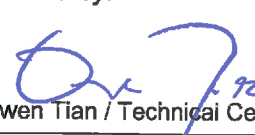


|                                                                                                                                                                                                                                                                   |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------|
| <b>Prüfbericht-Nr.:</b><br>Test report No.:                                                                                                                                                                                                                       | <b>50057770 001</b>                                                                                                                                    | <b>Auftrags-Nr.:</b><br>Order No.:                                                                                                                | <b>164072339</b>     | Seite 1 von 16<br>Page 1 of 16        |
| <b>Kunden-Referenz-Nr.:</b><br>Client reference No.:                                                                                                                                                                                                              | <b>N/A</b>                                                                                                                                             | <b>Auftragsdatum:</b><br>Order date.:                                                                                                             | <b>24.08.2016</b>    |                                       |
| <b>Auftraggeber:</b><br>Client:                                                                                                                                                                                                                                   | <b>Lightcomm Technology Co., Ltd.</b><br>RM 1808 18/F, FO TAN INDUSTRIAL CENTRE, NOS. 26-28 AU PUI WAN STREET, FO TAN SHATIN NEW TERRITORIES HONG KONG |                                                                                                                                                   |                      |                                       |
| <b>Prüfgegenstand:</b><br>Test item:                                                                                                                                                                                                                              | <b>Tablet PC</b>                                                                                                                                       |                                                                                                                                                   |                      |                                       |
| <b>Bezeichnung / Typ-Nr.:</b><br>Identification / Type No.:                                                                                                                                                                                                       | <b>DL1028W</b><br>(DIGILAND)                                                                                                                           |                                                                                                                                                   |                      |                                       |
| <b>Auftrags-Inhalt:</b><br>Order content:                                                                                                                                                                                                                         | <b>FCC approval</b>                                                                                                                                    |                                                                                                                                                   |                      |                                       |
| <b>Prüfgrundlage:</b><br>Test specification:                                                                                                                                                                                                                      | <b>CFR47 FCC Part 15: Subpart B Section 15.107</b><br><b>CFR47 FCC Part 15: Subpart B Section 15.109</b>                                               |                                                                                                                                                   |                      |                                       |
| <b>Wareneingangsdatum:</b><br>Date of receipt:                                                                                                                                                                                                                    | <b>29.08.2016</b>                                                                                                                                      | <b>Refer to photo documents</b>                                                                                                                   |                      |                                       |
| <b>Prüfmuster-Nr.:</b><br>Test sample No.:                                                                                                                                                                                                                        | <b>A000415310-001</b>                                                                                                                                  |                                                                                                                                                   |                      |                                       |
| <b>Prüfzeitraum:</b><br>Testing period:                                                                                                                                                                                                                           | <b>31.08.2016 - 18.11.2016</b>                                                                                                                         |                                                                                                                                                   |                      |                                       |
| <b>Ort der Prüfung:</b><br>Place of testing:                                                                                                                                                                                                                      | <b>Emtek (Shenzhen ) Co., Ltd.</b>                                                                                                                     |                                                                                                                                                   |                      |                                       |
| <b>Prüflaboratorium:</b><br>Testing laboratory:                                                                                                                                                                                                                   | <b>TÜV Rheinland (Shenzhen) Co., Ltd.</b>                                                                                                              |                                                                                                                                                   |                      |                                       |
| <b>Prüfergebnis*:</b><br>Test result*:                                                                                                                                                                                                                            | <b>Pass</b>                                                                                                                                            |                                                                                                                                                   |                      |                                       |
| <b>geprüft von / tested by:</b>                                                                                                                                                                                                                                   |                                                                                                                                                        | <b>kontrolliert von / reviewed by:</b>                                                                                                            |                      |                                       |
| <br><b>28.11.2016</b> <b>Andy Yan / Project Manager</b>                                                                                                                        |                                                                                                                                                        | <br><b>28.11.2016</b> <b>Owen Tian / Technical Certifier</b> |                      |                                       |
| <b>Datum</b><br>Date                                                                                                                                                                                                                                              | <b>Name/Stellung</b><br>Name/Position                                                                                                                  | <b>Unterschrift</b><br>Signature                                                                                                                  | <b>Datum</b><br>Date | <b>Name/Stellung</b><br>Name/Position |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                         |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |
| <b>FCC ID: XMF-MID10261B</b>                                                                                                                                                                                                                                      |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br>Condition of the test item at delivery:                                                                                                                                                                   |                                                                                                                                                        | <b>Prüfmuster vollständig und unbeschädigt</b><br>Test item complete and undamaged:                                                               |                      |                                       |
| <b>* Legende:</b> 1 = sehr gut      2 = gut      3 = befriedigend      4 = ausreichend      5 = mangelhaft<br>P(ass) = entspricht o.g. Prüfgrundlage(n)      F(ail) = entspricht nicht o.g. Prüfgrundlage(n)      N/A = nicht anwendbar      N/T = nicht getestet |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |
| <b>Legend:</b> 1 = very good      2 = good      3 = satisfactory      4 = sufficient      5 = poor<br>P(ass) = passed a.m. test specifications(s)      F(ail) = failed a.m. test specifications(s)      N/A = not applicable      N/T = not tested                |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |
| <b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b>                                          |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |
| <b>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</b>                                    |                                                                                                                                                        |                                                                                                                                                   |                      |                                       |

