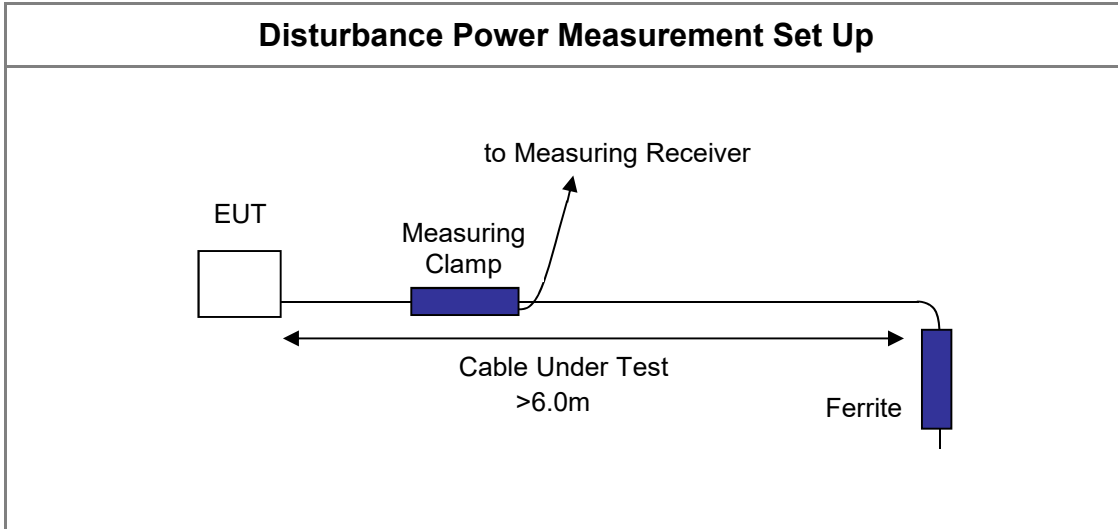
| Frequency (MHz): | Detector: | Limit, L (dB(μV)): | No of clicks over Limit, L: | Time (min): | Relaxed Limit, Lq (dB(μV)): | No of clicks over Lq: | Result: |
|------------------|------------|--------------------|-----------------------------|-------------|-----------------------------|-----------------------|---------|
| 0.15 | Quasi-Peak | --- | --- | --- | --- | --- | Pass |
| 0.5 | Quasi-Peak | --- | --- | --- | --- | --- | Pass |
| 1.4 | Quasi-Peak | -- | --- | --- | --- | --- | Pass |
| 30 | Quasi-Peak | --- | --- | --- | --- | --- | Pass |

Additional Comments:

Discontinuous conducted emissions were manually observed at 0.15 MHz and 0.5 MHz. They were observed as not exceeding the continuous conducted emissions limits.

Section 4.3: Disturbance Power Emissions

Test Standard: EN 55014-1:2006 + A1:2009 + A2:2011
 Frequency Range: 30 MHz to 300 MHz
 Operation Mode: The fan was operating during the test.



Test Equipment Used:

- 8651 Chase CEC8110 Ferrite Absorbing Clamp
- 8651A Telegartner J01006A0835 6dB Attenuator
- 8651B 10m BNC cable
- 8512 HP8568B Spectrum Analyser System
- 8637 HP Radiated Emissions Pre-scan Software
- 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

Below are the top recorded worst case disturbance power emissions:

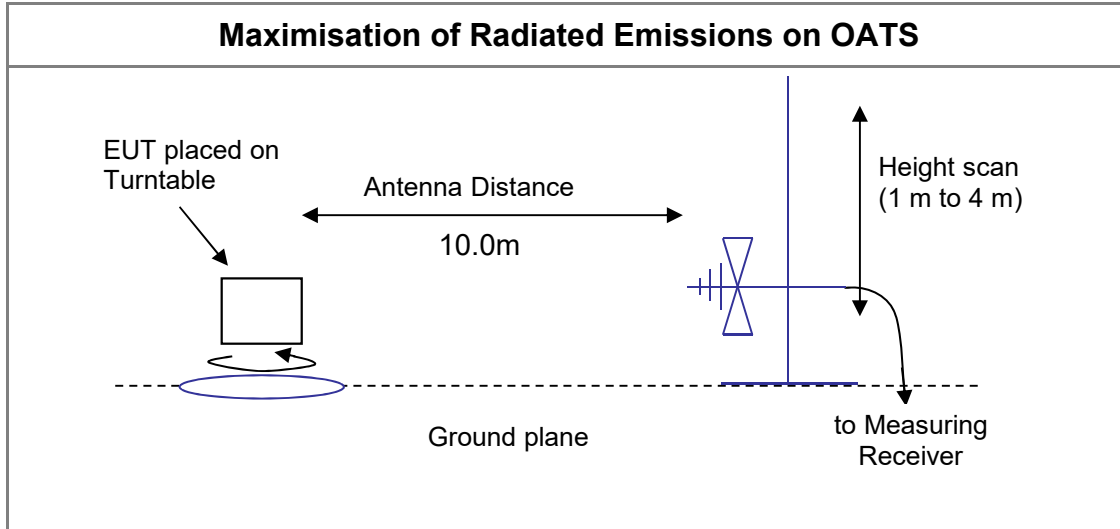
| Mains Voltage (Vac): | Cable Under Test: | Detector: | Frequency (MHz): | Level (dBpW): | Limit (dBpW): | Margin (dB): | Result: |
|----------------------|-------------------|-----------|------------------|---------------|---------------|--------------|---------|
| 230 | Mains | AV | 34.60 | 27.9 | 35.2 | -7.3 | Pass |
| 230 | Mains | AV | 34.84 | 27.9 | 35.2 | -7.3 | Pass |
| 230 | Mains | AV | 35.00 | 27.9 | 35.2 | -7.3 | Pass |
| 230 | Mains | AV | 34.36 | 27.8 | 35.2 | -7.4 | Pass |
| 230 | Mains | AV | 35.98 | 27.8 | 35.2 | -7.4 | Pass |
| 230 | Mains | QP | 35.08 | 33.5 | 45.2 | -11.7 | Pass |

Additional Comments:

None

Section 4.4: Radiated Emissions

Test Standard: EN 55014-1:2006 + A1:2009 + A2:2011
 Frequency Range: 30 MHz to 1000 MHz
 Operation Mode: N/A



Test Equipment Used:

None

Test Results:

Below are the top recorded worst case radiated emissions:

