EMC Test Report For

<{d.firstname} {d.lastname} >

**ULR - TC52281A000000XXXF**

Test Report No.: TASL/17025/EMC/TRP/MIL or DO/XXXX/YYY



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For any Complaints / Suggestions please email to:

[qmlabs@tataadvancedsystems.com](mailto:qmlabs@tataadvancedsystems.com)

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**Amendment History**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Revision No. | Date of Amend. | Amendment made | Reasons | Approved by |
| * 1. 0 | 01/03/2021 | Laboratory name and logo, Tata power sed is replaced with Tata advanced systems limited | Due to organization name change from TPSED to TASL | QM |
| 2.0 | 05/04/2021 | Reference no updated for use of NABL Accredited CAB combined ILAC MRA Mark ,included Test Report prepared by & EMC 32 software version is updated to 10.6 | To update Ref no provided by NABL for use of NABL Accredited CAB combined ILAC MRA Mark & Internal review of test report format | QM |
|  |  |  |  |  |

**EMC CENTRE ACCREDIATION DETAILS**

The accreditation details in the below table

|  |  |
| --- | --- |
| **Accreditation Bodies** | **Certificate Number** |
| National Accreditation Board for Testing and Calibration Laboratories (NABL) ,as per ISO/IEC 17025 :2017  Agreement for use of NABL Accredited CAB combined ILAC MRA Mark | TC-5228  Ref No: NABL/ILAC/0876 |
| Telecommunication Engineering Centre (TEC)  Department of Telecommunications  Government of India | TEC/MRA/CAB/IND-D/15  CAB Identification : IND015 |

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# General Information

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the Applicant** | Mr/Ms. <….........> | | |
| **Contact Name** | <….........> | | |
| **Contact No** | <….........> | | |
| **Email id** | <….........> | | |
| **EUT Manufacturer**  **Name and Address** | M/s. <….........> | | |
| **EUT Name** | <….........> | | |
| **Model No** | <….......................................................................................................> | | |
| **Serial No** | <….........> | | |
| **Supply Voltage & Current Ratings** | <….........> | | |
| **Test Location** | M/s.<……………………………………………..> | | |
| **Tests conducted** | <…..,……,…..,……,………,………,………,………,………,…,> | | |
| **Test Standard** | <……..,………,………,………,………,> | | |
| **Status of EUT on receipt** | EUT was received in Good Condition | | |
| **EUT Received on** | DD/MM/YYYY | | |
| **Dates of Test** | DD/MM/YYYY to DD/MM/YYYY | | |
| **Test Report Issued on** | DD/MM/YYYY | | |
| **Test witnessed by** | Mr. <….....>(Ms.<…....>) | | |
| **Test Result** | Pass/Fail | | |
| **Statement of conformity** | Declaration of conformity of the results is based as per the standard limits | | |
| **Test Report Prepared By** | Mr/Ms<…….> | | |
| Test Engineer and Reviewer Details | | | |
| **Tested by**  **<...............>**  **Test Engineer** | | **Reviewed by**  **<...............>**  **Lab in Charge** | **Authorized by**  **<................>**  **Technical Manager** |

