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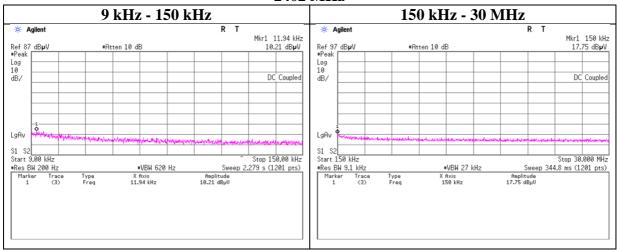
# **Conducted Spurious Emission**

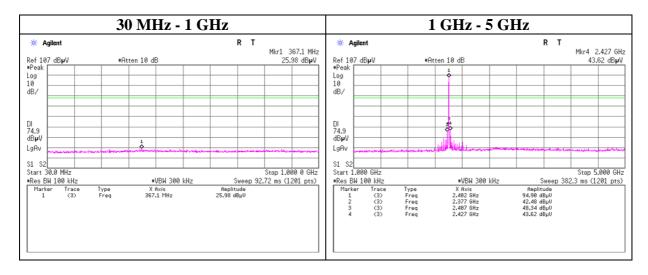
Test place Ise EMC Lab. No.11 Measurement Room

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Mode Tx DH5

### 2402 MHz





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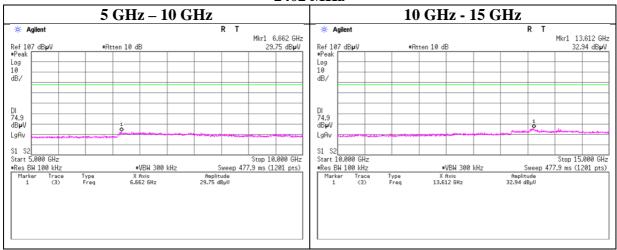
# **Conducted Spurious Emission**

Test place Ise EMC Lab. No.11 Measurement Room

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### 2402 MHz





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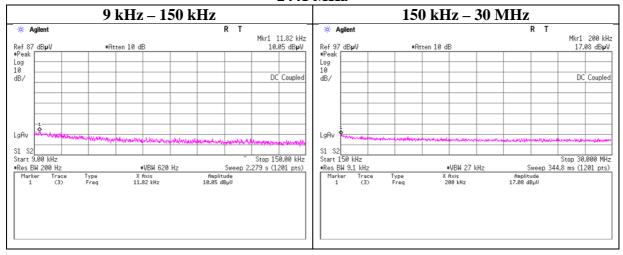
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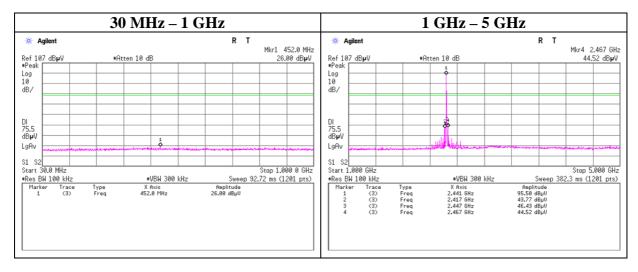
Test place Ise EMC Lab. No.11 Measurement Room

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### 2441 MHz





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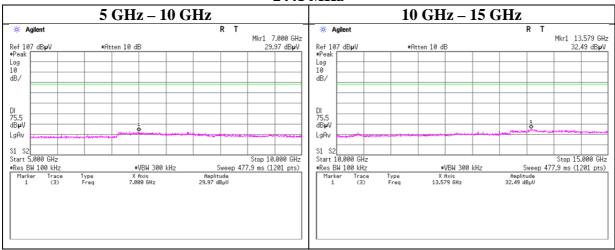
# **Conducted Spurious Emission**

Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono

Mode Tx DH5

### 2441 MHz





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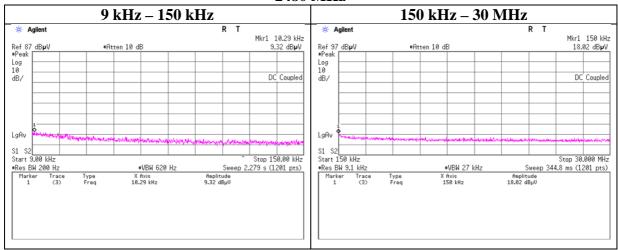
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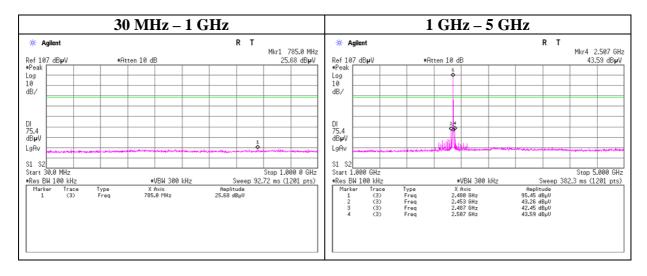
Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
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Mode Tx DH5

