

**Note :** Measurement setup for testing on Antenna connector

### 13.3 Test Result

Remark: All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

#### Chain 0

| Test Frequency: 3655MHz QPSK 10MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| -40                                | 120                | 107                  | 0.1279                |
| -25                                |                    | 123                  | 0.1470                |
| -10                                |                    | 105                  | 0.1255                |
| 0                                  |                    | 114                  | 0.1363                |
| 10                                 |                    | 118                  | 0.1410                |
| 20                                 |                    | 108                  | 0.1291                |
| 30                                 |                    | 111                  | 0.1327                |
| 40                                 |                    | 121                  | 0.1446                |
| 55                                 |                    | 120                  | 0.1434                |

| Test Frequency: 3660MHz QPSK 20MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| -40                                | 120                | 115                  | 0.1375                |
| -25                                |                    | 106                  | 0.1267                |
| -10                                |                    | 108                  | 0.1291                |
| 0                                  |                    | 109                  | 0.1303                |
| 10                                 |                    | 114                  | 0.1363                |
| 20                                 |                    | 111                  | 0.1327                |
| 30                                 |                    | 106                  | 0.1267                |
| 40                                 |                    | 110                  | 0.1315                |
| 55                                 |                    | 107                  | 0.1279                |

**Chain 1**

| Test Frequency: 3655MHz QPSK 10MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| -40                                | 120                | 119                  | 0.1422                |
| -25                                |                    | 119                  | 0.1422                |
| -10                                |                    | 122                  | 0.1458                |
| 0                                  |                    | 121                  | 0.1446                |
| 10                                 |                    | 123                  | 0.1470                |
| 20                                 |                    | 113                  | 0.1351                |
| 30                                 |                    | 121                  | 0.1446                |
| 40                                 |                    | 119                  | 0.1422                |
| 55                                 |                    | 121                  | 0.1446                |

| Test Frequency: 3660MHz QPSK 20MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| -40                                | 120                | 97                   | 0.1159                |
| -25                                |                    | 112                  | 0.1339                |
| -10                                |                    | 96                   | 0.1148                |
| 0                                  |                    | 103                  | 0.1231                |
| 10                                 |                    | 101                  | 0.1207                |
| 20                                 |                    | 111                  | 0.1327                |
| 30                                 |                    | 99                   | 0.1183                |
| 40                                 |                    | 112                  | 0.1339                |
| 55                                 |                    | 110                  | 0.1315                |

## 14 Frequency stability V.S. Voltage measurement

|                   |   |
|-------------------|---|
| Test Requirement: | FCC Part90.213(a) and RSS 197 section 5.3         |
| Test Method:      | FCC Part2.1055(a)(1)(b) and RSS Gen section 6.1.1 |
| Test Mode:        | Data communicating mode                           |
| Limit:            | FCC:  |

| Frequency range (MHz) | Fixed and base stations (±ppm) | Mobile stations (±ppm)    |                              |
|-----------------------|--------------------------------|---------------------------|------------------------------|
|                       |                                | Over 2 watts output power | 2 watts or less output power |
| Below 25              | 100                            | 100                       | 200                          |
| 25-50                 | 20                             | 20                        | 50                           |
| 72-76                 | 5                              |                           | 50                           |
| 150-174               | 5                              | 5                         | 50                           |
| 216-220               | 1.0                            |                           | 1.0                          |
| 220-222               | 0.1                            | 1.5                       | 1.5                          |
| 421-512               | 2.5                            | 5                         | 5                            |
| 806-809               | 1.0                            | 1.5                       | 1.5                          |
| 809-824               | 1.5                            | 2.5                       | 2.5                          |
| 851-854               | 1.0                            | 1.5                       | 1.5                          |
| 854-869               | 1.5                            | 2.5                       | 2.5                          |
| 896-901               | 0.1                            | 1.5                       | 1.5                          |
| 902-928               | 2.5                            | 2.5                       | 2.5                          |
| 929-930               | 1.5                            |                           |                              |
| 935-940               | 0.1                            | 1.5                       | 1.5                          |
| 1427-1435             | 300                            | 300                       | 300                          |
| Above 2450            |                                |                           |                              |

