




# TEST REPORT

|   |  |   |
|---|--|---|
| <b>KCTL Inc.</b><br>65, Sinwon-ro, Yeongtong-gu,<br>Suwon-si, Gyeonggi-do, 16677, Korea<br>TEL: 82-31-285-0894 FAX: 82-505-299-8311<br><a href="http://www.kctl.co.kr">www.kctl.co.kr</a>                             | Report No.:<br><b>KR18-SRF0127-C</b><br>Page (1) of (21) |  |
| <b>1. Client</b>  |  |   |
| <ul style="list-style-type: none"> <li>◦ Name : Hoimyung ICT</li> <li>◦ Address : 1203, Daeryung-technotown-8cha, 96, Gamasanro, Geumcheon-gu, Seoul, Korea, 08501</li> <li>◦ Date of Receipt : 2018-02-27</li> </ul> |  |   |
| <b>2. Use of Report</b> : -   |  |   |
| <b>3. Name of Product and Model</b> : Telematics Management System Terminal / DTM-01  |  |   |
| <b>4. Manufacturer and Country of Origin</b> : Hoimyung ICT / Korea   |  |   |
| <b>5. FCC ID</b> : 2ARPKDTM-01  |  |   |
| <b>6. IC</b> : 24504-DTM01  |  |   |
| <b>7. Date of Test</b> : 2018-09-19 to 2018-10-01   |  |   |
| <b>8. Test Standards</b> : Part 22 (H)<br>RSS-132 Issue 3 January 2013<br>RSS GEN Issue 5 April 2018  |  |   |
| <b>9. Test Results</b> : Refer to the test result in the test report  |  |   |
| Affirmation   | Tested by  | Technical Manager   |
|   | Name : Seonjun Yun (Signature)                           | Name : Seungyong Kim (Signature)  |
| 2018-12-28  |  |   |
| <h2>KCTL Inc.</h2>  |  |   |
| As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL Inc. |  |   |

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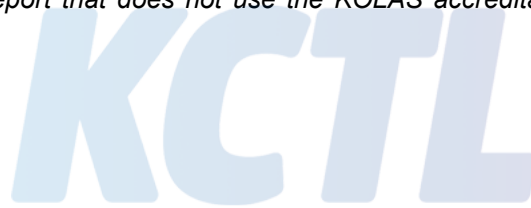
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**REPORT REVISION HISTORY**

| Date       | Revision                    | Page No |
|------------|-----------------------------|---------|
| 2018-10-05 | Originally issued           | -       |
| 2018-11-20 | Revised                     | 6, 7    |
| 2018-12-24 | Revised antenna information | 6       |
| 2018-12-28 | Revised antenna gain        | 6       |
|            |                             |         |
|            |                             |         |
|            |                             |         |
|            |                             |         |
|            |                             |         |
|            |                             |         |

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## 1. Client information

**Applicant:** Hoimyung ICT  
**Address:** 1203, Daeryung-technotown-8cha, 96, Gamasanro,  
Geumcheon-gu, Seoul, Korea, 08501  
**Telephone number:** +82 2 6958 3500  
**Facsimile number:** +82 2 6958 3530  
**Contact person:** Jongrak Geun / [kjr1234@hoimyung.co.kr](mailto:kjr1234@hoimyung.co.kr)

**Manufacturer:** Hoimyung ICT  
**Address:** 1203, Daeryung-technotown-8cha, 96, Gamasanro,  
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# KCTL

## 2. Laboratory information

### Address

#### **KCTL Inc.**

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Telephone Number: +82 31 285 0894

Facsimile Number: +82 505 299 8311

FCC Site Designation No: KR0040, FCC Site Registration No: 687132

VCCI Registration No. : R-3327, G-198, C-3706, T-1849

Industry Canada Registration No. : 8035A

KOLAS NO.: KT231

### **SITE MAP**



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### 3. Description of E.U.T.