***Note: This report is digitally signed by the approving authority through a secured workflow***

***Text Style: Arial, Text Size: 10, Picture size(H): 3.65inch or 9.3cm***

# Test Summary

## Electronics testing

## EMC Testing

| Emission Tests | | | |
| --- | --- | --- | --- |
| Sl. No | Name of the Tests | Limits | Results |
|  | CE01/CE101-Conducted Emissions, Power Leads, 30Hz to 10kHz | CE101-1/2/3/4 ,Submarine applications ,Navy ASW aircraft and Army aircraft | Emissions are within the Limit / Emissions are exceeding the limit  or  Pass / Fail  Refer [Annex 1](#Annexure1) |
|  | CE03/CE102-Conducted Emissions, Power Leads, 10kHz to 10MHz | CE102 -1 for all application | Emissions are within the Limit / Emissions are exceeding the limit  or  Pass / Fail  Refer Annex 2 |
|  | CE06/CE106-Conducted emissions, antenna terminal ,10kHz to 40GHz | 34 dBµV | Emissions are within the Limit / Emissions are exceeding the limit  or  Pass / Fail  Refer Annex 3 |
|  | RE01/RE101-Radiated Emissions, Magnetic field, 30Hz to 100kHz | RE101-1/2, all Army/Navy Applications | Emissions are within the Limit / Emissions are exceeding the limit  or  Pass / Fail  Refer Annex 4 |
|  | RE02/RE102- Radiated Emissions, Electric field, 10kHz to 18GHz | RE102-1/2/3/4, Surface ship/sub marine /aircraft and space system/ground army /ground air force applications | Emissions are within the Limit / Emissions are exceeding the limit  or  Pass / Fail  Refer Annex 5 |

## 

| Susceptibility Tests | | | |
| --- | --- | --- | --- |
| Sl. No | Name of the Test | Limits | Results |
|  | CS01/CS02/CS101-Conducted Susceptibility, Power Leads, 30Hz to 150kHz | CS101 -1,voltage limit for all application or CS101-2, power limit for all application or Curve#1,Curve #2 | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer Annex 6 |
|  | CS03/CS103,CS04/CS104, CS05/CS105 /-Conducted susceptibility, antenna port, intermodulation ,15kHz to 10GHz  rejection of undesired signal/ cross modulation  30Hz to 20GHz | -14 dBm- 80dB | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer Annex 7 |
|  | CS06/CS106-Conducted Susceptibility, transients, power leads | Vpeak = 400 volt peak  tr = 1.5 μsec, ± 0.5 μsec  tf = 3.5 μsec, ± 0.5 μsec  td = 5.0 μsec, ± 22%  Vsag ≤ 120 volt peak (maximum)  tsag ≤ 20 μsec | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer Annex 8 |
|  | CS114-Conducted Susceptibility, Bulk Cable injection, 10kHz to 200MHz | CS114 -1 ,Curve #3 | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer Annex 9 |
|  | CS115-Conducted Susceptibility, Bulk Cable Injection, Impulse Excitation | CS115-1,  Imax = 5Amps | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer [Annex 10](#Annexure11) |
|  | CS116 - Conducted Susceptibility, Damped sinusoidal Transients, Cable and power Leads, 10kHz to 100MHz | CS116-2,  Imax = 10Amps | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer [Annex 11](#Annexure11) |
|  | CS118 -Personnel borne electrostatic discharge. | ±8KV- Contact Discharge  ±15KV-Air Discharge | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer [Annex 12](#Annexure11) |
|  | RS01/RS101 - Radiated Susceptibility, Magnetic field, 2MHz to 18GHz | RS101-1/2 all Navy/ all Army applications. | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer [Annex 13](#Annexure11) |
|  | RS03/RS103- Radiated Susceptibility, Electrtic field, 2MHz to 18GHz | 10/50/200V/m | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail or Compliance / Incompliance  Refer [Annex 14](#Annexure10) |
|  | LDC102- Normal steady state limits for voltage | 28VDC  NLSS-22VDC  NHSS-29VDC | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer [Annex 15](#Annexure10) |
|  | LDC104-Toatal ripple | DC Voltage distortion: Voltage ripple  1.5Volts peak to average  Ripple frequency & Amplitude- 1.2kHz to 16.8KHz – 0.8Vrms to 0.06Vrms | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer [Annex 16](#Annexure10) |
|  | LDC301-Abnormal steady state limits for voltage | Voltage NLSS-20.0VDC  Voltage NHSS-31.5VDC | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer [Annex 17](#Annexure10) |
|  | LDC401-Emergency steady state voltage | Voltage ELSS-18.0VDC  Voltage EHSS-29.0VDC | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer [Annex 18](#Annexure10) |
|  | LDC601-Power Failure | 28VDC - 7 Sec  Duration of power failure :  100ms,500ms,3 s,7s | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer [Annex 19](#Annexure10) |
|  | LDC602-Phase reversal | 28VDC- 30 min | EUT Performance found satisfactory / EUT Performance found not satisfactory or  Pass / Fail  Refer [Annex 20](#Annexure10) |