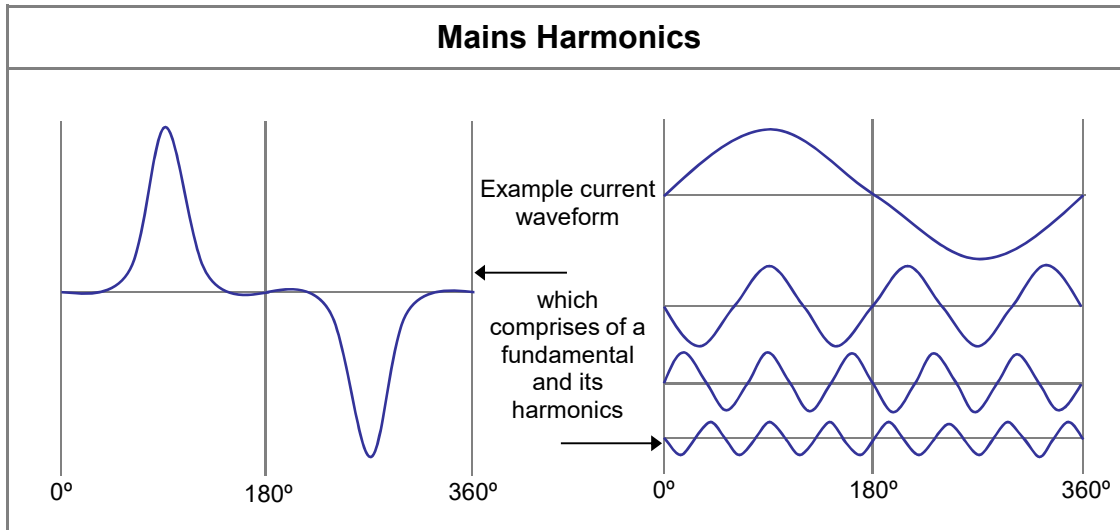
| Antenna Polarisation: | Antenna Distance (m): | Detector: | Frequency (MHz): | Level (dB(μV/m)): | Limit (dB(μV/m)): | Margin (dB): | Result: |
|-----------------------|-----------------------|-----------|------------------|-------------------|-------------------|--------------|---------|
| V | --- | --- | --- | --- | --- | --- | N/A |
| H | --- | --- | --- | --- | --- | --- | N/A |

Additional Comments:

The EUT had no clock frequencies >30MHz and meets the requirements of clause 4.1.2.3.2 and figure 10 of EN 55014-1:2006 + A1:2009, therefore this test is not required.

Section 4.5: Mains Harmonics

Test Standard: EN 61000-3-2:2006 + A1:2009 + A2:2009
 Class: A
 Test Method: Assessed by fluctuating harmonics over 2.5 minutes
 Frequency Range: 100 Hz to 2.0 kHz
 Operation Mode: The fan was turned on at the software prompt and was operating throughout the test.
 Mains Voltage: 230Vac



Test Equipment Used:

8675 Schaffner NSG1007-5 InterHarmonics Power Source
 8562 Voltech IEC555 Reference Impedance Network (short-circuited)
 8693 Voltech PM6000 Power Analyser
 8688 IEC1000-3 Software Release 3.11.07

Test Results:

The test was performed more than once in order to obtain a repeatability of the result within ±5%.

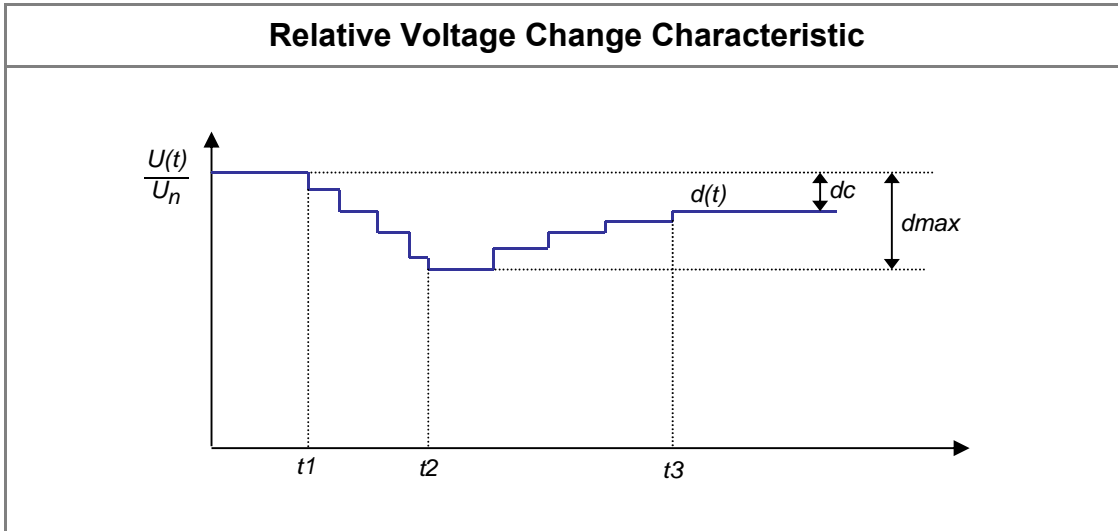
| Test Observation Period: | Power Consumption (W): | Repeatability achieved (Y/N): | Result: |
|--------------------------|------------------------|-------------------------------|---------|
| 2.5 minutes | 3.5 | Yes | Pass |

Additional Comments:

None

Section 4.6: Voltage Fluctuations

Test Standard: EN 61000-3-3:2008
 Operation Mode: The fan was turned on at the software prompt, was turned off and on during the test, and was operating for the remainder of the test.
 Mains Voltage: 230Vac



Test Equipment Used:

- 8675 Schaffner NSG1007-5 InterHarmonics Power Source
- 8562 Voltech IEC555 Reference Impedance Network (open-circuited)
- 8563 Voltech PM6000 Power Analyser
- 8688 IEC1000-3 Software Release 3.11.07

Test Results:

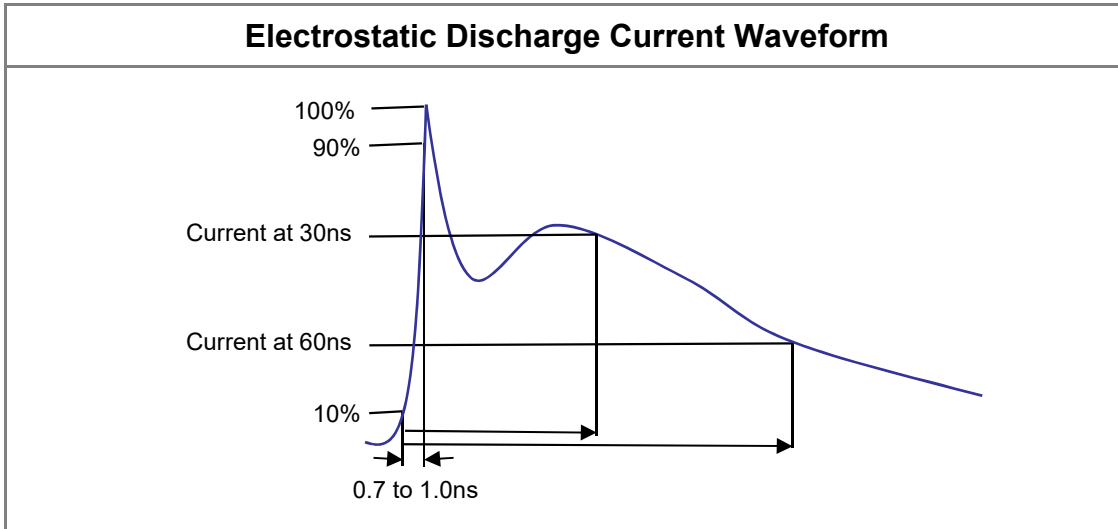
| Parameter measured: | Measured level: | Limit: | Result: |
|---------------------|-----------------|--------|---------|
| dc | 0.002 | 3.3 | Pass |
| dmax | 0.186 | 4 | Pass |
| d(t) | 0 | 500 | Pass |
| Pst | 0.106 | 1 | Pass |

Additional Comments:

None

Section 4.7: Electrostatic Discharge

Test Standard: EN 55014-2:1997 + A1:2001 + A2:2008
 Basic Standard: EN 61000-4-2:1995 + A1:1998 + A2:2001
 Operation Mode: The fan was operating during the test.
 Observing: The continued operation of the fan and illumination of the LED were monitored during the test.
 Performance Criteria: B
 Temperature (C): 21.3
 Relative Humidity (%): 46
 Atmospheric Pressure (mb): 1005



Test Equipment Used:

- 8709 Teseq NSG434 ESD Simulator
- Horizontal Coupling Plane
- Vertical Coupling Plane
- 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

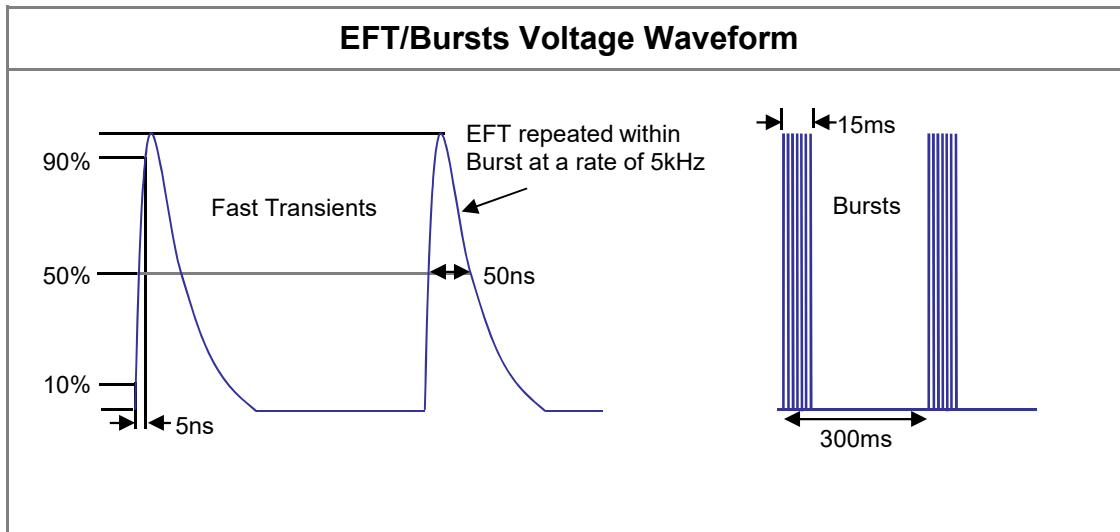
| Contact or Air Discharge? | Applied to: | +2kV | -2kV | +4kV | -4kV | +6kV | -6kV | +8kV | -8kV | Result: |
|---------------------------|------------------|------|------|------|------|------|------|------|------|---------|
| Contact | HCP | N/A | N/A | OK | OK | N/A | N/A | N/A | N/A | Pass |
| Contact | VCP | N/A | N/A | OK | OK | N/A | N/A | N/A | N/A | Pass |
| Air | Top grill | N/A | N/A | N/A | N/A | N/A | N/A | OK | OK | Pass |
| Air | Front grill | N/A | N/A | N/A | N/A | N/A | N/A | OK | OK | Pass |
| Air | LED | N/A | N/A | N/A | N/A | N/A | N/A | OK | OK | Pass |
| Air | Movement Sensor | N/A | N/A | N/A | N/A | N/A | N/A | OK | OK | Pass |
| Air | top side hole | N/A | N/A | N/A | N/A | N/A | N/A | OK | OK | Pass |
| Air | bottom side hole | N/A | N/A | N/A | N/A | N/A | N/A | OK | OK | Pass |

Additional Comments:

None

Section 4.8: EFT/Bursts

Test Standard: EN 55014-2:1997 + A1:2001 + A2:2008
 Basic Standard: EN 61000-4-4:2004
 Operation Mode: The fan was operating during the test.
 Observing: The continued operation of the fan and illumination of the LED were monitored during the test.
 Test Duration: 2.0 minutes
 Performance Criteria: B
 Temperature (C): 21
 Relative Humidity (%): 43
 Atmospheric Pressure (mb): 1005



Test Equipment Used:

8555 Schaffner NSG2025 Transient Generator
 8638 Schaffner WIN2025 EFT/Bursts Software
 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

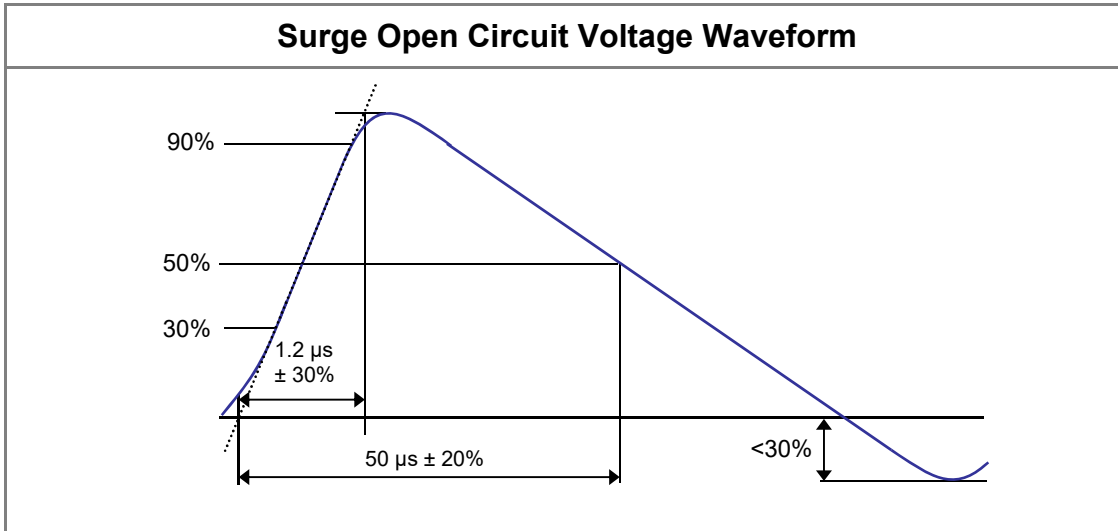
| Port Under Test: | +0.5kV | -0.5kV | +1kV | -1kV | +2kV | -2kV | Result: |
|------------------|--------|--------|------|------|------|------|---------|
| Live | N/A | N/A | OK | OK | N/A | N/A | Pass |
| Neutral | N/A | N/A | OK | OK | N/A | N/A | Pass |
| Earth | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LN | N/A | N/A | OK | OK | N/A | N/A | Pass |

Additional Comments:

None

Section 4.9: Surge Immunity

Test Standard: EN 55014-2:1997 + A1:2001 + A2:2008
 Basic Standard: EN 61000-4-5:2006
 Operation Mode: The fan was operating during the test.
 Observing: The continued operation of the fan and illumination of the LED were monitored during the test.
 Performance Criteria: B
 Temperature (C): 22
 Relative Humidity (%): 45
 Atmospheric Pressure (mb): 1006



Test Equipment Used:

8746 Schaffner Modula 6100 test system
 8752 Schaffner Modula software V2.7
 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