IC:

The transmitter frequency stability limit shall be determined as follows:

- The frequency offset shall be measured according to the procedure described in RSS-Gen and recorded;
- Using a resolution bandwidth of 1% of the occupied bandwidth, a reference point at the unwanted emission level specified in Section 5.7 on the emission mask of the lowest and highest channel shall be selected, and the frequency at these points shall be recorded as fL and fH respectively.

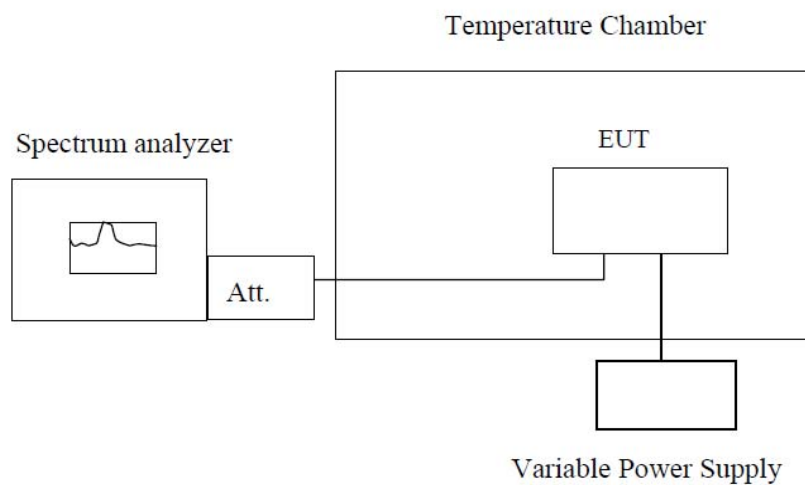
The applicant shall ensure frequency stability by showing that fL minus the frequency offset and fH plus the frequency offset shall be within the 3650-3700 MHz band.

### 14.1 EUT Operation

|                         |           |
|-------------------------|-----------|
| Operating Environment : |           |
| Temperature:            | 22.9 °C   |
| Humidity:               | 52.0 % RH |
| Atmospheric Pressure:   | 101.3kPa  |

### 14.2 Test Procedure

- Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.
- Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.
- Reduce the input voltage to specify extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.



**Note :** Measurement setup for testing on Antenna connector

### 14.3 Test Result

Remark: All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.

#### Chain 0

| Test Frequency: 3655MHz QPSK 10MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| 25                                 | 105                | 107                  | 0.1279                |
|                                    | 120                | 96                   | 0.1148                |
|                                    | 144                | 97                   | 0.1159                |

| Test Frequency: 3660MHz QPSK 20MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| 25                                 | 105                | 96                   | 0.1148                |
|                                    | 120                | 99                   | 0.1183                |
|                                    | 144                | 108                  | 0.1291                |