## Measurement uncertainty

The following measurement uncertainties are applicable to the relevant tests that are mentioned below:

|  |  |  |
| --- | --- | --- |
| **Test** | | **Uncertainty (±)** |
| Conducted Emission | |  |
| Radiated Emission | Below 1GHz |  |
| Above 1GHz |  |

## Opinions& Interpretations

## Deviation from standard

# Equipment under Test Description

<....................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................................>

Figure 1: Block diagram for EUT

Figure 2: Photograph of EUT

Figure 3: EUT Name and Serial No.

Figure 4: EUT Configuration

Figure 5: Photograph of EUT Cable

# Performance Monitoring Parameters

Detailed explanation of performance monitoring parameters with tolerance given by the customer and photographs

During susceptibility test the following parameters are monitored.

|  |  |  |
| --- | --- | --- |
| **Sl.No.** | **Monitored Parameters** | **Observed Conditions** |
| 1. |  |  |
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |
| 5. |  |  |
| 6. |  |  |

Figure 6: EUT Performance Monitoring

# Annexure 1: CE01/CE101- Conducted Emissions, Power Leads

## 

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_8.54

Temperature : .........ºC

Humidity :



**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Receiver Settings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Detectors** | **IF Bandwidth** | **Meas. Time** | **Receiver** |
| 30Hz- 1kHz | Peak | 10 Hz | 0.15s | ESU40 |
| 1kHz- 10kHz | Peak | 100 Hz | 0.015s | ESU40 |

Figure 7: CE01 / CE101 Limit

Graph 1: CE01 / CE101 – Ambient Graph

Graph 2: CE01 / CE101 - Positive or Phase

Graph 3: CE01 / CE101 - Négative or Phase

Figure 8: CE01 / CE101 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or Emission are within Limit /exceeding limit or as per JRF Decision Rule** |

# Annexure 2: CE03/CE102- Conducted Emissions, Power Leads

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_8.54

Temperature : .........ºC

Humidity :



**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Receiver Settings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Detectors** | **IF Bandwidth** | **Meas. Time** | **Receiver** |
| 10kHz- 150kHz | Peak | 1 kHz | 0.015s | ESU40 |
| 150kHz- 10MHz | Peak | 10 kHz | 0.015s | ESU40 |

Figure 9: CE03 / CE102 Limit

Graph 4: CE03 / CE102– Ambient Graph

Graph 5: CE03 / CE102- Positive or Phase

Graph 6: CE03 / CE102 - Négative or Neutral

Figure 10: CE03 / CE102 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or Emission are within Limit /exceeding limit or as per JRF Decision Rule** |

# Annexure 3: CE06/CE106- Conducted Emissions, Antenna Terminal

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_8.54

Temperature : .........ºC

Humidity : ..........%



**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Receiver Settings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Detectors** | **IF Bandwidth** | **Meas. Time** | **Receiver** |
| 10kHz- 150kHz | Peak | 1 kHz | 0.015s | ESU40 |
| 150kHz- 30MHz | Peak | 10 kHz | 0.015s | ESU40 |
| 30MHz- 1GHz | Peak | 100 kHz | 0.015s | ESU40 |
| Above 1GHz | Peak | 1 MHz | 0.015s | ESU40 |

Figure 11: CE06 / CE106 Limit

Graph 7: CE06 / CE106– <1MHz- 40GHz>

Figure 12: CE06 /CE106 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or Emission are within Limit /exceeding limit or as per JRF Decision Rule** |

# Annexure 4: RE01/RE101- Radiated Emissions, Magnetic field

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_8.54

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Receiver Settings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Detectors** | **IF Bandwidth** | **Meas. Time** | **Receiver** |
| 30Hz- 1kHz | Peak | 1 kHz | 0.015s | ESU40 |
| 1kHz- 10kHz | Peak | 10 kHz | 0.015s | ESU40 |
| 10kHz- 100kHz | Peak | 1 kHz | 0.015s | ESU40 |

