



# RADIO TEST REPORT

**Test Report No. : 10532071S**

**Applicant** : Ueda Japan Radio Co., Ltd.  
**Type of Equipment** : Secure Tag  
**Model No.** : DSF-214P  
**FCC ID** : 2ADKKDSF214  
**Test regulation** : FCC Part15 Subpart C: 2014  
**Test result** : Complied

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2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above regulation.
4. The test results in this test report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by any agency of the Federal Government.
6. The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan has been accredited.

**Date of test:** November 6 to 7, 2014

**Representative test engineer:**

Akio Hayashi  
Engineer  
Consumer Technology Division

**Approved by:**

Toyokazu Imamura  
Leader  
Consumer Technology Division



- The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan.  
 There is no testing item of "Non-accreditation".

**UL Japan, Inc.**

**Shonan EMC Lab.**

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13-EM-F0429

# **REVISION HISTORY**

## **Original Test Report No.: 10532071S**

Revision	Test report No.	Date	Page revised	Contents
- (Original)	10532071S	December 3, 2014	-	-
1	10532071S	December 18, 2014	4	Correction of Frequency of operation

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## **SECTION 1: Customer information**

Company Name : Ueda Japan Radio Co., Ltd.  
Address : 2-10-19 Fumiiri, Ueda-shi, Nagano, 386-8608 Japan  
Telephone Number : +81-268-26-2059  
Facsimile Number : +81-268-26-2072  
Contact Person : Kiyoharu Yamadera

## **SECTION 2: Equipment under test (E.U.T.)**

### **2.1 Identification of E.U.T.**

Type of Equipment : Secure Tag  
Model No. : DSF-214P  
Serial No. : Refer to 4.2 of this report.  
Rating : DC3V (2.3 to 3.3V)  
Receipt Date of Sample : November 6, 2014  
Country of Mass-production : Japan  
Condition of EUT : Production model  
Modification of EUT : No modification by the test lab.

### **2.2 Product description**

Model: DSF-214P (referred to as the EUT in this report) is a Secure Tag.

Clock frequency(ies) in the system : CPU: 32.768kHz, RF: 26MHz

#### Radio specification:

Equipment type : Transmitter  
Frequency of operation : 923.6-927.4MHz  
Type of modulation : FSK  
Antenna type : Loop  
Antenna connector type : Soldering  
Antenna gain : -17 dBi  
Operation temperature range : -10 to +50 deg.C.  
ITU code : F1D

Equipment type : Receiver  
Frequency of operation : 125kHz

#### FCC 15.31 (e)

The test was performed with new battery. Therefore, the EUT complies with the requirement.

#### FCC 15.203

The antenna is not removable from the EUT. Therefore, the EUT complies with the requirement

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## **SECTION 3: Test specification, procedures & results**

### **3.1 Test specification**

Test specification : FCC Part 15 Subpart C: 2014, final revised on August 15, 2014 and effective October 14, 2014  
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators  
Section 15.207 Conducted limits  
Section 15.209 Radiated emission limits, general requirements  
Section 15.249 Operation within the bands 902-928MHz, 2400-2483.5MHz, 5725-5875MHz, and 24.0-24.25GHz

### **3.2 Procedures & Results**

Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin	Results
Conducted emission	ANSI C63.4:2009 7. AC powerline conducted emission measurements	FCC 15.207	-	N/A *1)	N/A	N/A
20dB bandwidth	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.215	Radiated	N/A	-	Complied
Electric field strength of fundamental emission	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.249 (a)(e), 15.209	Radiated	N/A	8.3dB Freq.: 927.400 MHz Detector: Quasi-Peak Polarization: Horizontal	Complied
Electric field strength of spurious emission	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.205 (a)(b), 15.209, 15.249 (a)(d)(e)	Radiated	N/A	1.6dB Freq.: 928.000 MHz Detector: Quasi-Peak Polarization: Horizontal Mode: Tx 927.4MHz	Complied
Frequency tolerance	ANSI C63.4:2009 13. Measurement of intentional radiators	FCC 15.249 (b)	-	N/A *2)	N/A	N/A

Note: UL Japan's EMI Work Procedures No.13-EM-W0420 and 13-EM-W0422

\*1) The test is not applicable since the EUT has no AC mains.

\*2) The test is not applicable since the EUT does not operate in the 24.05-24.25GHz band.