#### 3.1 Basic description

|                         |  |
|-------------------------|--|
| Applicant               | Hoimyung ICT   |
| Address of Applicant    | 1203, Daeryung-technotown-8cha, 96, Gamasanro, Geumcheon-gu, Seoul, Korea, 08501 |
| Manufacturer            | Hoimyung ICT   |
| Address of Manufacturer | 1203, Daeryung-technotown-8cha, 96, Gamasanro, Geumcheon-gu, Seoul, Korea, 08501 |
| Type of equipment       | Telematics Management System Terminal  |
| Basic Model             | DTM-01   |
| Serial number           | N/A  |

#### 3.2 General description

|                                      |  |
|--------------------------------------|--|
| Frequency Range                      | 2 412 MHz ~ 2 462 MHz (802.11b/g/n_HT20)<br>826.4 MHz ~ 846.6 MHz (WCDMA Band 5) |
| Type of Modulation                   | DSSS (802.11b), OFDM (802.11g/n_HT20),<br>QPSK (WCDMA Band 5)                    |
| The number of channels               | 11 ch (802.11b/g/n_HT20)   |
| Type of Antenna                      | Dipole Antenna (802.11b/g/n_HT20, WCDMA Band 5)                                  |
| Antenna Gain                         | 2.882 dBi (802.11b/g/n_HT20)<br>1.519 dBi (WCDMA Band 5)                         |
| Conducted Output Power <sup>2)</sup> | 26.60 dBm (WCDMA Band 5)   |
| Power supply                         | DC 12 V, DC 24 V   |
| Product SW/HW version                | V1.01 / V1.01  |
| Radio SW/HW version                  | V1.01 / V1.01  |
| Test SW Version                      | MT8820C 23.03 #004   |
| RF power setting in TEST SW          | Referred the measuring instrument from manufacturer                              |

Note<sub>1</sub>) : The above EUT information was declared by the manufacturer.

Note<sub>2</sub>) : Test was performed by modular transmitter (Model Name: LISA-U200, FCC ID: XPYLISAU200, IC: 8595A-LISAU200N, Test Report No.6-0082-11-1-2b issued on 27, November, 2011 by CETECOM GmbH.

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### 3.3 Ambient Conditions

|                       | Temperature [°C] | Relative humidity [%] |
|-----------------------|------------------|-----------------------|
| Requirement for tests | 15 to 35         | 20 to 75              |
| Ambient Conditions    | 21               | 51                    |

### 3.4 Test frequency

- WCDMA Band 5 –

| Frequency (MHz) | Mode  | Channel |
|-----------------|-------|---------|
| 826.4 ~ 832.4   | WCDMA | 4132    |
| 836.4 ~ 836.6   |       | 4183    |
| 846.4 ~ 846.6   |       | 4233    |

### 3.5 Test Voltage

| Mode            | Voltage          |
|-----------------|------------------|
| Nominal Voltage | DC 12 V, DC 24 V |

## 4. Summary of test results

### 4.1 Standards & results

| FCC Rule Reference   | IC Rule Reference  | Parameter   | Report Section | Test Result                |
|--|--|---|----------------|----------------------------|
| 22.913(a)(2)   | RSS-132 Issue 3 (5.4)<br>RSS-133 Issue 6 (6.4)                           | Effective Radiated Power                              | 5.1            | C                          |
| 2.1053<br>22.917(a)  | RSS-132 Issue 3 (5.5)<br>RSS-133 Issue 6 (6.5)                           | Radiated Spurious Emission                            | 5.2            | C                          |
| 2.1046   | RSS-Gen Issue 5 (6.12)   | Conducted Output Power                                | 5.3            | NT<br>(Note <sub>2</sub> ) |
| 2.1049   | RSS-Gen Issue 5 (6.7)  | Occupied Bandwidth                                    | 5.4            | NT<br>(Note <sub>2</sub> ) |
| 24.232(d)  | RSS-132 Issue 3 (5.4)<br>RSS-132 Issue 6 (6.4)                           | Peak to Average Ratio                                 | 5.5            | NT<br>(Note <sub>2</sub> ) |
| 2.1051<br>22.917(a)  | RSS-132 Issue 3 (5.5)<br>RSS-133 Issue 6 (6.5)                           | Band Edge<br>Spurious Emission at Antenna<br>Terminal | 5.6            | NT<br>(Note <sub>2</sub> ) |
| 2.1055<br>22.917(a)  | RSS-Gen Issue 5 (6.11)<br>RSS-132 Issue 3 (5.3)<br>RSS-133 Issue 6 (6.3) | Frequency Stability                                   | 5.7            | NT<br>(Note <sub>2</sub> ) |
| Note <sub>1</sub> ): C = Complies, NC = Not Complies, NT = Not Tested, NA = Not Applicable<br>Note <sub>2</sub> ): Test was performed by modular transmitter (Model Name: LISA-U200, FCC ID: XPYLISAU200,<br>IC: 8595A-LISAU200N, Test Report No.6-0082-11-1-2b issued on 27, November, 2011 by<br>CETECOM GmbH. |  |   |                |                            |

- The general test methods used to test on this device are ANSI/TIA-603-E-2016 and KDB 971168 D01 v03.