Figure 13: RE01 / RE101 Limit

Graph 8: RE01 / RE101 – Ambient Graph

Graph 9: <RE01 /RE101>

EUT Left, Right, Top, Bottom, Display, keybord, Ventilation,etc….)

|  |  |
| --- | --- |
| **\*EUT Right Rear Bottom** | **\*EUT Front Bottom** |
| **\*EUT Left top middle** | **\*EUT Left Bottom** |

Figure 14: <RE01/RE101> Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or Emission are within Limit /exceeding limit or as per JRF Decision Rule** |

# Annexure 5: RE02/RE102 - Radiated Emissions, Electric field

## 

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_8.54

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Receiver Settings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Detectors** | **IF Bandwidth** | **Meas. Time** | **Receiver** |
| 10kHz- 150kHz | Peak | 1 kHz | 0.015s | ESU40 |
| 150kHz-30MHz | Peak | 10 kHz | 0.015s | ESU40 |
| 30MHz-1GHz | Peak | 100 kHz | 0.015s | ESU40 |
| 1GHz to 18GHz | Peak | 1 MHz | 0.015s | ESU40 |

Figure 15: RE02 / RE102 Limit

Graph 10: RE02 / RE102– Ambient Graph

Graph 11: RE02 / RE102– Vertical Polarization

Graph 12: RE02 / RE102 – Horizontal Polarization

|  |  |
| --- | --- |
| **10kHz to 30MHz** | **30MHz to 200MHz** |
| **200MHz to 1GHz** | **1GHz to 18GHz** |

Figure 16: RE02 / RE102 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or Emission are within Limit /exceeding limit or as per JRF Decision Rule** |

Annexure 6: CS01/CS02/CS101 - Conducted Susceptibility, Power Leads

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 7 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 8 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Scan Settings**

|  |  |  |  |
| --- | --- | --- | --- |
| **Subrange** | **Step Size** | **Dwell** | **Modulation** |
| 30Hz- 150kHz | 5% | 3 Sec | CW |

The test carried out in the following cables

|  |  |
| --- | --- |
| **Cable No.** | **Cable Description** |
|  |  |
|  |  |
|  |  |
|  |  |

Figure 17: CS01 / CS101 Limit

Graph 13: CS01/CS101 – Sensor Level (dBµV)

Figure 18: CS 01/ CS101 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 7: CS03/CS103, CS04/CS104,CS05/CS105 - Conducted Susceptibility, Antenna port-Intermodulation/ rejection of un desired signal/ Cross modulation

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6.

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 7 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 8 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

Graph 14: CS03/CS103, CS04/CS104, CS05/CS105 –<10khz to 20GHz>

Figure 19: CS03/CS103, CS04/CS104, and CS05/CS105 –Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 8: CS06/CS106 - Conducted Susceptibility, Transients, Power Leads

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 7 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 8 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

The test carried out in the following cables

|  |  |
| --- | --- |
| **Cable No.** | **Cable Description** |
|  |  |
|  |  |
|  |  |
|  |  |

Figure 20: CS06 / CS106 Limit

Figure 21: CS 06/ CS106 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 9: CS114 - Conducted Susceptibility, Bulk Cable injection

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 7 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 8 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Scan Settings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Step Size** | **Dwell** | **Modulation** | **Test Curve#** |
| 10kHz- 1MHz | 5% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |
| 1MHz to 30 MHz | 1% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |
| 30 MHz to 200 MHz | 0.5% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |

The test carried out in the following cables

|  |  |
| --- | --- |
| **Cable No.** | **Cable Description** |
|  |  |
|  |  |
|  |  |
|  |  |

Figure 22: CS114 Limit Curve#X

Graph 15: CS114 – Immunity Level (dBµA)

Graph 16: CS114 – Forward power (dBm)

Figure 23: CS 114 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 10: CS115 - Conducted Susceptibility, Bulk Cable injection, Impulse Excitation

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

The test carried out in the following cables

|  |  |
| --- | --- |
| **Cable No.** | **Cable Description** |
|  |  |
|  |  |
|  |  |
|  |  |

Figure 24: CS115 Limit

Figure 25: CS115 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 11: CS116, Conducted Susceptibility, Damped sinusoidal Transients.