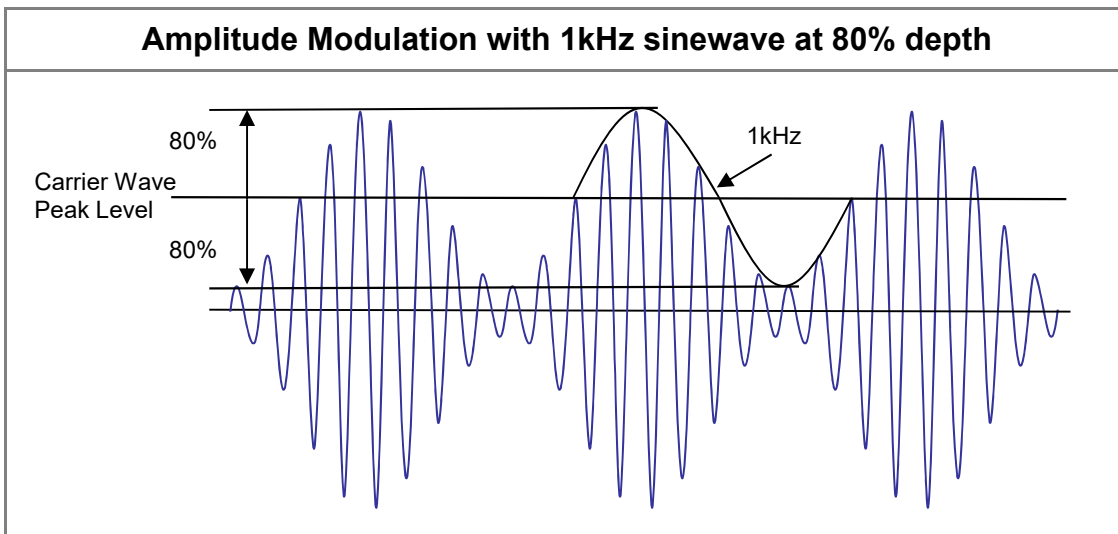
| Applied: | φ Angle: | R | C | +0.5kV | -0.5kV | +1kV | -1kV | +2kV | -2kV | Result: |
|----------|------------------|-------------|------------------|--------|--------|------|------|------|------|---------|
| L-N | 0 | 2 Ω | 18 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| L-N | 90 | 2 Ω | 18 μF | N/A | N/A | OK | N/A | N/A | N/A | Pass |
| L-N | 270 | 2 Ω | 18 μF | N/A | N/A | N/A | OK | N/A | N/A | Pass |
| L-E | 0 | 12 Ω | 9 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| L-E | 90 | 12 Ω | 9 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| L-E | 270 | 12 Ω | 9 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N-E | 0 | 12 Ω | 9 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N-E | 90 | 12 Ω | 9 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N-E | 270 | 12 Ω | 9 μF | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

Additional Comments:

None

Section 4.10: Conducted RF Immunity

Test Standard: EN 55014-2:1997 + A1:2001 + A2:2008
 Basic Standard: EN 61000-4-6:2007 + Corr 2007
 Operation Mode: The fan was operating during the test.
 Observing: The continued operation of the fan and illumination of the LED were monitored during the test.
 Frequency Range: 0.15 MHz to 230 MHz
 Frequency Step Rate: 1.0 %
 Dwell time: 3.0 s
 Test Level: 3.0 V (RMS)
 Modulation: 80 % Amplitude Modulation with 1.0 kHz sine wave
 Performance Criteria: A
 Temperature (C): 21.4
 Relative Humidity (%): 43



Test Equipment Used:

- 8527 HP8567A Signal Generator
- 8531 AR 25A250 RF Amplifier
- 8652 Bird 25-A-MFB-10 10dB Attenuator
- 8677 Schaffner CDN-M2-16 Coupling / Decoupling Network
- Associated Cables
- 8635 EMC Hire Conducted Immunity Software
- 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

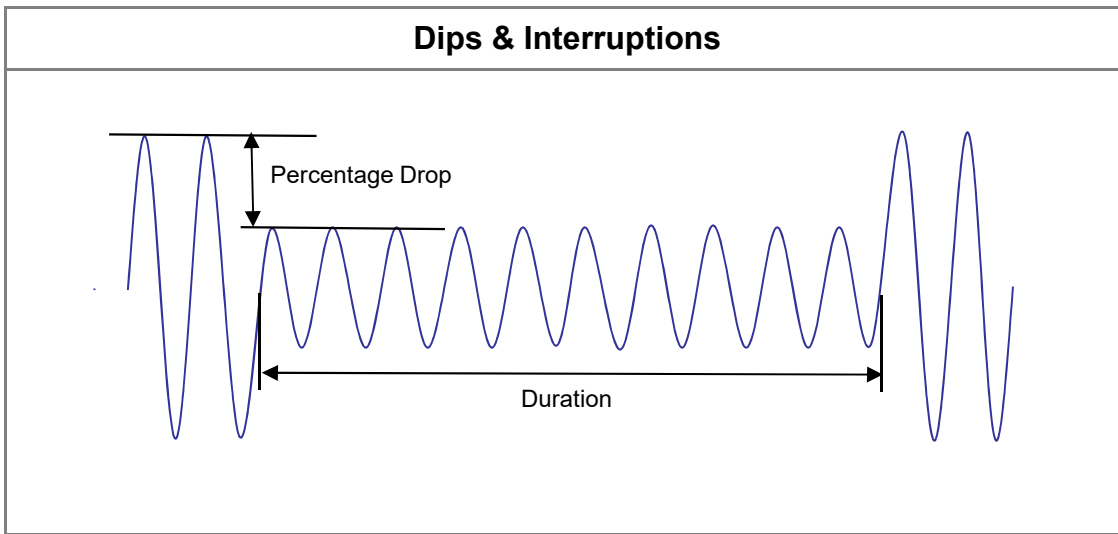
| Port Under Test: | RF coupled via: | Observed effect on EUT: | Result: |
|------------------|-----------------|------------------------------------------|---------|
| Mains | M2 | No malfunctions observed during the test | Pass |

Additional Comments:

None

Section 4.11: Dips & Interruptions

Test Standard: EN 55014-2:1997 + A1:2001 + A2:2008
 Basic Standard: EN 61000-4-11:2004
 Operation Mode: The fan was operating during the test.
 Observing: The continued operation of the fan and illumination of the LED were monitored during the test.
 Mains Voltage: 230Vac
 Performance Criteria: C
 Temperature (C): 21.9
 Relative Humidity (%): 46
 Atmospheric Pressure (mb): 1006



Test Equipment Used:

- 8746 Schaffner Modula 6100 test system
- 8742 Carroll & Meynell 15A Variac
- 8522 Beckman T100B multimeter
- 8752 Schaffner Modula software V2.7
- 8648 Oregon Scientific BAA898HG Environmental Monitor

Test Results:

| Percentage Drop: | Duration: | Performance Criteria: | Observed effect on EUT: | Result: |
|------------------|-----------|-----------------------|------------------------------------------|---------|
| >95 | +ve 0.5 | C | No malfunctions observed during the test | Pass |
| >95 | -ve 0.5 | C | No malfunctions observed during the test | Pass |
| 60 | 10 | C | No malfunctions observed during the test | Pass |
| 30 | 50 | C | No malfunctions observed during the test | Pass |

Additional Comments:

None

Section 5: Performance Criteria

Below is the performance criteria as expressed in EN 55014-2 EMC immunity standard.