### 4.2 Measurement Uncertainty

| Measurement Item            | Expanded Uncertainty<br>$U = kU_c (k = 2)$ |         |
|-----------------------------|--|---------|
| Voltage                     | 0.30 %                                     |         |
| Temperature                 | 1.12 °C                                    |         |
| Radiated Spurious emissions | 30 MHz ~ 1 000 MHz                         | 3.84 dB |
|                             | 1 000 MHz ~ 12.75 GHz                      | 3.90 dB |



## 5. Test results

### 5.1 Radiated Power(ERP/EIRP)

#### 5.1.1 Regulation

FCC §22.913(a)(2)

#### 5.1.2 Measurement Procedure

The method of measurement used to test this device are ANSI/TIA-603-E-2016 and KDB 971168 D01 v03 Section 5.1.2.

This procedure can be used to measure the peak power in either a CW-like or noise-like Narrowband RF signal.

THE measurement instrument must have a RBW that is greater than or equal to the OBW Of the signal to be measured and a VBW  $\geq 3 \times$  RBW

- a) Set the RBW  $\geq$  OBW.
- b) Set VBW  $\geq 3 \times$  RBW.
- c) Set span  $\geq 2 \times$  RBW.
- d) Sweep time  $\geq 20 \times$  (number of point in sweep)  $\times$  (transmission symbol period).
- e) Detector = peak.
- f) Trace mode = max hold.
- g) Allow trace to fully stabilize.
- h) Use the peak marker dunction to determine the peak amplitude level.

Remark:

- Actual setting: RBW = 1 MHz, VBW = 3 MHz

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### 5.1.3 Test Result

- Complied

#### WCDMA Band 5 (DC 12 V)

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. |       | Substitute<br>Level<br>(dB m) | ANT<br>Gain<br>(dB i) | Cable<br>Loss<br>(dB) | Limit<br>(W) |
|--------------------|-----------------------|--------|-------|-------------------------------|-----------------------|-----------------------|--------------|
|                    |                       | (dB m) | (W)   |                               |                       |                       |              |
| 826.40             | V                     | 19.13  | 0.082 | 23.40                         | -0.50                 | 3.77                  | 7.00         |
| 836.60             | V                     | 19.10  | 0.081 | 23.39                         | -0.50                 | 3.79                  | 7.00         |
| 846.60             | V                     | 19.01  | 0.080 | 23.42                         | -0.60                 | 3.81                  | 7.00         |

Note : The E.R.P or E.I.R.P = Substitute Level (dBm) + Ant. Gain (dBd or dBi) – Cable Loss (dB)

#### WCDMA Band 5 (DC 24 V)

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. |       | Substitute<br>Level<br>(dB m) | ANT<br>Gain<br>(dB i) | Cable<br>Loss<br>(dB) | Limit<br>(W) |
|--------------------|-----------------------|--------|-------|-------------------------------|-----------------------|-----------------------|--------------|
|                    |                       | (dB m) | (W)   |                               |                       |                       |              |
| 826.40             | V                     | 19.10  | 0.081 | 23.37                         | -0.50                 | 3.77                  | 7.00         |
| 836.60             | V                     | 19.13  | 0.082 | 23.42                         | -0.50                 | 3.79                  | 7.00         |
| 846.60             | V                     | 18.95  | 0.079 | 23.36                         | -0.60                 | 3.81                  | 7.00         |

Note : The E.R.P or E.I.R.P = Substitute Level (dBm) + Ant. Gain (dBd or dBi) – Cable Loss (dB)

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## 5.2 Radiated Spurious emission

### 5.2.1 Regulation

FCC §2.1053, §22.917(a)

### 5.2.2 Measurement Procedure

The method of measurement used to test this device are ANSI/TIA-603-E-2016 and KDB 971168 D01 v03 Section 5.8. and 6.1.

- a) Set the RBW
  - 100 kHz below 1 GHz
  - 1 MHz above 1 GHz
- b) Set VBW
  - 300 kHz below 1 GHz
  - 3 MHz above 1 GHz
- c) Detector = peak.
- d) Trace mode = max hold.
- e) Allow trace to fully stabilize.
- f) Use the peak marker dunction to determine the peak amplitude level.