### **3.3 Addition to standard**

Item	Test Procedure	Specification	Remarks	Worst Margin	Results
Occupied bandwidth (99%)	ANSI C63.4:2009 13. Measurement of intentional radiators, RSS-Gen 4.6.1	-	Radiated	-	Complied

Note: UL Japan's EMI Work Procedures No.13-EM-W0420 and 13-EM-W0422

\* Other than above, no addition, exclusion nor deviation has been made from the standard.

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### 3.4 Uncertainty

The following uncertainties have been calculated to provide a confidence level of 95% using a coverage factor k=2.

Item	Frequency range	No.1 SAC <sup>*1</sup> /SR <sup>*2</sup> (±)	No.2 SAC/SR (±)	No.3 SAC/SR (±)
Radiated emission (Measurement distance: 3m)	9kHz-30MHz	3.7 dB	3.5 dB	3.5 dB
	30MHz-300MHz	4.8 dB	4.9 dB	4.7 dB
	300MHz-1GHz	5.0 dB	5.0 dB	4.8 dB
	1GHz-18GHz	4.9 dB	4.9 dB	4.9 dB
	18GHz-26.5GHz	4.5 dB	4.3 dB	4.3 dB

\*1: SAC=Semi-Anechoic Chamber

\*2: SR= Shielded Room is applied besides radiated emission

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

#### Antenna port conducted test

Bandwidth Measurement uncertainty for this test was: (±) 0.66%

### 3.5 Test location

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JAB Accreditation No. : RTL02610

	IC Registration No.	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
<input type="checkbox"/> No.1 semi-anechoic chamber	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
<input type="checkbox"/> No.2 semi-anechoic chamber	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10m
<input checked="" type="checkbox"/> No.3 semi-anechoic chamber	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5m
<input type="checkbox"/> No.4 semi-anechoic chamber	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
<input type="checkbox"/> No.1 shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.2 shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
<input type="checkbox"/> No.3 shielded room	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
<input type="checkbox"/> No.4 shielded room	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
<input type="checkbox"/> No.5 shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
<input type="checkbox"/> No.6 shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-

### 3.6 Test setup, Data of test & Test instruments

Refer to APPENDIX 1 to 3.

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## **SECTION 4: Operation of E.U.T. during testing**

### **4.1 Operating mode**

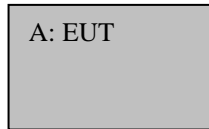
The EUT exercise program used during testing was designed to exercise the various system components in a manner similar to typical use.

<b>Test item</b>	<b>Operating mode</b>	<b>Tested frequency</b>
All items	Transmitting	923.6MHz, 925.4MHz, 927.4MHz

Software: WR-900

**Justification:** The system was configured in typical fashion (as customer would normally use it) for testing.

### **4.2 Configuration and peripherals**



\* Test data was taken under worse case conditions.

#### **Description of EUT and support equipment**

<b>No.</b>	<b>Item</b>	<b>Model number</b>	<b>Serial number</b>	<b>Manufacturer</b>	<b>Remarks</b>
A	Secure Tag	DSF-214P	0089 0002	Ueda Japan Radio Co., Ltd.	EUT

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## **SECTION 5: Radiated emission**

### **5.1 Operating environment**

Test place : See test data (APPENDIX 1)  
Temperature : See test data (APPENDIX 1)  
Humidity : See test data (APPENDIX 1)

### **5.2 Test configuration**

EUT was placed on a polystyrene platform of nominal size, 0.5m by 0.5m, raised 0.8m above the conducting ground plane. Photographs of the set up are shown in APPENDIX 3.

### **5.3 Test conditions**

Frequency range : 9kHz to 10GHz  
EUT position : Table top

### **5.4 Test procedure**

The Radiated Electric Field Strength intensity has been measured on a semi-anechoic chamber with a ground plane at a distance of 3m.

Measurement was performed additionally on open area at a 3m distance to confirm no noise was detected.

<9kHz to 30MHz>

The EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for vertical polarization (antenna angle: 0deg.to 360deg.) and horizontal polarization.

\* FCC 15.31 (f)(2) (9kHz-30MHz)

9kHz – 490kHz [Limit at 3m]= [Limit at 300m]-40log (3[m]/300[m])

490kHz – 30MHz [Limit at 3m]= [Limit at 30m]-40log (3[m]/30[m])

<30MHz to 10GHz>

The measuring antenna height was varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization.