Performance criterion 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 (or permissible loss of performance) 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 reasonably expect from the apparatus if used as intended.

Performance criterion 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 (or permissible loss of performance) 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. 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 reasonably expect from the apparatus if used as intended.

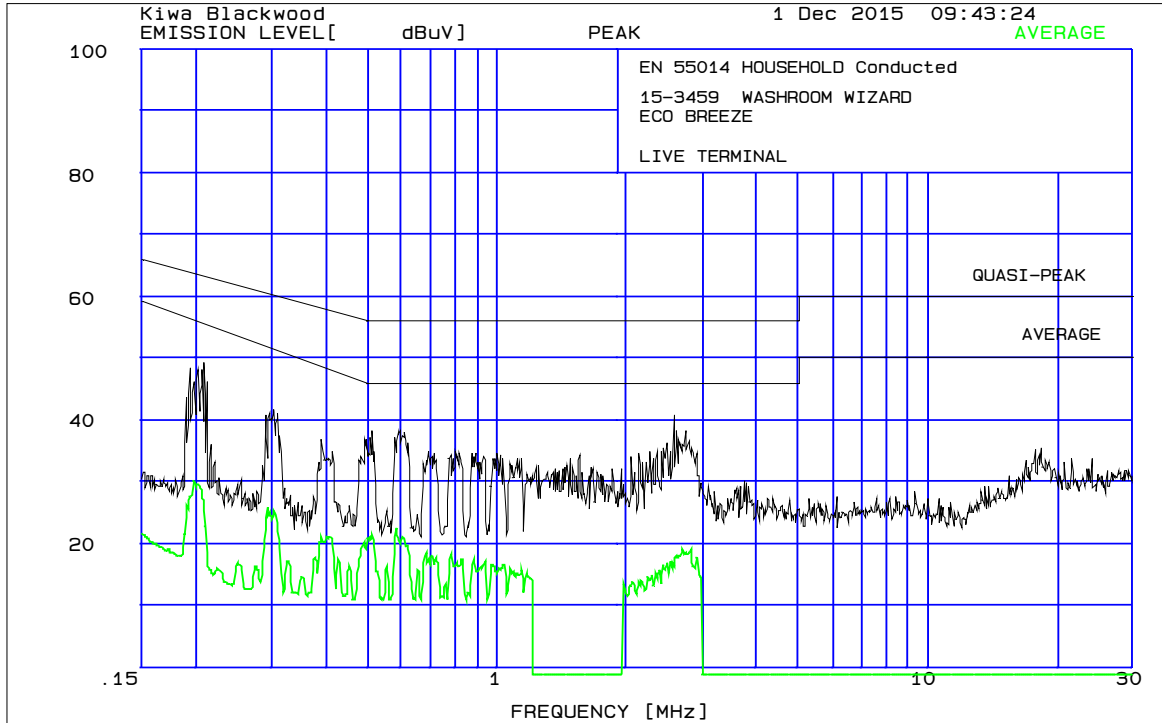
Performance criterion C: Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls, or by any operation specified in the instructions for use.

Section 6: List of Abbreviations

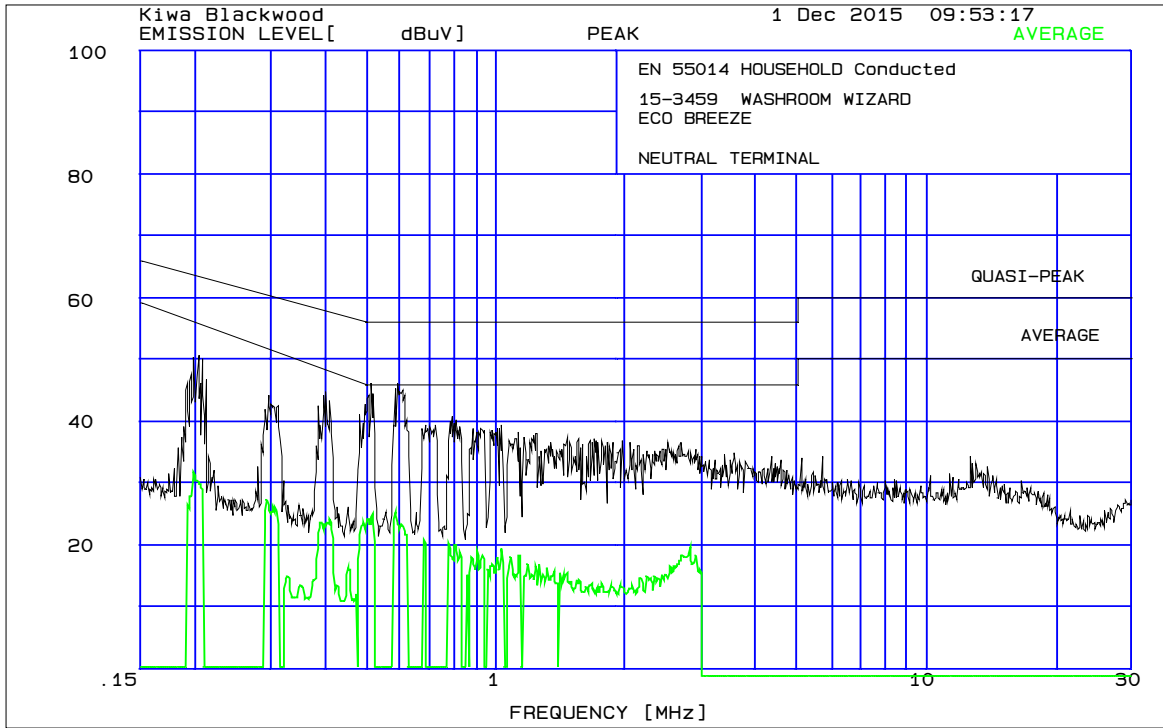
| | |
|-------------|-----------------------------------------------------------|
| EUT: | Equipment Under Test |
| AE: | Auxiliary Equipment (i.e. equipment connected to the EUT) |
| PK: | Peak Measurement Detector |
| QP: | Quasi-Peak Measurement Detector |
| AV: | Average Measurement Detector |
| L: | Live Terminal |
| N: | Neutral Terminal |
| E: | Earth Terminal |
| L-N: | Applied between Live and Neutral terminals |
| L-E: | Applied between Live and Earth terminals |
| N-E: | Applied between Neutral and Earth terminals |
| V: | Vertical Polarisation |
| H: | Horizontal Polarisation |