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## 5.2.3 Test Result

- Complied

### WCDMA Band 5\_(DC 12 V)

Operating Frequency : 826.40 MHz

Channel : 4132

Measured Output Power : 19.13 dB<sub>m</sub> = 0.082 W

Limit = 43+10log(P) dB = 32.13 dB<sub>c</sub>

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. | Substitute<br>Level | ANT<br>Gain | Cable<br>Loss | dB c  | Margin<br>(dB) |
|--------------------|-----------------------|--------|---------------------|-------------|---------------|-------|----------------|
|                    |                       | (dB m) | (dB m)              | (dB d)      | (dB)          |       |                |
| 183.26             | H                     | -48.30 | -47.43              | 0.80        | 1.67          | 67.43 | 35.30          |
| 767.20             | V                     | -46.20 | -42.68              | 0.10        | 3.62          | 65.33 | 33.20          |
| 1 655.33           | V                     | -52.00 | -54.95              | 8.40        | 5.45          | 71.13 | 39.00          |
| 4 576.72           | H                     | -46.40 | -48.13              | 11.30       | 9.57          | 65.53 | 33.40          |

Note : The E.R.P = Substitute Level (dBm) + Ant. Gain (dBd) - Cable Loss (dB)

Operating Frequency : 836.60 MHz

Channel : 4183

Measured Output Power : 19.10 dB<sub>m</sub> = 0.081 W

Limit = 43+10log(P) dB = 32.10 dB<sub>c</sub>

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. | Substitute<br>Level | ANT<br>Gain | Cable<br>Loss | dB c  | Margin<br>(dB) |
|--------------------|-----------------------|--------|---------------------|-------------|---------------|-------|----------------|
|                    |                       | (dB m) | (dB m)              | (dB d)      | (dB)          |       |                |
| 183.26             | H                     | -48.40 | -47.53              | 0.80        | 1.67          | 67.50 | 35.40          |
| 614.91             | H                     | -44.90 | -40.96              | -0.70       | 3.24          | 64.00 | 31.90          |
| 745.86             | V                     | -41.00 | -37.22              | -0.20       | 3.58          | 60.10 | 28.00          |
| 1 672.13           | V                     | -54.30 | -57.35              | 8.50        | 5.45          | 73.40 | 41.30          |

Note : The E.R.P = Substitute Level (dBm) + Ant. Gain (dBd) - Cable Loss (dB)

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Operating Frequency : 846.60 MHz

Channel : 4233

Measured Output Power : 19.01 dB<sub>m</sub> = 0.080 W

Limit = 43+10log(P) dB = 32.01 dBc

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. | Substitute<br>Level | ANT<br>Gain | Cable<br>Loss | dB c  | Margin<br>(dB) |
|--------------------|-----------------------|--------|---------------------|-------------|---------------|-------|----------------|
|                    |                       | (dB m) | (dB m)              | (dB d)      | (dB)          |       |                |
| 183.26             | H                     | -47.40 | -46.53              | 0.80        | 1.67          | 66.41 | 34.40          |
| 590.66             | H                     | -43.30 | -39.42              | -0.70       | 3.18          | 62.31 | 30.30          |
| 722.58             | H                     | -44.60 | -40.79              | -0.30       | 3.51          | 63.61 | 31.60          |
| 1 691.34           | V                     | -49.50 | -52.65              | 8.60        | 5.45          | 68.51 | 36.50          |

Note : The E.R.P = Substitute Level (dBm) + Ant. Gain (dBd) - Cable Loss (dB)



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**WCDMA Band 5\_(DC 24 V)**

Operating Frequency : 826.40 Mhz

Channel : 4132

Measured Output Power : 19.10 dB<sub>m</sub> = 0.081 W

Limit = 43+10log(P) dB = 32.10 dB<sub>c</sub>

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. | Substitute<br>Level | ANT<br>Gain | Cable<br>Loss | dB c  | Margin<br>(dB) |
|--------------------|-----------------------|--------|---------------------|-------------|---------------|-------|----------------|
|                    |                       | (dB m) | (dB m)              | (dB d)      | (dB)          |       |                |
| 183.26             | H                     | -48.60 | -47.73              | 0.80        | 1.67          | 67.70 | 35.60          |
| 627.52             | V                     | -41.60 | -37.34              | -1.00       | 3.26          | 60.70 | 28.60          |
| 763.32             | V                     | -39.20 | -35.39              | -0.20       | 3.61          | 58.30 | 26.20          |
| 1 650.53           | V                     | -53.00 | -56.13              | 8.40        | 5.27          | 72.10 | 40.00          |