#### Chain 1

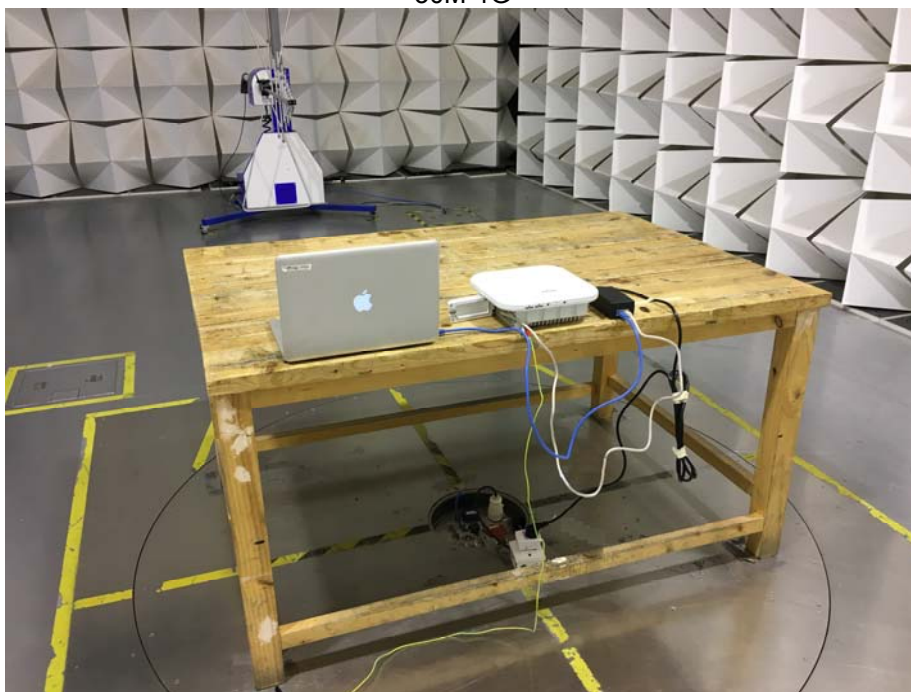
| Test Frequency: 3655MHz QPSK 10MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| 25                                 | 105                | 97                   | 0.1159                |
|                                    | 120                | 94                   | 0.1124                |
|                                    | 144                | 101                  | 0.1207                |

| Test Frequency: 3660MHz QPSK 20MHz |                    |                      |                       |
|------------------------------------|--------------------|----------------------|-----------------------|
| Temperature (°C)                   | Power Supply (VDC) | Frequency Error (Hz) | Frequency Error (ppm) |
| 25                                 | 105                | 105                  | 0.1255                |
|                                    | 120                | 102                  | 0.1219                |
|                                    | 144                | 110                  | 0.1315                |