**Prüfbericht - Nr.: 50057770 001**  
*Test Report No.*Seite 2 von 16  
Page 2 of 16

## ***Test Summary***

**5.1.1 CONDUCTED EMISSION***RESULT: Pass***5.1.2 RADIATED EMISSION***RESULT: Pass*

## Contents

|              |                                                          |           |
|--------------|----------------------------------------------------------|-----------|
| <b>1</b>     | <b>GENERAL REMARKS .....</b>                             | <b>4</b>  |
| <b>1.1</b>   | <b>COMPLEMENTARY MATERIALS .....</b>                     | <b>4</b>  |
| <b>2</b>     | <b>TEST SITES .....</b>                                  | <b>4</b>  |
| <b>2.1</b>   | <b>TEST FACILITIES .....</b>                             | <b>4</b>  |
| <b>2.2</b>   | <b>LIST OF TEST AND MEASUREMENT INSTRUMENTS.....</b>     | <b>5</b>  |
| <b>2.3</b>   | <b>TRACEABILITY .....</b>                                | <b>6</b>  |
| <b>2.4</b>   | <b>CALIBRATION .....</b>                                 | <b>6</b>  |
| <b>2.5</b>   | <b>MEASUREMENT UNCERTAINTY.....</b>                      | <b>6</b>  |
| <b>2.6</b>   | <b>LOCATION OF ORIGINAL DATA.....</b>                    | <b>6</b>  |
| <b>2.7</b>   | <b>STATUS OF FACILITY USED FOR TESTING.....</b>          | <b>6</b>  |
| <b>3</b>     | <b>GENERAL PRODUCT INFORMATION .....</b>                 | <b>7</b>  |
| <b>3.1</b>   | <b>PRODUCT FUNCTION AND INTENDED USE.....</b>            | <b>7</b>  |
| <b>3.2</b>   | <b>RATINGS AND SYSTEM DETAILS .....</b>                  | <b>7</b>  |
| <b>3.3</b>   | <b>INDEPENDENT OPERATION MODES .....</b>                 | <b>8</b>  |
| <b>3.4</b>   | <b>NOISE GENERATING AND NOISE SUPPRESSING PARTS.....</b> | <b>8</b>  |
| <b>3.5</b>   | <b>SUBMITTED DOCUMENTS.....</b>                          | <b>8</b>  |
| <b>4</b>     | <b>TEST SET-UP AND OPERATION MODES .....</b>             | <b>9</b>  |
| <b>4.1</b>   | <b>PRINCIPLE OF CONFIGURATION SELECTION .....</b>        | <b>9</b>  |
| <b>4.2</b>   | <b>TEST OPERATION AND TEST SOFTWARE.....</b>             | <b>9</b>  |
| <b>4.3</b>   | <b>SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT.....</b>  | <b>9</b>  |
| <b>4.4</b>   | <b>COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE .....</b>   | <b>9</b>  |
| <b>4.5</b>   | <b>TEST SETUP DIAGRAM .....</b>                          | <b>10</b> |
| <b>5</b>     | <b>TEST RESULTS .....</b>                                | <b>12</b> |
| <b>5.1</b>   | <b>TRANSMITTER REQUIREMENT &amp; TEST SUITES .....</b>   | <b>12</b> |
| <b>5.1.1</b> | <i>Conducted Emission .....</i>                          | <i>12</i> |
| <b>5.1.2</b> | <i>Radiated Emission .....</i>                           | <i>13</i> |
| <b>6</b>     | <b>PHOTOGRAPHS OF THE TEST SET-UP .....</b>              | <b>14</b> |
| <b>7</b>     | <b>LIST OF TABLES.....</b>                               | <b>16</b> |
| <b>8</b>     | <b>LIST OF PHOTOGRAPHS .....</b>                         | <b>16</b> |

# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:  
Appendix A: Test Results of Radiated Emission and Conducted Emission for Part 15B

# 2 Test Sites

## 2.1 Test Facilities

**Emtek (Shenzhen ) Co., Ltd.**

Bldg. 69, Majialong Industry Zone, Nanshan District, Shenzhen Guangdong, China

FCC Registration No.: 406365

Test site Industry Canada No.: 4480A-2

The tests at the test sites have been conducted under the supervision of a TÜV engineer.

## 2.2 List of Test and Measurement Instruments

**Table 1: List of Test and Measurement Equipment**

Emtek (Shenzhen ) Co., Ltd.

| <b>Conducted Emission</b> |                     |                  |                   |                   |
|---------------------------|---------------------|------------------|-------------------|-------------------|
| <b>Equipment</b>          | <b>Manufacturer</b> | <b>Model No.</b> | <b>Serial No.</b> | <b>Cal. Until</b> |
| Test Receiver             | R&S                 | ESCI             | 26115-010-0027    | 17.05.2017        |
| L.I.S.N.                  | R&S                 | ENV216           | 101161            | 17.05.2017        |
| 50Ω Coaxial Switch        | Anritsu             | MP59B            | 6100175589        | 17.05.2017        |
| Voltage Probe             | R&S                 | ESH2-Z3          | 100122            | 17.05.2017        |
| <b>Radiated Emission</b>  |                     |                  |                   |                   |
| <b>Equipment</b>          | <b>Manufacturer</b> | <b>Model No.</b> | <b>Serial No.</b> | <b>Cal. Until</b> |
| EMI Test Receiver         | R&S                 | ESU              | 1302.6005.26      | 17.05.2017        |
| Loop Antenna              | Schwarzbeck         | FMZB 1519        | 1519-012          | 17.05.2017        |
| Pre-Amplifier             | HP                  | 8447F            | 2944A07999        | 17.05.2017        |
| Bilog Antenna             | Schwarzbeck         | VULB9163         | 142               | 17.05.2017        |
| Pre-Amplifier             | A.H.                | PAM-0126         | 1415261           | 17.05.2017        |
| Horn Antenna              | Schwarzbeck         | BBHA 9120        | 707               | 17.05.2017        |
| Horn Antenna              | Schwarzbeck         | BBHA 9170        | BBHA9170399       | 17.05.2017        |
| Cable                     | N/A                 | 3M SF104-26.5    | 295838/4          | 17.05.2017        |
| Cable                     | N/A                 | 6M SF104-26.5    | 295840/4          | 17.05.2017        |
| Cable                     | Schwarzbeck         | AK9513           | ACRX1             | 17.05.2017        |
| Cable                     | Rosenberger         | N/A              | FP2RX2            | 17.05.2017        |
| Cable                     | Schwarzbeck         | AK9513           | CRPX1             | 17.05.2017        |
| Cable                     | Schwarzbeck         | AK9513           | CRRX2             | 17.05.2017        |
| Cable                     | H+B                 | 0.5M SF104-26.5  | 289147/4          | 17.05.2017        |
| Cable                     | H+B                 | 3M SF104-26.5    | 295838/4          | 17.05.2017        |
| Cable                     | H+B                 | 6M SF104-26.5    | 295840/4          | 17.05.2017        |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