The radiated emission measurements were made with the following detection of the test receiver and spectrum analyzer.

	9kHz to 90kHz & 110kHz to 150kHz	90kHz to 110kHz	150kHz to 490kHz	490kHz to 30MHz	30MHz to 1GHz	1GHz to 10GHz	
Detector type	PK/AV	QP	PK/AV	QP	QP	PK	AV *1)
IF Bandwidth	200Hz	200Hz	10kHz	9kHz	120kHz	RBW: 1MHz /VBW: 3MHz	RBW: 1MHz /VBW: 10Hz

\*1) When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

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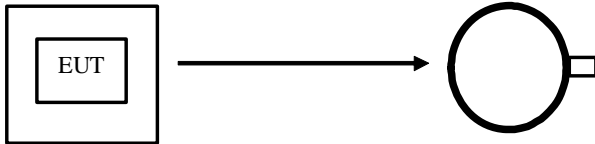
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The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

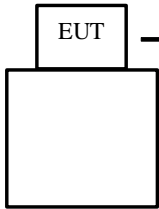
Antenna polarization	Frequency	Carrier	Spurious		
			9kHz-30MHz	30-1000MHz	1-10GHz
Horizontal		X	X	X	Z
Vertical		Z	Z	Z	Y

**Horizontal (Top View)**

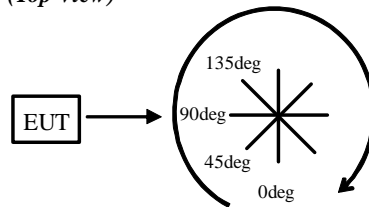


Antenna was not rotated.

**Vertical (Side View)**

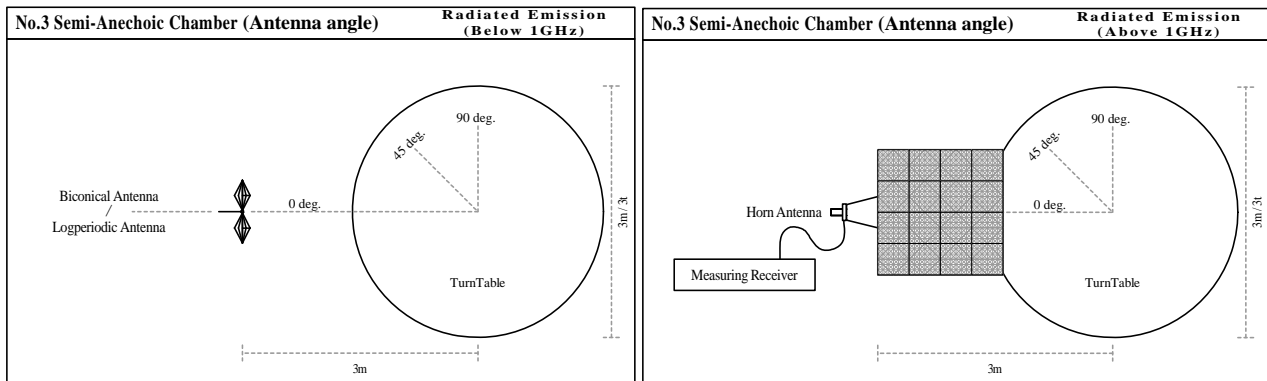


**(Top View)**



Front side: 0 deg.  
Forward direction: clockwise

**Figure 1. Direction of the Loop Antenna**



**Figure 2. Antenna angle (except Loop antenna)**

**5.5 Results**

Summary of the test results : Pass  
\* No noise was detected below 30MHz.

Refer to APPENDIX 1

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## **SECTION 6: 20dB bandwidth & Occupied bandwidth (99%)**

### **Test procedure**

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

### **Results**

Summary of the test results : Pass  
Refer to APPENDIX 1

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## **Contents of APPENDIXES**