## 15 Photographs of test setup and EUT.

### 15.1 Test Setup

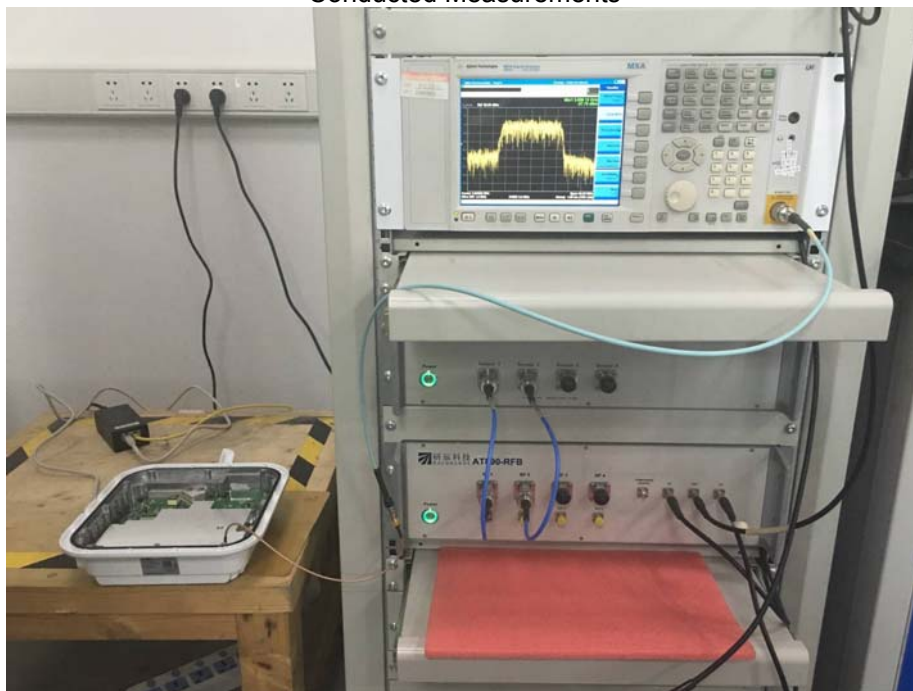
Radiated Spurious Emission  
30M-1G



1G-18G



### Conducted Measurements



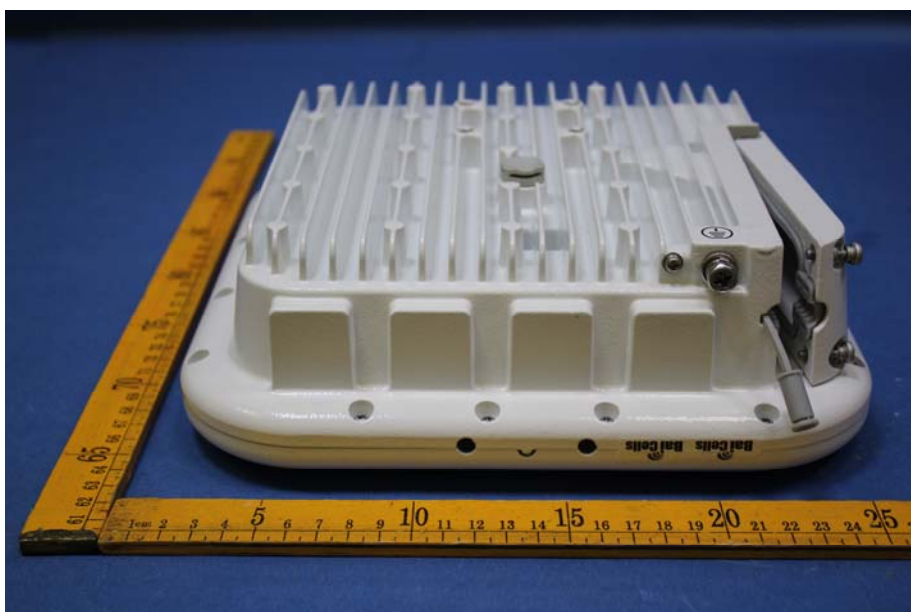