| Item                            | Extended Uncertainty |
|---------------------------------|----------------------|
| Conducted Emission              | $\pm 2.96$ dB        |
| Radiated Emission(30MHz – 1GHz) | $\pm 4.27$ dB        |
| Radiated Emission(1GHz – 18GHz) | $\pm 4.96$ dB        |
| Temperature                     | $\pm 0.5$ °C         |
| Humidity                        | $\pm 3.0$ %          |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The Emtex (Shenzhen ) Co., Ltd. Test facility located at Bldg. 69, Majialong Industry Zone, Nanshan District, Shenzhen Guangdong, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

### 3 General Product Information

#### 3.1 Product Function and Intended Use

The EUT is a 'Tablet PC' device. It supports Bluetooth 4.2 (Dual mode) and 2.4GHz Wi-Fi 802.11 b/g/n wireless technology. This report is only for JBC. Other functions are reported in the related reports.

For details refer to the User Manual, Technical Description and Circuit Diagram.

#### 3.2 Ratings and System Details

Table 2: Technical Specification of EUT

| Technical Specification     | Value                                                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------|
| Kind of Equipment           | Tablet PC                                                                                                          |
| Type Designation            | DL1028W                                                                                                            |
| Trade Mark                  | DIGILAND                                                                                                           |
| FCC ID                      | XMF-MID1026IB                                                                                                      |
| Operating Frequency         | 2400 - 2483.5 MHz                                                                                                  |
| Operating Temperature Range | 0 °C ~ +40 °C                                                                                                      |
| Operating Voltage           | DC 3.7V 6000mAh via internal rechargeable Li-Poly battery<br>DC 5.0V 2.5A via AC/DC adapter for charging           |
| Testing Voltage             | Fully charged DC 3.7V internal rechargeable Li-Poly battery<br>DC 5.0V 2.5A via AC/DC adapter with 120V/60Hz input |
| Adapter                     | Model: TEKA018-0502500UK<br>Input: AC 100-240V ~ 50/60Hz 0.5A Max.<br>Output: DC 5.0V ~ 2.5A                       |
| Highest internal source     | Less than 1.3GHz                                                                                                   |

### 3.3 Independent Operation Modes

The basic operation modes are:

- A. Running with full system, (with Adapter+HDMI output+Keyboard)
- B. Running with full system, (with Adapter+HDMI output)
- C. Running with full system, (with HDMI output+Keyboard)
- D. Running with full system, (With HDMI output)
- E. Off

Note: Running with full system including USB Playing/TF Card playing/ Memory Playing with HDMI displaying, Camera Recording etc. Only the worst cases of TF Card playing + HDMI output were reported.

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- |                              |                  |
|------------------------------|------------------|
| - Application Form           |                  |
| - Block Diagram              | - Photo Document |
| - ID Label and Location Info | - Schematics     |
| - User Manual                | - Block Diagram  |
| - Photo Document             |                  |



## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All testing were performed according to the procedures in ANSI C63.4: 2014.

According to clause 3.1, all tests were performed on model DL1028W in this report.

### 4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

| Description         | Manufacturer | Model             | S/N | Rating                                                           |
|---------------------|--------------|-------------------|-----|------------------------------------------------------------------|
| Shielded HDMI Cable | N/A          | N/A               | N/A | 150cm                                                            |
| Monitor             | Lenovo       | N/A               | 8#  | --                                                               |
| USB Disk            | Kingston     | DTM30R            | --  | 32GB                                                             |
| TF Card             | SanDisk      | --                | --  | 16GB                                                             |
| AC Adapter          | TEKA         | TEKA018-0502500UK | --  | Input: AC 100-240V ~ 50/60Hz 0.5A Max.<br>Output: DC 5.0V ~ 2.5A |