### **APPENDIX 1: Test data**

20dB bandwidth  
Radiated emission  
99% Occupied bandwidth

### **APPENDIX 2: Test instruments**

Test instruments

### **APPENDIX 3: Photographs of test setup**

Radiated emission  
Pre-check of the worst position

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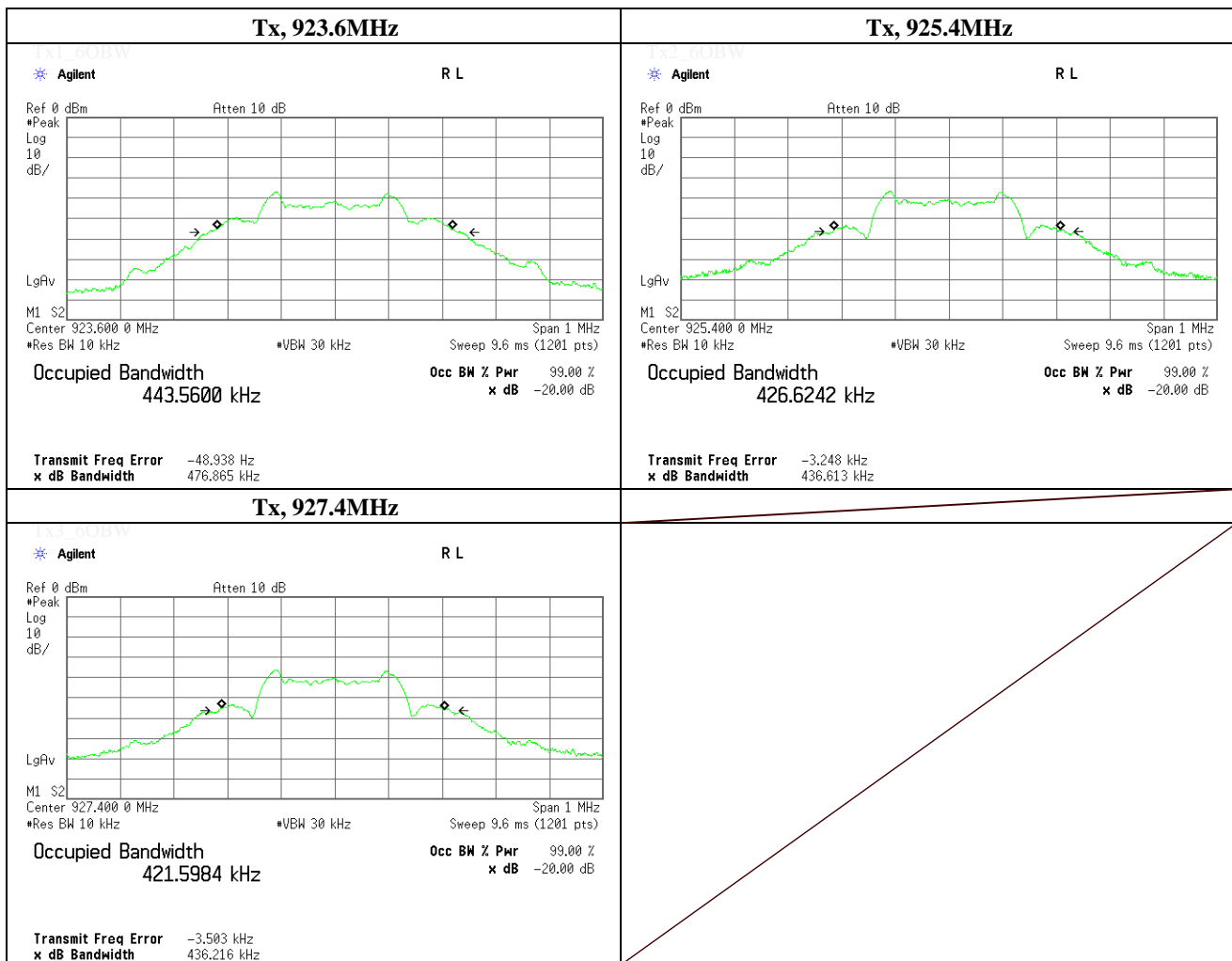
Facsimile : +81 463 50 6401

## APPENDIX 1: Data of Radio tests

### 20dB Bandwidth

Test place	UL Japan, Inc. Shonan EMC Lab.	No.3 Semi Anechoic Chamber
Date	November 7, 2014	
Temperature / Humidity	23deg.C , 50%RH	
Engineer	Akio Hayashi	
Mode	Tx,	

Freq. [MHz]	20dB Bandwidth [MHz]
923.6000	0.477
925.4000	0.437
927.4000	0.436



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## Radiated Emission

Test place            No.3 Semi Anechoic Chamber  
 Date                    November 6, 2014                    November 7, 2014  
 Temperature / Humidity 23 deg.C, 35 %RH                    23 deg.C, 50 %RH  
 Engineer                Akio Hayashi                            Akio Hayashi  
 Mode                    Tx,                    923.6 MHz