Note : The E.R.P = Substitute Level (dBm) + Ant. Gain (dBd) - Cable Loss (dB)

Operating Frequency : 836.60 Mhz

Channel : 4183

Measured Output Power : 19.13 dB<sub>m</sub> = 0.082 W

Limit = 43+10log(P) dB = 32.13 dB<sub>c</sub>

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. | Substitute<br>Level | ANT<br>Gain | Cable<br>Loss | dB c  | Margin<br>(dB) |
|--------------------|-----------------------|--------|---------------------|-------------|---------------|-------|----------------|
|                    |                       | (dB m) | (dB m)              | (dB d)      | (dB)          |       |                |
| 183.26             | H                     | -48.20 | -47.33              | 0.80        | 1.67          | 67.33 | 35.20          |
| 610.06             | V                     | -41.10 | -37.16              | -0.70       | 3.24          | 60.23 | 28.10          |
| 1 669.73           | V                     | -53.10 | -56.15              | 8.50        | 5.45          | 72.23 | 40.10          |

Note : The E.R.P = Substitute Level (dBm) + Ant. Gain (dBd) - Cable Loss (dB)

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Operating Frequency : 846.60 MHz

Channel : 4233

Measured Output Power : 18.95 dB<sub>m</sub> = 0.079 W

Limit = 43+10log(P) dB = 31.95 dBc

| Frequency<br>(MHz) | Ant.<br>Pol.<br>(H/V) | E.R.P. | Substitute<br>Level | ANT<br>Gain | Cable<br>Loss | dB c  | Margin<br>(dB) |
|--------------------|-----------------------|--------|---------------------|-------------|---------------|-------|----------------|
|                    |                       | (dB m) | (dB m)              | (dB d)      | (dB)          |       |                |
| 183.26             | H                     | -47.80 | -46.93              | 0.80        | 1.67          | 66.75 | 34.80          |
| 595.51             | V                     | -46.10 | -41.99              | -0.90       | 3.21          | 65.05 | 33.10          |
| 725.49             | V                     | -45.70 | -41.56              | -0.60       | 3.54          | 64.65 | 32.70          |
| 1 691.34           | V                     | -49.20 | -52.35              | 8.60        | 5.45          | 68.15 | 36.20          |
| 2 536.31           | V                     | -51.50 | -54.51              | 9.70        | 6.69          | 70.45 | 38.50          |
| 4 564.71           | V                     | -48.70 | -50.33              | 11.20       | 9.57          | 67.65 | 35.70          |

Note : The E.R.P = Substitute Level (dBm) + Ant. Gain (dBd) - Cable Loss (dB)



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## 5.3 Conducted Output Power

### 5.3.1 Regulation

FCC §2.1046

### 5.3.2 Measurement Procedure

A radio link was established between EUT and Radio Communications Tester. The output power of the EUT was set to maximum value by using the maximum power setting on the Radio Communications Tester.  
The worst case being reported.

### 5.3.3 Test Result

**Result: NT : Not Tested due to client request.**

**Please refer modular transmitter test report No. 6-0082-11-1-2b.**

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## 5.4 Occupied Bandwidth

### 5.4.1 Regulation

FCC §2.1049

### 5.4.2 Measurement Procedure

The method of measurement used to test this device is ANSI/TIA-603-E-2016 and KDB 971168 D01 v03.

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW  $\geq$  3 x RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

### 5.4.3 Test Result

**Result: NT : Not Tested due to client request.**

**Please refer modular transmitter test report No. 6-0082-11-1-2b.**

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## 5.5 Peak to Average Ratio

### 5.5.1 Regulation

FCC §27.50(d)(5)

### 5.5.2 Measurement Procedure

The method of measurement used to test this device is ANSI/TIA-603-E-2016 and KDB 971168 D01 v03.

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW > Emission bandwidth of signal
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

### 5.5.3 Test Result

**Result: NT : Not Tested due to client request.**

**Please refer modular transmitter test report No. 6-0082-11-1-2b.**

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## 5.6 Band Edge / Spurious Emission at Antenna Terminal

### 5.6.1 Regulation

FCC §2.1051, §27.53(c)(2), §27.53(h)

The power of emissions shall be attenuated (in dB) below the transmitter output power P ( dBW) by at least  $43 + 10 \log_{10} p$  (watts).