Annex A: Graphical Results

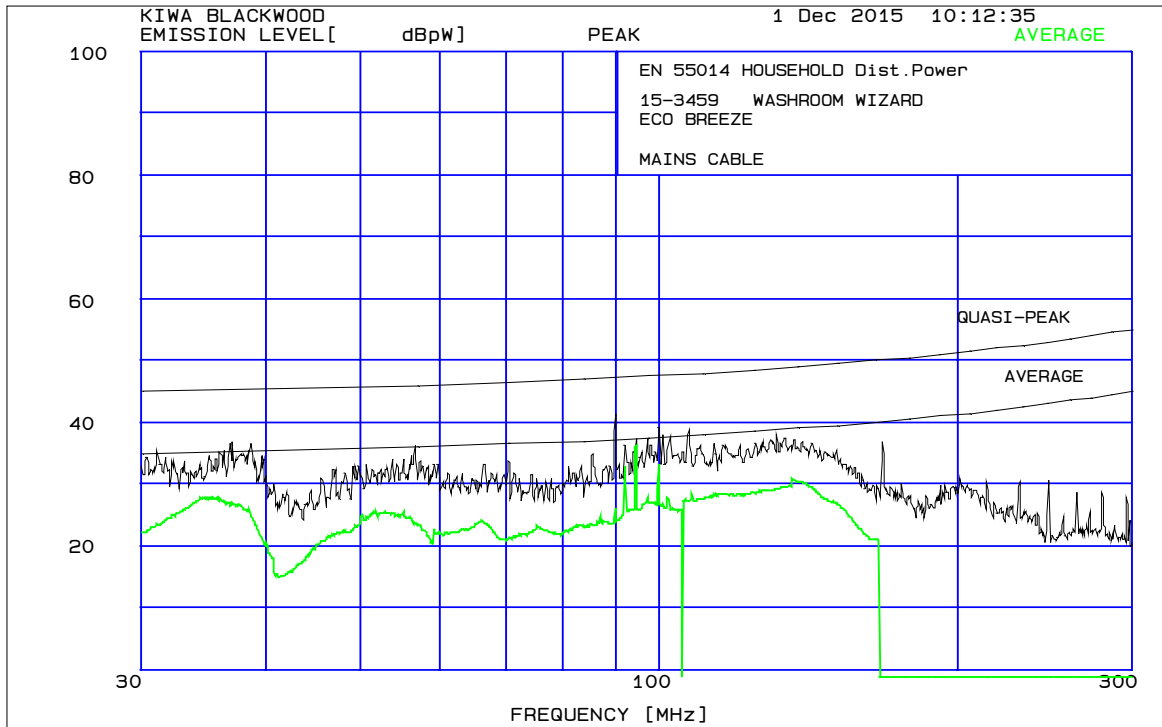
Graph 1: Mains Port Conducted Emissions - Live Terminal



Graph 2: Mains Port Conducted Emissions - Neutral Terminal



Graph 3: Disturbance Power Emissions - Mains Cable



Annex B: Tabular Results

Table 1: Mains Harmonics Results

| | | |
|------------------------------------------------|-----------------------------------------------------------------------------------|-------------------|
| Product: | ECO BREEZE | 01 Dec 2015 11:09 |
| Serial no: | | Page 1 of 1 |
| Description: | | |
| Result Name: | HARM1 | |
| Voltech IEC61000-3 Windows Software 1.12.05RC1 | Test Date: | 01 Dec 2015 11:04 |
| Type of Test: | Fluctuating Harmonics Test - Worst Case Table (2006) | |
| Power Analyzer: | Voltech PM6000 SN: 100006700179 Firmware version: v1.20.06RC4 | |
| Channel(s): | 1. SN: 090015501412, 28 Adjusted Date: 14 MAR 2009. 2. SN:None Adjusted Date:None | |
| | 3. SN:None Adjusted Date:None 4. SN:None Adjusted Date:None | |
| | 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:None | |
| Shunt(s): | 1. SN: 091024300522, 4 Adjusted Date: 16 MAR 2009. 2. SN:None Adjusted Date:None | |
| | 3. SN:None Adjusted Date:None 4. SN:None Adjusted Date:None | |
| | 5. SN:None Adjusted Date:None 6. SN:None Adjusted Date:None | |
| AC Source: | Mains / Manual Source | |
| Overall Result: | N/A | |

| | |
|------------------|---------|
| Class | Class A |
| Class Multiplier | 1 |