(\* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	902.000	QP	21.4	21.6	20.7	31.0	32.7	46.0	13.3	100	16	
Hori.	923.600	QP	72.8	21.8	20.8	30.9	84.5	93.9	<b>9.4</b>	100	16	
Hori.	928.000	QP	21.5	21.8	20.8	30.8	33.3	46.0	12.7	100	16	
Hori.	1847.200	PK	46.9	25.4	3.7	41.2	34.8	73.9	39.1	100	0	
Hori.	3694.400	PK	43.7	28.5	5.2	40.8	36.6	73.9	37.3	100	23	
Hori.	5541.600	PK	50.7	31.7	6.1	38.8	49.7	73.9	24.2	100	23	
Hori.	7388.800	PK	46.9	36.9	6.9	40.4	50.3	73.9	23.6	100	0	
Hori.	9236.000	PK	41.3	38.2	8.0	40.4	47.1	73.9	26.8	100	22	
Hori.	1847.200	AV	36.6	25.4	3.7	41.2	24.5	53.9	29.4	100	0	
Hori.	3694.400	AV	34.2	28.5	5.2	40.8	27.1	53.9	26.8	100	23	
Hori.	5541.600	AV	43.3	31.7	6.1	38.8	42.3	53.9	11.6	100	23	
Hori.	7388.800	AV	36.9	36.9	6.9	40.4	40.3	53.9	13.6	100	0	
Hori.	9236.000	AV	33.7	38.2	8.0	40.4	39.5	53.9	14.4	100	22	
Vert.	902.000	QP	21.4	21.6	20.7	31.0	32.7	46.0	13.3	116	241	
Vert.	923.600	QP	69.9	21.8	20.8	30.9	81.6	93.9	12.3	116	241	
Vert.	928.000	QP	21.4	21.8	20.8	30.8	33.2	46.0	12.8	116	241	
Vert.	1847.200	PK	46.7	25.4	3.7	41.2	34.6	73.9	39.3	100	332	
Vert.	3694.400	PK	48.0	28.5	5.2	40.8	40.9	73.9	33.0	100	280	
Vert.	5541.600	PK	51.5	31.7	6.1	38.8	50.5	73.9	23.4	100	334	
Vert.	7388.800	PK	46.2	36.9	6.9	40.4	49.6	73.9	24.3	100	51	
Vert.	9236.000	PK	42.8	38.2	8.0	40.4	48.6	73.9	25.3	100	334	
Vert.	1847.200	AV	36.4	25.4	3.7	41.2	24.3	53.9	29.6	100	332	
Vert.	3694.400	AV	38.0	28.5	5.2	40.8	30.9	53.9	23.0	100	280	
Vert.	5541.600	AV	42.7	31.7	6.1	38.8	41.7	53.9	12.2	100	334	
Vert.	7388.800	AV	36.3	36.9	6.9	40.4	39.7	53.9	14.2	100	51	
Vert.	9236.000	AV	32.9	38.2	8.0	40.4	38.7	53.9	15.2	100	334	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)) - Gain(Amplifier)

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## Radiated Emission

Test place            No.3 Semi Anechoic Chamber  
 Date                    November 6, 2014                    November 7, 2014  
 Temperature / Humidity 23 deg.C, 35 %RH                    23 deg.C, 50 %RH  
 Engineer                Akio Hayashi                            Akio Hayashi  
 Mode                    Tx,                    925.4 MHz

