*Form to be completed by client*

|  |  |
| --- | --- |
| Section 1: General information | |
| Company Name: |  |
| Company Address: |  |
|  |  |
|  |  |
|  |  |
| Client Contact Name: |  |
| Contact Telephone No: 🕿 |  |
| Contact Email: 🖂 |  |
| Customer Order No: |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Section 2: Equipment Under Test (EUT)** | | | | | | | | | | | | |
| Equipment Name: | |  | | | | | | | | | | |
| Model No / Type: | |  | | | | | | | | | | |
| Hardware Build Level: | |  | | | | | | | | | | |
| (For example, but not limited to; prototype, pre-production, engineering sample, production OR other etc.) | | | | | | | | | | | | |
| Software Revision Level: | |  | | | | | | | | | | |
| Serial No: | |  | | | | | | | | | | |
| Power Supply Details: | | Voltage: | |  | | Current: | |  | | Frequency: | |  |
| Phase: | | Single / Three | | | | 4-Wire (3P+E) / 5-Wire (3P+N+E) | | | | |
| Intended Installation Environment: | | | | |  | | | | | | | |
| (For example; Sea, Land, Air, Space etc.) | | | | | | | | | | | | |
| EUT Maximum Frequency Generated or Used: | | | | |  | | | | | | | |
| (This may include clocks, bus, signal line transmission, I.C’s, DC/DC converters, known spurious, switching and RF frequencies) | | | | | | | | | | | | |
| EUT Physical Dimensions (H x W x D) Metres: | | | | |  | | | | | | | |
| EUT Location: | Table-Top | | Floor | | | | Vehicle | |  | |  | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Section 3: Description of EUT and its Primary Function(s) | | | | | | |
| (A detailed technical description of the product and its function(s) (primary, intended or essential) is required in order to facilitate correct application of the appropriate EMC product standard(s). Examples of typical functions may include, or a combination of; storage, entry, display, retrieval, transmission, processing, switching, or control, of data and of telecommunication messages, radio transmission or reception etc.) | | | | | | |
| Description of EUT: | | | | | | |
| Primary Function of EUT: | | | | | | |
| **Section 4: List of EUT Cables** (Typical installation lengths are as stated in EUT Installation / User manual) | | | | | | |
| (The cable lengths given in this section will be used to determine test applicability) | | | | | | |
|  | Description  (i.e. AC Mains or DC Supply, Signal, Ethernet, Serial, CAN, USB…etc.) | Type  (i.e. 6 Core, Multi-core,  Multi-strand, TP, SWA, SWG) | Shielded or Unshielded | Maximum  Installation  Length | Test  Length |
| 1: |  |  |  |  |  |
| 2: |  |  |  |  |  |
| 3: |  |  |  |  |  |
| 4: |  |  |  |  |  |
| 5: |  |  |  |  |  |
| 6: |  |  |  |  |  |
| 7: |  |  |  |  |  |
| 9: |  |  |  |  |  |
| 10: |  |  |  |  |  |
| **Note:** For additional cables, please enter further details in Section 11 “Additional Information”. | | | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section 5: EUT Earth Bonding Arrangement(s)** Applicable  / Not Applicable | | | | |
| (Where applicable, specify the typical installation earth / bonding requirements i.e. 1mm2, 2.5mm2, 10mm2, Bus-Bar, or Flat Braid etc) | | | | |
| Conductor Type:  (Multi-Strand, Solid, Braid etc) |  | | Cross Sectional Area:  (CSA) |  |
| Conductor Length: |  | | Earth Impedance:  (Ze) |  |
| Type of Bonding:  (i.e. PE, Supplementary or RF) |  | | Earth Bonding Location: |  |
| Cable Description:  (i.e. Specification, Part No, Supplier etc) | |  | | |
| **Note:** In the absence of precise earth bonding information, and where required; Element will use Tin Coated 12mm x 2.3mm Flat 90A  Copper Braid (RS part No: 365-559), which will be precisely documented within resultant test reports or certificates. | | | | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Section 6: Support Equipment** | | | | |
| (Where applicable, including equipment required for operating and/or monitoring purposes i.e. external PSU, battery, PC, laptop, oscilloscope, DVM, load, ping loop-back connectors, thermo-couple, ECU, CAN interface, Ethernet hub, PSTN/ISDN exchange etc) | | | | |
| 1. | Description: |  | | |
| Make: |  | | |
| Model No: |  | Serial No: |  |
|  | | | | |
| 2. | Description: |  | | |
| Make: |  | | |
| Model No: |  | Serial No: |  |
|  | | | | |
| 3. | Description: |  | | |
| Make: |  | | |
| Model No: |  | Serial No: |  |
|  | | | | |
| 4. | Description: |  | | |
| Make: |  | | |
| Model No: |  | Serial No: |  |
|  | | | | |
| 5. | Description: |  | | |
|  | Make: |  | | |
|  | Model No: |  | Serial No: |  |
| **Note:** For additional support equipment, please enter further details in Section 11 “Additional Information”. | | | | |