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

## 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

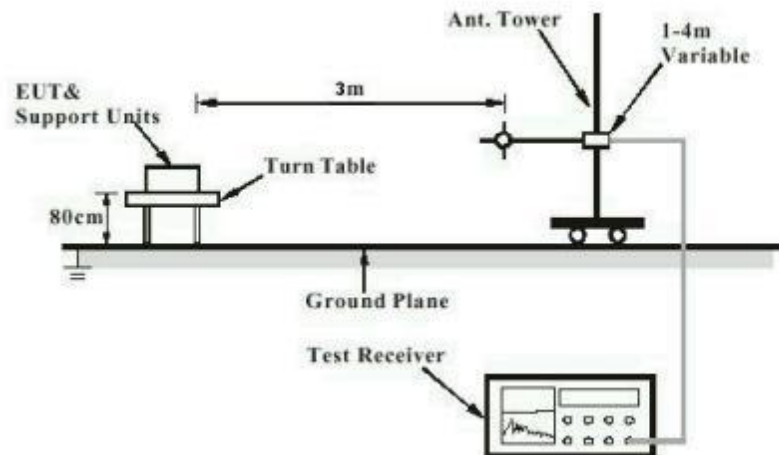
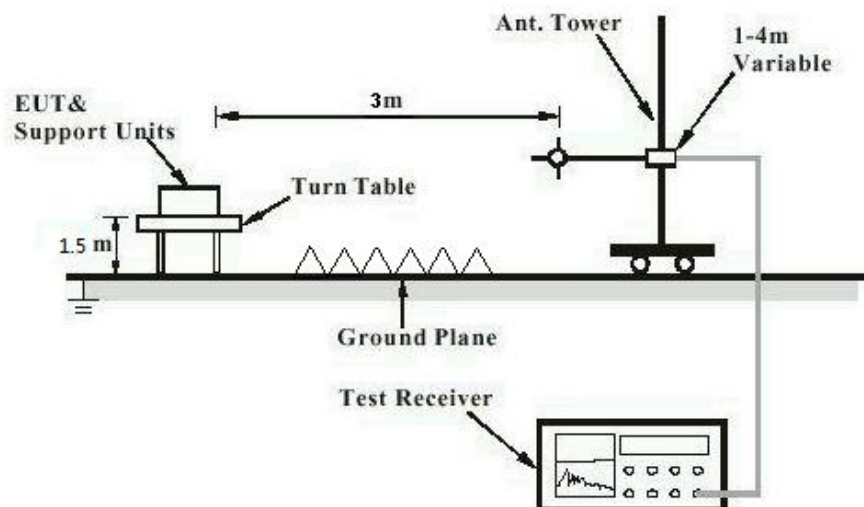
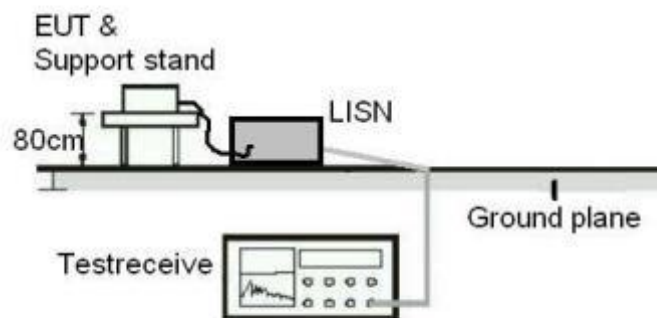


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



**Diagram of Measurement Configuration for Mains Conduction Measurement**

## 5 Test Results

### 5.1 Transmitter Requirement & Test Suites

#### 5.1.1 Conducted Emission

RESULT:

Pass

**Test Specification**

|                   |                      |
|-------------------|----------------------|
| Test standard     | : FCC Part 15.107(a) |
| Basic standard    | : ANSI C63.4: 2014   |
| Frequency range   | : 0.15 – 30MHz       |
| Limits            | : FCC Part 15.107(a) |
| Kind of test site | : Shielded Room      |

**Test Setup**

|                      |                 |
|----------------------|-----------------|
| Date of testing      | : 01.09.2016    |
| Operation mode       | : A, B          |
| Earthing             | : Not connected |
| Ambient temperature  | : 22 °C         |
| Relative humidity    | : 55 %          |
| Atmospheric pressure | : 101 kPa       |

For the measurement records, refer to the Appendix A.