(\* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	902.000	QP	21.6	21.6	20.7	31.0	32.9	46.0	13.1	100	24	
Hori.	925.400	QP	72.8	21.8	20.8	30.8	84.6	93.9	<b>9.3</b>	100	24	
Hori.	928.000	QP	22.0	21.8	20.8	30.8	33.8	46.0	12.2	100	24	
Hori.	1850.800	PK	45.7	25.5	3.7	41.2	33.7	73.9	40.2	100	13	
Hori.	3701.600	PK	45.3	28.6	5.2	40.8	38.3	73.9	35.6	100	13	
Hori.	5552.400	PK	52.5	31.8	6.1	38.8	51.6	73.9	22.3	100	13	
Hori.	7403.200	PK	47.1	36.9	6.9	40.4	50.5	73.9	23.4	100	13	
Hori.	9254.000	PK	42.0	38.2	8.0	40.4	47.8	73.9	26.1	100	13	
Hori.	1850.800	AV	40.5	25.5	3.7	41.2	28.5	53.9	25.4	100	13	
Hori.	3701.600	AV	34.0	28.6	5.2	40.8	27.0	53.9	26.9	100	13	
Hori.	5552.400	AV	42.2	31.8	6.1	38.8	41.3	53.9	12.6	100	13	
Hori.	7403.200	AV	37.3	36.9	6.9	40.4	40.7	53.9	13.2	100	13	
Hori.	9254.000	AV	33.0	38.2	8.0	40.4	38.8	53.9	15.1	100	13	
Vert.	902.000	QP	21.5	21.6	20.7	31.0	32.8	46.0	13.2	115	255	
Vert.	925.400	QP	70.8	21.8	20.8	30.8	82.6	93.9	11.3	115	255	
Vert.	928.000	QP	21.8	21.8	20.8	30.8	33.6	46.0	12.4	115	255	
Vert.	1850.800	PK	51.9	25.5	3.7	41.2	39.9	73.9	34.0	100	350	
Vert.	3701.600	PK	48.4	28.6	5.2	40.8	41.4	73.9	32.5	100	315	
Vert.	5552.400	PK	47.0	31.8	6.1	38.8	46.1	73.9	27.8	100	350	
Vert.	7403.200	PK	46.6	36.9	6.9	40.4	50.0	73.9	23.9	100	350	
Vert.	9254.000	PK	40.4	38.2	8.0	40.4	46.2	73.9	27.7	100	350	
Vert.	1850.800	AV	47.0	25.5	3.7	41.2	35.0	53.9	18.9	100	350	
Vert.	3701.600	AV	36.9	28.6	5.2	40.8	29.9	53.9	24.0	100	315	
Vert.	5552.400	AV	36.8	31.8	6.1	38.8	35.9	53.9	18.0	100	350	
Vert.	7403.200	AV	34.4	36.9	6.9	40.4	37.8	53.9	16.1	100	350	
Vert.	9254.000	AV	33.0	38.2	8.0	40.4	38.8	53.9	15.1	100	350	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)) - Gain(Amplifier)

**UL Japan, Inc.**

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## Radiated Emission

Test place            No.3 Semi Anechoic Chamber  
 Date                    November 6, 2014                    November 7, 2014  
 Temperature / Humidity 23 deg.C, 35 %RH                    23 deg.C, 50 %RH  
 Engineer                Akio Hayashi                            Akio Hayashi  
 Mode                    Tx,                    927.4 MHz

(\* PK: Peak, AV: Average, QP: Quasi-Peak)

Polarity	Frequency [MHz]	Detector	Reading [dBuV]	Ant.Fac. [dB/m]	Loss [dB]	Gain [dB]	Result [dBuV/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [deg]	Remark
Hori.	902.000	QP	21.5	21.6	20.7	31.0	32.8	46.0	13.2	100	16	
Hori.	927.400	QP	73.8	21.8	20.8	30.8	85.6	93.9	8.3	100	16	
Hori.	928.000	QP	32.6	21.8	20.8	30.8	44.4	46.0	<b>1.6</b>	100	16	
Hori.	1854.800	PK	44.5	25.5	3.7	41.2	32.5	73.9	41.4	100	179	
Hori.	3709.600	PK	45.7	28.6	5.2	40.8	38.7	73.9	35.2	100	46	
Hori.	5564.400	PK	50.3	31.8	6.1	38.8	49.4	73.9	24.5	100	48	
Hori.	7419.200	PK	46.2	37.0	6.9	40.4	49.7	73.9	24.2	100	2	
Hori.	9274.000	PK	41.0	38.2	8.0	40.3	46.9	73.9	27.0	100	48	
Hori.	1854.800	AV	36.8	25.5	3.7	41.2	24.8	53.9	29.1	100	179	
Hori.	3709.600	AV	34.4	28.6	5.2	40.8	27.4	53.9	26.5	100	46	
Hori.	5564.400	AV	45.0	31.8	6.1	38.8	44.1	53.9	9.8	100	48	
Hori.	7419.200	AV	35.4	37.0	6.9	40.4	38.9	53.9	15.0	100	2	
Hori.	9274.000	AV	32.6	38.2	8.0	40.3	38.5	53.9	15.4	100	48	
Vert.	902.000	QP	21.5	21.6	20.7	31.0	32.8	46.0	13.2	115	250	
Vert.	927.400	QP	71.7	21.8	20.8	30.8	83.5	93.9	10.4	115	250	
Vert.	928.000	QP	30.6	21.8	20.8	30.8	42.4	46.0	3.6	115	250	
Vert.	1854.800	PK	46.7	25.5	3.7	41.2	34.7	73.9	39.2	100	0	
Vert.	3709.600	PK	46.5	28.6	5.2	40.8	39.5	73.9	34.4	100	321	
Vert.	5564.400	PK	50.5	31.8	6.1	38.8	49.6	73.9	24.3	100	330	
Vert.	7419.200	PK	50.7	37.0	6.9	40.4	54.2	73.9	19.7	100	333	
Vert.	9274.000	PK	41.5	38.2	8.0	40.3	47.4	73.9	26.5	100	333	
Vert.	1854.800	AV	36.2	25.5	3.7	41.2	24.2	53.9	29.7	100	0	
Vert.	3709.600	AV	37.1	28.6	5.2	40.8	30.1	53.9	23.8	100	321	
Vert.	5564.400	AV	40.8	31.8	6.1	38.8	39.9	53.9	14.0	100	330	
Vert.	7419.200	AV	42.0	37.0	6.9	40.4	45.5	53.9	8.4	100	333	
Vert.	9274.000	AV	32.5	38.2	8.0	40.3	38.4	53.9	15.5	100	333	