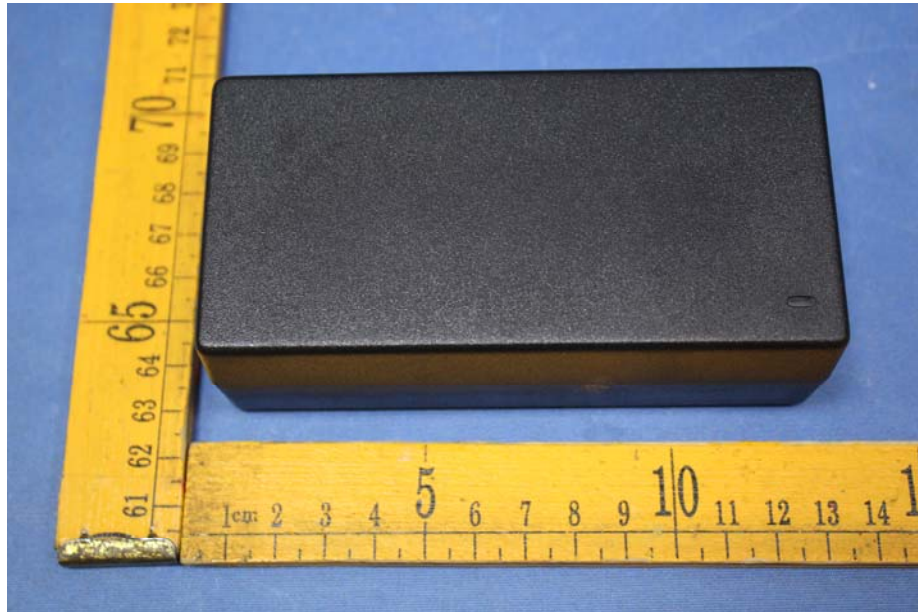
### 15.2 EUT - External View



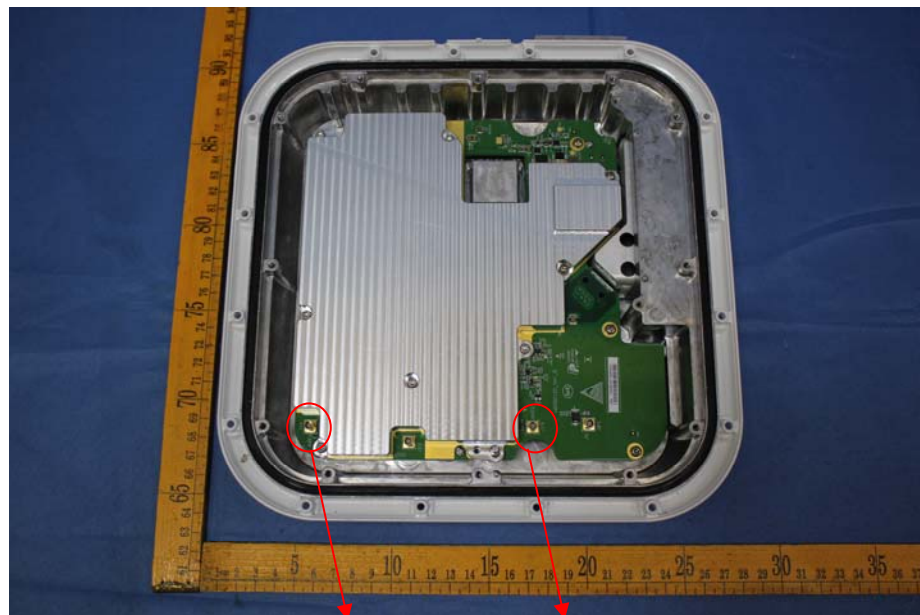


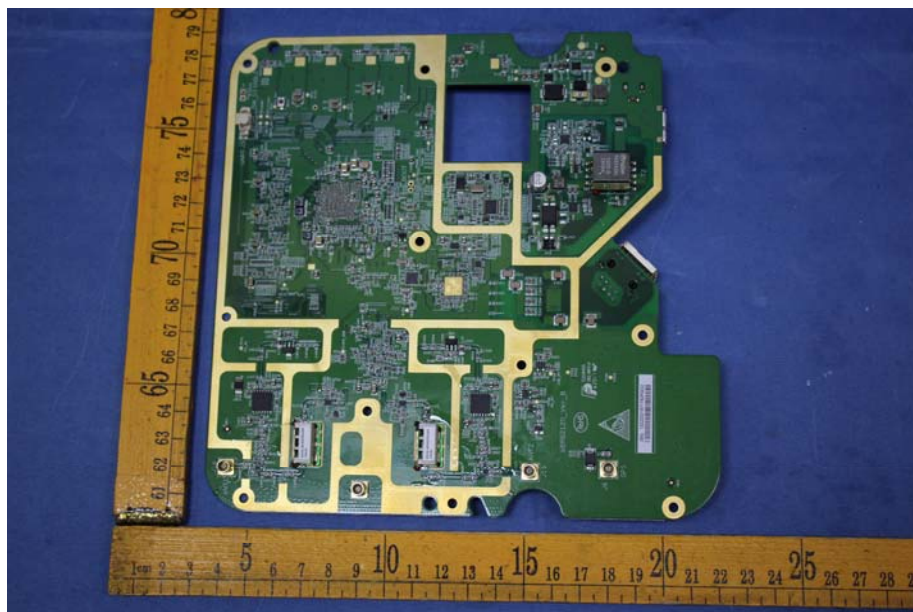






### 15.3 EUT - Internal View





===== End of Report =====