|  |
| --- |
| Section 7: Mode of Operation during EMC Tests |
| (Please note precisely, each applicable function. This shall include the exercising of all primary, intended or essential functions in the most representative mode, consistent with typical applications AND/OR a normal mode chosen to represent the worst case profile. A specific automated program may be required to fully exercise the EUT during EMC tests, such that the complete operational cycle is continuously repetitive in the shortest possible time; ideally <3sec. Multifunction equipment may need to be tested with each function in isolation, if this cannot be achieved simultaneously without physically modifying the EUT internally, however this may extend the test duration & cost) |
| Emission Tests: |
| Susceptibility Tests: |
| Additional Mode(s) of Operation – Susceptibility Tests (if applicable) |
| (To be assessed during continuous RF exposure at selected spot frequencies; where the EUT operating cycle is >3sec AND/OR EUT sensitive internal frequencies AND/OR known threats of EUT installation environment AND/OR additional EUT functions) |
|  |

|  |
| --- |
| Section 8: Method of EUT Monitoring |
| (During susceptibility testing, the ability of the EUT to withstand electromagnetic disturbance is assessed. Before commencement of testing, it is necessary to establish the suitability of precise monitoring methods appropriate to all primary, intended or essential functions, ensuring appropriate recognition of the nature of failure by display or operator interaction, generally achieved via software or support equipment. In certain instances Element may advise additional monitoring requirements in the quotation, specific to meeting the requirements of the standard quoted. Please specify how the EUT performance will be monitored and evaluated) |

|  |
| --- |
| Section 9: Pass / Fail Criteria – Susceptibility Tests (if applicable) |
| (Equipment may be susceptible to interference during the application of susceptibility test sequences. Therefore, before commencement of testing it is necessary to establish the limits of equipment performance which is permitted where susceptibility is observed. Expressed in terms which relate to the performance of the specific EUT and its associated primary, intended or essential functions when used as intended, including any associated tolerances, messages/indications, operating & fail safe conditions etc. Please give details of your specific performance criteria below) |
|  |
| Deviation(s): |  |
| (To be completed during or after testing, If applicable. Please insert any accepted deviations from the above AND/OR from the applicable EMC test standard(s), arisen as a result of the laboratory testing) |

|  |
| --- |
| Section 10: COSHH Applicable  / Not Applicable |
| (Are you intending to send any substances or chemicals to the Element site? The substance or chemical may be part of the EUT AND/OR in support of the EUT. If you answer “Yes”, then contact your Element representative for COSHH questionnaire RF515. Please note that COSHH is a Health & Safety legal requirement) |

|  |
| --- |
| Section 11: Additional Information |
| (Please note precisely any additional information deemed applicable in support of EMC tests) |

|  |
| --- |
| Section 12: Block Diagram |
| (Please provide a precise diagram of your proposed test arrangement detailing where appropriate earth bond locations, cable identification, support equipment and system interconnections etc) |
|  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Signed: |  | | Position: |  | |
| Print Name: |  | | Representing: |  | |
| Date: |  |  | | |  |