Result = Reading + Ant.Fac. + Loss (Cable+(Attenuator or Filter)) - Gain(Amplifier)

**UL Japan, Inc.**

**Shonan EMC Lab.**

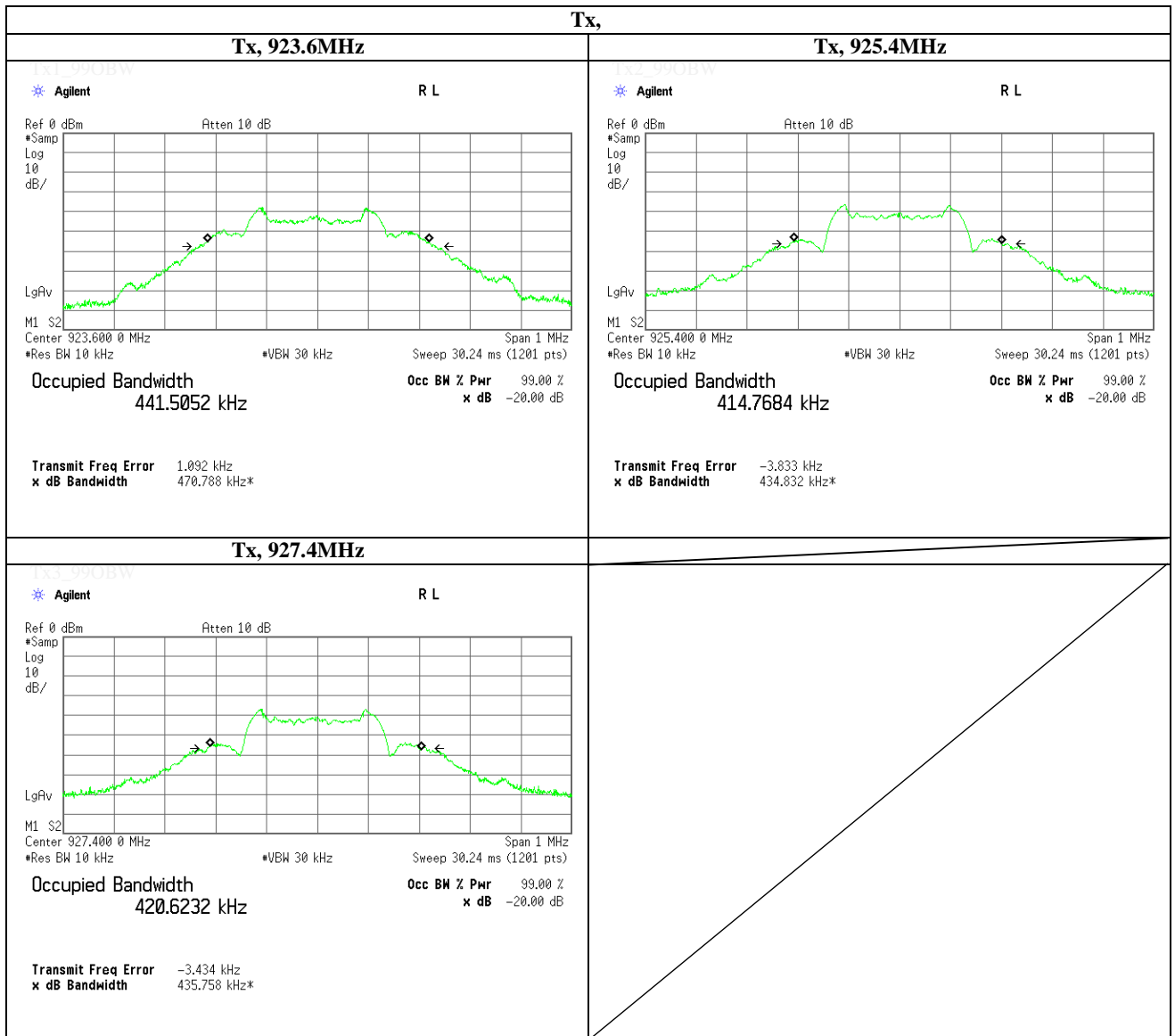
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Test place           UL Japan, Inc. Shonan EMC Lab.    No.3 Semi Anechoic Chamber  
 Date                 November 7, 2014  
 Temperature / Humidity  23deg.C       , 50%RH  
 Engineer             Akio Hayashi