## 5.1.2 Radiated Emission

**RESULT:****Pass****Test Specification**

|                   |                            |
|-------------------|----------------------------|
| Test standard     | : FCC Part 15.109(a)       |
| Basic standard    | : ANSI C63.4: 2014         |
| Frequency range   | : 30 - 6000MHz             |
| Classification    | : Class B                  |
| Limits            | : FCC Part 15.109(a)       |
| Kind of test site | : 3m Semi-anechoic Chamber |

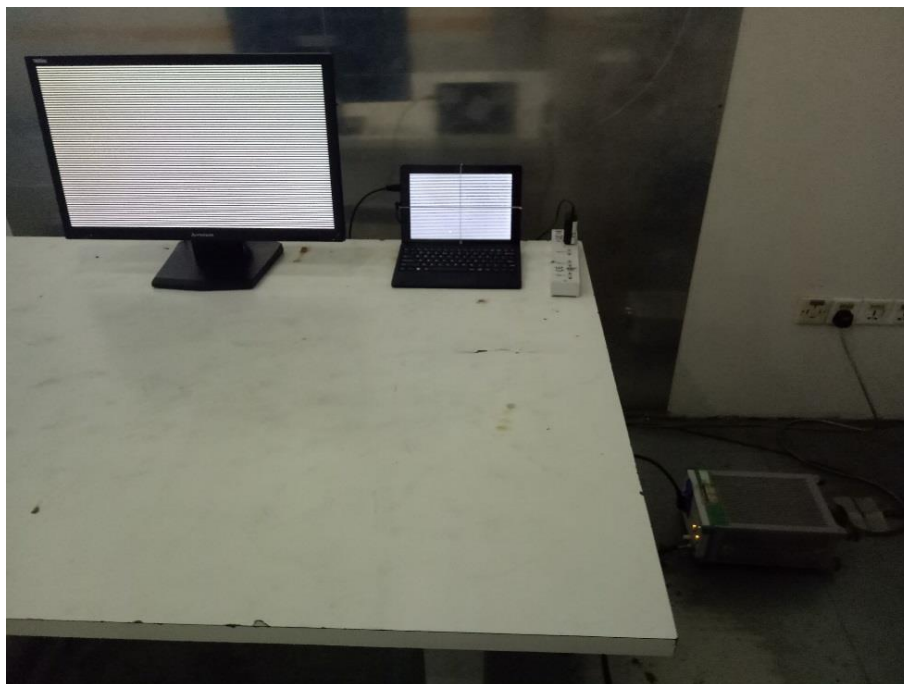
**Test Setup**

|                      |                           |
|----------------------|---------------------------|
| Date of testing      | : 31.08.2016 - 18.11.2016 |
| Operation mode       | : A, B, C, D              |
| Earthing             | : Not connected           |
| Ambient temperature  | : 24 °C                   |
| Relative humidity    | : 53 %                    |
| Atmospheric pressure | : 101 kPa                 |