### 5.6.2 Measurement Procedure

The method of measurement used to test this device is ANSI/TIA-603-E-2016 and KDB 971168 D01 v03.

#### - Band Edge Emission -

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW > 1% of the emission bandwidth
4. VBW > 3 x RBW
5. Detector = RMS
6. Number of sweep points  $\geq 2 \times \text{Span}/\text{RBW}$
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

26 dB below the transmitter power.

#### - Conducted Spurious Emission –

1. Start frequency was set to 30 MHz and stop frequency was set to at least  $10 \times$  the fundamental frequency
2. RBW  $\geq 100$  kHz (Frequency less than 1 GHz)  
RBW  $\geq 1$  MHz (Frequency greater than 1 GHz)
3. Detector = RMS
4. Trace mode = trace average
8. Sweep time = auto couple
9. The trace was allowed to stabilize

### 5.6.3 Test Result

**Result: NT : Not Tested due to client request.**

**Please refer modular transmitter test report No. 6-0082-11-1-2b.**

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## 5.7 Frequency Stability

### 5.7.1 Regulation

FCC §2.1055, §27.5(b), §27.5(h), §27.54

### 5.7.2 Measurement Procedure

The method of measurement used to test this device is ANSI/TIA-603-E-2016 and KDB 971168 D01 v03.

The EUT was placed inside the Environment Chamber.

Temperature is varied from  $-30\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$  (10  $^{\circ}\text{C}$  increments).

The primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment. For hand carried, battery powered equipment, reduce primary supply voltage to the battery operating end point which shall be specified by the manufacturer.

1. The carrier frequency of the transmitter is measured at room temperature.
2. The EUT was left inside chamber to stabilize to set temperature for minimum of thirty minutes.
3. Frequency measurements are made at 10  $^{\circ}\text{C}$  intervals ranging from  $-30\text{ }^{\circ}\text{C}$  to  $+50\text{ }^{\circ}\text{C}$ .

### 5.7.3 Test Result

**Result: NT : Not Tested due to client request.**

**Please refer modular transmitter test report No. 6-0082-11-1-2b.**

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## 6. Test equipment used for test

|   | Equipment Name                      | Manufacturer                | Model No.                | Serial No.  | Next Cal. Date |
|---|-------------------------------------|-----------------------------|--------------------------|-------------|----------------|
| ■ | Vector Signal Generator             | R&S                         | SMBV100A                 | 257566      | 19.01.05       |
| ■ | Signal Generator                    | R&S                         | SMR40                    | 100007      | 19.05.15       |
| ■ | Wideband Radio Communication Tester | R & S                       | CMW500                   | 141780      | 19.01.31       |
| ■ | Bilog Antenna                       | Teseq GmbH                  | CBL 6143A                | 35039       | 19.05.19       |
| ■ | Horn Antenna                        | ETS.lindgren                | 3117                     | 161225      | 19.05.18       |
| ■ | Highpass Filter                     | Wainwright Instruments GmbH | WHKX1.0/<br>1.5S-10SS    | 14          | 19.01.31       |
| ■ | Spectrum Analyzer                   | AGILENT                     | N9040B                   | MY57010132  | 18.11.23       |
| ■ | Attenuator                          | Weinschel ENGINEERING       | 10                       | AJ1239      | 19.05.14       |
| ■ | Amplifier                           | L-3 Narda-MITEQ             | AFS5-0010180<br>0-25-S-5 | 2054571     | 18.11.20       |
| ■ | Amplifier                           | SONOMA INSTRUMENT           | 317                      | 321041      | 19.01.05       |
| ■ | RF Selector                         | TOYO Corporation            | NS5800                   | 1003-010    | N/A            |
| ■ | Band Selector                       | TOYO Corporation            | NS5800                   | 1003-135    | N/A            |
| ■ | Band Selector                       | TOYO Corporation            | NS5800                   | 1003-320    | N/A            |
| ■ | Antenna Mast                        | MATURO                      | EAS 1.5                  | 042/8941211 | N/A            |
| ■ | Antenna Mast                        | MATURO                      | EAS 1.5                  | 043/8941211 | N/A            |
| ■ | Turn Table                          | MATURO                      | TT 0.8 PF                | 041/8941211 | N/A            |