### 2480 MHz





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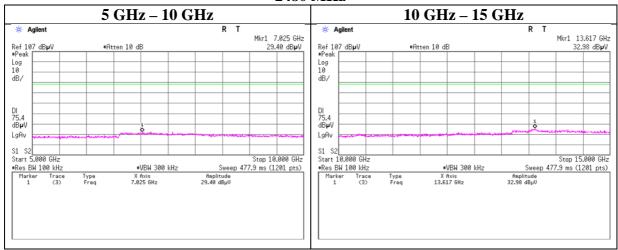
# **Conducted Spurious Emission**

Test place Ise EMC Lab. No.11 Measurement Room

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Mode Tx DH5

### 2480 MHz





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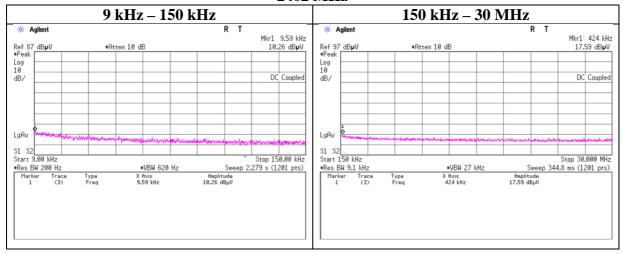
# **Conducted Spurious Emission**

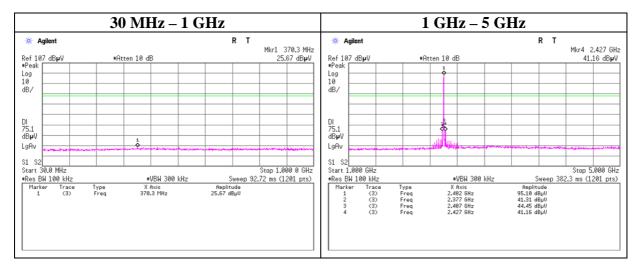
Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono

Mode Tx 3DH5

### 2402 MHz





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FCC ID : UJHAR0H

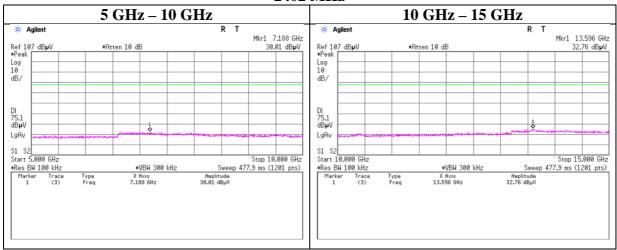
# **Conducted Spurious Emission**

Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono

Mode Tx 3DH5

### 2402 MHz





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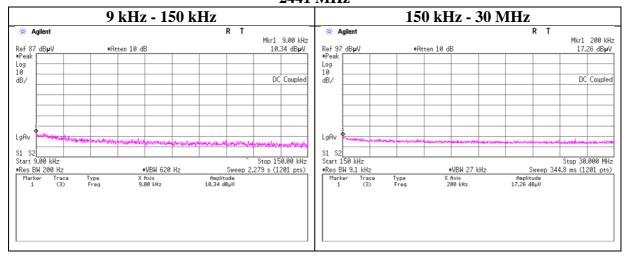
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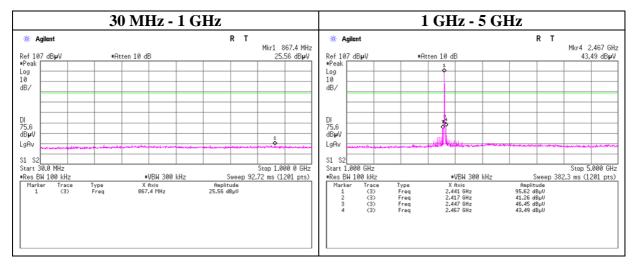
# **Conducted Spurious Emission**

Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono
Mode Tx 3DH5

### 2441 MHz





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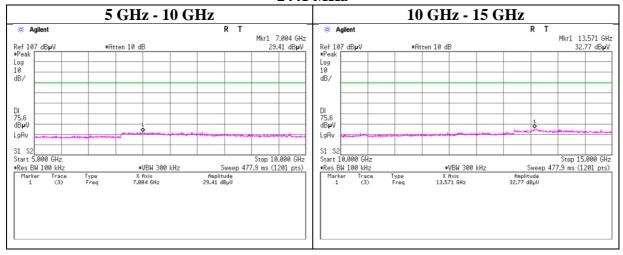
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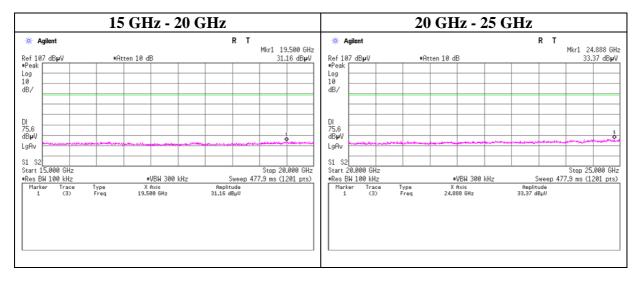
Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity Engineer 24 deg. C / 51 % RH
Shinichi Miyazono

Mode Tx 3DH5

### 2441 MHz





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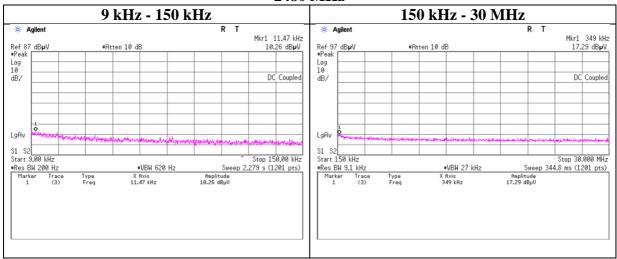
# **Conducted Spurious Emission**

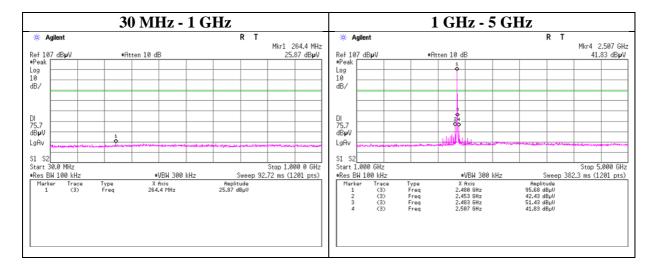
Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono

Mode Tx 3DH5

### 2480 MHz





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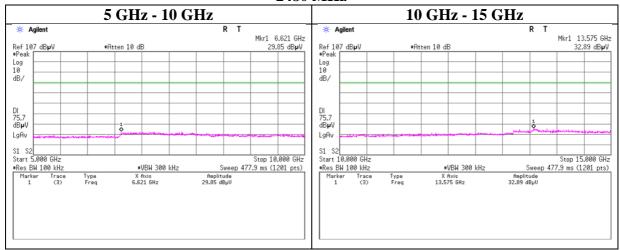
# **Conducted Spurious Emission**

Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity Engineer Shinichi Miyazono

Mode Tx 3DH5

### 2480 MHz





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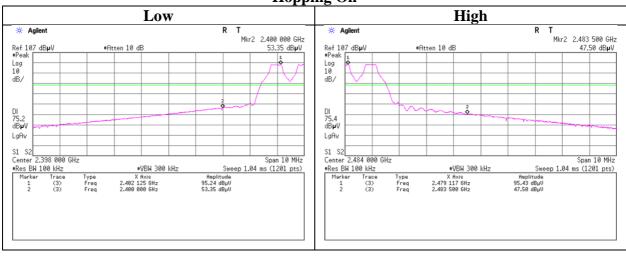
# **Conducted Emission Band Edge compliance**

Test place Ise EMC Lab. No.11 Measurement Room

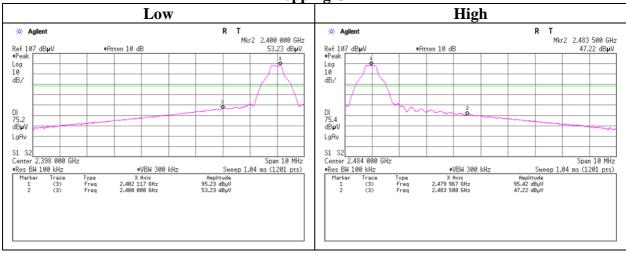
Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono

Mode Tx DH5

**Hopping On** 



**Hopping Off** 



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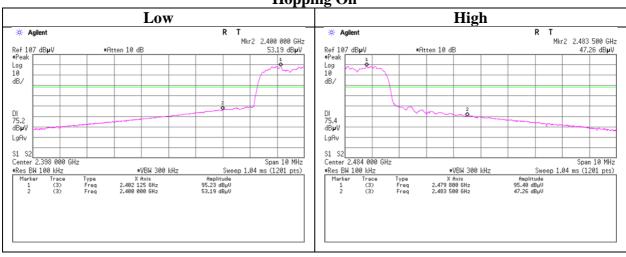
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# **Conducted Emission Band Edge compliance**

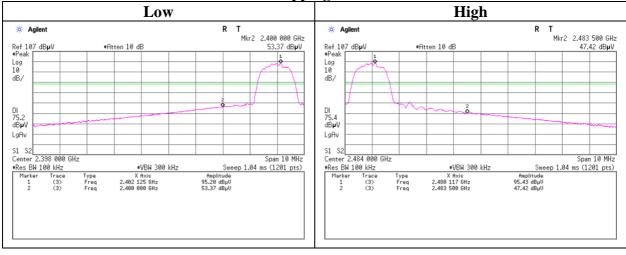
Test place Ise EMC Lab. No.11 Measurement Room

Report No. 10792621H
Date May 20, 2015
Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono
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**Hopping On** 



**Hopping Off** 



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# 99%Occupied Bandwidth

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Temperature / Humidity 24 deg. C / 51 % RH
Engineer Shinichi Miyazono
Mode Tx Hopping Off

**Hopping Off, DH5** Hopping Off, 3DH5 2402 MHz 2402 MHz # Agilent # Agilent R T Ref 107 dBµV Ref 107 dB**µ**V •Peak #Atten 10 dB Atten 10 dB Log 10 dB/ Log 10 dB/ LgAv M1 S2 Center 2.402 000 0 GHz Center 2.402 000 0 GHz \*Res BW 30 kHz \*VBW 100 kHz Sweep 3.2 ms (1201 pts) Sweep 3.2 ms (1201 pts) \*VBW 100 kHz Occupied Bandwidth Occ BW % Pwr 0cc BN % Pwr 99.00 % x dB -20.00 dB Occupied Bandwidth x dB -20,00 dB 833.6845 kHz 1.1603 MHz Transmit Freq Error x dB Bandwidth -41.143 kHz 928.350 kHz Transmit Freq Error -40.242 kHz 1.265 MHz 2441 MHz 2441 MHz R T R T \* Agilent # Agilent Ref 107 dBµV #Peak Ref 107 dB**µ**V #Peak #Atten 10 dE •Atten 10 dE Log 10 dB/ Log 10 dB/ ٠ **\$** LaAv LaAv M1 S2 Center 2.441 000 0 GHz •Res BW 30 kHz M1 S2 Center 2.441 000 0 GHz \*Res BW 30 kHz \*VBW 100 kHz \*VBW 100 kHz Sweep 3.2 ms (1201 pts) Sweep 3.2 ms (1201 pts) Occupied Bandwidth Occ BN % Pwr 99.00 % Occupied Bandwidth Occ BN % Pwr 99.00 % x dB -20.00 dB x dB -20.00 dB 838.5248 kHz 1.1620 MHz Transmit Freq Error x dB Bandwidth -41.307 kHz 929.564 kHz Transmit Freq Error x dB Bandwidth -40.486 kHz 1.268 MHz 2480 MHz 2480 MHz R T # Agilent # Agilent Ref 107 dB**µ**V #Peak Ref 107 dB**µ**V #Peak Atten 10 dE Atten 10 dE Log 10 Log 10 dB/ dB/ 4 LgAv LgAv M1 S2 Center 2.480 000 0 GHz •Res BW 30 kHz M1 S2 Center 2.480 000 0 GHz \*Res BW 30 kHz \*VBW 100 kHz \*VBW 100 kHz Sweep 3.2 ms (1201 pts) Sweep 3.2 ms (1201 pts) Occupied Bandwidth Occ BN % Pwr 99.00 % Occupied Bandwidth 99.00 % -20.00 dB 837.3554 kHz x dB 1.1604 MHz x dB -20.00 dB Transmit Freq Error x dB Bandwidth Transmit Freq Error x dB Bandwidth -41.236 kHz 1.264 MHz