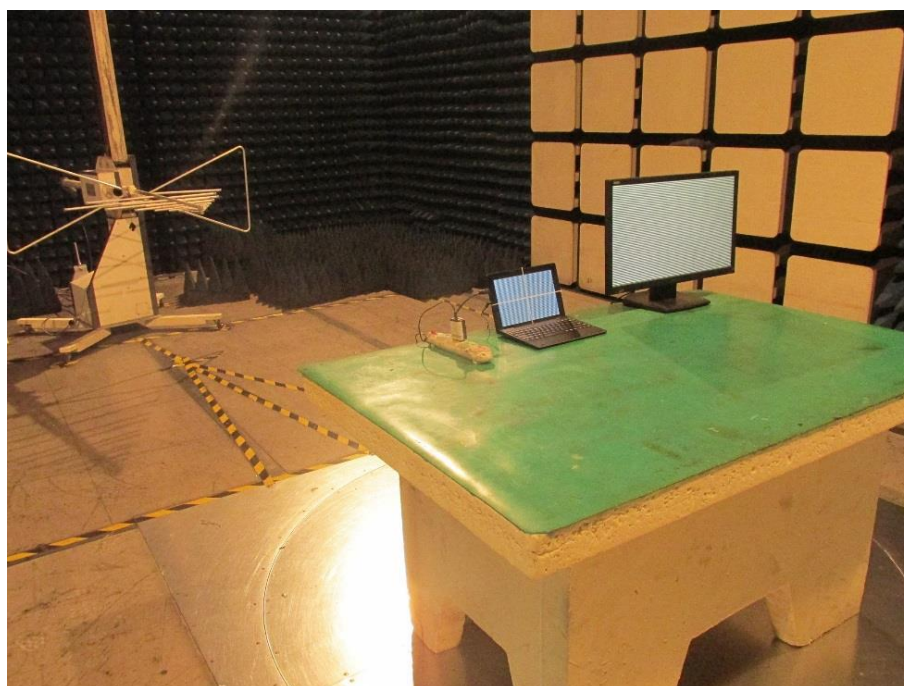
For the measurement records, refer to the Appendix A.

## 6 Photographs of the Test Set-Up

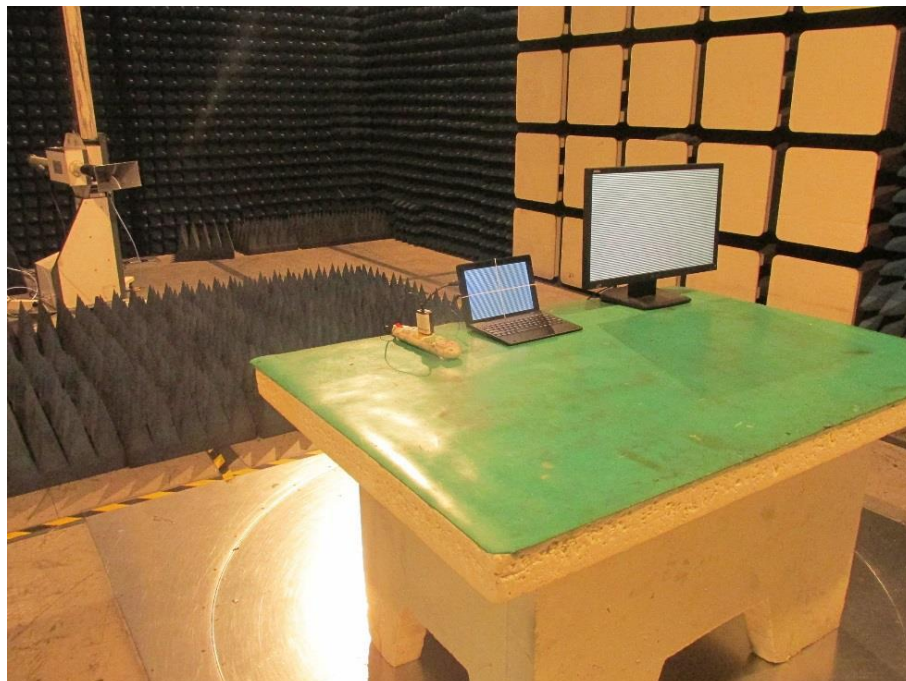
**Photograph 1: Set-up for Conducted Emission**



**Photograph 2: Set-up for Radiated Emission (30MHz ~ 1GHz)**



**Photograph 3: Set-up for Radiated Emission (above 1GHz)**



## 7 List of Tables

|                                                           |   |
|-----------------------------------------------------------|---|
| Table 1: List of Test and Measurement Equipment.....      | 5 |
| Table 2: Technical Specification of EUT .....             | 7 |
| Table 3: List of Accessories and Auxiliary Equipment..... | 9 |

## 8 List of Photographs

|                                                                 |    |
|-----------------------------------------------------------------|----|
| Photograph 1: Set-up for Conducted Emission .....               | 14 |
| Photograph 2: Set-up for Radiated Emission (30MHz ~ 1GHz) ..... | 14 |
| Photograph 3: Set-up for Radiated Emission (above 1GHz) .....   | 15 |