**99% Occupied Bandwidth**



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## APPENDIX 2 Test Instruments

### EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Serial No	Test Item	Calibration Date * Interval(month)
SAF-03	Pre Amplifier	SONOMA	310N	290213	RE	2014/02/14 * 12
SAT6-06	Attenuator	JFW	50HF-006N	-	RE	2014/02/17 * 12
SBA-03	Biconical Antenna	Schwarzbeck	BBA9106	91032666	RE	2014/10/18 * 12
SCC-C1/C2/C3/C4/C5/C10/SRSE-03	Coaxial Cable&RF Selector	Fujikura/Fujikura/Suhner/Suhner/Suhner/Suhner/TOYO	8D2W/12DSFA/141PE/141PE/141PE/141PE/NS4906	-/0901-271 (RF Selector)	RE	2014/04/25 * 12
SLA-03	Logperiodic Antenna	Schwarzbeck	UHALP9108A	UHALP 9108-A 0901	RE	2014/10/18 * 12
SOS-05	Humidity Indicator	A&D	AD-5681	4062518	RE	2014/10/30 * 12
STR-06	Test Receiver	Rohde & Schwarz	ESCI	101259	RE	2014/03/04 * 12
SJM-15	Measure	ASKUL	-	-	RE	-
SAEC-03(NSA)	Semi-Anechoic Chamber	TDK	SAEC-03(NSA)	3	RE	2014/07/14 * 12
COTS-SEMI-1	EMI Software	TSJ	TEPTO-DV(RE,CE, RFLMF)	-	RE	-
SAF-06	Pre Amplifier	TOYO Corporation	TPA0118-36	1440491	RE	2014/05/23 * 12
SCC-G04	Coaxial Cable	Junkosha	J12J102207-00	JUN-12-14-018	RE	2014/06/24 * 12
SCC-G23	Coaxial Cable	Suhner	SUCOFLEX 104	297342/4	RE	2014/05/15 * 12
SHA-03	Horn Antenna	Schwarzbeck	BBHA9120D	9120D-739	RE	2014/08/12 * 12
KSA-08	Spectrum Analyzer	Agilent	E4446A	MY46180525	RE	2014/03/04 * 12
SFL-01	Highpass Filter	MICRO-TRONICS	HPM50115	001	RE	2013/11/22 * 12
SAT10-02	Attenuator	JFW	50HF-010N	-	RE	2014/02/17 * 12
SLP-02	Loop Antenna	Rohde & Schwarz	HFH2-Z2	100218	RE	2013/11/08 * 12
SAT6-07	Attenuator	JFW	50HF-006N	-	RE	2014/02/17 * 12

The expiration date of the calibration is the end of the expired month .  
As for some calibrations performed after the tested dates , those test equipment have been controlled by means of an unbroken chains of calibrations .

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

Test Item :

RE: Radiated emission