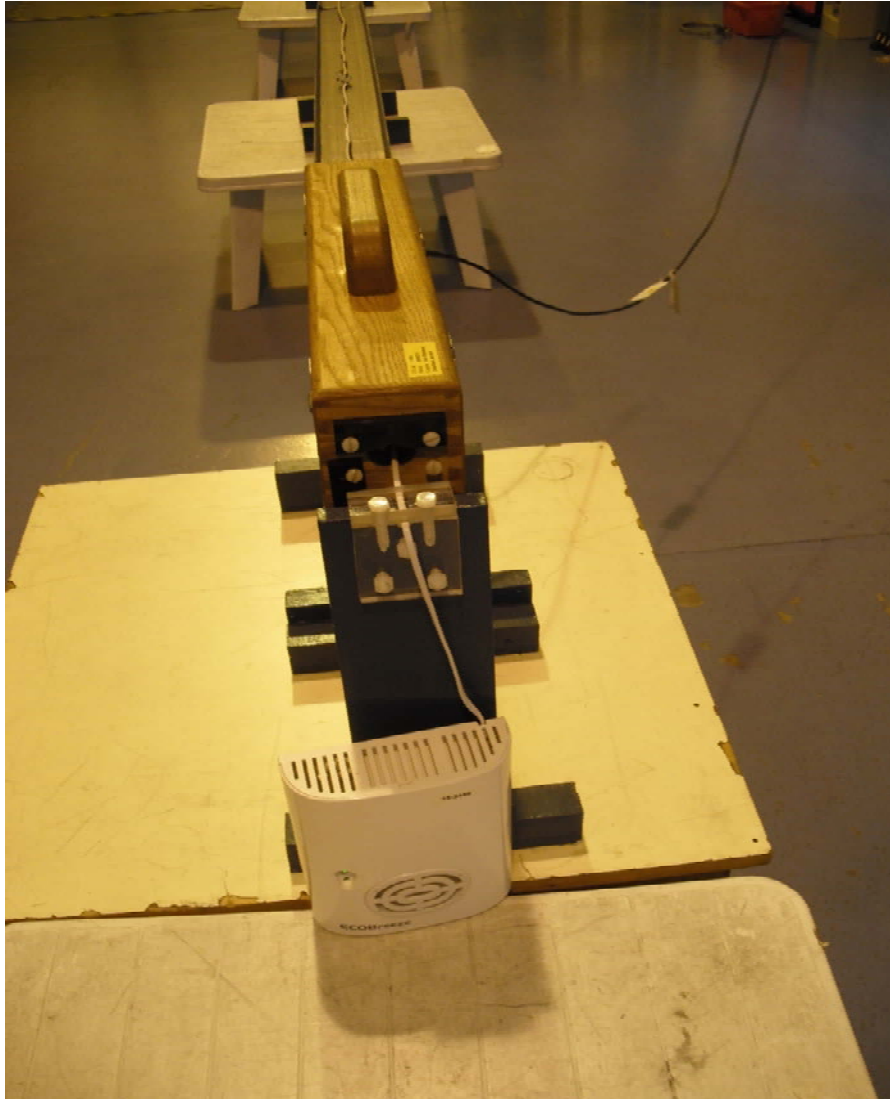
| Harm | Limit 1 | Limit 2 | Average Reading | <L1 <L2 | Max Reading | <L2 | Pass FAIL | Harm | Limit 1 | Limit 2 | Average Reading | <L1 <L2 | Max Reading | <L2 | Pass FAIL |
|------|---------|---------|-----------------|---------|-------------|-----|-----------|------|---------|---------|-----------------|---------|-------------|-----|-----------|
| 2 | 1.0800A | 1.6200A | 0.926mA | ✓✓ | 0.975mA | ✓ | N/A | 3 | 2.3000A | 3.4500A | 13.37mA | ✓✓ | 13.44mA | ✓ | N/A |
| 4 | 430.0mA | 645.0mA | 0.849mA | ✓✓ | 0.905mA | ✓ | N/A | 5 | 1.1400A | 1.7100A | 12.44mA | ✓✓ | 12.50mA | ✓ | N/A |
| 6 | 300.0mA | 450.0mA | 0.901mA | ✓✓ | 0.852mA | ✓ | N/A | 7 | 770.0mA | 1.1550A | 11.96mA | ✓✓ | 12.01mA | ✓ | N/A |
| 8 | 230.0mA | 345.0mA | 0.748mA | ✓✓ | 0.787mA | ✓ | N/A | 9 | 400.0mA | 600.0mA | 11.06mA | ✓✓ | 11.11mA | ✓ | N/A |
| 10 | 184.0mA | 276.0mA | 0.684mA | ✓✓ | 0.724mA | ✓ | N/A | 11 | 330.0mA | 495.0mA | 10.14mA | ✓✓ | 10.19mA | ✓ | N/A |
| 12 | 153.3mA | 230.0mA | 0.638mA | ✓✓ | 0.678mA | ✓ | N/A | 13 | 210.0mA | 315.0mA | 9.099mA | ✓✓ | 9.170mA | ✓ | N/A |
| 14 | 131.4mA | 197.1mA | 0.539mA | ✓✓ | 0.573mA | ✓ | N/A | 15 | 150.0mA | 225.0mA | 7.936mA | ✓✓ | 8.009mA | ✓ | N/A |
| 16 | 115.0mA | 172.5mA | 0.473mA | ✓✓ | 0.508mA | ✓ | N/A | 17 | 132.3mA | 198.5mA | 6.759mA | ✓✓ | 6.842mA | ✓ | N/A |
| 18 | 102.2mA | 153.3mA | 0.403mA | ✓✓ | 0.442mA | ✓ | N/A | 19 | 118.4mA | 177.6mA | 5.600mA | ✓✓ | 5.698mA | ✓ | N/A |
| 20 | 92.00mA | 138.0mA | 0.337mA | ✓✓ | 0.369mA | ✓ | N/A | 21 | 107.1mA | 160.7mA | 4.437mA | ✓✓ | 4.534mA | ✓ | N/A |
| 22 | 83.63mA | 125.4mA | 0.286mA | ✓✓ | 0.322mA | ✓ | N/A | 23 | 97.82mA | 146.7mA | 3.386mA | ✓✓ | 3.493mA | ✓ | N/A |
| 24 | 76.69mA | 115.0mA | 0.305mA | ✓✓ | 0.331mA | ✓ | N/A | 25 | 90.00mA | 135.0mA | 2.423mA | ✓✓ | 2.526mA | ✓ | N/A |
| 26 | 70.76mA | 106.1mA | 0.231mA | ✓✓ | 0.250mA | ✓ | N/A | 27 | 83.33mA | 125.0mA | 1.588mA | ✓✓ | 1.700mA | ✓ | N/A |
| 28 | 65.71mA | 98.57mA | 0.216mA | ✓✓ | 0.231mA | ✓ | N/A | 29 | 77.58mA | 116.3mA | 0.938mA | ✓✓ | 1.046mA | ✓ | N/A |
| 30 | 61.33mA | 92.00mA | 0.215mA | ✓✓ | 0.232mA | ✓ | N/A | 31 | 72.58mA | 108.8mA | 0.616mA | ✓✓ | 0.680mA | ✓ | N/A |
| 32 | 57.50mA | 86.25mA | 0.211mA | ✓✓ | 0.225mA | ✓ | N/A | 33 | 68.18mA | 102.2mA | 0.655mA | ✓✓ | 0.687mA | ✓ | N/A |
| 34 | 54.11mA | 81.17mA | 0.209mA | ✓✓ | 0.226mA | ✓ | N/A | 35 | 64.29mA | 96.42mA | 0.842mA | ✓✓ | 0.881mA | ✓ | N/A |
| 36 | 51.11mA | 76.66mA | 0.201mA | ✓✓ | 0.215mA | ✓ | N/A | 37 | 60.81mA | 91.21mA | 1.011mA | ✓✓ | 1.044mA | ✓ | N/A |
| 38 | 48.42mA | 72.63mA | 0.192mA | ✓✓ | 0.211mA | ✓ | N/A | 39 | 57.69mA | 86.53mA | 1.053mA | ✓✓ | 1.079mA | ✓ | N/A |
| 40 | 46.00mA | 69.00mA | 0.182mA | ✓✓ | 0.201mA | ✓ | N/A | | | | | | | | |

Annex C: Photographs

Photograph 1: Mains Port Conducted Emissions Setup



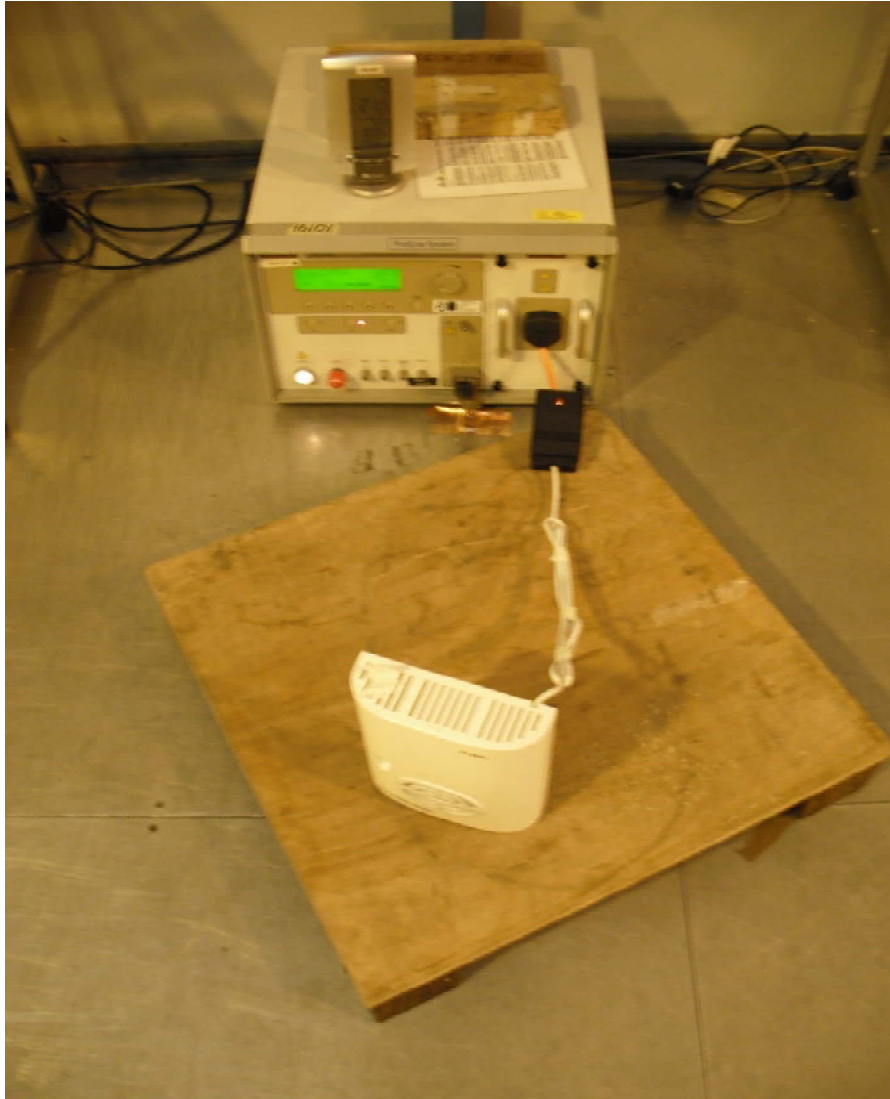
Photograph 2: Disturbance Power Emissions Setup