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 7 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

The test carried out in the following cables

|  |  |
| --- | --- |
| **Cable No.** | **Cable Description** |
|  |  |
|  |  |
|  |  |
|  |  |

Figure 26: CS116 Limit

Figure 27: CS116 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 12: CS118, Personal borne Electrostatic Discharge

**Common Information:**

Reference Standard : **<………………….>**

Basic Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Temperature : .........ºC

Humidity : ..........%

Atmospheric Pressure : Start\_....kPa

End\_....kPa

**Test Equipment :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Equipment** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

**Discharge points of Contact:**

|  |  |
| --- | --- |
| **Sl.No.** | **Test Points** |
| 1 | **<……….>** |
| 2 | **<……….>** |
| 3….N | **<……….>** |

Discharge points of Air:

|  |  |
| --- | --- |
| **Sl.No.** | **Test Points** |
| 1 | **<……….>** |
| 2 | **<……….>** |
| 3….N | **<……….>** |

|  |  |
| --- | --- |
| **Test Details: Contact Discharge** | |
| Discharge Network : 150pF, 330Ω | Discharge Type: Contact (Direct) |
| Level : 8KV | Polarity : Positive & Negative |
| Number of Discharge per test points: ≥10 pulses |  |
| Observation : | |

|  |  |
| --- | --- |
| **Test Details: Contact Discharge** | |
| Discharge Network : 150pF, 330Ω | Discharge Type: Contact (Indirect) |
| Level : 8KV | Polarity : Positive & Negative |
| Number of Discharge per test points: ≥10 pulses | Indirect discharge planes: VCP & HCP |
| Observation : | |

|  |  |
| --- | --- |
| **Test Details: Air Discharge** | |
| Discharge Network : 150pF, 330Ω | Discharge Type: Air |
| Level : 2kV,4kV,8kV and 15kV | Polarity : Positive & Negative |
| Observation : | |

Figure 28: Photographs of ESD Test Setup

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

# Annexure 13: RS01/RS101,Radiated Susceptibility,Magnetic Field

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Scan Settings**

|  |  |  |  |
| --- | --- | --- | --- |
| **Subrange** | **Step Size** | **Dwell** | **Modulation** |
| 30Hz- 100kHz | 5% | 3 Sec | CW |

Figure 29: RS01 / RS101 Limit

Graph 17: RS01 / RS101 – Immunity level Magnetic Field Level (dBpT )

|  |  |
| --- | --- |
| **\*EUT Right** | **\*EUT Front** |
| **\*EUT middle** | **\*EUT Left** |

Figure 30: <RS01/RS101> Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

# Annexure 14: RS03/RS103,Radiated Susceptibility, Electric Field

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : EMC32 Ver\_10.6

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 4 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 5 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 6 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Subrange** | **Step Size** | **Dwell** | **Modulation** | **Field Level(V/m)** |
| 10kHz- 1MHz | 5% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |
| 1MHz to 30 MHz | 1% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |
| 30 MHz to 1 GHz | 0.5% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |
| 1 GHz to 8 GHz | 0.1% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |
| 8 GHz to 40 GHz | 0.05% | 3 Sec | PM,1 kHz 50% duty cycle. | <…..> |

Graph 18: RS03 / RS103 – Field Level (dBµV /V/m)

Graph 19: RS03 / RS103 – Antenna Forward Power (dBm)

|  |  |
| --- | --- |
| **10kHz to 80MHz** | **80MHz to 200MHz** |
| **200MHz to 1GHz** | **1GHz to 6GHz** |

Figure 31: RS03 / RS103 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 15: LDC102, Normal steady state limits for voltage

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

**Test Method : <…………………...>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : …………………….

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

LDC 102-1 MIL-STD-704 normal limits for steady state voltage

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Normal limit** | **704A** | **704B** | **704C** | **704D** | **704E** | **704F** |
| Voltage NLSS | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| Voltage NHSS | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test condition** | **Voltage** | **Frequency** | **Time duration** | **Observation** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Figure 32: LDC102 -1