# UL Japan, Inc. Ise EMC Lab.

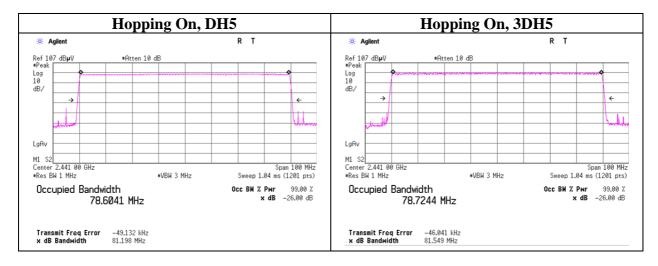
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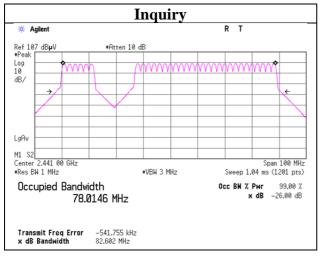
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# 99% Occupied Bandwidth

Test place Ise EMC Lab. No.11 Measurement Room

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Mode Tx Hopping On





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# **APPENDIX 2:** Test instruments

**Test equipment** 

| Control No. | Instrument                    | Manufacturer         | Model No                    | Serial No                      | Test Item | Calibration Date * Interval(month) |
|-------------|-------------------------------|----------------------|-----------------------------|--------------------------------|-----------|------------------------------------|
| MAEC-03     | Semi Anechoic<br>Chamber(NSA) | TDK                  | Semi Anechoic<br>Chamber 3m | DA-10005                       | RE        | 2015/02/19 * 12                    |
| MOS-13      | Thermo-Hygrometer             | Custom               | CTH-180                     | 1301                           | RE        | 2015/01/13 * 12                    |
| MJM-16      | Measure                       | KOMELON              | KMC-36                      | -                              | RE        | -                                  |
| COTS-MEMI   | EMI measurement program       | TSJ                  | TEPTO-DV                    | -                              | RE        | -                                  |
| MRENT-116   | Spectrum Analyzer             | Agilent              | E4440A                      | MY46187620                     | RE        | 2015/03/09 * 12                    |
| MHA-21      | Horn Antenna 1-18GHz          | Schwarzbeck          | BBHA9120D                   | 9120D-557                      | RE        | 2014/08/12 * 12                    |
| MCC-167     | Microwave Cable               | Junkosha             | MWX221                      | 1404S374(1m) /<br>1405S074(5m) | RE        | 2014/05/26 * 12                    |
| MPA-11      | MicroWave System<br>Amplifier | Agilent              | 83017A                      | MY39500779                     | RE        | 2015/03/19 * 12                    |
| MHA-17      | Horn Antenna 15-40GHz         | Schwarzbeck          | BBHA9170                    | BBHA9170307                    | RE        | 2014/06/11 * 12                    |
| MTR-08      | Test Receiver                 | Rohde & Schwarz      | ESCI                        | 100767                         | RE        | 2014/08/19 * 12                    |
| MBA-03      | Biconical Antenna             | Schwarzbeck          | BBA9106                     | 1915                           | RE        | 2014/10/18 * 12                    |
| MLA-03      | Logperiodic Antenna           | Schwarzbeck          | USLP9143                    | 174                            | RE        | 2014/10/18 * 12                    |
| MCC-51      | Coaxial cable                 | UL Japan             | -                           | -                              | RE        | 2014/07/14 * 12                    |
| MAT-70      | Attenuator(6dB)               | Agilent              | 8491A-006                   | MY52460153                     | RE        | 2015/04/08 * 12                    |
| MPA-13      | Pre Amplifier                 | SONOMA<br>INSTRUMENT | 310                         | 260834                         | RE        | 2015/03/10 * 12                    |
| MOS-19      | Thermo-Hygrometer             | Custom               | CTH-201                     | 0001                           | AT        | 2014/12/22 * 12                    |
| MSA-15      | Spectrum Analyzer             | Agilent              | E4440A                      | MY46187105                     | AT        | 2014/11/11 * 12                    |
| MAT-24      | Attenuator(10dB)(above 1GHz)  | Agilent              | 8493C                       | 71389                          | AT        | 2014/06/12 * 12                    |
| MCC-163     | Microwave Cable               | Murata               | MXGS83RK3000                | -                              | AT        | 2014/11/05 * 12                    |
| MPM-13      | Power Meter                   | Anritsu              | ML2495A                     | 0824014                        | AT        | 2014/11/11 * 12                    |
| MPSE-18     | Power sensor                  | Anritsu              | MA2411B                     | 0738174                        | AT        | 2014/11/11 * 12                    |
| MCC-38      | Coaxial Cable                 | UL Japan             | -                           | -                              | AT        | 2014/12/02 * 12                    |
| MAT-10      | Attenuator(10dB)              | Weinschel Corp       | 2                           | BL1173                         | AT        | 2014/11/19 * 12                    |

The expiration date of the calibration is the end of the expired month.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

Test Item: RE: Radiated Emission test

**AT: Antenna Terminal Conducted test** 

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