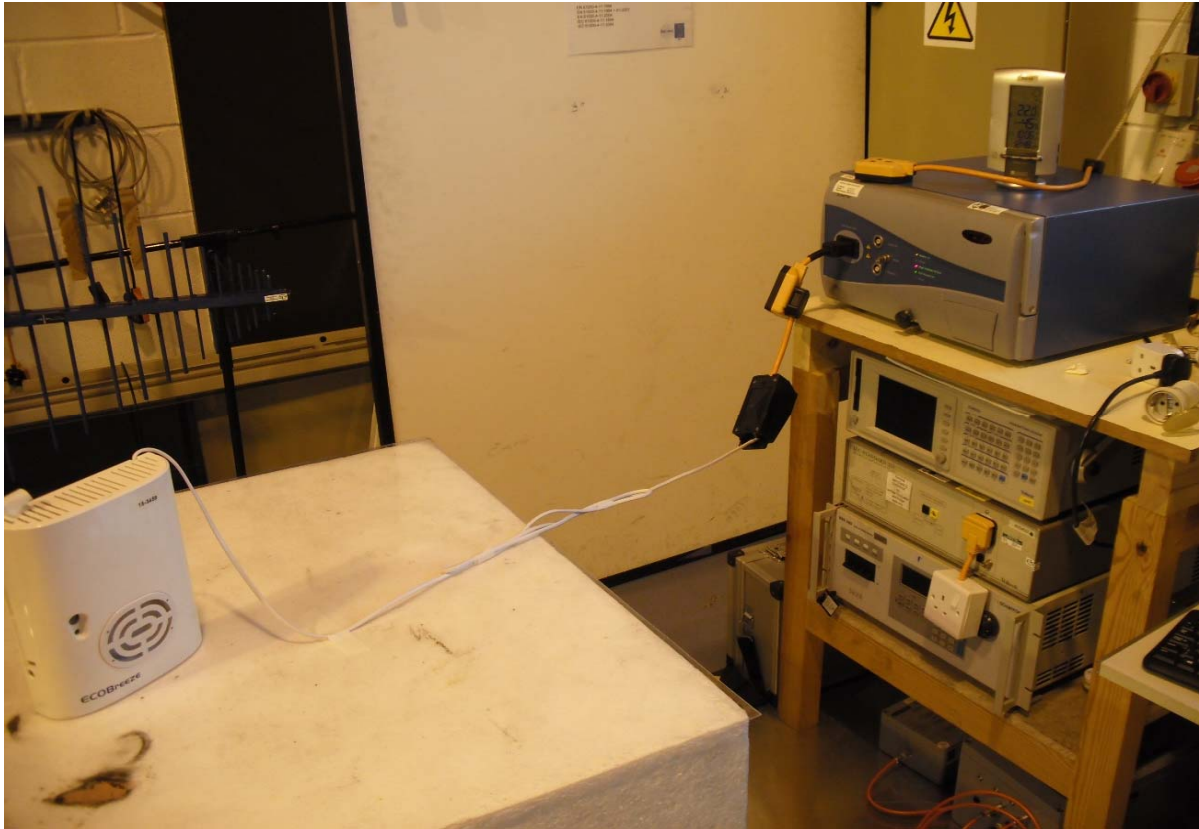
Photograph 3: Electrostatic Discharge Setup



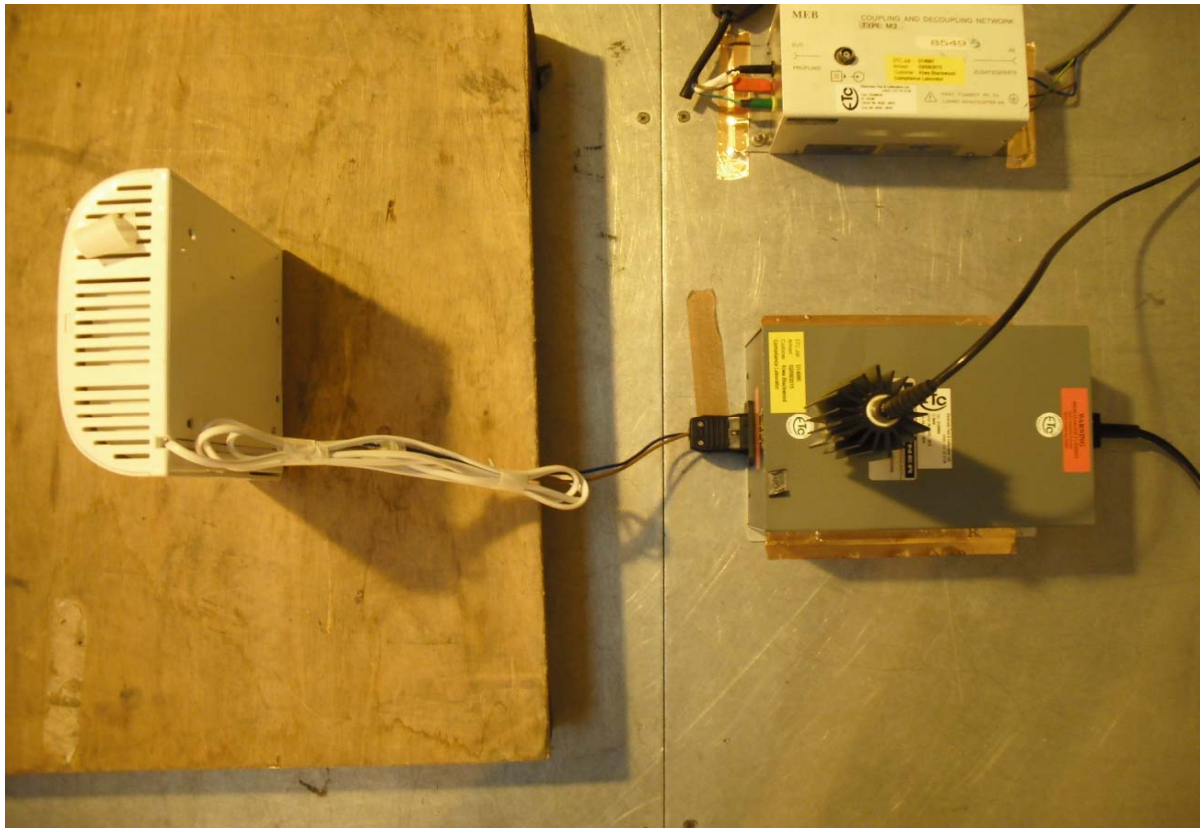
Photograph 4: EFT / Bursts Setup



Photograph 5: Surge Immunity Setup



Photograph 6: Conducted RF Immunity Setup



Photograph 7: Dips & Interruptions Setup



End of Report