Figure 33: LDC102 Test Setup Photograph 1

Figure 34: LDC102 Test Setup Photograph 2

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 16: LDC 104,Total Ripple

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

**Test Method : <…………………...>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : …………………….

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

LDC104-1 MIL-STD-704 limits for ripple DC voltage distortion

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Limit** | **704A** | **704B** | **704C** | **704D** | **704E** | **704F** |
| Voltage Ripple | 2Volts peak to Mean | 1.5Volts peak to Average | 1.5Volts peak to Average | 1.5Volts peak to Average | 1.5Volts peak to Average | 1.5Volts peak to Average |

|  |  |  |
| --- | --- | --- |
| **Test condition** | **Ripple Frequency Components** | **Amplitude of Ripple Component (Vrms)**  **MIL STD-704A/B/C/D/E/F** |
| A | ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| B | ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |
| ………….Hz |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test condition** | **Ripple Frequency Components** | **Amplitude of Ripple** | **Time duration** | **Observation** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Graph 20: LDC104 -1

Figure 35: LDC104 Test Setup Photograph 1

Figure 36: LDC104 Test Setup Photograph 2

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 17: LDC 301, Abnormal Steady state Limits for voltage

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

**Test Method : <…………………...>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : …………………….

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

LDC301-1 MIL-STD-704 abnormal limits for steady state voltage

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Abnormal limit** | **704A** | **704B** | **704C** | **704D** | **704E** | **704F** |
| Voltage NLSS | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| Voltage NHSS | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test condition** | **Voltage** | **Time duration** | **Observation** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Graph 21: LDC301 -1

Figure 37: LDC301 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 18: LDC 401, Emergency Steady state Limits for voltage

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

**Test Method : <…………………...>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : …………………….

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

LDC401-1 MIL-STD-704 emergency limits for steady state voltage

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Abnormal limit** | **704A** | **704B** | **704C** | **704D** | **704E** | **704F** |
| Voltage ELSS | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| Voltage EHSS | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test condition** | **Voltage** | **Time duration** | **Observation** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Graph 22: LDC401 -1

Figure 38: LDC401 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 19: LDC 601, Power Failure

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

**Test Method : <…………………...>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : …………………….

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

LDC601-1 MIL-STD-704 power failure limits

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Limit** | **704A** | **704B** | **704C** | **704D** | **704E** | **704F** |
| Power failure | 7 Sec | 7 Sec | 7 Sec | 7 Sec | 7 Sec | 7 Sec |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test condition** | **Voltage** | **Time duration** | **Observation** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Graph 23: LDC601 -1

Figure 39: LDC601 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

Annexure 20: LDC 602, Phase reversal

**Common Information:**

Ref EMC Test Plan / QT / ATP : **<………………….>**

Test Standard : **<………………….>**

**Test Method : <…………………...>**

Test Date : **<dd/mm/yyyy>**

Test mode : **<………………….>**

Software used : …………………….

Temperature : .........ºC

Humidity : ..........%

**Test Equipment Used :**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl. No.** | **Description** | **Make** | **Model No.** | **Serial No.** | **Cal Due** |
| 1 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 2 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |
| 3 | **<……….>** | **<……….>** | **<……….>** | **<……….>** | **<……….>** |

**Specifications:**

LDC602-1 MIL-STD-704 power failure limits

|  |  |
| --- | --- |
| **Limit** | **704F** |
| Phase reversal | Phase reversal does not cause damage |

|  |  |  |  |
| --- | --- | --- | --- |
| **Test condition** | **Voltage** | **Time duration** | **Observation** |
|  |  |  |  |
|  |  |  |  |

Graph 24: LDC602 -1

Figure 40: LDC602 Test Setup Photograph

|  |  |
| --- | --- |
| **Test Result** | **Pass/Fail or EUT performance found satisfactory / Not Satisfactory or as per JRF Decision Rule** |

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